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Experiences of adult siblings of illicit drug users

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Running Head: ADULT SIBLINGS OF ILLICIT DRUG USERS

Experiences of Adult Siblings of Illicit Drug Users

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A thesis submitted in partial fulfilment of the requirements
for the award of Doctor of Philosophy (Clinical and Forensic Psychology)
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Abstract

The sibling relationship is unique in that it is relatively egalitarian, ascribed, and can be the longest-lasting across the lifespan. Siblings can act as supports for one another during major life events, both in childhood and adulthood. Siblings can also be a source of significant stress. The literature on family coping indicates that there are significant impacts to family members' well-being from dealing with stress and strain that result from a family member's drug use problem. However, researchers have not investigated the impacts on adult siblings despite the importance and uniqueness of sibling relationships. The broad aim of this research was to develop a theory of the adult sibling relationship when one sibling's drug use impacts significantly on the quality of the relationship. Phenomenological interviews with 25 adults with a sibling with an illicit drug use problem were analysed using grounded theory. A provisional model and theory was developed from the first phase of data analysis which was then consolidated in the second phase. Two case studies were drawn from the pool of participants to illustrate how the model and theory developed here could be applied to assist a forensic evaluator in child protection and family court matters. Several themes related to stress and distress, coping, and support were identified. Adults were more likely to use social support rather than access professional services. Adults were found to experience distress comparable to parents or partners. However, they were likely to feel distress both from direct impacts from their sibling and from witnessing the impact on parents and other family members. Adults who characterised their sibling relationship as warm and close since childhood experienced a cycle of engagement and support of the user followed by detachment and bounded relationships. These adults were particularly influenced to engage in support due to a high sense of obligation to care for their siblings and also experienced difficulty disengaging from their sibling. Adults whose sibling relationships were characterised by high conflict (rivalry) or indifference since childhood felt less obliged to engage in support for their sibling and maintained clear boundaries. Adult siblings reported a belief that siblings have more freedom to detach from a user sibling than parents have freedom to detach from a user child, especially if more vulnerable family members required protection from the user. Forensic evaluators can use the theory as a guiding framework when a sibling is a litigant or witness in child-protection or Family Court matters. The findings also inform clinical practice in terms of the psychological needs of this population, such as issues with adjustment, grief and loss, stress, general coping, and the impact of protracted and disruptive life experiences as a result of having a sibling with an illicit drug use problem.

Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

- i. incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education;*
- ii. contain any material previously published or written by another person except where due reference is made in the text of this thesis; or*
- iii. contain any defamatory material*

Signed: Amy McAlpine

Date: 28 May 2013

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Chapter One: Introduction

The sibling relationship is unique in that it can be the longest lasting over the lifespan. It often extends from childhood to old age, longer than relationships with parents, partners, or children (Connidis, 2010; Lamb, 1982; Van Volkom, 2006). The sibling relationship is also ascribed, not earned as in other relationships such as friendships or partnerships (Cicirelli, 1995). One's status as a sibling will always be retained, regardless of whether there is contact between siblings (Cicirelli, 1995). Furthermore, the sibling relationship is viewed as relatively egalitarian compared to other family relationships such as that between a parent and child. In childhood and adolescence siblings are teachers, confidants, and protectors (Abramovitch, Pepler, & Corter, 1982; Bryant, 1982; Buhrmester & Furman, 1990). They are sources of love, affection, support, as well as competition and frustration (Bank & Kahn, 1982; Buhrmester & Furman, 1990; Dunn, 1993). The sibling relationship significantly influences the development of children, independent of the influence of the parent-child relationship (Dunn, 2005). Furthermore, it is the quality of the sibling relationship that plays an important role in whether it positively or adversely affects child development (Dunn, 2005). In adulthood, the sibling relationship retains its emotional significance, despite siblings seeking independence from their family of origin (Connidis, 2010; Cicirelli, 1980, 1995; Ross & Milgram, 1982). Adult siblings become important sources of support for each other, especially during major life events such as marriage, children, divorce, illness and death (Connidis, 1994; O'Bryant, 1988). However, siblings can also be a source of stress, especially where one sibling suffers from mental or physical illness or disability (Bank & Kahn, 1982; Bluebond-Langner, 1996; Stoneman & Waldman Berman, 1993). An area of sibling stress that has not been well researched is the impact of a sibling with an illicit drug use problem.

In the second chapter of this thesis I explore the significance of the sibling relationship over the lifespan. In order to understand the emotional and social significance of the sibling relationship, I first review the major psychological paradigms and theories underpinning the role of close relationships in healthy personality development. These are contemporary psychodynamic theory, social learning theory, and attachment theory. Second, I review the literature on the sibling relationship during childhood, adolescence and adulthood, with a specific focus on the role of support in adult sibling relationships. Lastly, I review the literature on support provided by adults to their sibling with a physical or mental illness or disability, and the impact on well adult siblings. However, the role of support and the impact on adults with a

sibling with an illicit drug use problem has received limited research attention. This is the focus of the third chapter.

The research on the impact on family members of drug users recognises the significant stress and strain that individual family members experience. However, there has been no research that specifically explores the impact to siblings from the adult sibling perspective. In chapter three I first review the differing theoretical perspectives that underpin the models of family impacts. These include codependency models, family systems theory, and stress and coping theory. The literature on family impacts underpinned by these theoretical perspectives is then explored. The literature covered here focussed on alcohol and drug use in general. However, though alcohol use is associated with a great amount of harm to the user and the community, due to the nature of illicit drug use and its potential for harms associated with the criminal justice system (e.g. the user being prosecuted for illegal drug use or engaging criminal behaviour in order to fund substance use, for example stealing from the family) and acute mental or general health issues that can occur from the use of illicit substance (e.g. amphetamine induced psychosis, violent or aggressive behaviour, risk of overdose or death from heroin use) the focus of the research was specifically illicit drug use. Furthermore, different sorts of impacts to a sibling might occur from alcohol versus illicit drug use, which might lead to different dynamics between siblings. Therefore, in order to not obfuscate the data, the focus was restricted to the impact of illicit drug use only. Lastly, I review the limited literature that considers the impact to siblings. However, this literature is from a parent's perspective, or considers only younger children and adolescent siblings. There is no research that explores the impact on adult siblings from the adult sibling perspective. This chapter closes with the broad purpose of the programme of research that aims to bridge the gap between what is known about the significance of adult sibling relationships and the particular impacts on adults who are coping with a sibling with an illicit drug use problem.

Chapters four to eight of the thesis outline the development of a theory of the impact on adult sibling relationships when one sibling has an illicit drug use problem. The final model and theory integrates several major psychological theories, including social learning theory, attachment theory (from a contemporary psychodynamic or social learning theory perspective), family systems theory, and stress and coping theory, with the literature on normative sibling relationships, in order to understand several pathways that an adult might travel through when coping with the impacts of their sibling's illicit drug use problem. The model and theory accounts for the different possible journeys an adult might travel through depending on the level of closeness, affection, rivalry, indifference, or ambivalence that exists

within the sibling relationship. The final model and theory is robust because it has integrated several psychological theories and appears to be able to accommodate different sibling journeys should future research gather data that show evidence for different types of adult sibling relationships.

Chapter nine focuses on the forensic implications and utility of the theory. Data gathered during the programme of research showed that adult siblings are often involved with care and protection of the children of their illicit-drug using sibling. Adults can be involved as litigants or key witnesses in Family Court or Child Protection matters and the process of litigation can be an event that disrupts the quality of the adult sibling relationship. This chapter presents two case studies to illustrate how a forensic evaluator can apply the theory to understand the dynamics of the sibling relationship where it is relevant to litigation. Furthermore the case studies show how a forensic evaluator can use the theory as the scientific basis to empirically underpin expert opinion.

Chapter ten provides the conclusion to the thesis, summarising the major findings from the programme of research. The programme of research bridges the gaps in the literature by providing a rich understanding of how drug use impacts on the quality of siblings relationships, how the sibling experience compares to the experiences of parents, partners, or children of illicit drug users, how the impact of drug use differs from the impacts of other illnesses or disabilities, and how clearer integration of empirical psychological theories has developed a robust model and theory of sibling relationships impacted by illicit drug use. Lastly, critical areas that researchers need to focus on are identified in order to validate the theory and extend the body of knowledge across the sibling literature and the drug and alcohol field.

Chapter Two: The sibling relationship

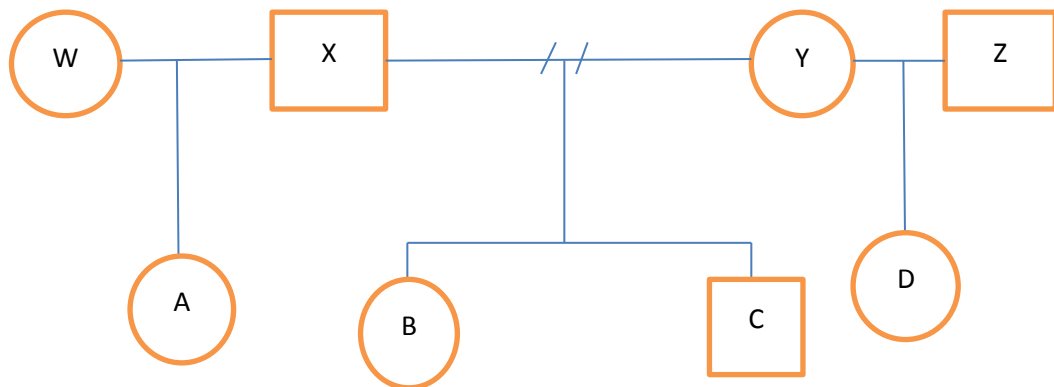
In order to understand how the sibling bond is formed and maintained, it is important to examine how psychological theories explain the significance of close relationships. The major psychological theories that are discussed in the following two chapters are contemporary psychodynamic theory, attachment theory, social learning theory and family systems theory. The various explanations of the sibling relationship from each of these theoretical perspectives are explored under each theory. Most of these theoretical perspectives explain how the sibling relationship develops in early childhood. However, it is important to understand how the sibling relationship develops over the lifespan. The literature examining how the sibling relationship develops and changes through childhood, adolescence, early adulthood and older adulthood is reviewed. Finally, the limited literature examining events that interfere or impact on the quality of the sibling relationship in adulthood, such as sibling disability, illness, and mental health issues is also reviewed.

Definition of sibling

Given the changing structure of family over the years, the definition of a sibling in the literature has become increasingly broad. Cicirelli (1995) defined full, half, step, adoptive and fictive siblings. Full siblings are individuals who have both biological parents in common. Half siblings only have one biological parent in common, for example two sisters who have the same biological mother but different biological fathers. Step siblings have no biological parents in common, but are linked through one step-sibling having a biological parent linked to the other step-sibling's biological parent through marriage or a marriage-like relationship. Adoptive siblings are linked when one or both individuals are legally adopted into the family. Cicirelli defined fictive siblings as "nonfamily members who have been accepted into the family as siblings based on desirability or custom rather than on the basis of blood ties or legal criteria" (Cicirelli, 1995, p. 3). Similarly, Bedford and Avioli (2012) suggested the use of an anthropological classification system. This included 'consanguinal' siblings who are related by blood such as full or half siblings, 'affinal' siblings who are related by adoption or marriage such as step siblings or siblings-in-law, and 'quasi-siblings' who are akin to Cicirelli's fictive siblings such as fostered children, godsiblings, or children who share a 'wet-nurse' (Bedford & Avioli, 2012).

The identification of what constitutes a family and the structure of family ties is changing rapidly (Connidis, 2010; Diderich 2008). Current researchers have integrated definitions in line with changing sociodemographic factors such as divorce and re-partnering, cohabitation and

nonmarital childbearing, and longer life spans resulting in later-life re-partnering and subsequent new adult siblings-in-law (Bedford & Avioli, 2012; Diderich, 2008; Walker, Allen, & Connidis 2005). The following genogram illustrates how children who have completely different biological parents and who do not live together may still identify themselves as siblings:



In this example child A would be identified as a half sibling to children B and C as they all share the biological father X in common. Child D would be identified as a half sibling to B and C as they all share the biological mother Y in common. Children A and D do not share any biological parents in common and do not live in the same household, but as parent figures X and Y have a previous relationship and share child care duties, children A and D might identify themselves as siblings if this is a value and a norm expressed by all family members. Thus siblings are defined in terms of their relationship to each other, to their parents and parent figures, and to their family, in a biological, legal, or cultural context.

Characteristics of the sibling relationship

Due to the sibling relationship being defined by the above contexts, sibling researchers (Cicerelli, 1995; van Volkom, 2006; Walker, Allen & Connidis, 2005) asserted that the sibling relationship is an ascribed relationship; i.e., sibling status is obtained through birth, legal or cultural means rather than status being gained or earned as in other relationships such as friendships. As it is an ascribed relationship, sibling status (being a brother or a sister) can never be changed (Cicerelli, 1995, Walker, Allen, & Connidis 2005). As such, there will always be a bond or connection between siblings, even if the day to day contact in the relationship is dissolved. Further, Bedford (2005) asserted that the sibling bond can often lie 'dormant' in the

absence of frequent contact. The existence of the sibling bond therefore is a necessary condition to the possibility of the sibling relationship being revived after times of conflict or dissolution, whereas this opportunity might not exist in other dissolved relationships such as friendships (Cicirelli, 1995).

Cicirelli (1995) posited that the sibling relationship is also relatively egalitarian. He stated that the egalitarian nature of the relationship is based on the equivalence of sibling's feelings of acceptance of one another and this allows siblings to relate to one another as equals (Cicirelli, 1995). However, there may be power or status differences between siblings, such as age, gender, size, intelligence, socioeconomic status, and influence with other family members (Connidis, 2010). Researchers (McHale & Crouter, 2005; Voorpostel & Van Der Lippe, 2007; Walker, Allen, & Connidis, 2005, 2010) have suggested that sibling relationship is characterised by an egalitarian structure similar to peer or friend relationship, where there is an emphasis on sociability and exchange, as well as a hierarchical structure, where some siblings might hold more status or power than others, for example, older siblings becoming caregivers or providers for younger siblings (Bedford & Avioli, 2012; McHale & Crouter, 2005). Sibling relationships are therefore likely better characterised as a horizontal relationship (as opposed to vertical such as the parent-child relationship) with elements of both family and kinship ties and friendship bonds (Walker, Allen & Connidis, 2005, 2010).

The sibling relationship is unique in that it is a relationship that can last the entire lifespan and, whether formed in childhood, adolescence or adulthood, can often last to older adulthood (Connidis, 2010). The duration of the relationship is often longer than parent/child, friendship, or spousal relationships, providing a sense of continuity over the life course and a sense of connection to our family ties from childhood through to adulthood (Connidis, 2010). Sibling relationships in early childhood are usually characterised by daily intimate contact and early shared experiences (Cicirelli, 1995; Connidis, 2010). Over time sibling relationships become less geographically or physically close as adult siblings move out of the family home and reach lifespan milestones such as establishing their own homes and family (Van Volkom, 2006). Intimacy in the adult sibling relationship is often maintained through various means of periodic contact (physical visits or electronic communication via phone, emails, or social networking sites). Researchers suggested that the adult sibling relationship is vulnerable to change or disruption unless the quality of the sibling relationship is actively maintained (Bedford & Avioli, 2012; Voorpostel & Van Der Lippe, 2007; Walker, Allen & Connidis, 2005). Events that are likely to disrupt the quality of the sibling relationship that have been explored in the literature

(discussed in later chapters) include caring for siblings with mental illness or disability. Of course, another external event that might disrupt the sibling relationship is illicit drug use.

Psychological theories of relationships

Sibling research has evolved in a western individualistic context with limited research on the sibling relationship in other cultures (Cicirelli, 1994; Riedmann & White, 1996). The significance of the sibling relationship has been examined for its influence on individual differences such as personality, cognitive, social, and emotional development (Bedford, 1989a; Whiteman, McHale, & Soli, 2011). Implicit in this notion is the idea that close relationships are critical to individual development. This idea is central across all theoretical perspectives. In this section I review how contemporary psychodynamic theory and social learning theory explain the significance of close relationships to individual development. The contribution of the sibling relationship to the progression of individual development is reviewed under each theoretical perspective.

Psychodynamic theory

Westen (1998) outlined five main tenets that unified contemporary psychoanalytic and psychodynamic theory. The first is an emphasis on unconscious mental processes (thoughts and feelings) and unconscious motivational processes (drives). Freud (1920) focussed on primitive, instinctual processes such as sexual and aggressive drives that operate outside our awareness in the unconscious. Jung (1960) differed from Freud in identifying that sexual urges were only one aspect of libido, the general life energy that flows between the conscious and unconscious. Second, these drives often operate in parallel and can conflict, producing seemingly irrational behaviour, ambivalence, compromise solutions (Freud, 1920; Jung, 1960). Third, childhood experiences have significant lasting effects in shaping personality and individual differences. Adler (1929) posited that both parents have a profound effect in shaping the personality of their children based on differential treatment according to children's birth order (whether one is a first, second or last born child) (Ansbacher & Ansbacher, 1964). Horney (1950) believed that harsh treatment of children by their parents contributed to neurotic personality. Conversely, fair, warm, supportive and considerate parenting facilitated healthy personality development and helped individuals toward self-realisation (Horney, 1950). Parental treatment of children is seen as critical to resolution of crises and development of ego strength in Erikson's (1985) early stages of development in Ego Psychology. Fourth, our social interactions are influenced by mental representations of our self, others, and relationships. Self-psychology theorists such as Kohut (1991) and object-

relations theorists such as Kernberg (1984), Fairbairn (1952), Winnicott (1965), and Klein (1959; 1965) identify that these mental representations are formed from reciprocal early childhood experience with caregivers and continue to influence our interactions in social relationships throughout our lives. Lastly, personality and maturity develops when we learn to regulate our feelings and move from a dependent state to an interdependent one (Westen, 1998).

The sibling relationship seems to have relatively little significance in contemporary psychodynamic theory. Though there are points of difference among psychoanalytic and psychodynamic theorists, Westen (1998) outlined that the main psychodynamic concepts regard the infants' experience of the external world and how this is internalised as essential building blocks to healthy or pathological personality development. The role of parent figures in the development of an individual is often seen as most prominent and influential. Though a sibling can often be a significant figure in an infant's experience of the world and interaction with a sibling will influence an infant's developing mental representations, there is extremely limited literature that delineates the psychoanalytic interpretation of the influence of the sibling relationship (Mitchell, 2011). In the tradition of using clinical material to illustrate psychoanalytic interpretations, the literature that does exist draws on case study examples to explore sibling's early relationships as influencing choice of romantic partners (object choice) (Abend, 1984).

The first identification of the significance of the sibling relationship appeared in the psychoanalytic clinical literature, commencing with Freud's conceptualisation of siblings as rivals for parental affection. Alfred Adler rejected Freud's emphasis on the libido, but took up the notion of sibling rivalry with his focus on birth-order effects and its impact on the development of personality. Due to inconsistent results, the simplistic notion that specific birth order placing will influence development of specific traits such as intelligence, achievement and success, has generally been rejected (see Adams, 1972; Michalski, & Shackelford, 2001; Zajonc, 2001; Zajonc & Mullally, 1997 for review). However, similar lines of enquiry have been generated from this literature such as effects of structural variables including gender, age spacing, and number of siblings, on individual development (Bank & Kahn, 1982, Cicirelli, 1978; Cicirelli, 1995; Rothbart, 1976). An extensive review of the literature and debate regarding the effects of family and sibling structural variables on individual development variables such as intelligence and personality is beyond the scope of this thesis and is already adequately addressed in the literature (Abdel-Khalek & Lynn, 2008; Downey, 2001; Rodgers, 2001; Rodgers, Cleveland, van den Ord, & Rowe, 2001; Wichman, Rodgers, & MacCallum, 2006,

2007; Zajonc & Sulloway, 2007). However, the impact of family and sibling structural variables such as birth order, age spacing and gender composition on dimensions of the sibling relationship have received limited research attention. These studies tend to be atheoretical in their approach and are reviewed in the section on structural variables below.

A key concept of Adler's theory of personality development is that our behaviour is guided by striving to overcome feelings of psychological and social inferiority (Adler, 1927). As psychoanalytic theory emphasises early life experiences, a parent's treatment of each individual child and the sibling relationship becomes central to an infant's striving for superiority in early family life. The first born child is seen to be the centre of his or her parents' attention and resources, but faces what Adler termed dethronement when a new sibling is born who competes for parental attention. This activates the first born's feeling of inferiority. If parents do not adequately prepare the first born for the arrival of a sibling, the first born will harbour resentment toward his or her sibling. If adequately prepared, the first born can become protective, even adopting a surrogate carer role for their younger sibling. The second born competes with his or her elder sibling for parental attention. This sense of competition leads the second born to set unrealistically high goals that ultimately lead to failure. The youngest sibling is also seen as capturing most of the parent's attention due to being the baby of the family. Pampered youngest children are seen as excessively dependent on others and therefore also likely to fail. In order to reduce competition, children develop qualities and interests unique from their siblings; a process Adler termed sibling de-identification (Ansbacher & Ansbacher, 1964). This sibling differentiation is thought to reduce rivalry and assist with more harmonious sibling relationships. There is inconsistent evidence to support this notion (Feinberg, McHale, Crouter, & Cumsille, 2003; Watzlawik, 2009; Whiteman, Bernard, & McHale, 2010; Whiteman & Christiansen, 2008; Whiteman, McHale, & Crouter, 2007a). However, parents' different treatment of each child in the family based on a child's birth order is thought to influence the individual development of each child and the quality of the relationship between siblings.

The quality of the relationship between siblings in early and middle childhood is impacted when parents provide each child with different levels of psychological resources such as warmth, affection, attention, support or control (Brody, 1998). The main term used in the literature to refer to parents' unique treatment of each child within the family is 'parental differential treatment'. Brody, Stoneman, and Burke (1987) found that when mothers directed more attention toward a younger sibling, there was less overall sibling to sibling interaction and lower rates of exchanged prosocial behaviour. Stocker, Dunn, and Plomin (1989) found

that when mothers directed more attention toward younger siblings this resulted in more conflict within the sibling relationship. Brody, Stoneman, and McCoy (1994) assessed both mothers' and fathers' parent-child relational quality and found that when parents' relationship with the younger child is more negative than with the older child, both siblings assessed their relationship with each other as more negative. There were no associations with the quality of the sibling relationship when there were differences in the relational quality between a parent and the older child.

Shanahan, McHale, Crouter, and Osgood (2008) investigated perceived differential treatment and sibling relationship quality between siblings aged from middle childhood to late adolescence. They found that maternal warmth directed toward the first born child was most strongly associated with that child's warmth toward their sibling. Furthermore, differential conflict between a parent and second born child was most strongly associated with that child's conflict toward their older sibling. Shanahan et al. (2008) posited that second born children's acting-out behaviour may be an attempt to ensure increased parental attention. Whereas first born children are socialised to not engage in hostility toward their siblings and generalise their disappointment in the parent-child relationship through decreasing levels of warmth and emotional closeness toward the younger sibling. Although these results are consistent with previous research showing either increased conflict or decreased positive interaction between siblings when there is differential parental treatment, the application of Adler's birth order theory does not appear to adequately explain the reasons for these results. Other factors such as whether children perceive their differential treatment as fair appears to mediate the quality of the sibling relationship, even in adult sibling relationships.

Perceived parental differentiation can exist well into the lifespan (Baker & Daniels, 1990; Bedford, 1992; Sutor & Pillemer, 2000; Sutor, Sechrist, Plikuhn, Pardo, & Pillemer, 2008; Sutor, Sechrist, Plikuhn, Pardo, Gilligan, & Pillemer, 2009). Boll, Ferring, and Filipp (2005) found that adults perceived their relationship quality with their sibling as best when they felt they were treated equally by their parents. Parental differential treatment was judged as fair if the participant perceived that they were only slightly favoured by a parent. Participants felt that parental differential treatment was unjust and reported diminishing relationship quality when they perceived that they were either extremely favoured or disfavoured by a parent. Although the perception of parental differential treatment can change temporarily according to changes in personal, environment, and relationship conditions between parents and adult children, Boll, Michels, Ferring, and Filipp (2010) have found that the perception of whether one is a disfavoured child remains relatively stable over time. Further, the perception that one

was disfavoured as a child has been shown to continue to impact negatively on the quality of the sibling relationship into midlife (Sutor et al., 2009)

Social learning theory

Research based on Adlerian concepts of sibling rivalry and the quality of the sibling relationship has increasingly integrated concepts grounded in a social learning theory approach. Social learning theory draws on cognitive and behavioural concepts to explain how behaviour is learned and how personality develops through our experiences with other people. Extending beyond the strict behavioural position of John B. Watson and B. F. Skinner, who emphasised the measurement of observable behaviour, theorists such as Julian Rotter and Albert Bandura also emphasised the influence of mental events (cognitive constructs) that shape behaviour (Ryckman, 2008). Hence, Rotter and Bandura both emphasise the social-cognitive approach inherent in social learning theory.

Social learning theorists see behaviour as goal directed; that is behaviour is motivated by the fulfilment of goals or needs through maximising rewards and minimising or avoiding punishment (reinforcers) (Ryckman, 2008). Consistent with contemporary psychodynamic theory, an infant's family life is seen as the environment where early goals and needs are learned via interaction with his or her caregiver. Parents or parent-figures are emphasised as the significant social figures that either satisfy or frustrate needs. These early experiences of which behaviours give rise to certain reinforcers develop what Rotter termed expectancies (Rotter, 1954; 1966). An expectancy is a thought or belief (cognitive construct) that, based on previous experiences, a particular event or behaviour will be followed by a specific reinforcer (Rotter, 1954; 1966). These expectancies might pertain to a specific situation or be generalised to similar situations (Rotter, 1966).

Rotter (1954; 1960) posited that the potential of performing a specific behaviour is a function of the expectancy of a specific reinforcement occurring, and the value of that reinforcement, after performing that behaviour within a specific situation. Therefore the prediction of the behaviour is based on the person's past experience and the current situation. Rotter (1960) termed the meaning and relevance an individual ascribes to a situation as the 'psychological situation'. Drawing on process models where social and cognitive processes are seen as underlying the motivation for specific behaviour, Mischel and Shoda (1995) explicated the role of affect and emotion as a mediating variable in their cognitive-affective system theory of personality. Behaviour within a situation is reciprocally mediated by not only thoughts and

beliefs, but also affect; i.e., mood states, feelings, emotions, and physiological reactions (Mischel & Shoda, 1995; 1998). Individuals vary in their accessibility to and activation of mood and emotional states when these interact dynamically with other mental events such as self-representations within a given situation. The organisation of the dynamic relationship between cognition and affect is stable and, when activated within a given situation, lead to characteristic behaviour of an individual. For example, those who are quick to feel anger and prone to act aggressively, or those who are prone to feel anxious and withdraw when approached socially do so because they expect to be rejected. These interactions between cognition, affect, and behaviour are not reactive to a situation, but act reciprocally. They are activated by specific features of a situation and provide feedback that regulates behaviour and thus in turn might also impact and change the situation (Mischel & Shoda, 1995; 1998). Just like Rotter's psychological situation, Mischel and Shoda theorised that cognitions such as scripts and self-representations and affect such as accessibility to emotion and mood state, constitute the necessary psychological features of a situation that influence an individual's reaction to an event and leads them to behave in characteristic or predictable ways.

Bandura (1977b) also believed that the interactions between our social environment, cognitive constructs, and emotional arousal shape behaviour. Delineating the social learning theory approach from both psychodynamic and strict behavioural approaches Bandura (1977b) asserted that:

People are neither driven by inner forces nor buffeted by environmental stimuli. Rather, psychological functioning is explained in terms of continuous reciprocal interaction of personal and environmental determinants. Within this approach, symbolic, vicarious, and self-regulatory processes assume a prominent role (p.12)

Bandura (1977b) recognised the role of cognition and emotion within the situation context of reciprocal determinism; that is the interaction and mutual influence between cognition, behaviour, and environmental determinants. The state of a person's emotional arousal further influences their performance of a specific behaviour within a given situation or can interfere with acquisition of new behaviours (Bandura, 1977b).

Bandura (1977b) also hypothesised that people can acquire novel behaviour through observing others (models) and the consequences of their actions (vicarious reinforcement); a process termed 'observational learning'. Through the use of symbols such as words or images people

can process and retain mental representations of their own and observed experiences and use these to guide future behaviour. Due to the ability to retain and reflect on our experiences of certain behaviours, events, and subsequent reinforcers, we are able to exert a measure of control over our behaviour, thus giving us the capacity for self-regulation (Bandura, 1977a; Bandura & Walters, 1963).

Though the role of parents as social partners and models has been emphasised in shaping children's behaviours, siblings can reciprocally influence each other's behaviour through reinforcement. Bandura (1977b) posited that models are more influential if they are seen as having higher status, power, or competence. Older siblings, who may be seen as having more competence, can serve as powerful models to younger siblings. Research investigating the effects of sibling dyad structural variables (gender, age, and age gap) in observational learning has produced mixed results (Slomkowski, Rende, Conger, Simons, & Conger, 2001; Whiteman, McHale, & Crouter, 2007a, 2007b). Some researchers suggested that sibling relationship dynamics rather than structural variables per se are more likely to moderate effects of modelling and observational learning (Whiteman, McHale, & Soli, 2011; Feinberg, Solmeyer, & McHale, 2012).

The research on sibling influence on behaviour such as substance use is also equivocal. Many studies supported the notion of sibling influence with older sibling's substance use associated with younger sibling's substance use even when controlling for other factors such as parental substance use and family environment factors (Brook, Brook, & Whiteman, 1999; Fagan & Najman, 2005; Windle, 2000). However, adolescent substance use has also been found to be significantly influenced by the peer group. The peer group may or may not also be mediated by an older sibling where the older sibling might influence the younger sibling's selection of deviant peers or where both siblings share a peer group (Conger & Reuter, 1996; Low, Shortt, & Snyder, 2012; Needle, McCubbin, Wilson, Reineck, Lazar, & Mederer, 1986; Rende, Slomkowski, Lloyd-Richardson, & Niaura, 2005). Of increasing focus is the dynamics of the sibling relationship and how factors such as conflict or warmth influences younger siblings' substance use. East and Khoo (2005) found that sibling dyads with an older sister in single parent families tended to support each other. The sibling relationship was characterised by higher sibling warmth and this had a buffering effect on a younger sister's substance use. Samek and Rueter (2011) found that the greater perceived affection and love (emotional closeness) and quality of time spent with the sibling (behavioural closeness) lowered the likelihood of a younger sibling's substance use, particularly with younger sisters. This study delineated effects of an attachment relationship (closeness and bonding) and modelling and

found no interaction between modelling and prediction of younger siblings' substance use. Low, Shortt, and Snyder (2012) found that sibling conflict and collusion (mutual reinforcement and normalisation of deviant behaviour) was associated with younger sibling's involvement with a deviant peer group and this in turn predicted substance use. Therefore, although there does appear to be some support for the effect of older sibling's modelling of behaviour, it appears that sibling relationship variables such as conflict and warmth might be more predictive of either direct influences on younger siblings substance use or indirect influences on selection of a deviant peer group, which in turn has been shown to significantly influence adolescent substance use. Though there is still a limited body of research that supports these hypotheses, it appears that interactions between structural variables and relationship variables might provide a better understanding of sibling influence on substance use behaviour or selection of peers.

Attachment theory

Both psychodynamic and social learning theories recognise the significance of early family life in influencing the development of personality through close relationships. Bowlby (1969) hypothesised an ethological explanation of the significance of those early relationships in attachment theory. Bowlby suggested that attachment behaviour grew out of the initial parent-child bond. Bowlby saw bonding as an evolutionary process where parent-child proximity ensures initial protection of the vulnerable infant and the stability of the parent-child relationship over time. Infants seek to have their physiological needs such as hunger, comfort, and security met through certain goal directed behaviours such as crying, seeking contact, smiling, following, clinging, and calling. However, Bowlby saw attachment as an extension of this initial bond and protection of the infant through meeting physiological and security needs. How well those security needs are met by the principal caregiver impacts on the quality of attachment.

Bowlby (1979) and Ainsworth (1989) both classify attachment as one of a class of affectional bonds that humans develop. In summary, the criteria for an affectional bond include a) an enduring attraction one person has for a specific individual, i.e., the affectional bond is a characteristic of the person, not of the dyad, b) the relationship is emotionally significant, c) the individual seeks proximity or closeness to this person, and d) the individual feels distressed when separated from this person (Ainsworth, 1989). For an affectional bond to be classified as an attachment bond the individual must also seek security and comfort from the other person in the relationship, regardless of whether or not security is achieved (Ainsworth, 1989). If

security is achieved, the person is able to use the other individual as a 'secure base' from which to confidently engage with their environment (Ainsworth, 1989; Bowlby, 1988). Although also meeting the criterion for an affectional bond, an attachment bond implies that an individual seeks both security and comfort either directly from the relationship or from a mental representation of the relationship and this felt security gives the person confidence to engage with the world.

Bowlby (1979) hypothesised that humans are inherently motivated to seek attachment, whether or not the parent adequately meets the child's needs. Therefore attachment is seen as a primary need, rather than a secondary drive to the drive to satisfy physiological needs. Bowlby's hypothesis is consistent with social learning theory and Rotter's (1954) posited view that we learn how to meet our primary psychological needs through the process of satisfying physiological needs in infancy. Rotter outlined the primary psychological needs as need for recognition or status, protection/dependency, dominance, independence, love and affection, and physical comfort (Rotter, Chance, & Phares, 1972). As children develop, the primary psychological needs become no longer paired with satisfaction of physiological needs, but paired with cues from the social environment that have been learned and reinforced (Rotter, 1954). Thus, those cues become reinforcements that maintain their strength or value because they consistently meet psychological needs (Rotter, 1954). Consistent with Bowlby's assertion that attachment is a primary need and is sought regardless of whether physiological needs are met, Rotter's categories of needs showed that we are motivated to satisfy primary psychological needs such as protection, love and affection, regardless of whether or not physiological needs are met.

Bowlby (1969) stated that attachment behaviour is expressed over the course of child development in different behaviours and in different contexts. Though humans are never completely free from dependence on others to some extent, with age and development there is an increased ability to gain comfort from symbolic representations, which Bowlby termed 'internal working models'. From a psychodynamic perspective the development of symbolic, or self- and object- representations occur through the processes of introjection and identification (Kernberg, 1984; Klein, 1959; Kohut, 1991). For example, the task of feeding an infant becomes a symbiotic process between parent and child driven by unconscious need fulfilment and conscious attempts to resolve conflict within the mother and establish self and object representations in the infant (Offerman-Zuckerberg, 1992). The infant searches for the mother to satisfy the biological need of hunger. Depending on the feeding experience, this leads to opportunities for introjection of a good mother image based on satiation of need, or bad

mother image if the need is frustrated or painful, for both the infant and the mother. This translates into object representations of a good or bad mother and self-representations of a good or bad self. Based on the experience of continuing repetition of reciprocal processes between the infant and care-giver, the stabilised intrapsychic structures of object- and self-representations form the basis for later object relations, thus shaping our personality and our interactions with our social world (Fonagy, Gergely, & Target, 2008). From a social learning perspective, symbolic or mental representations are developed through the same reciprocal process between infant and caregiver. However, the development of mental representations is explained through the reinforcement process. Goal directed attachment behaviours express basic needs for caregivers to either satisfy or frustrate. Subsequently, cognitive structures develop that predict future interactions such as expectancy (Rotter, 1954; Rotter, 1966) and self-efficacy; that is the belief that one has the ability to perform certain behaviour and that they can produce results by those actions (Bandura, 1977; 2000).

From both contemporary psychodynamic and social learning perspectives internal working models are seen as developing from the quality of the attachment with caregivers and are predictive in their nature. We develop autobiographical memories and scripts (Nelson, 2003; Nelson & Fivush, 2004) and schemata that guide our expectations of new experiences of close relationships based on our past experiences (Bretherton & Munholland, 2008; Thompson, 2006). Internal working models are not immutable and we are capable of developing new internal working models (Grossmann, 1999) that assist with construction of our emerging self-concept. Harter (2006) defines self-concept as mental representations of the way we see ourselves and whether we view ourselves as competent in the world and/or worthy of love. Self-concept is constructed over time through normal social experiences and cognitive changes and becomes more complex over the developmental trajectory (Harter, 2006). However, due to their predictive nature, internal working models developed based on the quality of early attachment relationships can continue to impact on close relationships over the lifespan (Ainsworth, 1985; Belsky, 1997; Bowlby, 1988; Fortuna, Roisman, Haydon, Groh, & Holland, 2011; Grossmann, 1999; Grossman, Grossman, Kindler, & Zimmerman, 2008; Harter, 2006; Main, Kaplan, & Cassidy, 1985; Zayas, Mischel, Shoda, & Aber, 2011).

Bowlby (1969) and Ainsworth (1989) found that infants can form multiple attachments. However, these attachment relationships are placed within a hierarchy with the main caregiver placed at the top of the hierarchy as the primary attachment figure. The primary attachment figure becomes the person toward whom the majority of attachment behaviour is directed. Though other attachment figures can provide soothing, the infant also discriminates the

primary attachment figure as the only person who can fulfil security needs when seeking comfort, thereby ceasing attachment behaviour such as calling, crying etc. Because an older sibling spends a significant amount of time with the infant and can sometimes take on a parent surrogate role, Bowlby and Ainsworth suggested that siblings can become attachment figures. Siblings are not usually the primary attachment figure, but they might be a subsidiary attachment figure in the hierarchy. An attachment relationship with a sibling may alleviate distress when both are separated from their primary attachment figure (Ainsworth, 1989). Of course, an infant might not form an attachment bond at all with his sibling, but the bond could still be classified as an affectional bond as per Ainsworth's distinction between attachment and affectional bonds (defined earlier in this section). Ainsworth posited that these bonds between siblings are developed from a background of shared experiences within their family and shared values and perceptions that lead to mutual understanding and trust. This engenders feelings of security in the relationship despite rivalries and other sources of ambivalence (Ainsworth, 1989).

Stewart (1983) investigated attachment relationships between younger siblings aged 10 to 20 months and older siblings aged 30 to 58 months. In a modification of Ainsworth's 'strange situation' procedure (Ainsworth & Bell, 1970), the siblings' attachment and caregiving behaviour directed toward each other was observed once their parent left the observation room. Twenty-eight older siblings representing 52% of the sample directed caregiving behaviours toward their younger siblings such as approaching, hugging, verbal reassurances and engaging their sibling in play. Twenty-one younger siblings of the 28 sibling dyads moved closer to their older sibling and engaged in play when a stranger entered the room. The author stated that proximity seeking and using the older sibling as a secure base indicated that the older sibling was an attachment object to the younger sibling. In a similar study, Stewart and Marvin (1984) also found that a majority (62%) of younger siblings were able to use their older siblings who displayed caregiving behaviour as a secure base for exploration. Roughly half of the sample (51%) of older siblings was classified as caregivers. None of the younger siblings of non-caregiving older siblings used their older sibling as a secure base. This indicated that an attachment relationship is only facilitated when the caregiver can understand and respond sensitively to the infant's signals of distress. Thus an attachment relationship was observed in both studies when older siblings directed caregiving behaviour toward younger siblings when they noticed the younger sibling was experiencing distress, and the younger sibling was able to gain comfort and security from that relationship, using the older sibling as a secure base in order to increase play and exploration.

Teti and Ablard (1989) investigated the role of attachment security to the mother in shaping the sibling relationship. Using Ainsworth's strange situation, the researchers assessed the quality of attachment security in a primary observation visit with mother and toddler, and the sibling relationship in a secondary observation visit with the mother and two children (toddler aged 1.08 to 2.16 years and older sibling aged 2.17 to 7.83 years). The researchers found that older siblings characterised by secure child-parent attachment directed more caregiving behaviour toward younger siblings. Less secure older children also directed caregiving behaviour toward their younger sibling, but this only occurred when the younger sibling's distress was particularly high. Younger children occasionally directed attachment behaviours toward their older siblings and, on these occasions, the older sibling was always characterised as securely attached. Volling (2001) also investigated the impact of the quality of child-parent attachment on the quality of the sibling relationship. Older sibling's emotional regulation skills, empathy, and prosocial care-giving behaviour directed toward a younger sibling were investigated over a 4-year phase. There were no associations found between infant-father attachment quality, children's emotional regulation and sibling relationship quality. There were also no differences across all types of infant-mother attachment quality and expression of distress in the older child. However, older siblings who were classified as insecure-resistant were more likely to seek comfort from their younger sibling, presenting a reversal in the expected sibling roles. These children also presented more hostile and conflict behaviour toward their younger siblings than the insecure-avoidant and secure children. Therefore the quality of child-parent attachment impacts on the quality of nurturance and caregiving in older children and the availability of siblings to act as subsidiary attachment figures, with more securely attached older children being able to provide comfort and security when their younger siblings are distressed.

In infancy and childhood attachment behaviour is complementary, with one relationship partner being weaker or more vulnerable (the infant) directing attachment behaviour toward someone who is perceived as stronger or wiser (the mother or caregiver) in order to gain comfort and security (Ainsworth, 1989; Bowlby, 1969). Due to our increasing ability to develop internal working models and derive comfort from mental representations as we develop, adult attachment relationships are characterised more by reciprocal provision and acceptance of care between relationship partners (Weiss, 1994). Adult attachment relationships maintain features of infant-caregiver attachment such as proximity seeking for comfort and security (from the actual person or from mental representations of the attachment figure), separation distress when there is a loss of the attachment figure, specificity in the attachment figure such that the attachment figure is not interchangeable or replaceable with others, and the

pervasiveness of the sense of being bonded with the attachment figure (Weiss, 1994).

Therefore adult attachment relationships are characterised by the use of a relationship partner (or the mental representation of the partner) as a safe haven when there is a threat and a secure base for exploration, thus serving a support function. The partners engage in some degree of proximity seeking, thereby engendering trust, self-disclosure, expression of needs and intimacy. There is also separation distress when one partner leaves or dies, although the sense of a bond with that partner continues after separation (Campa, Hazan, & Wolfe, 2009; Hazan & Shaver, 2004).

Cicirelli (1989) investigated how feelings of attachment and perceptions of the sibling bond in 83 older adult siblings (aged 61 to 91 years) contributes to well-being in later life. He posited that an adult model of sibling attachment is characterised by maintaining a feeling of closeness and contact through accessing mental representations of one's sibling. This is supplemented by occasional contact via visits or phone. He further posited that as we age we are more likely to experience threats to our life and well-being. Therefore older adults are motivated to repair relationships, mend rivalries, and protect their sibling, which consequently maintains closeness in the relationship and preserves the sibling bond. On measures of closeness, conflict, and indifference, Cicirelli found that older adults who perceived greater closeness with their sister experienced fewer symptoms of depression. Conflict with or indifference to a sister was also associated with increased symptoms of depression. A perception of closeness to a brother was not significantly associated to well-being. Cicirelli suggested that the greater role of sisters rather than brothers in maintaining attachment bonds may be due to women being socialised to display nurturing and caregiving behaviour and to maintain family ties. Thus women appear better suited to become attachment figures. However, though the study looked at measures of closeness, conflict, and indifference, it failed to make the distinction between an attachment and affectional bond. The question related to the measure of closeness was "to what extent do you feel close to (feel a sense of love, get along very well with) your siblings?" This question fails to fit the criteria of felt security (safe haven and secure base), proximity seeking and separation distress that characterises an attachment relationship. Rather this study merely measures the degree to which harmony, conflict, or indifference in older adult sibling relationships contributes to measures of depression.

In contrast, Doherty & Feeney (2004) investigated the likelihood of an adult choosing specific relationship partners as either a primary attachment figure or as part of an attachment network based on measures related to secure base, safe haven, proximity seeking and separation protest. The authors noted that attachment hierarchies are likely to change over

the time to reflect changing social needs and as new relationships are formed and others are lost through breakdown or bereavement. Therefore some attachment figures might become more salient than others at times, dependent on the adult's needs.

Respondents were asked to rank the importance of six possible attachment figures (partner, mother, father, friends, child, and siblings) in order of importance to assess the strength of attachment and primary attachment figures. Siblings were ranked fifth out of the six possible attachment figures, ranking only above fathers, and 5.6% of the sample nominated their sibling as their primary attachment figure. Siblings were identified with mothers and fathers as a base for exploratory behaviours (serving a secure base function), but friends were predominately used for support and comfort. Moreover, 22% of the sample was assessed to be 'fully attached' to their sibling (again ranked only above fathers, though partners ranked highest as a primary attachment figure), that is their relationship with their sibling met all three necessary attachment criteria of safe haven, secure base, and separation protest.

Attachment to siblings was stronger for those respondents with no children and no partner, particularly with older participants. This suggested that siblings as attachment figures might become more salient when partners, parents, or children are not available. Overall attachment to siblings reduced during mid-life, then rose again in later years, which is generally consistent with the literature on sibling relationships over the lifespan (reviewed in the following section). This study delineated specific aspects of attachment behaviour (i.e. using relationship partners as a secure base or safe haven). However, the study did not assess attachment security. It is likely that given respondents were requested to rank preferred attachment figures that their choice of primary attachment figure might be indicative of a secure attachment style where their security needs are met.

Fraley & Tancredy (2012) evaluated attachment relationships in adult twin siblings compared to non-twin siblings. The authors posited that twins potentially spend extended periods of time together and share more common experiences and environments compared to non-twin siblings and this is likely to facilitate development of an attachment relationship. Twins were found to be more likely to use their co-twin as an attachment figure than non-twins were found to use their siblings. Further, monozygotic twins are the most likely to feel attached to their co-twin, followed by dizygotic and then non-twin (but full) siblings, who both share approximately half of their genetic variance. The authors suggested that being a twin led to sharing similar environments that heightened a sense of intimacy. However, the author relied on a single item measure that contained components of safe haven, secure base, proximity

seeking and separation distress and, in contrast to Doherty and Feeney (2004), could not delineate which attachment needs were met. Different aspects of the attachment relationship could therefore not be assessed and, similar to the Doherty and Feeney study, the attachment style was not measured. Further, both of these studies cross sectional studies and it is unclear whether it is the shared childhood environments that led to bonding and which contributed to ongoing feelings of attachment that extend into adulthood or whether adult twins continued to remain emotionally close due to other shared environment factors (e.g. continuing to live close and sharing common experiences).

An extensive review of the differences between adult twin and non-twin sibling and other kin attachment relationships is beyond the scope of this thesis (for further reading see Brussoni, Jang, Livesley, & MacBeth, 2000; Neyer, 2002a; Neyer, 2002b; Neyer & Lang, 2003; Tancredy & Fraley, 2006; Torgersen, Grova, & Sommerstad, 2007). However, the adult sibling literature that does measure aspects of the attachment relationship (though not necessarily attachment style) indicated that adult siblings can act as significant attachment relationship partners over the lifespan. The research indicated that the sibling relationship might be more salient for twin, older, childless and single siblings, though it is unclear to what extent other factors influence the selection of a sibling as either a primary attachment figure or as part of an adult's attachment network. Possible relationship maintenance factors could be a sibling's emotional and geographic availability, and perceived potential to exchange support. The literature on relationship maintenance factors is explored in more detail in the section below on support in adult sibling relationships.

Sibling relationships over the lifespan

Given the definitions stated earlier of what is a sibling, broadly speaking siblings can be seen as sharing the same parent figure/s. Cicirelli (1995) defines the sibling relationship as:

...the total of the interactions (physical, verbal, and nonverbal communication) of the two or more individuals who share knowledge, perceptions, attitudes, beliefs, and feelings regarding each other, from the time that one sibling becomes aware of the other. A sibling relationship includes both overt actions and interactions between the sibling pair as well as the covert subjective, cognitive, and affective components of the relationship. The implication is that sibling relationships can continue to exist when the siblings are separated by distance and time without ongoing sibling interaction. (p. 4)

As with close relationships in general there is a degree of interdependency and mutual influence within the sibling relationship (Cicirelli, 1995; Huston & Rempel, 1989; Huston & Robins, 1982; Reis & Rusbult, 2004). The last sentence of Cicirelli's (1995) definition suggested a condition in the sibling relationship that is akin to Bowlby's (1969) and Ainsworth's (1989) concept of an affectional bond in that there is an internal working model and a sense of the continuing existence of the bond even if there is separation. Bank and Kahn (1982) also characterised the sibling relationship as a bond. They stated that certain circumstances such as shared history, similarities in age and sex that promote common life experiences, and the more time and space shared by siblings, give greater access to each other and engender a closer bond. Moreover, Cicirelli and Bank and Kahn suggest that the presence of a bond does not necessarily suggest that the relationship is always positive. Hence the sibling relationship can vary in terms of how long it is maintained and levels of closeness, conflict, involvement, and interest or indifference between each sibling.

Sibling relationships in early and middle childhood

As the sibling relationship is a close relationship, siblings have been found to have mutual influence over each other's behaviour, beliefs, and emotions. In childhood, siblings spent a great deal of time engaged in social interaction with each other (Abramovitch, Pepler, & Corter, 1982). Thus, siblings have served as agents of socialisation (Lamb, 1982). In their day to day interaction, siblings not only engaged in conflict, but they also learnt to resolve conflict through cooperation, sharing, and helping behaviour. They acted affectionately toward each other, engaging in verbal praise, comfort and reassurance (Abramovitch et al., 1982; Dunn & Munn, 1986). Thus, in their interaction with siblings, children learnt to generalise behaviour to other situations and relationships (Abramovitch et al., 1982).

In middle childhood, the sibling relationship has been found to continue to develop along both positive and negative dimensions. Older siblings can serve as confidants, supporters, and teachers as siblings enter the school system (Bryant, 1982). However, research has shown that siblings can be subjected to social comparison processes (Festinger, 1954) and have often compared themselves to one another, as well as teachers, parents and other adults comparing siblings to each other (Connidis, 2007; Feinberg, Neiderhiser, Simmens, Reiss, & Hetherington, 2000; Noller, Conway, & Blakeley-Smith, 2008). This may increase feelings of rivalry and jealousy that continue into adulthood (Bryant, 1982; Connidis, 2007; Cicirelli, 1995; Dunn, 1993; Dunn & Kendrick, 1982; Lamb, 1982; Noller, Conway, & Blakeley-Smith, 2008). Due to

both positive and negative feelings within the relationship, and the struggle between affection, support, and conflict, identification and differentiation, the sibling relationship can also be characterised by ambivalence (Bryant, 1982; Dunn & Kendrick, 1982).

Some researchers have hypothesised that the quality of sibling relationships in childhood and adolescence is impacted by marital transitions and studies have shown that sibling dyads in remarried families tend to experience more negativity and conflict (Hetherington & Clingempeel, 1992; Hetherington et al., 1992; Hetherington et al., 1999; Hetherington & Stanley-Hagan, 1999; MacKinnon, 1989a, 1989b). In a review of the literature on sibling relationships in intact versus remarried families, Hetherington (1999) found that full siblings in remarried families were characterised by more rivalry and disengagement than intact families, especially amongst brothers. However, the data for those studies were drawn from a sample of stepfamilies where the couples were in longer term marriages (five to nine years of marriage). Whereas a study by Deater-Deckard, Dunn and Lussier (2002) gathered data from a broader sample of married, unmarried but cohabitating, and single-mother families, many of whom had been through very recent transitions. The researchers found that there were no differences in the quality of sibling relationships (positive or negative dimensions) between intact and re-partnered families, although siblings in single-mother families were found to experience more negativity, but not less positivity (Deater-Deckard, Dunn, & Lussier, 2002). Across all studies full siblings were found to experience more negativity than half or step siblings, though there were no differences in positivity across all sibling dyad types. These results indicate the nuanced and complex nature of sibling relationships in that profound conflict as well as profound empathy, warmth and closeness can co-exist regardless of genetic relatedness.

Sibling relationships in adolescence

The research on the relationship quality between siblings in adolescence appears to be conflicting. Some researchers (Buhrmester & Furman, 1990; Cicirelli, 1995) suggested that there is less companionship and intimacy between opposite sex adolescent sibling dyads than in same sex sibling dyads. Rivalry and conflict was shown to increase during early adolescence, with greater conflict in siblings with a small age gap, but decreased in older adolescents (Buhrmester & Furman, 1990; Cicirelli, 1995). Whereas other researchers (Lamb, 1982; Tucker, Barber, & Eccles, 1997; Tucker, McHale, & Crouter, 2001; Updegraff, McHale, & Crouter, 2002; Ross & Milgram, 1982) suggested that adolescent siblings use each other for support and choose each other as confidants over their parents during adolescent transitions. Overall, it is

suggested that the intensity and frequency of all interactions between siblings decreased during the adolescent years as part of the normal developmental transition toward greater independence and individuation, and more interest in developing peer and romantic partner relationships (Buhrmester & Furman, 1990; Deater-Deckard, Dunn, & Lussier, 2002; Scharf, Shulman, & Avigad-Spitz, 2005). Despite a decrease in overall interaction, siblings reported a growing sense of intimacy and caring in their relationship as they get older (Cole & Kearns, 2001).

Sibling relationships in early to middle adulthood

In adulthood the trend of decreasing contact or interaction continued in young and middle adulthood, but increasing levels of warmth and feelings of closeness and less conflict into older adulthood appeared to continue (Bedford & Avioli, 2001; Cicirelli, 1995; Ross & Milgram, 1982; Scharf, Shulman, & Avigad-Spitz, 2005). In younger adulthood the normal developmental transitions such as moving out of the family home, education and employment, developing romantic partnerships and having children led to increased geographical distance, less contact and less interaction (Cicirelli, 1995; Conger & Little, 2010; Ross & Milgram, 1982). If geographical distance is maintained over a long period of time then this reduced feelings of closeness, especially when there is little contact via other means (Folwell, Chung, Nussbaum, Bethea, & Grant, 1997; Ross & Milgram, 1982). Geographical distance can lead to psychological distance and could be seen to legitimise a way to disentangle oneself from uncomfortably close family relationships, but it also makes conflict resolution difficult (Ross & Milgram, 1982). Rivalry stemming from childhood interactions and comparisons from parents have been found to continue into young and middle adulthood, especially if the family values achievement (Bedford, 1989a; Cicirelli, 1995). However, moving geographically closer to a sibling has been found to increase daily contact and can increase feelings of closeness in sibling relationships that were already characterised by positive feelings. In sibling relationships already characterised by negative feelings, siblings tended to not have contact with one another even if they lived close to each other (White & Riedmann, 1992).

Sibling relationships from middle to older adulthood

The quality of the sibling relationship during childhood sets the emotional climate for later impacts on the sibling relationship where positive sibling relationships have been found to survive or recover quickly from ruptures and negative relationships experienced increases in conflict and rivalry (Cicirelli, 1995; Ross & Milgram, 1982). Siblings' feelings of closeness from childhood were found to be engendered by shared interests and activities and shared time and

space such as sharing a bedroom (Ross & Milgram, 1982). Shared family values in childhood such as unity, harmony, conflict resolution, and lack of favouritism were factors that maintained closeness in adulthood. These family values were likely to influence maintenance of contact between siblings through family traditions and rituals that allow siblings to reminisce, incorporate their families and share common experiences (Ross & Milgram, 1982). Those factors appeared to become more important in older adulthood to engender feelings of closeness, companionship, and friendship in siblings (Bedford, 1989b; Cicirelli, 1995; Connidis, 1989). Hence, though there appeared to be a trend toward less contact that could at times lead to less closeness, which stabilised in younger and middle aged adult siblings due to normal life transitions, older adults tended to report becoming closer to their siblings and finding them sources of comfort and support (Bedford, 1989; Cicirelli, 1995; Connidis, 1989, 1992; White, 2001). Close sibling relationships in older adulthood have also been found to contribute to well-being at this life stage (Cicirelli, 1995; Goetting, 1986; Lee, Mancini, & Maxwell, 1990).

The sibling relationship is consistently described in the literature in terms of closeness and affection, or conflict and rivalry stemming from close sibling bonds (Bank & Kahn, 1982; Bedford & Avioli, 2001; Furman & Buhrmester, 1985; Gold, 1989; Lamb, 1982; Riggio, 2000; Riggio, 2006; Seltzer M. M., 1989). Cicirelli (1995) stated however, that five to eleven percent of all sibling relationships can be characterised by indifference toward one another. He speculated that lack of interest or affiliation between siblings may be due to large age spacing, geographical distance and failure to develop secure attachments in childhood. Bank and Kahn (1982) described this type of relationship as 'de-identifying disowned'. However, far from being indifferent, which suggested a lack of any type of feeling toward a sibling, Bank and Kahn described disowning as an active attempt to try to detach from one's sibling. This is generally motivated from childhood hate, envy, or perceiving the sibling as weaker in some way. Siblings therefore chose pathways that ensure they have little or no contact. Further, Bedford (1989) and Gold (1989) asserted that separation in sibling relationships can occur through apathy, geographic separation, lack of emotional availability and divergence in values and lifestyle. Gold identified that 'apathetic' or indifferent siblings have no psychological involvement with each other and show no signs of solidarity or responsibility toward each other. However, it is unclear whether separation occurs due to life events or due to underlying indifference in the sibling relationship and lack of a close emotional bond. There is scant research evidence on indifferent sibling relationships as much of the sibling research collected data from participants who did have some level of interest in their sibling and their sibling relationship. Therefore

little is known about how indifferent sibling relationships in adulthood have developed from childhood and which factors led to the loss of, or failure to develop a strong sibling bond.

Sibling relationship trajectory over the lifespan and cohort issues

Consistent with the above literature on the sibling relationship over the lifespan, Neyer (2002) found a general U-shaped developmental trend for the degree of emotional closeness and contact frequency. The trend showed a greater degree of emotional closeness and contact on childhood and adolescence, which decreased in early and middle adulthood due to leaving the family of origin and focussing on family of procreation and careers, etc. (Neyer, 2002). During the older adult years of retirement and 'empty-nest', the sibling relationship became more salient and contact frequency and emotional closeness increased. Neyer asserted that the sibling relationship is likely reselected due to its emotional significance developed from a lifetime of shared biographical and historical experiences, as well as greater life expectancies leading to a greater need to consolidate social resources in later life, of which siblings form a part. However, Bedford and Avioli (2012) highlighted research that showed differing contact frequency and support trends in sibling relationships over the lifespan (Buhl, 2009; Scott, 1996; White, 2001 as cited in Bedford & Avioli, 2012). Bedford and Avioli asserted that as well as oft cited factors such as methodological and socio-cultural structural differences in studies, contradictions in the sibling research might also be due to cohort differences, i.e., differing emphasis on, and availability of, intimate sibling relationships for World War II brother relationships versus post war 'baby-boomers'.

Support in adult sibling relationships

In early adulthood, the increasing focus on developing independence and autonomy has been found to lessen ties and obligations to family of origin and new ties and obligations to romantic partners and children might have not yet have been developed (Arnett, Ramos, & Jensen, 2001). Furthermore, Connidis (1992, 2010) posited that due to the voluntary nature of sustaining sibling ties in adulthood (Goetting, 1986) siblings may feel less obliged to provide support to each other than to children, spouse, and parents. However, siblings are often sources of support (Bedford & Avioli, 2012) and life events such as having children, widowhood, and illness and death of a close family member-except for a parent which has been shown to increase conflict and decrease relationship quality (Bedford, 2005; de Vries, 2012)- have been found to draw siblings closer together (Connidis, 1992; O'Bryant, 1988). Perceived psychological support from a sibling and having a genuine interest in one another's

well-being deepens and maintains existing close emotional ties among siblings (Cicirelli, 1991; Connidis, 1989).

Siblings have been found to provide either instrumental or social support. Instrumental support involved financial help, help during illness (Connidis, 1994), transportation, meal preparation (Avioli, 1989) and providing goods and services (Mikkelson, Floyd, & Pauley, 2011). Social support involved pleasurable sociability, advice, reassurance, self-validation (Avioli, 1989), and expressions of concern, love, empathy, respect, and confidence in the other person (Mikkelson et al., 2011). Research has found that higher rates of support are exchanged between siblings with more genetic relatedness. Though it is still unclear the extent to which genetic relatedness impacts on relational factors (such as closeness) and subsequently how those relational factors might motivate siblings to engage in support (Mikkelson et al., 2011). Most aspects of instrumental support tended to be dependent on physical proximity to one's sibling, whereas the emotional aspects of social support could be communicated without necessarily having physical contact (Avioli, 1989). Rather than the actual exchange of support simply the perception of the availability of sibling support has been shown to increase well-being in older adults (Avioli, 1989; Cicirelli, 1989; Connidis, 1994; White & Riedmann, 1992).

Support has been shown to be a factor in relationship satisfaction amongst siblings. As well as the instrumental and emotional support factors outlined above, Myers and Bryant (2008) found that communication (speaking to one another every day, affectionate verbal and non-verbal expressions of love) and protection (looking out for sibling's best interests and not letting others hurt him or her) indicated commitment to one's sibling and these were positively related to relationship satisfaction. Positive and open communication, sharing group membership and responsibilities have also been found to be positively related to increased trust, satisfaction, closeness, commitment, and solidarity in sibling relationships (Myers & Goodboy, 2010). These behaviours were used at a higher rate amongst siblings who already identified themselves as emotionally and psychologically close (Myers & Goodboy, 2010). Siblings with closer genetic relatedness (twins and full siblings) were found to use the relational maintenance behaviours at a higher rate than less genetically (half siblings), or non-genetically related siblings (step or adopted siblings) (Mikkelson, Myers, & Hannawa, 2011). This suggested that siblings who already felt close were motivated to engage in behaviour that maintained closeness. This also suggested that siblings who did not view themselves as close still engaged in behaviour that maintained the relationship (though at a lesser rate), indicating that all types of siblings consider their relationship to each other to be important enough to engage in behaviour that maintained the relationship (Myers, 2011; Van Volkom, 2006).

Some researchers suggested that the sibling relationship becomes voluntary in adulthood (Connidis, 1992; Goetting, 1989). Other researchers suggested that as the sibling relationship is ascribed it retains its involuntary status in adulthood and siblings may be motivated to maintain their relationship and provide support to each other due to a sense of obligation or duty (Mikkelsen, 2006; Myers, 2011). Myers (2011) investigated the reasons why adult siblings aged 18 to 63 years old chose to maintain their relationship. Though participants were invited to report on relationships with biological, step, or adopted siblings, no demographic data were collected or reported. Therefore it is unclear if reasons for maintaining relationship differ with sibling type. Responses were coded into seven categories; 1) *we are family*, 2) *we provide each other with support*, 3) *we share similar or common interests and experiences*, 4) *we are friends*, 5) *I love my sibling*, 6) *we are relationally close*, and 7) *we live close to each other*. These results are consistent with several themes in the sibling literature. First, physical proximity to a sibling encourages maintenance of the relationship (*we live close to each other*). Second, the sense of the sibling bond in childhood encourages family ties, a sense of obligation to the family and the sibling, and genuine affection for the sibling and these are motivations to engage in support for the sibling (*we are family*, *we provide each other with support*, *I love my sibling*, and *we are relationally close*). Third, siblings are often similar, share common values, concerns, and interests that encourage shared time and space and a sense of friendship with the sibling (*we share similar or common interests and experiences* and *we are friends*). Myers differentiated the reasons why siblings maintain relationships into two categories; circumstance (family obligations and physical proximity) and choice (commonalities and affection). Although it is not surprising that siblings who characterised their relationship as close, affectionate, and supportive sought to maintain those relationships, it is interesting that one's sense of obligation to family and to a sibling might be an important factor in continuing to engage in the relationship regardless of whether one is satisfied or feels close in the relationship.

Lee, Mancini, & Maxwell, (1990) posited that contact with a sibling may be motivated by factors such as closeness, feeling responsible for the welfare of a sibling and obligated to maintain contact, and conflict. Overall, siblings who lived closer to one another had the most contact, felt the most close, and felt the most responsible for their sibling. The study also found that siblings who lived closer to one another also experienced the most conflict, which the authors posit may be an artefact of having more contact due to physical proximity. This also suggests that merely having contact with a sibling does not guarantee relationship satisfaction. Contact because of obligation was found to be equally motivated by closeness and feeling responsible for a sibling. Contact by choice was found to be mainly motivated by

closeness, but also to a degree by feeling responsible for a sibling, suggesting that feeling close with one's sibling mediates what may be perceived as onerous obligation to look out for the welfare of a sibling (Lee et al., 1990). This study suggested that contact with a sibling may not be exclusively motivated by either positive relationship factors such as affection and closeness or a sense of duty or obligation, but that these factors may both be important to the reasons why siblings maintain their relationship.

It is unclear to what extent feeling obligated ties siblings together and influences contact and provision of support in the absence of closeness and affection, or if siblings truly sense the voluntary nature of their relationship and feel free to disengage from their sibling. Indeed, Avioli (1989) posited that if siblings fail to reciprocate support to the satisfaction of both parties in the relationship, this violates the expectation of equitable exchange in sibling relationships. This violation might disrupt the relationship and legitimise a sibling's physical and psychological withdrawal from the relationship, thereby reducing a sense of obligation (Avioli, 1989). Whiteman, McHale, and Soli (2011) also suggested that the sibling relationship operates on equity theory and social exchange theory. In equity theory, relationship partners track the balance of contributions and rewards from the relationship. An imbalance in the ratio of contributions and rewards results in relationship dissatisfaction and distress and a desire to withdraw from the relationship (Whiteman, McHale, & Soli, 2011). In social exchange theory, individuals also track investments and rewards gained from a relationship. If the costs of maintaining the relationship outweigh its benefits, and a more satisfying relationship is deemed to be available, then an individual is likely to withdraw from the relationship (Whiteman et al., 2011). Therefore, according to these theories, it appears that if a sibling cannot equitably contribute, this violates the egalitarian norms of the sibling relationship and legitimises withdrawal of contact and support.

In combining the research on adult sibling relationship maintenance, support, and the role of obligation with social exchange and equity theory, one would logically conclude that an imbalance of reciprocity would likely reduce one's sense of obligation to continue to provide support to a sibling, i.e., an adult sibling's sense of obligation is reduced when the other sibling does not equitably contribute to the relationship and violation of the norms of sibling relationships legitimises withdrawal from a dissatisfying relationship. However, the concept of obligation has not been clarified in the research on sibling relationship maintenance and it is unclear the extent to which a sense of obligation (whether influenced by affection and/or duty to family) motivates provision of support and continued investment in the sibling relationship. Furthermore, no researcher has specifically combined sense of obligation and social exchange

and equity theory variables, nor the degree to which sibling relationship factors (closeness, warmth, rivalry, ambivalence, or indifference) moderate a sense of obligation and decision to provide or withdraw support.

Structural variables

Structural variables such as gender, age spacing, birth order and genetic relatedness have been shown to have important outcomes in the quality of sibling relationships. Adult siblings reported more positive beliefs about their childhood relationships in same gender dyads than mixed gender dyads (Riggio, 2000; 2006). Overall, having a sister overwhelmingly represented better relational outcomes in terms of provision of support and experiences of closeness and affection (Cicirelli, 1989, 1991; Pulakos, 1989; Stewart, Kozak, Tingley, Goddard, Blake, & Cassel, 2001; Vogt Yuan, 2009; Voorpostel & Blieszner, 2008; Weaver, Coleman, & Ganong, 2003; White & Riedmann, 1992). Sister-sister relationships have been found to be the most intimate, warm and supportive, followed by mixed gender dyads and finally brother-brother dyads (Buhrmester & Furman, 1990; Cole & Kearns, 2001). Though sister-sister relationships were the most intimate (Connidis & Campbell, 1995), they could also be the most intense, with tension between sisters particularly detrimental to well-being in older age (Bedford, 1989a; Cicirelli, 1989; Van Volkom, 2006). Brother-brother dyads exhibited the highest level of rivalry (Cicirelli, 1982), experienced the least intimacy and conflict resolution, yet engaged more in companionate activities (Cole & Kearns, 2001). Only one study by Shortt and Gottman (1997) appeared to have contradictory findings. This study focussed on dimensions of warmth, conflict, and power to determine the contribution of family structural variables to closeness and distance in sibling relationships. The researchers did not find any effect of gender and closeness between adult siblings. However, closeness in the sibling relationship was found to be characterised by greater warmth and fewer power struggles suggesting that these factors are more salient than gender in facilitating closeness and warmth. Some researchers suggested that the gender differences in intimacy, caring, and nurturing in other sibling research might be due to females being socialised toward nurturing and emotionally intimate roles (Cicirelli, 1989; Ross & Milgrim, 1982; Van Volkom, 2006). Cole and Kearns (2001) suggested that measurement of intimacy in sibling relationships might be biased toward these socialised gender differences. They suggested that brother-brother dyads might in fact experience intimacy through shared activities rather than through intimate disclosure. In fact the findings by Shortt and Gottman suggested that development of key relationship skills such as showing empathy, validation, and successful conflict resolution can lead to establishing more harmonious sibling relationships regardless of gender.

Burhmester and Furman (1990) suggested that older siblings have the experience of being nurturing and caring and younger siblings have the experience of being nurtured and cared for. Younger siblings reported admiration for older siblings and perceived experiencing less conflict than their older siblings perceived experiencing with them (Burhmester & Furman, 1990). Older adolescent siblings were perceived by both older and younger siblings to be a source of support to younger adolescent siblings in social and school domains and risky behaviour (Tucker, McHale, & Crouter, 2001). However, adolescent siblings were found to be mutually supportive regarding family issues (Tucker, et al., 2001).

Greater age spacing between siblings that increases the gap between siblings' major developmental transitions may reduce a sense of closeness and connection around shared events such as marriage and parenthood (Conger & Little, 2010). However, a small age gap may also increase feelings of rivalry and competition (Conger & Little, 2010). Burhmester and Furman (1990) found that larger age spacing may facilitate more affectionate and nurturing relationships, whereas small age spacing increased conflict and vying for dominance. Less conflict with larger age spacing is consistent with other research (Stocker, Lanthier, & Furman, 1997). However, age spacing appears to account for less variance than other variables such as gender (Burhmester & Furman, 1990).

There is a dearth of research on multiple sibling dyads within the same family, including differences in genetic relatedness and the impact on the quality of adult sibling relationships and individual outcomes (Kramer & Bank, 2005). Thus no clear conclusions can be drawn from the literature. Given the changing structure of family in recent years, this is an important direction for future research.

Adults with siblings living with disabilities and mental illness

Siblings can be a source of support during difficult times, but can also be a source of stress. Over the past two decades literature has developed in the area of adult sibling relationships where one sibling is living with intellectual, developmental or physical disability, mental illness, or traumatic brain injury (Degeneffe & Burcham, 2008; Degeneffe & Lynch, 2006; Dew, Balandin, & Llewellyn, 2008; Greenberg, Kim, & Greenley, 1997; Greenberg, Seltzer, Orsmond, & Kraus, 1999; Hatfield & Lefley, 2005; Heller & Kramer, 2009; Lohrer, Lukens, & Thorning, 2007; Pompeo, 2009; Smith, Greenberg, & Seltzer, 2007). Davys, Mitchell, and Haigh's (2011) review of the literature on adult siblings of individuals with learning disabilities identified some themes that are consistent with the literature on normative adult sibling relationships. The trajectory of normative adult sibling relationships indicate decreasing closeness, contact, and

support during late adolescence and early adulthood due to developmental transitions such as establishing peer and romantic relationships, pursuing employment and education and leaving the home. During late adulthood there is an increase in closeness, warmth and support. This general trend was consistent in adults with siblings with a learning disability where younger, less established adults and adults with younger children living at home were less likely to be involved in caretaking and support of their siblings, though support began to increase in middle adulthood. Adults had an expectation of being involved in some capacity of future caregiving of their sibling, especially when parents pass away. The level of involvement expected was found to be related to family factors such as parental expectation and roles shaped by family values and norms. Furthermore, as is consistent with the literature on normative sibling relationships, sisters were found to provide more support and were more likely to be involved in caregiving roles than brothers (Davys et al., 2011).

Few studies focussed specifically on how the quality of the sibling relationship is impacted by factors associated with specific disabilities or disorders. In general, relationship quality appeared to be related to functioning and behaviour in the sibling (Davys, Mitchell, & Haigh, 2011). A greater degree of reciprocity in the sibling relationship has been found with siblings with higher functioning (Wilson, McGillivray, & Zetlin, 1992). Additionally, the worse or more difficult the behaviour associated with the disorder, the less closeness, affection, and warmth is present in the sibling relationship (Doody, Hastings, O'Neill, & Grey, 2010; Hodapp & Urbano, 2007; Orsmond, Kuo, & Seltzer, 2009; Orsmond & Seltzer, 2007; Smith & Greenberg, 2008; Taylor & Hodapp, 2012). In comparing between types of disabilities and disorders, researchers have found that sibling relationship quality is generally better with siblings with intellectual disability versus autism (Hodapp & Urbano, 2007; Orsmond & Seltzer, 2007), and intellectual disability versus mental illness (Seltzer, Greenberg, Krauss, Gordon, & Judge, 1997). Adults with siblings with mental illness versus intellectual disability reported more psychological distress and less psychological well-being particularly when they perceived their sibling as having a pervasive impact on their life (Seltzer et al., 1997; Taylor, Greenberg, Seltzer, & Floyd, 2008). However, a further study by Burke, Taylor, Urbano, and Hodapp (2012) found that regardless of sibling's functioning, disability, or behaviour, adults held an expectation that they would be involved in future caregiving of their unwell sibling when parents are no longer available as primary carers.

Lively, Friedrich, and colleagues (1995; 2004; Friedrich, Lively, & Rubenstein, 2008) have investigated the impact of coping with a sibling with schizophrenia. Lively, Friedrich, and Buckwalter (1995) found that adult siblings experienced ongoing grief and sadness reactions

from observing the effects of the illness. Adult siblings also reported a sense of distancing in their sibling relationship and greater distance and conflict amongst all family members. Lively, Friedrich, and Rubenstein (2004) also found the sibling relationship to be negatively impacted by disturbing behaviours associated with schizophrenia. Adults found verbal abuse from their sibling and disruption to household routine to be most stressful and impacted on well-being. This is consistent with findings of other research on adults with siblings with schizophrenia that found negative impacts on psychological well-being (Barnable, Gaudine, Bennet, & Meadus, 2006; Kristoffersen, Polit, & Mustard, 2000; Stalberg, Ekerwald, & Hultman, 2004). Lively and colleagues moved from a focus on the impacts on the sibling relationship to using a stress and coping theory framework to understand the needs and experiences of adults with a sibling with schizophrenia. Their further research is reviewed in the next chapter as it draws on stress and coping theory and is analogous to the experiences of adults with a sibling with substance use problems.

Summary

Several themes emerged from the body of literature on sibling relationships. First, the dimensions of sibling relationship quality were often described in terms of warmth or closeness, conflict or rivalry, ambivalence, and indifference. The sibling relationship was found to be often close in childhood, where close emotional ties, according to the literature on attachment relationships in siblings from a psychodynamics or social learning theory perspective, affectional and sometimes attachment bonds are formed. Further, as the literature drawing on social learning theory indicated, sibling can act as important social agents in childhood. The sibling relationship appeared to be characterised by distance in early adolescence as individuals become more invested in peer relationships and interests outside the family, but adolescents reported a growing sense of intimacy and closeness as they grow older. This tended to stabilise in early to middle adulthood, but siblings who have shared close emotional bonds and experienced affection and warmth during childhood sought to maintain contact and closeness in their relationship during normal developmental changes such as leaving home, education, marriage, and parenthood. Overall, the emotional climate of the sibling relationship from childhood set the tone for the quality of the relationship over the lifespan. Physical proximity to one's sibling appeared to encourage contact. However, contact with a sibling may not have equated to relationship satisfaction. Siblings reported feeling even closer in older adulthood and a close and supportive sibling relationship contributed to well-being. Having a sister contributed to the most closeness, warmth, nurturing and support in sibling relationships, with sister-sister relationships characterised as the most intimate.

Siblings have been shown to be an important source of support for one another. Siblings have been found to be motivated to maintain their relationship due to feelings of closeness and a sense of obligation to care for one another. However, it is unclear to what extent the quality of the sibling relationship (i.e., warmth, conflict, or indifference) moderated a sense of obligation to one's sibling, or if a sense of obligation was a barrier to withdrawing from a dissatisfying relationship. Lastly, some research suggested that having a sibling with a physical or mental illness impacted negatively on the sibling relationship and the health of the adult. An area that has received no research attention is the impact of having a sibling with an illicit drug use problem. This is the focus of the next chapter.

Chapter Three: Impact of drug use on family members

In this chapter I discuss the major models of understanding the impact of substance use in the family. First, codependency models, family systems theory and stress and coping models are discussed. Next, the research findings on the impact on family members are presented. The relevant literature on stress and coping in family members of a relative with a substance use problem is reviewed followed by a review of the limited literature on the experiences and impacts on siblings. The chapter concludes with directions for future research and the rationale for the aims of the programme of research reported in this thesis.

Models of family impacts

Codependency

Literature dating back to the 1950s in the alcohol dependence field highlighted a pathological view of partners of problem drinkers, such as personality deficiencies in the partner, or viewing the partner or family members as contributing to the maintenance of problematic use because of internal pathology (see Watts, Bush, & Wilson, 1994 for review). A major model that emerged in the 1980s from the United States dependence and self-help field was the Codependency model. The Codependency model has suffered from disparate conceptualisations and definitions in the popular and scientific literature (Hands & Dear, 1994; Harper & Capdevila, 1990). Originating from disease model based Alcoholics Anonymous, codependency was originally conceived of as a disease present in the wives of 'alcoholics' i.e., alcohol dependent persons (Haaken, 1990; Harper & Capdevila, 1990). Codependency has also been conceived of as relationship addiction, as a personality disorder (disturbed personality hypothesis) or as dysfunctional behaviour (but only in relation to disturbed personality or disease concepts) (see Hands & Dear, 1994 and Harper & Capdevila, 1990 for review). There has been some agreement on the core characteristics of 'codependents' including a reliance on others for internal validation and sense of self, fulfilling others' needs before one's own, and engaging in caretaking or rescuing behaviour such as ameliorating the consequences of the problem drinker's behaviour, and suppressing one's own emotions (Dear, 2002; Dear & Roberts, 2005; Dear, Roberts, & Lange, 2004). Attempts to develop a workable definition in the popular literature have resulted in descriptions of behaviour or theories of the origin of the 'disease' rather than a clear definition of codependency based on empirically validated psychological constructs and theories (Hands & Dear, 1994).

Despite the lack of an empirically validated definition the notion of codependency continued to gain popularity through to the early 1990s mainly due to endorsement through Twelve Step programs and publically available self-help literature (e.g. Beattie, 1987, 1989). Attempts were made in the scientific literature to validate, measure, and develop diagnostic criteria for codependency (Cermak, 1986; Dear, 2002; Dear & Roberts, 2005; Fischer, Spann, & Crawford, 1991; Harkness, Swenson, Madsen-Hampton, & Hale, 2001; and see Fuller & Warner, 2000 for review). Some psychometric scales were developed and, when tested, showed a degree of validity and reliability (Dear, 2002; Dear & Roberts, 2005). However, the applicability of the scales was limited due to a lack of empirical definition and a valid psychological construct of codependency.

Another criticism of the model highlighted a gender bias. The feminist perspective critiques codependency as pathologising women who are behaving in accordance with their socialised roles of nurturing and caring for others (Dear & Roberts, 2002; Hands & Dear, 1994; Haaken, 1990). It is also argued that the codependency label maintains the focus of ascribing pathology to women more than men and it has been further legitimised by treatment professionals through Twelve Step rehabilitation programs in the United States (Asher & Brissett, 1988). Therefore women are retained in individual treatment rather than focussing on the need for social change (see Hands & Dear 1994 for review). Despite the recognition of a gender bias and other limitations of the codependency label as ascribed to partners of problem drinkers, the concept of codependency was still endorsed by treatment professionals in the United States and extended to include labelling other family members as 'codependents' (Haaken, 1990).

Codependency and the family

The notion of codependency as a disease was expanded through other twelve step programs such as Al-Anon (primarily wives, but also other family members of alcoholics) and ACOA (Adult Children of Alcoholics) (Haaken, 1990). Codependency was generalised to all family members and even the closest members of the alcohol dependent person's social network (Gierymski & Williams, 1986). All family members were viewed as suffering from an identical disease process to the alcohol user, with codependency being a primary disease with its own physical symptoms affecting every single member of the family (Gierymski & Williams, 1986). Family members were seen as enabling the disease to continue as recovery in the user risked the loss of role for the codependent, an idea analogous to the alcohol user losing their substance (Harper & Capdevila, 1990). Adult children of alcohol dependent parents were seen

as internalising a set of rules that allowed them to cope in their family of origin such as caretaking or being responsible for others (Haaken, 1990). This manifested in parentification (particularly of daughters) to compensate for the decreased availability or capacity for caretaking in the alcohol dependent parent. Internalisation of this role led the codependent adult child of the alcohol dependent person to perpetuate dysfunctional or pathological behaviours (Haaken, 1990).

Codependency therefore began to be named as a family disease in the Al-Anon and ACOA literature (Gieryski & Williams, 1986; Haaken, 1990; Harper & Capdevila, 1990). With a focus on the need to treat the family members of alcohol users, the language of systemic family therapy began to be incorporated into the treatment field (Gieryski & Williams, 1986; Harper & Capdevila, 1990; Prest & Protinsky, 1993). However, the actual practice of treatment was without the underlying theory of family systems (Harper & Capdevila, 1990). Indeed treatment of family members did not involve systemic family therapy. Instead 'codependents' were treated in parallel individual therapy to address their "denial" and treat their codependency (Harper & Capdevila, 1990).

Moreover, critiques of the codependency construct highlight the tendency in the literature to present codependents as an homogenous group with identifiable negative behaviours and symptoms (Gieryski & Williams, 1986; Hands & Dear, 1994). A focus on the homogeneity of symptoms based on observational data that targets negative similarities risks stereotyping every family member of an alcohol dependent person and enforces the pathological view (Gieryski & Williams, 1986). However, a shifting of the focus revealed the many heterogeneous responses, resources, and coping strategies among the family members (Gieryski & Williams, 1986; Gomberg, 1989). Furthermore research has shown that family members show a similar variety of responses to many other stressful events in the family such as mental illness and other diseases and disorders (Orford, 1987). Family members' coping responses are then normalised and therefore are not pathological (Hands & Dear, 1994).

The codependency concept gained popularity through pop psychology self-help literature and the pervasiveness of Twelve Step programs. However, an empirical construct of codependency has continually defied validation either as a disease, a personality disorder, or even identification of codependents as an homogenous population with some inherent pathology. The concept of codependency can therefore be discarded in favour of models that acknowledge the normalised variety of responses inherent in family members coping with stressful situations. The codependency concept should also be discarded in favour of models

that draw on empirically validated theories that link back into mainstream psychological theory (i.e., models that draw on psychodynamic and social learning theory). Models that integrate mainstream psychological theory in the drug and alcohol field are family systems models and stress and coping models.

Family systems theory

Family systems theory is not a theory per se, rather the notion of family systems theory has arisen from family therapists who apply general systems theory to understanding processes within a family (Minuchin, 1985). General systems theory is grounded in biological science and cybernetics (Goldenberg & Goldenberg, 2008). A system is viewed as more than the composite of its parts and the system as a whole can only be understood in terms of the relationship between each part. Thus the family as a whole system can only be understood in terms of the dynamics between each family member, rather than each family member in isolation (Goldenberg & Goldenberg, 2008).

The relationships between each family member are not cause-and-effect (linear) in nature. The relationships are reciprocal, with recognition of circular causality in multiple directions and between multiple family members (Goldenberg & Goldenberg, 2008). Complex transactional influences such as coalitions, alliances, and conflicts are then understood in terms of how they develop from the family system and how they then reciprocally influence the family system (Goldenberg & Goldenberg, 2008). These ongoing and reciprocal transactions help to establish family norms, values and beliefs that organise and regulate family processes (Walsh, 2012a). Family norms become unspoken rules about expected roles, what behaviour is permitted, and consequences for breaching expectations for each member of the family (Walsh, 2012a).

The family can be viewed as going through its own life cycle with shifts and changes in the roles, expectations, closeness and boundaries in the relationships between each member over time (McGoldrick & Shibusawa, 2012). These tend to be normative transitions, though stressors can occur to the family when change occurs 'off time', such as the death of a child (Walsh, 2012a). Family homeostasis refers to the family's ability to adapt to change to regain equilibrium to maintain stability in the system in the face of a stressor (Goldenberg & Goldenberg, 2008). Positive and supportive relationships between family members, including siblings, may contribute to growth in the face of adversity and strengthen family resilience (Walsh, 2012b). Healthier families respond to stress flexibly with more effective problem solving and coping strategies (Walsh, 1995). However, demand for change that is too

challenging, too great, or too fast may be met with rigidity in transactional patterns and boundaries rather than adaptability to permit restructuring within the system (Goldenberg & Goldenberg, 2008; Minuchin, 1974).

Sub systems within the family system are organised hierarchically according to gender, generation (parent/child), common interests, or function (family roles and responsibilities) (Minuchin, 1974). Subsystems are demarcated by boundaries that determine membership and define how much contact is allowed with other family members outside the subsystem in order to preserve the subsystem's autonomy (Goldenberg & Goldenberg, 2008). The sibling subsystem is an important training ground for learning to support, negotiate, compete, and resolve conflict with similar age peers (Feinberg, Solmeyer, & McHale, 2012). The systemic issue arising from parent-child relationships and the quality of sibling relationships has been highlighted in the research reviewed in chapter one on parental differential treatment, highlighting the reciprocal and circular causality concepts in systems theory.

The sibling subsystem may have its own power balance between older and younger siblings, but this power may be deferred when negotiating with the parental subsystem which has more authority in the hierarchy (Goldenberg & Goldenberg, 2008). Subsystems may be formed through temporary or permanent alliances and coalitions such as between a parent and a child. Children that are co-opted by a parent into an inappropriate alliance or coalition against another parent, a process called triangulation, indicate problems in the spousal subsystem (Cox & Paley, 1997; Minuchin, 1974). Subsystems with boundaries that are undefined or blurred may sacrifice development and autonomy amongst members and results in enmeshment. Whereas subsystems with boundaries that are too fixed or rigid may sacrifice involvement, warmth and nurturance between other members of the system, and results in disengagement from each other (Minuchin, 1974). A family that is characterised by disengagement or enmeshment as defined by inappropriate coalitions and rigid or diffuse boundaries has failed to develop the functioning of each member. These families are seen as dysfunctional or as having unworkable patterns and processes (Goldenberg & Goldenberg, 2008; Walsh, 1995).

Family systems and the drug and alcohol field

As discussed above, the notion of family systems relevant to the drug and alcohol field began to develop with an initial focus in treating alcohol dependent persons and their family members. In the 1970s Steinglass and colleagues investigated the interaction of couples where

at least one member of the couple was identified as an alcohol dependent person (Davis, Berenson, Steinglass, & Davis, 1974; Steinglass, Davis, & Berenson, 1977). A model of interaction based on systems theory was derived from observing couples during periods of intoxication and sobriety. This model was applied when wet (currently drinking) and dry (currently sober) families were observed in laboratory conditions (Steinglass, 1979) and in the home environment (Steinglass, 1981). Steinglass and colleagues concluded that the use of alcohol within the family may serve an adaptive function by allowing families to interact in ways that accomplish important tasks such as problem solving. The use of alcohol in the family therefore becomes reinforced to maintain family stability.

Steinglass (1985) used family systems theory to develop a model of 'alcoholism maintenance'. The 'alcoholic family' is viewed as a system organised around the theme of alcohol, including 'alcoholic behaviours' or dependence behaviours (Steinglass, 1985). The 'alcoholic family' relies on 'alcoholic behaviours' for predictable responses to short term problem solving and daily tasks in order to maintain homeostasis. 'Alcoholic families' are viewed as seeking to maintain stability in the short term rather than seeking long term growth (Steinglass, 1985). Furthermore, stability in the family is dependent on the drinking behaviour of the alcohol dependent person to problem solve in the short term and return the family to a stable state (Steinglass, 1985).

In a review of the literature of substance use and the family system, Kaufman (1985) described family members as enmeshed, especially mothers with their drug using sons. Fathers were seen as either absent (physically or emotionally) or also enmeshed. Kaufman polarised siblings as either 'very good' or 'very bad'. Very good siblings either adopt a parenting role to replace the absent father or become very successful. The good sibling was viewed as being able to individuate from the family through vocational success. However, if siblings did not individuate, Kaufman (1985) described them as also being enmeshed with the family. The very bad siblings fused with the original drug user and also engaged in substance use. The family system is viewed as being maintained through mutual feelings of guilt and manipulation of family members where the user relies on parents to support drug use and family members scapegoat the user for family problems (Kaufman, 1985).

More recent literature indicated that clinicians continued to draw upon family systems theory as the focus of the literature was on the evaluation of family therapy as treatment for substance use. However, there is not much further research elaborating or validating family systems theory as applied directly to understanding drug use in the family. Furthermore, the

family therapy field may not draw directly upon family systems theory when treating substance use in the family. Family therapy might involve different approaches and a variety of interventions drawn from several theoretical orientations including behavioural marital and family therapy, group approaches, and macro-systemic approaches, as well as family systems theory (Corless, Mirza, & Steinglass, 2009).

Stress and coping models

Stress and coping models sit within the broad paradigm of social learning theory because of the emphasis on cognitive and affective components of coping responses to stress that are appraised in terms of whether they will lead to rewards or punishment. In relation to psychology stress can be seen as “any event in which environmental demands, or internal demands, or both tax or exceed the resources of the individual” (Monat & Lazarus, 1991, p.3). Coping is defined as “an individual’s efforts to master demands...that are appraised (or perceived) as exceeding or taxing his or her resources” (Monat & Lazarus, 1991, p.5). In stress and coping models people are seen as responding differently to long standing adversity such as war, unemployment, illness, or living with an ill relative. Some coping responses are deemed as more useful than others in dealing with the strain, with less successful strategies resulting in deterioration of health and well-being (Lazarus & Folkman, 1984). Inherent in the stress and coping model is the normalisation of the variety of responses that people have to different stressors as well as the acknowledgement of the capacity to cope.

Cognitive appraisal is a key component of stress and coping theory. In order to distinguish whether a situation is benign or a threat, we use *primary* and *secondary* appraisal to decide if and what type of coping resources need to be mobilised in response to a stimulus (Lazarus & Folkman, 1984). *Primary appraisal* evaluates whether the situation is a) irrelevant, where we judge that there is no response needed to a stimulus, b) benign-positive, where we judge that the outcome of responding to a stimulus will result in rewards such as positive feelings, and c) stress appraisals, where a stimulus is judged as stressful and requiring coping responses (Lazarus & Folkman, 1984). Stress appraisals include harm/loss, threat, or challenge. Harm/loss appraisals occur when a person has sustained a psychological or physical injury or illness, or loss of a loved one. Threat appraisals occur when initial or further harm or loss is anticipated and is characterised by negative emotions such as fear, anxiety and anger. Challenge appraisals occur when a threat is sensed (and therefore can occur simultaneously with threat appraisals), but involve the anticipation of rewards such as growth, enhanced social and personal resources, and development of new coping skills (Schaefer & Moos, 1992). Challenge

appraisals are therefore characterised by positive emotions such as eagerness, exhilaration, and excitement (Lazarus & Folkman, 1984). Secondary appraisal involves examining what might and can be done to manage or cope with the situation, whether using the coping responses will lead to the desired outcome, and a judgement of one's effectiveness in implementing those responses to obtain the desired outcome (Lazarus & Folkman, 1984). In short, primary appraisals evaluate what is at stake and secondary appraisals evaluate coping options, and the interaction of those factors shape the degree of stress and emotional reactions (Lazarus & Folkman, 1984).

Lazarus and Folkman (1984) viewed coping as an ongoing *process* of cognitively and behaviourally responding to, appraising and reappraising specific internal and external stress demands in an *effort* to manage those demands (Carpenter, 1992; Folkman, 1992). Furthermore coping may serve two main functions: emotion focussed coping to manage emotions when a situation is appraised as being unable to be changed or modified, or problem focussed coping when the situation is appraised as being able to be managed or changed. Cognitive strategies used in emotion focussed coping include avoiding, minimising, distancing, selective attention, positive comparisons, and finding positives from negative events. Other cognitive strategies used in emotion focussed coping involve ways to increase emotional distress to an acute level through self-blame or self-punishment in order to feel relief from distress when it subsides. Behavioural emotion focussed coping includes taking one's mind off a problem through exercise, meditation, substance use, or venting emotions and seeking emotional support (Lazarus & Folkman, 1984). Problem focussed coping, as the name suggests involves problem solving efforts through identification of the issue and possible solutions, weighing up costs and benefits of each option, and taking action. Problem focussed coping may include a behavioural element such as removals of barriers, learning new skills, and gathering physical and mental resources, and a cognitive element such as adjusting expectations of the self (aspirations, ego involvement) (Lazarus & Folkman, 1984). Emotion focussed and problem focussed coping often occur simultaneously and can either facilitate or impede each other (Lazarus & Folkman, 1984).

Lazarus and Folkman (1984) stated that certain factors influence appraisal of a situation and coping responses. Appraisal of a situation can be influenced by a person's level of commitment (how much they value the relationship, what is important or meaningful to them motivates coping) or beliefs (i.e., the extent to which one believes they have control over outcomes). Appraisal is also influenced by situation factors such as whether a situation or event is novel, predictable, imminent, of long duration or chronic in nature, or ambiguous (i.e., of unknown

type, predictability, and temporal factors). These factors are interdependent and influence the evaluation of what is at stake (primary appraisal). The evaluation of coping options in secondary appraisal is influenced by a person's coping resources, i.e., what is available to mobilise for a coping response. Coping resources include a person's health status, material resources, skills (problem solving and social skills), positive beliefs that give rise to hope, and social support. Social support includes emotional support (reassurance, confiding), tangible support (financial aid, doing practical tasks for someone who is ill), and informational support (provision of information or advice). As highlighted in chapter one in the sibling support literature, social support can provide a buffer against stress and contribute to well-being (Lazarus & Folkman, 1984). However, Folkman (1992) highlighted that the most benefit can be gained from social support when a person is aware of what type of social support (i.e., emotional, instrumental) will suit their needs. A mismatch between needs and support such as receiving advice when emotional support is needed may lead to further frustration (Folkman, 1992). Consistent with the sibling literature, simply perceiving that one can draw on social support if it is needed contributes to coping resources.

Thus some of the factors that influence stress and coping have already been highlighted in the general adult sibling literature, particularly in the literature on the impact of unwell siblings on well siblings. As discussed in chapter one, Friedrich, Lively, and Rubenstein (2008) looked at the coping strategies preferred by adult siblings of people living with schizophrenia. The strategies involved emotion focussed and problem focussed coping using cognitive and behavioural strategies. The strategy ranked first by siblings was 'realise schizophrenia is a disease, not anyone's fault'. This emotion focussed cognitive strategy allowed management of stress through changing the meaning of the event. However, this preferred strategy may not be relevant to siblings of drug users as there are many models of drug use. For example, schizophrenia might have a biological or organic basis, which fits with a disease model and does not carry a moral ('blaming') component. Whereas individuals' beliefs around drug use might adhere to a moral model that not only views drug dependence as a disease, but also views the drug user as responsible for change (Hopson, 1993). This connotes that the user is also responsible for not changing, perhaps 'choosing' to use drugs. There might not be the same level of 'blamelessness' or compassion for the drug user as there is for an individual diagnosed with the disease schizophrenia. Therefore, the preferred coping strategy used by adults with a sibling with schizophrenia might not be directly transferable to adults with siblings with an illicit drug use problem.

Other coping strategies ranked highly by siblings of individuals with schizophrenia included reading literature on schizophrenia, having a supportive family, seeing the sibling's symptoms controlled and suffering less, living apart from the sibling, accepting the sibling's illness, talking to other people with an ill family member, accepting the individual will never recover, and dealing with one day at a time. Other strategies included exercising, spiritual activities and joining a support group. Stalberg, Ekerwalk, and Hultman (2004) also found that well siblings use avoidance strategies to create emotional and physical distance from their sibling with schizophrenia. These authors also described caregiving and grieving as coping strategies for well siblings. These strategies highlight the importance of emotional, tangible and informational social supports as major components of siblings coping. Though the specific strategies may be different for siblings of drug users, social support may be key for this population and may become evident in future research.

Friedrich, Lively, and Rubenstein (2008) also looked at immediate needs for siblings. Respondents identified the most important need was for services for ill siblings, rather than services for themselves. Other important identified needs included open communication in the family, emotional support from loved ones, information about the illness, and relationships and activities outside the family. Other research has shown that well siblings are particularly dissatisfied by services provided to their unwell sibling and informational support provided by professionals for themselves and the family regarding schizophrenia and treatment (Barnable, Gaudine, Bennet, & Meadus, 2006). Again these needs highlight the relevance of professional services for siblings of individuals with a mental illness which may be relevant to siblings of drug users. Indeed future research may find that siblings only need to access drug and alcohol agencies directly for services related to quality informational support. Social support within the community and interests and relationships outside of the family might be more beneficial and effective for maintaining adult sibling well-being.

Stress and coping models in the drug and alcohol field

Literature that draws on stress and coping theory in the drug and alcohol field acknowledges multiple factors and transactional influences within the family in the course of drug use, even if the aetiology of use might have multiple origins (Orford, 2001). Therefore stress and coping models represent a departure from the pathology models of the codependency movement. In the drug and alcohol field where those disturbed personality hypotheses regarding spouses of alcohol dependent persons were predominant, Finney, Moos, Cronkite and Gamble (1983) and colleagues endeavoured to investigate stress and coping perspectives in a conceptual

framework of spouse functioning. They posited that four spouse-related characteristics (ethnic status, education, initial functioning, and coping style) would interact with environmental characteristics (namely alcohol dependent partner impairment, environmental stressors, and family social environment) to impact on spouse functioning as measured by level of the spouse's own alcohol consumption, depressed mood, physical symptoms, and medication use. They found that use of avoidance coping strategies by the spouse such as over-eating and keeping feelings to oneself had a significant effect on depression and marginal significant effect on alcohol and medication use. Impaired functioning in the alcohol patient such as anxiety, depression, physical symptoms, and whether the alcohol patient was working, had direct significant effects on spouse depression, physical symptoms and medication use. The authors suggested that living with a partner with severe alcohol use presents a significant environmental stressor that, if dealt with via avoidance rather than active cognitive and behavioural coping strategies, contributes to negative impacts on well-being.

Extending the stress and coping perspective to understanding family members, Cronkite, Finney, Nekich and Moos (1990) investigated family adaptation to having a partner or a parent with an alcohol use disorder (whom they term 'alcoholic partner'). Summarising research on spouses of alcohol dependent partners, Cronkite et al. (1990) stated that there were no differences in occupational functioning, stressors, social resources, and coping between spouses of remitted alcohol dependent persons and community controls. However, spouses of an alcohol dependent partner who had relapsed experienced more life stressors, increased alcohol use and depressed mood, and viewed their family as less cohesive. Given that no data supported the disturbed personality hypothesis, Cronkite et al. stated that spouses of alcohol dependent persons were normal individuals trying to cope with cyclical crisis situations as a result of their partner's drinking. The significant strain experienced during these times abated once the partner engaged in efforts to control his or drinking behaviour, though strain continued if there were residual psychosocial impairments in the alcohol dependent partner.

When comparing children of alcohol dependent parents with matched controls, Moos and Billings (1982) found differences in emotional and physical status. Children of remitted alcohol dependent parents and control children were comparable on measures of physical health and emotional functioning. However, children of relapsed alcohol dependent parents were more likely to suffer from mood problems such as depression and anxiety, suffer indigestion and nightmares, and were more likely to suffer serious physical and mental problems. In addition, the families of relapsed alcohol dependent persons were less cohesive and less likely to promote development among family members. Although this study did not specifically focus

on types of coping strategies employed by children, the authors highlighted the importance of understanding the functioning and coping in all family members and subsequent reciprocal impacts on the family system. The implicit circular and reciprocal nature of stress and coping (i.e., how one's family member's behaviour impacts on another and how their coping responses further impacts on the system) makes explicit how systems theory links with stress and coping theory.

Stress and coping models were also applied to understanding coping in spouses of alcohol users by Orford and colleagues (Orford, Guthrie, Nicholls, Oppenheimer, & Hensman, 1975). Their research has expanded over the past three decades to understanding the stress and coping in family members of substance users (Copello, Templeton, & Powell, 2010; Orford, 1987; Orford, et al., 2001; Orford et al., 1998; Orford, Copello, Velleman, & Templeton, 2010; Orford, Rigby, Miller, Tod, Bennett, & Velleman, 1992; Orford, Velleman, Copello, Templeton, & Ibanga, 2010). Family members are viewed in terms of experiencing strain created by a close relative's substance use. Family members are seen to employ specific strategies to cope with stress resulting from that strain (Orford et al., 1992; Orford et al., 2001). These strategies are seen as normal responses by ordinary people to a very difficult situation (Orford, Velleman, Copello, Templeton, & Ibanga, 2010).

Stress-Strain-Coping-Support Model

The Stress-Strain-Coping-Support (SSCS) model extended the stress and coping theory to elucidate the stress experienced by family members, the resulting strain, ways of coping, and beneficial supports (Orford, Copello, Velleman, & Templeton, 2010). As outlined above the SSCS model acknowledged the *stress* created in a family when one member develops a drug use problem. Problems arising from drug dependence can be characterised by an excessive focus on obtaining and using a substance to the extent that the user's resources such as time, attention, and finances are taken away from the needs of family, relationships, employment, education, and other responsibilities (Orford, Copello et al., 2010). The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR, American Psychiatric Association, 2000) classification for substance dependence and abuse acknowledged the significant impairment and distress in the user's work, leisure life, interpersonal relationships, legal issues, and physical and psychological problems. The impacts on the substance user's life can represent significant stress for the family members that can be caught in the fallout of these situations (Orford, Copello et al., 2010). Orford and colleagues endorsed a cause and effect position. Regardless of the family member's status of health prior to experiencing the stress caused by a

family member's problematic drug use, the *strain* caused by the stress resulting from a family member's drug use problem resulted in increased rates of general, physical and mental ill-health in family members (Orford, Copello et al., 2010). The specific stress and strain impacts for family members are further discussed in the research findings on family impacts below.

The third aspect of the model involved family members ways of *coping*, responding to or managing the problems related to the drug use or to the drug user themselves (Orford, Copello, Velleman, & Templeton, 2010). The authors suggested that coping strategies are not always well thought out and can include ways of responding that family members find both effective and ineffective. An essential component of coping also involved the dilemmas that family members face in the struggle to decide the best ways of responding. However, an essential difference between the SSCS model and other pathology based models is the inherent assumption that family members have the capacity to cope and are empowered to behave in ways that both improve their own health and impact the substance user in a positive way (Orford, Copello et al., 2010).

The last component of the model interconnected with coping is social *support* for family members. Quality social support is seen as helping the family member cope with the problem (Orford, Copello, Velleman, & Templeton, 2010). Therefore social support is not only the people in the family member's close social network, but also emotional, informational, and material support from both formal and informal areas such as friends or professionals. However, there can be significant barriers to family members seeking support (Orford, Copello et al., 2010). Ways of coping, social supports, and barriers to seeking support are further discussed in the research on the SSCS model below.

The SSCS represented an alternative way of viewing family members that recognised the impacts in the forms of stress and strain and normalised the ways that family members respond to problem drug use in the family. Orford and colleagues used the SCSS model to underpin interventions that improve the responses of professionals to family members (Copello & Orford, 2002; Copello, Ibanga, Orford, Templeton, & Velleman, 2010; Copello, Orford, Velleman, Templeton, & Krishnan, 2000; Copello, Templeton, Orford, & Velleman, 2010a, 2010b; Orford, Templeton, Patel, Copello, & Velleman, 2007). Where the codependency model views family member's coping responses as pathological, the stress and coping model views their responses as normal. Further, the stress and coping model acknowledges the variety of complex and often apparently conflicting coping responses that family members use in response to stress and strain. Drawing on the perspective of stress and

coping models allows professionals to normalise and validate the distress that family members feel and the dilemmas they face in trying to find the right coping strategy, instead of seeking to 'fix' family members. Professionals can recognise the stress and strain on family members and seek to support them in ways that assist them to cope with the impacts.

Research findings on family impacts

The advent of stress and coping models in the drug and alcohol field allowed commonalities in the impacts of drug use on all family members to be identified. These impacts were family violence, shock, grief, fear, anger, guilt, worry, loss of trust, shame and stigma, social isolation, physical and mental health problems (Barnard, 2005; Barnard, 2007; Jackson, Usher, & O'Brien, 2007; Orford, et al., 2001; Orford, Rigby, Miller, Tod, Bennett, & Velleman, 1992; Orford, Velleman, Copello, Templeton, & Ibanga, 2010; The Parliament of the Commonwealth of Australia, 2007). Financial costs were also incurred by family members through supporting the user. The family also incurred costs through funding treatment, lost income from taking time off work to care for the user, from having the user live under the same roof, or supporting the user to maintain their own home. Further costs were incurred through theft, loans, and paying the user's debts (The Parliament of the Commonwealth of Australia, 2007). Family members were therefore not only coping with financial burdens, but suffered from a range of psychological, emotional, social, and health costs.

Copello, Templeton and Powell (2010) suggested that even a conservative estimate of one family member per individual with an alcohol or drug use disorder would mean that more than 91 million people worldwide are suffering from the above impacts. In Australia, the Australian Bureau of Statistics 2007 National Survey of Mental Health and Wellbeing (2008) estimated the prevalence rate of 1.4% of the people in the population who met criteria for a 12-month drug use disorder (excluding alcohol). This would suggest that a similar percentage of families in Australia are affected by the impacts of a family member's drug use disorder. However, as data are not collected in Australia it is not possible to have an accurate picture of the number of family members impacted and the costs incurred.

The focus of the impact of drug use in the literature has been on the experiences of partners, parents, and children and how they have coped. Although these family members had common experiences, the research also showed variability in the impacts between each population according to the specific relationship to the user. In Orford, Velleman, Copello, Templeton, and

Ibanga's (2010) review of their group's two decades of research on the impact of substance use on the family, the authors concluded that while there might be some differences in the experience that are more prominent depending on the relationship to the user, the overall essence of the experience is the same for all family members. Some of those nuances in experience according to the literature are explored here.

As described above, the focus of the early research on partners of substance users has been on the experiences of wives of problem drinkers. As the Codependency model has been discarded in favour of the more empirically accepted stress and coping models, Hurcom, Copello and Orford (2000) reviewed the relevant literature on the experiences of partners of problem drinkers from the stress and coping perspective. Hurcom et al. (2000) suggested that female partners tend to use avoidance coping strategies more than male partners. They reported that avoidance strategies are less effective in dealing with stress and sometimes resulted in higher rates of depression, alcohol intake, and increased conflict in the relationship. Orford and colleagues' coping typologies such as active and avoidance strategies have been further researched and revised and are reviewed later in the chapter.

The research summary by Cronkite, Finney, Nekich, and Moos (1990) on children of parents with an alcohol use problem is reviewed above. Several aspects of the nature of substance dependence in general have been found to have serious impacts on children of problem substance users. The use of parents' resources to obtain and use drugs as well as the impacts of regular use, intoxication, or dependence had negative consequences on the family structure and the physical, social, and psychological development of the child. Velleman and Templeton's (2007) review of the literature highlighted key family structures and functions that are disrupted by parents' problem drug use. These were: rituals (i.e., birthdays or Christmas); roles (shift in roles to compensate for the user's behaviour such as disciplining and finances); routines (unpredictability in the user's behaviour); communication; social life; finances; relationships and interactions. Other general risk factors that, if present in the home, exacerbated outcomes were: high levels of family disharmony or violence; physical, sexual, or emotional abuse; inconsistent, ambivalent or neglectful parenting; absence of a stable adult figure; exposure to, or awareness of, criminal activity; witnessing drug use or paraphernalia (see Velleman & Templeton, 2007 for more).

As well as being at risk of experiencing or witnessing violence, abuse, or neglect, children and adolescents felt negative emotions such as shame, fear, guilt, anger, and embarrassment, or they adopted responsible or parenting roles at an early age. Although some of these

experiences are not unique to children, such as negative emotions, these negative experiences resulted in behavioural and emotional difficulties including antisocial behaviour or problems with school, social isolation, peer relationship difficulties, anxiety and depression, and an increased likelihood of being referred to child protection services. However, though the presence of a parent with substance use brought the above risks, Velleman and Templeton (2007) also recognised that there are resilience and protective factors that can ameliorate these risks. Furthermore, they stated that practitioners can facilitate promotion of the resilience and protective factors to modify the impact.

For parents of problem drug users several conflicts arose in the midst of trying to manage the problem. Barnard (2007) highlighted the conflict parents face in having so much focus on the problem drug user that other children in the family miss out on parental resources.

Relationships between all family members became strained when arguments arose over the best way to respond to the problem. Other research suggested that parents felt guilty, responsible, or blamed for the problem (Jackson, Usher, & O'Brien, 2007). The experiences of the siblings were explored in a limited way in the research on parent's experiences. These studies are further explored in the review of the research on siblings.

Research into family impacts using stress and coping models

Orford, Rigby, Miller, Tod, Bennett, and Velleman's (1992) early work drawing on the stress and coping theory created a provisional typology of coping in fifty family members of illicit and licit (prescribed benzodiazapines) drug users. The early research is reviewed here as Orford and colleagues are among the first and the most prolific researchers to have drawn on the stress and coping models. This specific study is also one of the few studies that identified specific coping strategies of siblings. The majority of relatives in this study were female partners, although male partners, parents, one daughter, and four siblings were included. Participants reported being exposed to the drug use in the family from between six months and 19 years. Participants reported the type of stress experienced in relation to the substance user's behaviour. Types of stress included violence and verbal aggression, unpredictable behaviour and mood, stealing, selling or damaging property, embarrassing behaviour, irritability, and the user going missing without informing others. Semi structured interviews with the participants elicited details of coping; that is, anything the participant reported doing, feeling, or thinking in response to, or as a consequence of, the drug use.

Qualitative analysis revealed a preliminary eight-fold typology of coping subsumed under four main categories. The first category named 'Angry or withdrawing' involved emotional, inactive, or avoiding coping strategies. The second category named 'Kind, non-confrontative' involved being tolerant and supportive of the user. The third category named 'Firm towards the user' involved controlling and confrontative coping strategies. The fourth coping strategy named 'Self-protective' involved the family member seeking a life independent of the user or their behaviour.

These coping strategies were not used discretely and consistently by family members. Rather, several coping strategies were engaged in at a time, or over time. The authors noted that family members overall commonly engaged in a mixture of tolerance, support for the user, and control strategies. They identified a subset of family members (two sisters, two brothers, and a daughter) who primarily engaged in kind/non-confrontative strategies (tolerant or supportive of the user) and were not typically firm toward the user (controlling or confrontative) or self-protective (independent).

The authors suggested that the siblings and adult child participants, having self-selected to be part of the study, might be more highly concerned about the user's drug use and might not represent the normal adult sibling or offspring role. This statement assumes that a more typical adult sibling role would involve being less concerned and more emotionally or behaviourally disengaged from the drug user. This also leaves the question open as to whether typical adult siblings actually cope with the drug user's behaviour through disengaging, or whether they have less need to engage coping strategies due to being less affected by the behaviour because they have already disengaged as part of a typical adult sibling relationship.

Two decades later Orford and colleagues' research has been extended over 25 publications drawn from interviews with over 800 families from varying cultural groups from England, Mexico, Italy, and Australia. Specific cultural groups researched were British Sikh families, Pakistani-Kashmiri and African Caribbean families in England, and Aboriginal family members in the Australian Northern Territory. The authors noted that females were overrepresented in their samples with female partners and mothers being the most common groups. However, a range of immediate family members (partners, parents, some siblings and adult children) were represented as well as some aunts, uncles, and cousins. Orford, Velleman, Copello, Templeton, and Ibanga (2010) summarise the findings of their research under the SSCS model. The SSCS extends stress and coping models in the drug and alcohol field to distinguish the differences

between the experience of stress and the resulting emotional and psychological strain and ways of coping and beneficial support.

Orford, Velleman, Copello, Templeton, and Ibanga (2010) summarised stress under five main factors. First, family members found that their relationship with the user had become disagreeable and sometimes aggressive. Family members noticed significant changes to the user's mood and engagement in family life. The user was seen as rude, at times physically or verbally aggressive, and deceitful. Second, family members experienced conflict over money and possessions. This was usually in relation to the user taking valuables from the home, failing to contribute financially to the household or using the family's financial resources. Family members often felt pressured to give or lend money. Third, family members experienced uncertainty due to the unpredictability of the user's behaviour. This was usually related to not knowing when the user would be coming or going from the home and also to not knowing exactly what was going on with the user. Fourth, family members were worried about the user. Family members saw their loved one as a victim of the substance and worried about their health (physical and mental), safety, and social, employment, and financial prospects. Lastly, family members found their home and family life threatened. This was through depletion of the family financial resources, damage to the home, overt presence of drug use and/or paraphernalia, deterioration in relationships between all family members through differences in coping and disagreements on how to respond to the user, and restriction of the family member's social life.

As a result of the stress, family members experienced emotional and psychological strain. The rollercoaster of emotional experiences involved feelings of helplessness and despair, worry and anxiety, fear and feeling alone, anger and resentment, low or depressed mood, and feeling guilty and devalued (Orford, Velleman, Copello, Templeton, & Ibanga, 2010). As well as the feelings of anxiety and worry about the user, family members were also aware of the impact on the whole family's well-being. Specifically, they were often concerned about the impact on siblings of the user or children of the user. The authors identified the conflict and guilt family members felt when they expressed anger and resentment toward the user. This is illustrated in the following quote: "For example, the sister of a drug misusing brother said, 'I hardly ever speak to him, he scares me. It's horrible, he's my own brother and I actually hate him'." (Orford, Velleman et al., 2010, p.50). Family members often felt a loss of self-confidence and blamed themselves for the problem which, in turn, decreased their self-confidence. The stress often contributed to deteriorating physical and psychological health. Family members reported increasing panic attacks, chest pains, poor sleep, high blood pressure, depression,

suicidal thoughts, exhaustion, changes in appetite, and increase or fluctuations in their own alcohol and other substance use (Orford, Velleman et al., 2010).

Orford and colleagues' original typology of coping from their early 1990s research was revised and collapsed into three main responses that they termed as positions a family member can take towards a relative's excessive alcohol or drug use (Orford, Velleman, Copello, Templeton, & Ibanga, 2010). These positions were Putting up with it, Standing up to it, or Withdrawing from it. Under these three positions Orford and colleagues named eight specific ways of coping which are explored below. As identified in the early research the authors stated that these ways of coping are not categorical, but blend into one another. Family members showed ways of coping that were in between one way of coping and another, or that mixed two or more ways of coping. Family members were often caught in dilemmas over deciding the best way to respond (Orford, Velleman et al., 2010).

As Ways of coping under the first position of Putting up with it, family members were viewed as resigned and accepting, sacrificing and compromising, or supporting the drug user. When resigned or accepting family members were inactive in the face of the problem or accepted the situation as it was. Other family members accommodated the drug user or their behaviour through comprises such as buying necessities for the drug user rather than giving him or her cash. In this way family members found ways to support the user, but reported feeling conflicted by feelings of being manipulated or giving into demands from the drug user.

As Ways of coping under Standing up to it, family members were viewed as protecting themselves and the family, refusing, resisting, and assertive, or confronting, controlling and emotional. The authors stated that these strategies were attempts by family members to gain a sense of control over family and home life. The authors further stated that some coping strategies might be more effective than others depending on the family circumstances. However, family members reported that confrontative, controlling (i.e., destroying means of drinking or taking drugs) or emotional (i.e., venting anger) responses tended to be counterproductive.

Lastly, as ways of coping under Withdrawing from it, family members were viewed as avoiding and escaping, or gaining independence. Family members attempted to avoid other coping strategies such as self-sacrifice by trying to put physical and/or emotional distance between themselves and the user. They obtained distance either through cloistering themselves away in

other parts of the house or living apart from the user. The aim of these strategies for some was to avoid the drug user yet for others the aim was to improve their own quality of life.

Support was closely connected with coping under the SSCS model. Family members reported benefits from having people in their life that supported their coping strategies rather than criticised or disapproved of them. Having someone to talk openly to about problems in a non-judgemental atmosphere was also of benefit to family members. This type of support was sought from friends, neighbours, or professionals. Family members reported that they appreciated people who had the same experiences because they felt they were not on their own. Practical and accurate information was also reported as beneficial support. Lastly, family members reported appreciating people who were positive about the drug user especially in their interactions with the user or in ways that showed they felt the user deserved to be helped and had potential to change.

Family members reported several barriers to seeking support. Family members often felt shame from having a relative as a drug user and were concerned about being seen as a bad parent or partner. At times, the drug user convinced the family member not to seek support by trying to normalise or minimise the problem. Family members were often disappointed in the support they received. Most often this was in the form of unwanted advice about how they should respond to the problem. It was noted that the advice could come from members within the same family. These family members could also be critical of others in the family seeking independence, describing them as cold, hard, or cruel or viewing them as breaking family norms. Some family members felt that professionals were unable or unwilling to help them with strategies for dealing with the problem. They reported feeling cut off from useful information about drug use or the user themselves. They further reported that at times they felt the professional was implying that the family member contributed to the problem.

Based on the past two decades of the group's research, Orford, Velleman, Copello, Templeton, and Ibanga (2010) concluded that having a family member with a drug use problem is a universal experience regardless of social, cultural, or material differences. However, they posited that there might be certain aspects of the experience that are more prominent depending on the sociocultural context. For example, the risk to family financial stability in poverty-stricken families in Mexico, the gendered or socialised view of male and female roles that influence coping strategies, or the threat to autonomy in individualistic white English families. The authors did note that the experience is affected by the relationship to the user. The parent's experience is not exactly the same as the adult child's. They hypothesise that

“being female or male, wife or husband, mother or father, sister or brother, may colour that experience but it does not alter its essence” (Orford, Velleman, Copello, Templeton, and Ibang, 2010, p.61). However, it is not clear to what extent aspects of the experience are more prominent for adult siblings, nor is it clear whether certain aspects of the adult sibling’s experience become so prominent or are so different that in fact the essence of the experience is altered. Therefore the nuanced experience of the adult sibling is an important area for future research.

Research from the sibling’s perspective

A study by Jackson, Usher, and O’Brien (2006-7) examined parental perspectives of their children’s drug use. Thematic analysis identified five themes relevant to the experience of having a member of the family with substance use issues. These themes were; betrayal and loss of trust; abuse, threats, and violence; sibling anger and resentment; isolation, disgrace and humiliation; and feeling blamed. Although this research mainly focussed on the experiences of parents, the authors noted that specific experiences related to siblings became evident in the data. Parents recognized the impact of the drug using child on their other children and often felt torn between supporting one child and protecting the other children. Parents recognized both the danger of physical threats between siblings and also the nature of the often tumultuous relationship between siblings. Furthermore, the parents reported that siblings were resentful of the drug user as parent resources were taken by bringing up grandchildren (children of the user), which meant their own children missed out. The parents reported that these sentiments lead to further detachment from the user sibling.

This study was one of the few to examine the impact of a family member’s drug use on a sibling. The authors identified that siblings might have their own unique experiences such as anger and resentment. However, sibling’s experiences were examined from the point of view of the parent only. As the sibling experience was viewed through the ‘lens’ of the parent, it is not possible to say that all themes identified from this study are relevant to the sibling experience, nor that all siblings experience anger and resentment as part of the impact of having a drug-using sibling. Future research should therefore seek to gather data that explore the broad range of sibling relationships and experiences in order to understand the breadth of possible impacts to siblings.

Barnard (2005) researched the impact of drug use in the family on parents and siblings. In 2002-03 in the Greater Glasgow area 20 parents and 20 younger siblings of problem drug users aged 16 to 26 years old were interviewed. The identified impacts on the family included having drugs as the focus of attention, dealing with theft and violence, and stress and anxiety. The parent's perspective drew out the family's struggle to adapt to finding out a child has a substance use problem, including how the parents responded by trying to manage and contain the problem through to how they have coped.

The sibling's perspective was drawn from the younger sibling of the 'index' (drug using) sibling. A portion of Barnard's (2005) research was devoted to examining the impact of exposure of drug use on the younger sibling, including initiation to use. She concluded that exposure to use might elevate the risk of a younger sibling's initiation to use, although other factors such as parental supervision and the quality of the relationship between parent and child are more likely to contribute to the level of risk. Barnard further suggested that those siblings who do not use are more likely to be connected to a stable family environment, adhere to conventional social mores and socialise with non-using peers. This seems to suggest that family in general and peers have a greater influence on the experience of the sibling, especially with regard to how one sibling's drug use impacts on another sibling. However, another contributing factor in the decision of one sibling to not engage in use that was not explored here, or in the research reviewed in chapter one on sibling influence, is the impact of being a witness to an older brother or sister's problematic use. Drawing on social learning theory and Bandura's notion of modelling and vicarious learning, future research could explore whether or not witnessing the consequences of a sibling's problematic use serves as a protective factor and deters initiation to use in younger siblings.

Barnard (2005) also focussed on impacts to younger siblings other than risk of initiation to use. The younger siblings articulated the expectation of a normal sibling relationship characterised by guidance, protection, trust, and support. The relationship became fractured or was further damaged if there was pre-existing animosity by the drug use taking centre stage in the older sibling's life. While also coping with quarrels between siblings, the younger siblings observed arguments between their older sibling and their parents. Dealing with these frustrations, and viewing their sibling as selfish or feeling sorry for themselves and blaming others, led younger siblings to be disinclined to associate with their older siblings, which led to further disengagement within the sibling relationship.

The younger siblings also expressed feeling worried and anxious about the health and safety of their older sibling. Barnard (2005) noted that the younger siblings often felt powerless to initiate any change in the older sibling, remaining as a witness to the drama. They expressed feeling shame from the stigma of having a family member with a drug problem and were often involved in their sibling's public displays of embarrassing or antisocial behaviour. Although not clearly articulated in Barnard's research it appears that younger siblings were caught coping with the emotional turmoil that resulted from the direct impact on them from the older sibling's behaviour as well as from viewing the impact on their parents, all without the benefit of parental support because the family's capacity to provide support was lessened by the focus on the drug user.

Summary and directions for future research

Commonalities in the themes that can be drawn from the research, whether from the point of view of the parent or from a younger sibling, included viewing the sibling as trapped in between the dynamics of the relationship between parent and child. They witnessed the impact and the pain of their parents' experience, but they felt helpless to alter anything in their sibling's life. They were viewed as missing out on the family resources as the focus of the family remained on the child with the drug problem. They experienced the same rollercoaster of emotions that parents felt, such as fear, worry, and anxiety, shame and embarrassment. On occasions they were also a target of violence, aggression, and stealing.

The above review of the literature showed the increased recognition of the impact of a family member's drug use. However, there remained a prevalent focus in the research on the experiences of spouses, parents, and children. The perspective of siblings appeared to be neglected in determining the specific impacts on them as both a child in the family and as a brother or sister. The limited literature examining the experiences of siblings was from the point of view of the parent, in terms of recognising that the sibling has become a 'lost child' in the family system. Literature from the point of view of the sibling was from the younger child or adolescent siblings. The focus of research was often on initiation to use by the older sibling. In Orford and colleagues' research, the authors suggested that their participants represent an anomalous adult sibling relationship characterised by more engagement and interest in their sibling relationship. They also suggested that the sibling's experience might have aspects that were more prominent in comparison to other family member's experiences, based on their relationship to the user. However, they posited that in essence the sibling's experience was

the same as every family member. Barnard (2005) suggested that because she was able to interview family members together her participants' might represent more stable or harmonious families. In none of this research has there been a focus on understanding the impact on the adult sibling from their own point of view, in the individual context as well as from the context of the sibling relationship and the family system. Future research needs to draw on a broad range of adult sibling experiences to elicit an understanding of the unique and common impacts on adult siblings of illicit drug users from the perspective of the adult sibling.

Broad aims of the program of research

The broad aim of this research was to understand the impact on an adult sibling and the sibling relationship when there is a stressor such as illicit drug use. Because the available research has not given a clear understanding of adult siblings' perspective it was necessary to conduct exploratory qualitative research. The purpose of the research was to formulate a rich understanding of the impact on the adult sibling of the illicit drug user in terms of their experiences, impacts to other close relationships, changes in family dynamics, coping with the loss of the sibling or the sibling relationship, stress and distress impacts on health, work life, finances, and general stress, coping, and support needs. This was in order to inform psychological practice, both clinically (counselling and treatment needs) and forensically (evaluations for legal proceedings).

Chapter Four: Study one aims and methodology

Aims for study one

In consideration of the fact that there was very little current research focusing directly or specifically on the experience of adult siblings of illicit drug users it was necessary to conduct exploratory research. The needs of this population were simply unknown and could only be estimated from analogous research on sibling relationships impacted by disability, illness, and mental health research, or from research from the point of view of parents of drug users. From a clinical perspective it was important to understand the factors that influence adult siblings' decisions to access, or barriers to access, services in the Drug and Alcohol Sector and the general psychological services sector. It was also not known what clinical needs, if any, were present in this population and if these needs were met through individual, relational, and family systems clinical practice.

Therefore, the main aim of the study one was to investigate the lived experiences of adult siblings of illicit drug users. The exploratory nature of the current research necessitated a qualitative approach with a phenomenological perspective to understand the lived experience of these individuals. The study aimed to understand certain aspects of adult's experience of the sibling relationship from their perspective. These aspects underpinned the following research questions:

1. Are there any impacts from having a sibling with an illicit drug use problem on the quality of relationships
 - a) between the participant and their user sibling,
 - b) with other family members such as other siblings, parents, and children,
 - c) with the participant's intimate partner relationship, and
 - d) with the participant's friends?
2. If there are impacts on the sibling relationship, how has the sibling relationship changed across time?
3. What are the impacts on the participant's psychological health and well-being, including any mental health issues, experience of stress, experience of coping, and other psychological phenomena (thoughts, feelings, and behaviour)?
4. Is there any impact on the participant's other areas of life such as work, study, finances, and general health?

Methodology

Research design

This study used a phenomenological approach to understand from the perspective of the experiencing person certain aspects of the lived experience of an adult sibling of an illicit drug user. Grounded theory methodology aims to develop conceptually dense theory that accounts for variation in complex social phenomena, without rigid adherence to specific types of data or theoretical interest (Strauss, 1987). Due to the richness and complexity of the phenomenological data collected, grounded theory methodology was used to move beyond merely describing the experience to building a theory that explains adult participants' experience of their sibling relationship when their siblings' illicit drug use interferes with the quality of that relationship over time. The theory also explains participants' experience of the impact of their siblings' illicit drug use problem on other significant relationships and areas of the participant's life such as work, study, finances, and general and psychological health and well-being.

The main study (study one) is presented in two phases to reflect the development of the model and theory with two stages of participant recruitment. The methodology for the whole study is described here as the procedure and analysis was consistent over both phases (thus it has been treated as one study). The third phase (Chapter nine) draws two case studies from study one participants to illustrate how the model and theory developed here can be applied to assist forensic evaluators in child protection and family court matters.

Phenomenology

Phenomenology looks at an everyday event (phenomenon) from the point of view of the person experiencing the phenomenon (Liamputtong & Ezzy, 2005; Starks & Trinidad, 2007). Becker (1992) asserts that the two basic premises of phenomenology are that a) the everyday world and b) the person's experience are valid sources of knowledge. Becker stated that it is possible to understand the nature of an event by studying how it occurs in everyday life. The everyday world becomes a source of knowledge about human nature and phenomena (Becker, 1992). Furthermore, a person's first hand or vicarious experience of the world (what we are aware of at any point in time through our physical senses, thinking, remembering, imagining and feeling) is viewed as the source of knowledge about oneself, other people, and the world in general. Rather than distrusting our subjective experience, phenomenology views

experience as the cornerstone of knowledge. Thus, the person experiencing the phenomena is viewed as the expert (Becker, 1992).

Further to this, phenomenology seeks to understand the meaning people ascribe to their experience, or how the experiencing person constructs their 'life-world'. The life world is described as the whole of the person's unquestioned, or taken-for-granted, subjective experience of their everyday life (Liamputtong & Ezzy, 2005). In experiencing their everyday life-world, human beings are able to be reflective, be aware of and think about their experience of themselves and others (Becker, 1992). The meaning people make of the reasons for their actions, leads to understanding why people behave the way they do (Liamputtong & Ezzy, 2005).

Phenomenology assumes that the structure and essence of experiences contributes to shared meaning between several individuals through identification of common components (Becker, 1992; Liamputtong & Ezzy, 2005). Therefore, a phenomenological approach seeks to understand through descriptive analysis of un-led narrative accounts certain aspects of the lived experience of adult siblings of illicit drug users and explores the shared meaning individuals give to this experience. As this was exploratory research the phenomenological approach is key to acknowledging that adult siblings' subjective experience makes them the expert and their knowledge is critical to understanding how the meaning they make of their experience impacts on the quality of the sibling relationship.

Due to the fact that the subjective experience of adult siblings of illicit drug users has never been explored in the literature it was important to seek diversity in the sample in order to gather data on a broad range of possible experiences. A heterogeneous sample in terms of age, gender, severity of drug use in the sibling, participant and sibling birth order and sibling structure (full, half, or step siblings) led to a range of stories and experiences. The commonalities between those stories allow the shared meaning to be explored and understood.

Grounded theory

The grounded theory method of analysis was developed by sociologists Juliet Corbin and Anselm Strauss. The grounded theory approach is described by Strauss and Corbin (1990) as "a qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon" (p.24). In other words, data are collected from

an area under study (a phenomenon), it is analysed using specific step-by-step methods (systematic set of coding procedures) that involves a reciprocal or often simultaneous process of analysing and synthesising from concrete to increasingly abstract concepts, and returning to the data to test conclusions (inductively derived and data driven). This is in order to develop a theory that explains and faithfully represents the phenomenon in a way that is useful to practitioners and scientists in the area of study. The actual theory (a representation of reality that explains concepts and relationships between concepts) that develops from using the grounded theory method of analysis is called *a grounded theory*. The use of this methodology to analyse phenomenological data allowed an inductively derived grounded theory to emerge that explained the lived experiences of adult siblings of illicit drug users.

Participants

Study One participants were recruited in two phases. In the first phase participants were recruited through advertising in X-press magazine (free street press magazine focussed on music, film, and art culture), Community Newspapers, flyers on university campus, and snowball sampling. This initial phase of recruitment resulted interviews with an initial ten Western Australian participants whose data are captured in phase one analysis. For the second phase, a further fifteen participants were recruited Australia-wide through appearances on local (ABC) and national (Triple J) radio, and snowball sampling. Participants were included based on their self-report of identifying their sibling as a current or past illicit drug user and who identified their sibling as having a significant impact in their life. Participants were included regardless of whether they identified themselves as a user or non-user. Interviews lasting 45-180 minute were completed with 25 participants. Basic demographic data were collected at the beginning of the interviews. Participants were aged between 22 and 60. There were 22 female and 3 male participants. Nine of the participants reported being the youngest sibling, 8 reported being a middle sibling, and 8 reported being the eldest sibling. The age differences between the participant and the user sibling ranged from a twin to 11 years. Most participants were full siblings; however, there were also half and step siblings.

Participants were asked to report data for their user sibling, including their sibling's age, gender, birth order, and drug/s of choice. The age range of the user siblings was 22 to 55 years old. There were 8 female and 18 male user siblings (one participant reported on both a brother and a sister). Of the user siblings, 11 were the youngest, 6 were the middle, and 9 were the eldest sibling. Participants reported knowing that their sibling's drug or drugs of choice

included heroin and “homebake”, amphetamine and methamphetamine, marijuana, “ecstasy” (MDMA), prescription drug and methadone misuse, cocaine, “trips” (LSD), and opium.

Participants often said that their siblings were polydrug users and suspected that their sibling was probably using more, or other, drugs that they did not know about. Some participants also spontaneously reported that their sibling used or “abused” alcohol.

Participants reported the extent to which they believed the drug use impacted on eight areas of their user-sibling’s life: employment, relationships, family, social, legal, financial, emotional and mental health, and general health. These eight areas were rated on a 5 point Likert Scale (0= not at all, through to 4 = severe impact). Most participants rated the drug use as having an impact toward the severe end of the scale in most of these areas (see Table 1).

Table 1

Participants Beliefs Regarding the Impact of Drug Use on Eight Areas of the User-sibling’s Life

Area	<i>n</i>	<i>M</i>	SD	Range
Employment	25	3.12	1.27	0-4
Relationships	25	3.32	0.85	1-4
Family	25	3.64	0.70	1-4
Social	25	3.08	0.91	1-4
Legal	25	2.96	1.43	0-4
Financial	25	3.68	0.75	1-4
Emotional and Mental Health	25	3.60	0.58	2-4
General Health	25	3.12	1.01	1-4

Procedure

Participants were requested to contact the researcher to register their interest in participating in the research and, if suitable, a time was organised to conduct an interview in person or by phone. Participants who completed the interview in person received a double movie pass as compensation for travel to the meeting site. No incentive or reward was given for participants who completed telephone interviews. At the interview, participants were given, or were read verbatim, an information letter in regards to the study and were asked to sign a consent form

or give verbal consent. Participants were asked to complete a Demographics Questionnaire. Permission to audio record the interview was sought. The participant was asked if they had any questions or needed any information clarified before the interview began. The interviews were recorded using a portable audio recorder (telephone interviews were conducted on speakerphone for this purpose). The participants were asked at the beginning of the interview “Please tell me about your experiences of being a sibling of an illicit drug user?” Participants were free to begin their story where they felt most relevant. Further open ended prompts to elicit un-led narrative accounts were; “Please tell me more about that?”, “What are the feelings that go with that experience?” and “What things are going through your mind when you reflect on that?” As the study aimed to understand several areas related to the lived experience of siblings, including coping and consequences, stress and distress within the sibling relationship, there were several domains of interest that were used to guide participants to discuss these domains without leading them to discuss certain content related to these domains. These domains included the impact on the quality or formation of relationships, including with the user, with other family members, with friends, and intimate partnerships, how the relationship has changed across time, how the person coped, the impacts on emotional and psychological well-being, how this experience has impacted on other areas of the participants’ life (work, study, finances, health), and any differences in the experiences of participants who do or do not use substances themselves. The prompts used were; “Some of the areas other people have spoken about that you haven’t spoken about is....Is this relevant for you?” and “Some people have different experiences, I would like to know what it has been like for you...” Audio recorded data were stored on a USB hard drive.

Analysis

Audio recorded interviews were transcribed into Microsoft Word documents and de-identified during transcription. The transcriptions were read and checked against original recordings to ensure accuracy. The de-identified transcripts were then uploaded into the software program QSR NVivo to assist with storage and management of data. The grounded theory analysis procedure outlined by Strauss and Corbin (1990) was followed because that publication provides the most detailed step-by-step instruction of the grounded theory analysis method, although these steps often occur simultaneously and reciprocally. In fact, the authors stress the need to not rigidly adhere to coding procedures, but to apply them flexibly according to the needs of the research project (Glaser & Strauss, 1965; Strauss, 1987; Strauss & Corbin, 1990). Open and Axial Coding was completed in NVivo to assist with highlighting and storing

coding of chunks of data and sorting into hierarchies. Later coding was stored and managed in Microsoft Word or in freehand memos and diagrams.

Analysis procedure

Theory was built from analysing data through the use of coding procedures. In grounded theory these procedures are called open coding, axial coding, and selective coding. Open coding and axial coding were used alternately in the early stages of analysis as the data was initially broken down and themes (concepts and categories) are conceptualised. These procedures were also used later in analysis during selective coding when new themes emerged or existing themes required further development.

Open coding

Open coding involved breaking down the data and initially labelling identified concepts. This involved reading transcriptions line-by-line and naming ideas, events, incidents, thoughts, feelings, actions, and interactions identified in each 'chunk' (a word, line, sentence, paragraph or several paragraphs) of data. By comparing each idea for similarities and differences within the same transcript and between transcripts, similar phenomena were given the same label. These became known as 'concepts'. Similar concepts that seemed to relate to the same phenomena were then grouped together under a higher order or more abstract 'category'. For example, through reading and re-reading within and between transcripts I identified several chunks of data where participants seemed to be discussing their sibling's negative behaviour. I coded similar phenomena identified in each chunk of data under a separate concept label; lying, stealing, taking, aggression, mistrust and fear. As these concept labels appeared to relate to the same notion that the participant had experienced a transgression of boundaries, I grouped these concepts under the more abstract category label; the theme 'boundary breaches'.

These categories, or themes, were then further developed in terms of their properties (attributes or characteristics of the category) and dimensions (location of the properties of a category along a continuum). To take another example from the data, every participant described various feelings and emotions they experienced. These were grouped under the category Emotional Experiences with each concept labelled anger, wanting sibling contrition, hurt and betrayal, worry, shame and embarrassment, hope, guilt, and grief. However, there were differences in the way participants described how deeply these experiences were felt and how long these emotions lasted. Therefore these categories were deemed to have the

properties of intensity and duration. These emotions could be placed along dimensional continua of low intensity to high intensity and short duration to long duration. For example, the emotion of anger, perhaps experienced as rage, could be described as having the properties of high intensity and short duration. This may be contrasted by the participant feeling frustrated or annoyed by their user sibling, which can be experienced as an emotion with low intensity but long duration.

Category names are also known as 'themes'. Several themes or categories that appeared to be related to each other were grouped together under a superordinate theme that represents a higher level of abstraction in the data. For example the theme of boundary breaches appeared to be related to other themes named Discovery of use, Perception of sibling, and Impact of use on the sibling relationship. All of these categories/themes appear to be related to participant's experience of their sibling and their sibling's drug use and therefore they are grouped under the superordinate theme named User factors. The hierarchy of concepts subsumed under categories/themes that are then subsumed under superordinate themes allow increasing abstractions of data that not only make the data more understandable and manageable, but also allowed relationships between themes to emerge and the beginnings of the model and theory to develop.

Axial coding

Axial coding involved noticing the relationships and connections between categories/themes and using the grounded theory coding paradigm to further develop each category in terms of its dimensions and properties, thus assisting with conceptual density. The grounded theory coding paradigm involved: identifying a *phenomenon* (a central idea, event or happening); the *causal conditions* that are events or incidents that lead to the occurrence of the phenomenon; the *context* in which the phenomenon occurs; the *action or interactional strategies* used to manage the phenomenon; the *intervening conditions* that may facilitate or constrain the use of strategies; and the *consequences* or results of implementing those strategies. Strauss and Corbin (1990) termed the features of a category (named in italics) 'subcategories'. For ease of understanding I have retained the use of the words *context*, *intervening conditions*, *strategies*, and *consequences* in my pictorial representation of the model (see Results section, Figure 1).

Each of the categories/themes named in open coding were able to be identified as a phenomenon or as one of the above subcategories that relate to a phenomenon. Statements of relationships between each category and sub category were recorded in a diagrammatic representation termed a *logic diagram*. In a *logic diagram* a theme or category from the data

that is an event or happening was identified as a *phenomenon*. The properties and dimensions of the *phenomenon* became the *context* in which *action/interaction strategies* are taken to handle or manage the *phenomenon*. *Context* then also became the conditions under which those strategies were implemented.

Grounded theory views *action/interactional strategies* as purposeful or goal oriented behaviour enacted toward managing, handling, carrying out, or responding to a *phenomenon*. However, these actions may not always be successful. Grounded theory recognises the importance of looking for failed *action/interaction strategies*. Factors that facilitate or constrain the implementation of *action/interactional strategies* are termed *intervening conditions*. These conditions may be “time, space, culture, economic status, technological status, career, history, and individual biography” (Strauss & Corbin, 1990, p.103). Finally, the results of implementing *action/interactional strategies* (whether they are successful or not) are termed *consequences*. *Consequences* may also be actual or potential events or happenings that occur to people, places, or objects (Strauss & Corbin, 1990). The *consequences* of one sequence may become the *context*, or the set of conditions, for the next sequence of events.

Through asking questions of the data and making comparisons between categories (i.e., how is category X related to category Y? Under what conditions does Z occur?) and checking these statements of relationships against the data, several logic diagrams were generated. Strauss and Corbin (1990) term this process ‘moving between inductive and deductive thinking’ by constantly proposing hypotheses generated from working with data and checking those hypotheses against those data. Hypotheses can then be verified or similarities and differences can be specified among and within categories. Several categories were further developed in terms of specifying their properties and dimensions, giving them conceptual depth and density.

Selective coding

The last coding process extends and replicates the process in axial coding with a focus on collapsing the data to more abstract levels and integrating the data in order to *explicate the Story Line* (Strauss & Corbin, 1990). This involved identifying a central phenomenon that appeared to be the main problem or focus of the study. The central phenomenon needed to be broad and abstract enough to encompass the story and became the *core category*. This phenomenon was given a category name to which other categories were linked using the same paradigm in axial coding. This process of analytically telling the main storyline by making statements of relationships of how categories and sub categories were related to the

properties and dimensions of the core category allowed several patterns in the data to emerge. These patterns also captured another important element of grounded theory—that of *process*. *Process* refers to identifying, accounting for and explaining why and how change occurs in relation to the success or failure of action/interactional strategies. The model presented in the Results section is the diagrammatic representation of the results of applying the paradigm and includes the change process. The Theory presented in the Results section is the narrative of the main story line explaining the statements of relationships between categories and the core category.

Theoretical sampling

As noted above it was imperative to the research design to seek a heterogeneous sample in order to gather data about a diverse range of possible experiences of adult siblings. This follows the process of *open sampling* in grounded theory where the aim is to uncover as many categories through skilful non-leading interviewing with participants who have been indiscriminately selected. Once the first 4 interviews were completed, a rudimentary open coding procedure was used to identify categories that appeared to hold *theoretical relevance*. Concepts that repeatedly emerged from open coding that appeared to be significant, or that pertained to the domains identified prior to interviewing, were deemed theoretically relevant. This process cued me in subsequent interviews to probe participants for depth when subjects spontaneously arose that held theoretical relevance (*fortuitous on site open sampling*). This included when the experiences described appeared similar to and notably different from the initial concepts identified during open coding.

During axial coding Strauss and Corbin (1990) suggest that sampling should uncover and validate relationships that have been coded using the coding paradigm. This sampling procedure, termed *relational and variational sampling*, can be done selectively by purposefully seeking out participants who potentially provide data that flesh out specific properties and dimensions of identified categories. However, this was not possible under the current research design due to the difficulty accessing participants and, except for the 25th participant sought specifically to gather data on forensically relevant themes, participants were indiscriminately recruited. Therefore *relational and variational sampling* was completed by chance, rather than by choice, by probing for depth when theoretically relevant subjects arose during interviews, or by asking specific questions after un-led narrative accounts had been given. Questions were framed to probe for similarities and differences, hence the relevance of open-ended questions such as “Some of the areas other people have spoken about that you haven’t spoken about

is....Is this relevant for you?” and “Some people have different experiences, I would like to know what it has been like for you...”

The aim in selective coding is to develop the properties and dimensions of categories to ensure conceptual depth and density. Therefore deliberate and directed sampling, termed *discriminate sampling*, aims to gather data to flesh out categories. *Discriminate sampling* was the focus of the second phase of data collection that was led by radio interviews. *Discriminate sampling* is discussed further in the Analysis section of the Second Phase of Study One.

Journaling, memos and diagrams

Methodological rigor was ensured through the use of journaling and records of memos and diagrams. Throughout the research process the researcher kept files that included contemporaneous interview notes, records of supervision meetings, and thoughts, ideas and hypotheses generated from the analysis process such as questions to be asked about the data and directions for future sampling. The journals also include memos and diagrams generated from data analysis. These include code notes on hard copies of de-identified transcripts, diagrams and word documents of possible hierarchical relationships between themes/categories during open coding, diagrams and tables of category properties and dimensions and logic diagrams during axial coding, and visual representations and hard copies of Word documents of the developing model and theory during selective coding. Rigor is also ensured through use of an audit trail to follow the process of analysis. Journals are dated and several versions of analysis and coding are kept in the form of dated saved Word documents and versions of NVivo.

Chapter Five: Results of study one

This section presents the results of the grounded theory analysis of the first phase of research (study one phase 1). A descriptive summary of the results of the analysis of the initial ten Western Australian participant interviews are first presented. There are 31 themes that emerged from those data which are subsumed under 8 higher order themes (refer Figure 1. See Appendix A for larger figure). Each higher order theme is presented with a brief explanation and description. This is followed by an explanation of each theme under the higher order theme with illustrative quotes from participants. The second part of this results section presents the model and theory that emerged from the grounded theory analysis process as proscribed by Strauss and Corbin (1990).

Quotes have undergone minor editing so that they are comprehensible and are de-identified. Where the illustrative quotes include potentially identifying information such as names, suburbs, schools, etc, the identifying information has been replaced with a descriptor in parentheses. For example, if a participant uses the name of a sibling, the name will be replaced with the relevant descriptor such as “(user sibling)”, or “(sibling 2)”, etc. There has also been some minor editing to the use of pronouns so that the quote makes sense out of its original context. Where a pronoun has been replaced, it will include a descriptor of the person to whom the pronoun refers. An example of an edit is as follows:

Raw quote

he's very very very bright, which is really upsetting and makes me really angry cause I think 'you've got all this potential and you're not doing anything with it'

Edited quote

(My brother) is very very very bright, which is really upsetting and makes me really angry cause I think he's got all this potential and he's not doing anything with it

Additionally, to improve readability of quotes minor utterances such as 'um', 'ah', and repetition of words that occur as part of natural flow of speech have been deleted from quotes. An example of an edit is as follows:

Raw quote:

I don't ring her with joy, you know, I don't ring her with 'oh I want to see what's happening' um because she, it's that un-un- un-ah-predictability and you never know what you're going to get

Edited quote

I don't ring her with joy, I don't ring her with 'oh I want to see what's happening' because it's that unpredictability and you never know what you're going to get

The illustrative quotes have been chosen to best reflect the meaning of each theme. However, the quote presented may contain elements of other themes identified in the data. This reflects the richness of the data and the complexity of meanings and ideas expressed by participants. The reader may also begin to identify the relationships between themes by being able to identify several ideas within one quote. The relationships identified in the data are made more explicit through the explanation of the model and theory that is presented after this section.

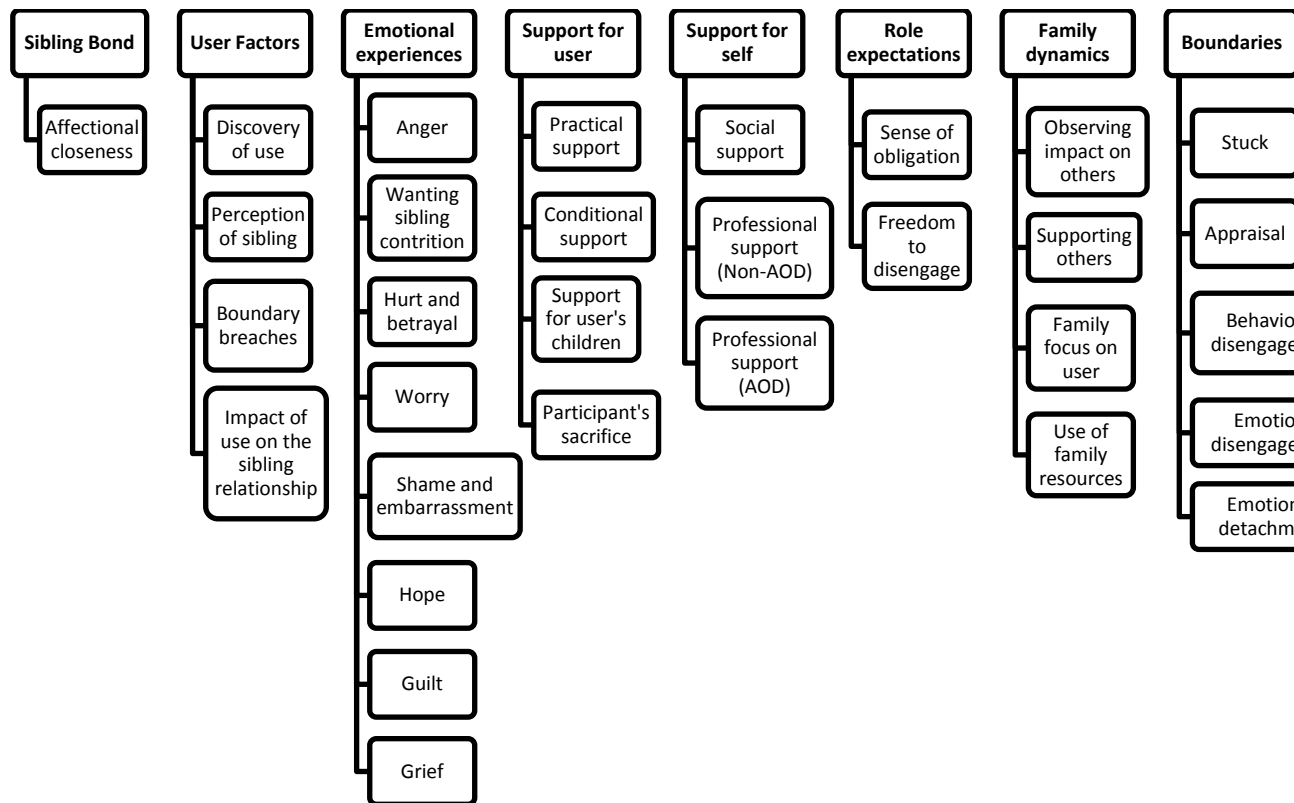


Figure 1 Descriptive theme summary

The sibling bond

The sibling relationship is the core theme at the centre of the experience of being a sibling of an illicit drug user. Participants explored their sense of their sibling bond through descriptions

of shared family history and important events, descriptions of the type of caring relationship, and common interests. Factors such as birth order may influence the type of caring relationship, such as an older sibling looking after a younger sibling, or a younger sibling looking up to an older sibling. However, participants expressed a sense of mutual protection and caring regardless of birth order. Participant 1 described a close relationship with her older sister from when they were young, casting her big sister in the role of a significant care giver in her life:

she's always been my big sister... she's kinda like a second mum, even though she's been off her head and had all these problems and that, we were very close when I was young

Participant 3 also expressed a sense of mutual protection and caring between her and her older brother:

(My brother) always looked after me and I looked after him at school...as much I could being the younger sister...that's just what you do with family, you just look after each other. If somebody hurts somebody that you love then you try to do something to fix it or help them or just make them feel better in some way and I always felt like I always got that from (user sibling) until...

Age differences and sibling structure (such as full, half, or step siblings) could impact on the depth of the bond, with siblings closer in age and full blood siblings tending to describe deeper childhood bonds. However, participants with significant age differences still described a sense of a close relationship with their user sibling, such as the fifteen year age gap between participant 7 and her younger sister:

it was just like a normal sister-sister relationship, I loved her and she was a sweet girl...we were very close. And I think that's why, that's maybe what's underneath the sadness, the fact we did have quite a lovely relationship when she was growing up, until all this nonsense started to happen

The descriptions gave a sense of the nature of the attachment between siblings ranging from high affectional closeness, which is characterised by a high degree of mutual affection and caring, through to low affectional closeness, which is characterised by geographical, emotional, and psychological distance in both childhood and adult life. Juxtaposed with the above

descriptions of high affectional closeness in the sibling bond, Participant 5 described a relationship characterised by low affectional closeness with her older brother:

our relationship wasn't really tight because he left home, I was only quite young, so I was only probably nine, and he left to go live on the streets. But I remember going to visit him in Hay St Mall one night and I just thought oh this is so sad, like he could be home with us but (he) chose to live this life.

At the point where one sibling's drug use begins to become problematic, whether the sibling relationship is characterised by high or low affectional closeness, the sibling bond and how siblings relate to one another begins to be affected, as explored in the following themes.

User factors

This theme captures participants' perceptions and experiences of their user sibling and their user sibling's drug use. Elements of the experience related to the user are explored, such as discovery of problematic use by the participant, the participant's perception of their user sibling when they have been affected by drug use, and descriptions of how participants feel their user sibling has breached boundaries such as lying, stealing, and aggressive behaviours. Participants describe their first response as engaging in caring behaviour and find ways to support the user, as is consistent with the mutual caring and protection in sibling relationships. However, behaviours relating to the user sibling and their drug use impact significantly on the participant (as will be further explored in the theme emotional experiences) and begin to change the way the participant relates to their user sibling.

User factors: Discovery of use

Participants discussed the various ways they found out about their sibling's substance use. Some participants had no prior knowledge of their sibling's drug use and experienced shock when the use was disclosed by the user, family members, or friends.

We're gonna go take (user sibling) somewhere. And so I said...where are we going? And (my family) said I think it's time that you know... basically, we were going to a methadone clinic....they were trying to explain to me that (my sister) had a heroin problem but that she was trying to get better and that she was on methadone. So that was a bit of a shock...(Participant 1)

Often participants already had a prior understanding that their sibling was involved in some level of drug use. Participants expressed shock, sadness, hurt, and worry when they discovered that their sibling's drug use was either more severe or more problematic than they first understood. Participant 3 discussed her initial discovery of her brother's amphetamine use and subsequent discovery that his route of administration had changed from snorting to injecting:

I basically walked into my bathroom to my brother sniffing speed on my bathroom vanity and my partner sitting in the corner shooting up.....I don't know why I was stupid enough to believe that it stopped every time, but I did.... I wanted them to do the right thing by themselves as well as everybody else....I came home and found them all doing it, found out that (user sibling) was shooting up, whereas, you know, the other times I thought he was just snorting it

The discovery of use also allowed the participant to understand the reasons behind the user's erratic behaviour by placing it in the context of effects of drug use. Participant 17 consolidated the discovery of her brother's use with previous observations of her brother's uncharacteristic behaviour:

I think probably it had been going on for longer than any of us realised...it may be as long as ten years ago, I don't know... he had had at times irrational behaviour and irrational talk and I look back now and realise, I didn't know at the time, but it's because he'd been using this drug.

Even though discovery of use was experienced as hurtful, shocking, and concerning for participants, it helped to consolidate suspicions and place the user sibling's erratic and confusing behaviour into context. Once known, participants became quite adept at identifying when their sibling was affected by drug use. This impacted on the way they perceived their sibling.

User factors: Perception of sibling

Participants became keenly aware of the effects of drug use on their sibling. The effects discussed ranged from the acute effects of drug intoxication and withdrawal symptoms through to long term impacts of regular drug use. Other perceptions described were personality factors including vulnerabilities in their siblings that participants perceived made

their sibling susceptible to drug use and long term personality and characterological changes due to chronic problematic use.

Participant 3 described some of the behavioural signs of drug use that she frequently identified in her user sibling:

he'd sit there and talk to you, I mean he was obviously coming down or he was fully on speed and he'd just blahbahbahbahbahbah just constantly and he'd tell the same five minute story and it'd be over and over and over again and you'd just sit there thinking I can't listen to this story anymore. But if you told him 'hey you actually told me that story five minutes ago', 'No I didn't', and then he'd get really angry... 'No I didn't, what the hell are you talking about'

Participant 5 commented on vulnerabilities in her brother that made him susceptible to drug use since a very young age:

my mum said that even early on (user sibling) did silly things like go stole a bike as a little kid... you know it was like his life was sort of destined for what he had become (Participant 5)

Participant 2 also described personality and character variables she had observed in her brother since he was a young child. Furthermore, participant 2 commented on a sentiment that other participants expressed: that their user sibling appears to never have matured morally and cognitively. Rather, their development appears to be stunted since the drug use began:

he just refuses to fit into things, he wants to be always the centre of attention...that was established with his growing up I spose, he always was the centre of attention- and I don't have any animosity towards him on that, never have done- but I don't think it's done him any good...he's never, never ever been expected to do anything and now my parents get really upset that he doesn't give to them...so, you'd think, okay you get to be forty-eight and you sort of see the world and think oh well it's give and take, but, I don't know, obviously doesn't always work that way

Participants saw permanent long term changes in their sibling as a result of their drug use, often characterising them as untrustworthy and unstable. Often participants described

behaviours in their sibling associated with drug use, such as being manipulative, when the drug use had been resolved for some time. This indicated either that participants' perception of their sibling, once changed, is difficult to alter, or that behaviour once associated with drug use continues even when use ceases. This may also indicate that users have learned ways of coping and meeting needs that are difficult to shift even when they no longer use.

We're in a new house and she's never lived there... but she's quite happy to breeze in and go around and go through everyone's stuff and all the rest of it. That really pissed me off, get out of my stuff, stop casing my crap (Participant 6)

Furthermore participants expressed anger and sadness as they felt that the potential their user sibling presented with early in life would never be fulfilled:

(My brother) is very very very bright, which is really upsetting and makes me really angry cause I think he's got all this potential and he's not doing anything with it, you know, he should feel guilty or he should be making the most of himself, giving to the world what he's got instead of constantly taking (Participant 2)

Overall, participants' descriptions of the user sibling once they had engaged in drug use are quite negative, bereft of hope, and reflective of loss and grief. Participants gave a sense that the sibling they related to when they were young was now gone. This loss was attributed to the impacts of the drug and drug-using lifestyle. Participants found it difficult to be comfortable in the relationship as it once had been, before the impact of other factors, such as boundary breaches described below, had permanently changed the way they view their user sibling.

User factors: Boundary breaches

Participants described several transgressions within the sibling relationship, often experienced as breaches of boundaries. The transgressions ranged from minor, such as the user sibling telling 'white lies' to serious, or major transgressions such as violence, aggression, or fraud.

Participant 1 recalled an example of her user sibling lying:

I just remember bawling my eyes out and saying '(User sibling)'s saying that dad uses drugs and he's got the needles in his room'... and so of course (my other sisters) were

then consoling me and just going 'She's off her head...you can't listen to a word she says, she's a liar'.

Participant 3 discussed her brother's stealing behaviour and the subsequent impact and coping responses of her family members:

(User sibling) was still going really bad for quite some time, he was coming here, breaking into this house, stealing things from mum and (step dad)... they took him to court so many times, they had to report him to the police, it broke mum's heart

Participant 4 discussed an example of fraud by her brother after she had refused a request from him to register a car under her name because he did not have a licence:

I got a knock on the door from the police saying that my car had been dumped and a woman had found it and freaked out cause there was needles all through the car - so he'd registered in my name, forged my signature.... so I spent, you know, two hours talking to these police and they said 'well, it's registered in your name' and I said, 'But I haven't signed any papers to register a car in my name, it can't be registered in my name', so they got the registration papers and they said 'isn't this your signature?' and I went 'It's not my signature, that's not my signature' and I said 'I'm telling you now my brother's forged my signature', cause it didn't even look like my writing, it was my brother's writing. And so I had to go down to the traffic office and sign a stat dec saying basically my brother was a liar and that it wasn't my car, cause I didn't have a choice, you know, he didn't leave me with any other option...

Other participants discussed feeling verbally abused and taken advantage of by their user sibling. This was a common boundary breach that left the participant feeling 'used' by their sibling and began to unbalance the sense of mutual care within the relationship. Participant 8 provided accommodation, food, and money to her brother on a regular basis:

By this stage every bit of groceries that I had, the toilet paper, everything's just run into the ground, even though I was on a reasonable income, but just trying to sustain his, you know... cause I'm cooking, I'm doing everything for him as if he was like a four year old, five year old, no different.

She further expressed the lack of respect and acknowledgement from her brother for everything she felt she had provided for him and her experiences of his abuse:

my brother got the impression that I'd also put a restraining order on and he was very aggressive through text messages and he said 'I'm glad that I vomited everywhere, I'm pleased that you have to clean that up', you know, all this really vitriolic, that really hurt, that was really hard to take... that he would be sick, whether or not he was so off his mind that he didn't even know, that he would leave after being told he had to go after having the luxury of the accommodation, that it would then be drawn to his attention what he did and then, rather than be remorseful, he would actually use that as an opportunity for verbal abuse and abuse towards me

Constant boundary breaches left participants feeling disrespected and used by their sibling and upset the series of checks and balances in the mutually caring and giving relationship between siblings. Participants became wary and started to try to protect themselves from further harm (this will be explored further under the theme boundaries). However, this wariness of further boundary breaches impacted on the sibling relationship.

User factors: Impact of use on the sibling relationship

As a result of the harm experienced by participants, they described feeling much tension and anxiety when they either anticipated interacting or actually interacted with their user sibling. The impact of this tension on the relationship meant that the sibling bond, i.e., affectional closeness, began to fracture and create psychological and emotional distance between siblings.

Every time the phone rang I used to get tense and every time I heard my brother's voice at the other end of the phone I thought 'what does he want now, how much does he want now?' (Participant 2)

I said no and he tried coaxing me into it first, that went on for about half an hour to an hour of him going 'Oh, come on, I just need... to be able to have a car so I can get to work', you know the whole everything that he needed a car for and if I didn't do this then he wouldn't be able to have the car and he wouldn't be able to do so much other stuff and it would just be horrible for his life and...so that was pretty horrible... then he got angry and basically said to me something along the lines of 'Oh well fuck

you then, clearly you don't love me anymore', stormed out of the house and...yeah I didn't see him again for probably about six months (Participant 4)

I always hesitate, I don't ring her with joy, I don't ring her with 'oh I want to see what's happening' because it's that unpredictability and you never know what you're going to get, always walking on eggshells because I don't want to put my foot in it (Participant 7)

Emotional experiences

As can be seen in the above quotes participants described experiencing a range of emotions related to discovery of their sibling's use, their user sibling's drug use-related behaviour, and the impact on the relationship. Emotions experienced most often in relation to the user sibling's behaviour included anger, hurt and betrayal, and worry. Participants also described experiencing shame due to the perceived stigma of having a family member with a drug use problem, or embarrassment from their user sibling's public behaviour when intoxicated or the deterioration of their appearance due to the drug use. These emotions were often juxtaposed with hope when the participant perceived that the sibling had an opportunity to withdraw from the drug using lifestyle, or guilt when the participant considered withdrawing support from the user. When the impact of use affected the sibling relationship to the degree that the participant began to pull away from the user, participants describe experiencing grief and loss related to a sense of losing their sibling.

Emotional experiences: Anger

Participant 1 expressed anger in relation to her sister's lack of support for her when she was experiencing difficulties in her life:

I just was very angry, I was angry that I'd been there for her and I just got shit all back. And then also what she'd done to the family as well, not just about me...

Participant 3 also expressed anger at her brother for the impact on her and her family:

when I think about everything he's done to everybody it makes me angry, it makes me really angry. And what makes me even more angry is he thinks that we should just forget

Emotional experiences: Wanting sibling contrition

A part of the emotional experience of anger is the desire in the participant for their user sibling to recognise the impact of their behaviour and be truly contrite. Participants described an inability in their sibling to be aware of the full impact of their behaviour and therefore an inability for the user sibling to be remorseful and make proper amends for their actions. Furthermore, participants described observing in their user sibling an expectation that the family should be moving on and treating the user with trust.

I think sometimes me and my sisters forget that (user sibling) hasn't - she probably has been sorry at some point- but I don't think she's really come to us and said 'I've put everyone through like crap and I've gotta own this'. I don't think that's really happened...(Participant 1)

nothing was said, there was no apology, no explanation. And I think that made it so that I couldn't actually...as much as I said okay I'm gonna talk to him again, I can't have a relationship with him because I can't... there's not even a sorry. And I don't think that he even slightly realises, I really don't think he knows what he did to me...I think he just thinks it's all about him and that when other people say you did this to me, it's a 'that's your problem, not mine, that's the way you saw it, not the way I saw it'...(Participant 3)

Emotional experiences: Hurt and betrayal

In addition to anger and a desire for contrition from their sibling, participants gave a sense of the hurt they felt as a result of their user sibling's lack of acknowledgement of the impact of their actions.

I don't feel like being again this supportive person and doing everything with her because I feel like she's kinda thrown it all back in my face (Participant 1)

Participant 3 further discussed the hurt she has experienced throughout the years. Many participants gave a sense of the betrayal they felt as a result of the user sibling contravening

the unwritten rules of sibling relationship where it is understood that you respect and protect each other.

I don't forget the hurt, I still feel the hurt, I just block out the situation, but I think when it comes down to rolling all of the years into you know, trying to think about how you feel and how it affects you...I mean obviously it's betrayal through the whole thing

Emotional experiences: Worry

Many participants expressed concern and worry over their user sibling. The worry was related to the sibling's general health and wellbeing and also related to what they might do when they were intoxicated. Participants expressed concern over whether their sibling would overdose or die.

I mean for a long time we just thought it was gonna be a phone call from the police saying that he's dead, you know, and that's the reality, is when someone is that heavily into that lifestyle- and it's not even worrying about overdose, it's worried about what he does when he's on it as well (Participant 4)

when he's outside (of prison) it's just a nightmare, like you don't know where he is, he'll ring up out of the blue and he could be high... it's just not knowing that he's safe and you don't know whether you'll get a call that things have gone wrong and that he may of died (Participant 5)

At times where the user sibling was recovering or recovered from drug use dependence, participants expressed hope that recovery would be maintained. However, participants also expressed worry over whether their sibling would maintain stability and not relapse.

I have to say that over the last twelve months he's only used twice, in the middle of last year and then just before Christmas and since then hasn't. And believe me everybody keeps a very nervous eye on him when he goes off to business meetings in the city, everybody is on tenterhooks wondering will he go and use again (Participant 17)

Emotional experiences: Shame and embarrassment

Participants expressed feeling embarrassed by their user sibling's public behaviour whilst their sibling has either been intoxicated by drug use or due to changes in their behaviour and appearance over time as result of drug use (e.g. deterioration in hygiene and health, antisocial behaviour). Participants described efforts to cover up or hide the reasons for their sibling's appearance. Some of these reasons were related to their own social embarrassment, whereas other participants described reasons related to their family value system and the shame experienced by family members due to the perceived stigma of having a family member with a drug use problem.

my friends were sort laughin, and I think I actually put it down to 'oh god she's probably been smoking too much weed', because that was acceptable to say that... but I don't think I still really understood whether it was speed or heroin or a cocktail of something, I just said that because I knew that that was the best cover up I could probably do and the only way to attribute her saying random things (Participant 1)

This sort of undercurrent, this message I think that you just pick up from (user sibling) and maybe the family's a bit like that as well, but mum had said herself 'God we've been spending ages, all these years, trying to keep it sort of contained not telling people... I don't feel like I can even be bothered anymore', because (user sibling) has gone back to (using), it's almost like why should we be trying to keep her secret and trying so hard when she just doesn't give a shit anyway (Participant 1)

One of my children does know...he must have overheard something and I felt it was silly not to tell him, he was mature enough to understand. But the other two don't so all the time 'why hasn't he been to visit?' you know, these sort of questions and friends, relations, that kind of stuff... this big secret, this big shame that you take on board (Participant 17)

Emotional experiences: Hope

As part of the rollercoaster of emotional experiences, participants described feeling hope that their sibling will continue to remain abstinent or stable and not relapse. As discussed above, the expression of hope was often tinged with doubt or worry. Therefore the expression of hope became more of a wishing for the best rather than a firm belief that their sibling would maintain stability.

you always hope when he gets out the last time that he's gonna get better and that this time when he just got out he had a girlfriend and you thought oh maybe he's gonna get on track and get a job (Participant 5)

but still part of me thinks, you know, I can't fix that, but just despite everything I see in front of me, there's still some part of me that still believes that I can help my brother and that he can live a normal life, but he never will and, but I still can't...it's logical and rational that he's never gonna be that way but at an emotional level part of me still believes maybe he could (Participant 8)

Emotional experiences: Guilt

Participants described feeling guilty when trying to disengage from their sibling or as a result of deciding to disengage. Guilt appears to be related to the contravention of the unspoken rules of the sibling bond, that of mutual protection and caring. Therefore guilt appears to be the main emotion that serves to keep participants locked in a cycle of sacrificing to support the user (the theme 'participant sacrifice' is explored further below) and aiming to set boundaries as in 'behavioural disengagement' (this theme is also explored below). Participant 8 described her constant re-engagement and sacrifice in helping her brother in order to avoid feeling guilty:

I see these people in the doorways and I just look at them to see if that's my brother, and that's something I don't want my brother to be, you know. And I think well if it means he can stay in my place, if it means he's on my floor again, back on the same couch I scrubbed clean, then if that's what it takes for me to not look in a doorway to see his face looking back at me then that's what I have to do

And:

I said to my boyfriend, 'Yeah I know what he did last time, but what are you gonna do; sorry', you know, 'find yourself a bridge'? I just can't do that because it's something I would then have on my conscience, it's not something that I could just step away from and know if something happened to him, if he overdosed or, cause he's been suicidal, constantly suicidal... could I live with knowing that he killed himself and the day before I'd told him 'You can't stay in my unit', I don't think I could

Participant 9 described the guilt she experienced after she did impose boundaries:

we rescinded bail because he had been involved in an accident where he caused harm to another person and their car and we had police come to our place cause they knew where he was as we'd taken the bail out on him...and he went back to jail, so that caused for myself a lot of grief and guilt because I'd given my own brother up...

Emotional experiences: Grief

Participants described experiencing grief and loss. For some participants the loss of a user sibling was through death due to overdose or other drug-related factors. However, participants also expressed experiencing grief and loss through a sense of losing their sibling to the drug use lifestyle. Due to the impacts of the user's behaviour, participants described a need to distance themselves and psychologically 'let go' of their user sibling. The process participants go through to get to this point of deciding to let go is further discussed below under the higher order theme of Boundaries. However, as part of the emotional experiences, participants describe experiencing grief when going through the process of distancing themselves and after they have decided to disengage or detach from their user sibling.

it's the letting go that hurts the most and they don't understand that, they think oh you're a bitch because you let go, you're not...they don't realise that it's because you care that you have to and that actually hurts more than the lies and loss of trust and everything and it hurt so much for me (Participant 3)

the less he knows about me the safer I feel I guess, but at the same time it's sad, you know, he's my brother... it's sad because it could've been so different...but now, I just can't...I don't trust him (participant 4)

Support for user

Participants engaged in support for their user sibling in several ways including support for the user themselves and support for the user's children. This theme also explores the significant sacrifices participants gave in order to provide support.

Support for user: Practical support

Practical supports for the user included shelter, food, and financial support. Participants also provided support for treatment including researching treatment providers and facilitating entry and attendance at treatment services. Support was often given in addition to parental support. However, support was also given when parental support was withdrawn or not available.

when mum's been really desperate I've said to her 'I'll give you five hundred, if you give it to him, don't say it came from me', because I don't want him then coming to me (Participant 2)

he basically came round and he was in trouble, owed money all the rest of it as goes with all that lifestyle, then basically told him he could stay with us for a little while but not very long because it was a little house we already had four of us living in there, he needed to sort himself out and get on his way (participant 3)

I immediately felt that I could help him deal with this. I did all the research, I called up various bodies to find out what it was I was dealing with, I offered him all my- any kind of help, anything that would help him deal with it. I suggested to him that he seek counselling, I felt that that was mandatory (Participant 17)

Support for user: Conditional support

Some participants became aware that simply giving money to their user sibling meant that the funds would be used to access drugs rather than as intended for bills and food. Participant 6 described finding ways to provide basic physiological needs whilst limiting the chances that her support would be misused:

I'd maybe get her like a gift card to one of the stores so that she'd have to go to the store, which obviously, like she can still get around it, but I'd try to make her life more difficult, you know, so at least maybe she would get some food

Participant 5 discussed the conditions under which she would consider providing limited support to her brother:

Obviously he'll talk about it when he's inside but when he gets out he would have to put in the steps to, you know, like actually make arrangements to clean up his act, he'd have to get a job and hold that job, like he gets a job and it's like a couple of days or a week and it's fall by the wayside...he'd have to hold and have some sort of security behind him before... he'd have to make a lot of changes

Support for user: Support for user's children

Participants were also keenly aware of the need to provide support for the children of their user sibling. Support for the children included practical and emotional support when participants felt that their user sibling was unable to care for the children, or when children were already in the care of grandparents (participant's parents).

I remember just being so pissed off on Christmas day and the kids, you know (child)'s there crying, I mean it might've only been about something stupid, I don't know, but where is (my user sister)? She's completely off her head, she turned up the music full ball and put some heavy metal music on... I remember I just had to like compensate as their aunty...I feel like I've gotta be this normal sort of parent figure right now, because she's just out in the garden just absolutely off her head (Participant 1)

so what I decided to do was every Saturday I'd go round and pick up the kids, the two boys and take them swimming or to the movies or something like that, so they would have a dose of normal, what I think was normal, but something that wasn't like chaos (Participant 7)

it was his daughter's birthday, he had no money to buy her anything, she was turning like seven or something, and she wanted to see him, spoke to him on the phone and she said 'Oh daddy, are you coming to see me today?' and he said 'I don't know where she gets that idea from' and I said 'Well I'll tell you what, I'll come and pick you up, you can use my phone to ring your daughter, I'll drive you, I'll buy a present for her, so you can give her a present, and then I'll drive you to (suburb) so you can see her, I'll take her out if you want, you can take her to Adventure World, take her from a meal anywhere kids wanna go, I'll pay for the whole thing, I'll drop her back and then I'll drop you back to (suburb) so you don't have to pay a cent and you can take her out and show her a beautiful day for her birthday that she'll always remember (Participant 8)

Some participants became aware of the impacts of their user sibling's lifestyle on the children and became involved in Family Court and child protection matters. Participant 6 discussed her sister and the impact on her niece:

(User sibling)'s in an abusive relationship and I was really worried that she was gonna get hurt and I was worried that my niece was going to get hurt so I took her out of that situation and just never took her back... and my sister had a breakdown so she wasn't in any condition to look after her anyway and then she got evicted...even now she's not really in any position to look after (her daughter) so, you know, it's like...she can't have her.

Support for the user: Participant sacrifice

In the course of providing support to the user sibling and the user sibling's children, participants described significant sacrifices in their personal life. As a result of these sacrifices, participants experienced costs in their relationships, financial, work, and study areas of their life, as well as impacts to their physical and emotional wellbeing.

I'd come home but then I was trying to help mum out, like didn't want her to have a meltdown, so it was just getting the kids bathed, fed, helping clean the house, just being a buffer against mum having a meltdown so then I couldn't be bothered doing study when I got home, I was just too tired (Participant 1)

as much as I told him he had to pay us money he hadn't, I had been feeding him, clothing him, putting a roof over his head, I put fuel in his car, I was working at Coles as check out chick 35 hours a week, I wasn't earning very much money (Participant 3)

So I mean basically now I have to go to the court and go and read all the subpoenaed records, I mean there's like a billion documents that I have to go read because I'm representing myself cause I can't afford to get a lawyer and I don't qualify for legal aid cause I have a job and my sister qualifies for legal aid cause she's on a disability support pension....I have to take time off work and (niece) has got an independent child lawyer which gets paid for by legal aid but then the cost gets split between the two parties that are fighting over the kid- oh guess who's fighting over the kid, that would be me, oh good (sarcastic tone), I have to pay for that (laughs), so, I mean they

want to put a caveat on my house so that if I sell my house they get their money, I was like I don't think I should have to pay anything at all...not my kid...(Participant 6)

Participant 9 discussed sacrifices that she had made to support her brother, even though she herself also experienced a drug use problem. She discussed the significant financial costs of clearing her brother's drug debts with his dealer:

then I hear from his dealer 'Look, you know, he's got six hundred bucks on tick, what can you do?', 'What do you want me to do?', 'Oh, you know, I need that money from him'. I can't pay for it anymore, I've already gone through all the savings, I can't pretend there's money in there anymore (Participant 9)

Support for self

When the impact of the user sibling's drug use, or the process of supporting the user, started to create stress in the participant's life, they engaged in support for themselves. Participants discussed engaging in informal supports such as ensuring they maintain other areas of their life, or being able to access social supports such as family and friends. Other participants discussed more formal supports accessed through treatment or other psychological health services. Supports were found as either helpful or unhelpful. Some participants also discussed difficulty or barriers to accessing adequate support.

Support for self: Social support

Participants discussed finding family and friends helpful supports when they felt free to discuss their difficulties. Participants described finding the most helpful behaviour from the support person as listening without judgement of the participant or the user and help with maintaining boundaries.

So when I have been angry about it I've known that I can talk to (sibling 3) and say 'I'm just at my wits end and she just doesn't give a shit about anyone and she's doing this and..' and (sibling 3) will just be like 'yeh, I know, nothing's really changed'. So I can talk to her about it (Participant 1)

my partner at the time he would listen a lot, but he doesn't really understand drug use and I just remember saying 'No...you're not really getting it, like I just need you to

listen, you know'. But he got better, he kind of understood that that's just what I needed, I just needed to vent or talk about it (Participant 1)

I've found it really difficult. (Husband)'s been very supportive in that and I thought he was being a bit hard at first...but it was actually, he made it easier for me to deal because he gave me the support, whereas my ex-husband just wanted me to take care of everything. Whereas (husband) would actually answer the phone sometimes and just say 'If you ever want any advice, come up and we're happy to give you some advice on how to cope with it, but no, we can't lend you any money' (Participant 2)

but I made some good friends and I think that helps as well. And that stopped me from really losing it and it made me realise that there was more important things in life, I think. And I had their support (Participant 4)

Some participants discussed feeling more comfortable and more understood when they discussed their user sibling with someone who had similar experiences or who understood the nature of drug use.

In the moment I don't think (my husband) understands, but you know, he's a human being, he's got a family and his family hasn't been through the same things, but they've been through different things, but it's just as hard to deal with other things for some people. And no, he doesn't understand me because he was the youngest child and he had a big sister that looked after him so...he might empathise. And so at first I used to get angry with him cause I think 'no, you don't understand, you just don't care, you don't care about me, you don't know how I'm feeling', but then you sort of start accepting...they're empathising, they're not just trying to make life easier for themselves, they're trying to make it easier for you too (Participant 2)

people outside the family, they may of had their own similar situation and, you know, all human beings have emotions and feelings, but unless people see you on a day to day...they can't really understand how you're really coping with things (Participant 2)

it's not helpful to talk to somebody else in an attempt to get some help or sharing or some understanding, I think it's highly unlikely that you would talk to somebody who hasn't had that experience, they're not on the same wavelength (Participant 7)

Support for self: Professional support (non-AOD)

Some participants discussed accessing professional psychological services to help coping with drug use in the family. Usually this was in the context of greater stressors in the participant's life, of which the stress created by the user sibling contributed to a feeling of not coping. Services included individual psychological or psychiatric consultation and family therapy either with or without the user present.

But I actually did go and see a psychiatrist and a psychologist earlier when my kids were young, cause I wasn't coping and I didn't have anyone else to talk to. I didn't want to talk to my friends about it cause I didn't want to burden them with things, cause they were having their own problems at the time... so to go and talk to somebody, away from your own environment, where you didn't have all these reminders everywhere and actually just that was your time to say, you know, 'I'm feeling this, I'm feeling that'...I actually did have to do that just for my sanity...there were no solutions there obviously because they don't have the solutions, but at least I got to say it (Participant 2)

you feel like you're on your own and it is something that I have dealt with with mum, we've actually been to see psychologists together for that and we actually did almost like couple's therapy kind of thing but with a mother and a daughter. And we did try it with (my user brother). We did actually try to have him come along to therapy... he came for one session...he told lies during it and he just wouldn't listen, he didn't actually hear what me and mum were saying. And I mean I know you can't expect things out of one session, but when he's lying and it was so difficult to get him to that one, he wasn't ready (Participant 4)

Support for self: Professional support (AOD)

Some participants were able to access specialist Alcohol and Other drug services. Often the type of support found to be helpful that was provided by these services was education regarding the particular drug or regarding the user.

But I'm one of those people who would look for all information in any circumstances, if it was my own health I'd want to explore all the possibilities, all the avenues and get

as much information as possible. I'm big on information in every aspect of my life, so definitely having information was helpful, it gave me an understanding of what to expect, it gave me an understanding of what I could and couldn't do, I discovered that that there are bodies out there who can help, I'm not so sure that it helped me so much, it's more for the addict, I'm not so sure about support for myself (Participant 17)

As Participant 17 suggests, many participants commented that although they found the education helpful, they did not receive adequate counselling support for their particular need as a sibling of an illicit drug user. Therefore they did not continue to engage with the service.

I was here by myself with three kids and I had this brother that I was feeling guilty that I couldn't cope with as well, but he was just one of the things... and I did actually go to (AOD service), but that was for my son. And I didn't find that particularly helpful, it really didn't help me cope at all (Participant 2)

I didn't find them that helpful. They were sort of helpful, helped me understand a little more about him, didn't really help me with me... they didn't really help me understand where I was at. And maybe that's because I didn't keep going (Participant 4)

Furthermore, other participants described not knowing about what type of support would have been most helpful, nor where they could access support.

I can only think of in terms of the family and I just feel, I don't know maybe there is some sort of support for the family like, for a child with a drug and alcohol use...looking back we really needed it, mum and dad needed it. I don't know why mum didn't even go to a counsellor...I don't know if mum tried, I feel like we might of but we couldn't really find some, I don't know (Participant 1)

Role expectations

In this theme, participants explored their role in the family and in the sibling relationship and expressed a sense of obligation to the user sibling. Participants felt they were beholden to specific expectations as an artefact of the sibling relationship. They also explored the

possibility of potentially having more freedom to disengage from obligation because they were not the parent of the user.

Role expectations: Sense of obligation

Where participants held a sense of high affectional closeness in their sibling bond, they also expressed a high sense of obligation to care for, protect, and nurture their user sibling. Participants expressed feeling that, due to the sibling bond, they held a special role in the user sibling's life that would carry enough weight to motivate their sibling to cease drug use. This sense was expressed as both an internal value and also an expectation that was placed on them by other family members and people outside the family. Some participants expressed a sense that they would always meet this obligation, no matter what the personal costs. Other participants expressed disappointment, hurt, and frustration when they realised that their association with their sibling would not lead to change in their sibling's use. Often this realisation led to further appraisal (this theme is explored further below) that sparked changes in participants willingness to engage in support for their user sibling and what type of support they provide.

Well I'm the eldest and I deeply resent it (laughter), have been responsible for whether somebody had a runny nose, or their shoes on, and things like that, but that was just the way it was, there wasn't anybody else to take responsibility, my mum and my stepfather always worked, so I was the one that was home, cause school finished before work finished and I was the one that both (middle sibling) and (user sibling) would come to if they were in trouble because they wouldn't go to mum and dad, because, one: they didn't really have time, they weren't there and second, they might get into more trouble (laughter) than they would with me (Participant 2)

I think expectations is another thing too, that people feel the burden of expectations and that burden becomes their own burden as well because they start expecting it from themselves (Participant 2)

I can look back with a clear conscience and say, if he wanted a hand, if he could've got out from anything that I did, so there's nothing I haven't done to help him to step out of the situation (Participant 8)

A sibling, I suppose it depends on the closeness of the sibling...you do feel a certain responsibility....you know my brother and I have been very close and if you're close to

somebody you can't help but feel a certain responsibility for that person...but I think if I was in trouble that he would feel the same about me (Participant 17)

I sometimes wonder if my ex-sister-in-law wanted me to know because she felt if anybody could make a difference and get him to seek help it would be me and perhaps I was a little disappointed in the fact that I couldn't make that difference...that responsibility, or that expectation, was something I felt could've been placed on me and something I just couldn't do anything about (Participant 17)

Role expectations: Freedom to disengage

In this theme participants explored their role as the sibling and the expectation of unconditional support as part of a sibling's responsibility. Participants suggested that parents might have been expected to continue to provide support to the user, no matter how difficult the situation became for the user and for the family. It was suggested that siblings might have more freedom to either disengage completely or to provide only conditional support to the user. Even if siblings decided to disengage, they still had the representation of the sibling relationship in their mind and a sense of their sibling's 'presence' in their life, despite geographical and psychological distance.

it's just mixed emotions, I think that's what happens with it, you're struggling with this, you're meant to sort of be this supportive sister- and maybe there's the expectation of unconditional love as a sibling I don't know...but I'm just realising that no....parents have that, maybe siblings is a little bit different...(Participant 1)

I'm a long way down the track, you know, a kid that starts out with a big brother or little sister using or something, there's a long way in between, it never finishes I don't think, cause even if they leave your lives, they never leave your head so it's a long term for them, it is like having children, you can decide never to talk to them again, but there'd still be the reminders, so you might as well learn to deal with it (Participant 2)

as a sibling I guess it's maybe a little bit easier because you have your own life on track and it's like well, you accept that that's what he's doing and this is your life so you'd just like to know where he is and how he is and that he's okay (Participant 5)

Family dynamics

The sibling relationship is part of the larger family system and many participants explored the dynamics in their family relationships that were impacted by one member's drug use. This higher order theme explored the participants' observations of the impact on other family members (mainly parents), how the participant has supported other family members, and how the family focussed on the user, both psychologically and practically in terms of funnelling family resources into supporting the user.

Family dynamics: Observing impact on others

Many participants observed the negative impacts on other family members from one member's drug use. The impact to parents was more frequently commented on, although other siblings' perceptions and coping were also discussed.

so all of this sort of stuff went on for a long time. Mum and dad being at their wits end, mum just being crying- she was just like a bundle of nerves, because she knew if they had a fight... they didn't wanna set (user sibling) off, because if she was really angry, they were scared she was gonna go off and overdose... I just think mum and dad were constantly walking on eggshells around her (Participant 1)

(Mum) rang up and she was just crying on the phone... she started reading something out of the paper and just sounded like our brother and I was like 'oh mum...god I thought someone had died'... it's almost like kind of angry with her cause 'You know this is the life that he's chosen' and it's like 'why haven't you accepted that yet?' like the level of acceptance that I have... I don't know, it just seems to fall off me, whereas she seems to take it on and it's all a big drama (Participant 5)

my dad was there pleading with the psychologist 'This is just going around in circles, it has been for ten years, this guy is on a one-way ticket to death in the next few years unless something's done about it, he needs to get his life back in order...', I'd never really seen my dad so emotional and... he was nearly crying and he was just devastated (Participant 8)

Family dynamics: Supporting others

Participants felt that they needed to provide practical and emotional support to their parents and other family members. Participants often felt that not only were they coping with their own emotions and stress in relation to their user sibling, but they also took on other family member's stress and helped them cope. This made the role of participant in the family system integral to maintaining its functioning.

But quite often being the buffer with mum, cause she would just have a meltdown. It was like I actually had to follow her around the house and be like "Mum" and sometimes I can hear her like doing this breathing thing where...she's going (imitating hitched breathing) and I have just say "stop!...you need to sit down" because she's just that much on edge. So...yeh, mum gets a bit stressed (Participant 1)

I had to watch and listen to both my mother, who eventually found out what was happening, and deal with her on an emotional level, my sister-in-law who was going through hell and needed to talk to somebody and it would usually be me, my ex-sister-in-law who was dealing with her own children, so it became much more than just my own personal feelings towards it, it became wrapped up in the rest of the family and the responsibility (Participant 17)

Family dynamics: Family focus on the user

This theme, in conjunction with the below theme, use of family resources, highlighted how much of family resources are focussed on the user. Participants felt that there was a psychological focus on the user and many family rituals and day to day practices centred around the user. This was in terms of how family members related to the user and to each other, or in terms of how much of the family time was devoted to conversations about the user and coping with the impacts.

(Sibling 3 and 2) are both living in separate countries, so I'm just having conversations with them on the phone, and mum and dad do the same as well, but then at dinnertime me, mum, and dad would often just end up... we talk and we analyse it (Participant 1)

so I guess what I'm saying when I think about it it's not only changed the dynamics of my relationship with my brother, but the dynamics of my relationship with my father

and probably my mother, just in our expectations of each other and less individualised, you know we're kind of seen at times as being in terms of what we can provide in assistance for my brother, rather than us seeing as a person (Participant 8)

I didn't see any reason to ring my mum and dad up from the other side of the country and say 'Oh hi I've got a raging speed habit', or 'Oh hi, I've....got a heroin habit', it wasn't their business...I had ownership of that, it was mine, and then when I did talk to them, or when I'd hear from them I would just hear about (user sibling)...no, I don't have...no one has the right really to double whammy their parents like that (Participant 9)

Family dynamics: Use of family resources

Participants further commented on how much of the practical family resources (finances, property, time, etc) were given to the user. Participants commented on the effect of missing out on those family resources, especially as most participants would also be using their own resources to support the user.

me and mum and dad would all get together and help him organise a place to live and get him some furniture and paint the house and clean and all of that sort of stuff. And six months later he's lost the house, he's lost the car, he's lost the job... then you gotta go and clean the unit, the flat, whatever it is that he's in, which just festers, you know, six months without being cleaned, it's just disgusting... because he hadn't paid the rent and so he'd lose all the furniture as well because they'd repossess it all... TVs and all the rest of it, which we'd all helped him get (Participant 4)

my parents were due to retire and had been planning retirement, just before dad's contract finished and... they were required to pay for (user sibling)'s legal bills, which amounted to well over five hundred and fifty thousand dollars...It won't ever change, even if they work out that he's using, if (user sibling's girlfriend) says to them there's money missing out of the account, you know it'll be months or a year before they even start taking any notice and once again it'll just start again, that circle of blame, the circle of helping, the circle of 'he's got kids now, you know, it's more important to help him' (Participant 9)

Boundaries

The higher order theme of boundaries explored the ways participants reflected on and evaluated the impact of the stress of having a sibling as an illicit drug user and their capacity to meet the demands of coping with those impacts (appraisal). As a consequence of this appraisal, this theme explored the way participants tried to manage or cope with those demands through creating psychological or behavioural distance in order to protect themselves and others from the stress and other impacts. The different behavioural and psychological strategies implemented by participants to create distance are described in the themes behavioural disengagement and emotional disengagement. Where the sibling relationship becomes so altered or damaged, or where a bond exists that is characterised by low affectional closeness, some participants describe coping through emotional detachment.

Boundaries: Stuck

Participants discussed feeling limited in the choices they could make to cope with the situation. They described a sense of being stuck between role expectations (specifically a sense of obligation to their sibling), family dynamics, behavioural disengagement, and sibling sacrifice. When contemplating alternative choices, it appears that emotional experiences such as guilt and hope, as well as the pull of the sibling bond, influenced the choices participants made to remain engaged with their user sibling.

Even when you're aware of having a choice, it doesn't feel like you have a choice sometimes, because your heart won't let you make some of the choices that other people say 'you've got this, you can do this, or you can do this' and that was the hard thing when (husband) and I first got together, saying 'just hang up, just say this, just say that' and you just feel you can't.... it's like, you know, which one of your children do you want to die, you've got a choice, but it isn't a choice really, sometimes it's just too hard a decision, so... I don't know." (Participant 2)

so it's kinda like you've got a choice and, this is what my dad is very good at saying, it's wonderful cause he can hark back to all these great psychological theories and in many ways he's right but, you know, you've got a choice, you can enable this behaviour or... but at the end of the day, there's not really a choice cause you either supposedly enable the behaviour and protect him from the consequences, or you allow him to have the consequences and then knowing that you just facilitated his

demise, and then you have to look at that for the rest of your life so it's really not a very good choice either way" (Participant 8)

it was probably before he went to New Zealand I'd started to realise, but I still tried, I started to realise that I needed to distance myself, but I still kept trying, so I'd sort of pull back and then I'd try and then I'd pull back and then I'd try. And when he came back I thought right, we can do something here, he's obviously come back for a reason, he wants to sort things out, I'll give him these opportunities, you know (Participant 4)

Boundaries: Appraisal

In this theme, participants began to appraise the balance of the level of support they gave to their sibling against the outcome of their efforts. Most participants began to realise that the process of supporting their sibling came with significant adverse physical, emotional, psychological, financial, and social costs, as can be seen in the above themes. Participants discussed the realisation that despite their significant support, their sibling had not shown any long lasting change or remission of drug use. Therefore, the effort they put in and the resulting stress they suffered had not reaped any positive reward, either for themselves or the user.

Appraisal involved not only the participants' willingness to support, it also included their judgement of their ability or capacity to provide ongoing support, such as whether or not they will continue to have the requisite resources. Often participants' own lives, families, and the user's children became important outweighing factors. Participants discussed their view that their life and their family required their resources more than the user sibling. They also discussed the importance of providing support to the more vulnerable children of the user, even if this was at the expense of support for the user. Therefore, the process of appraisal often resulted in the participant deciding to limit the impact of the stress from their user sibling through limiting how much they engaged with the user.

at the end of the day I have to recognise that as much as I can try and offer help and support there comes a moment when there's a limit to what anybody can do, unless the user, unless the using person, in this case my brother, was prepared to seek help (Participant 17)

But I've got my own children and my own grandchildren to worry about and provide for and if I was constantly doling out for him then my children (would suffer)- and they have suffered in the past because of it (Participant 2)

I was grappling with my son who had a substance abuse problem and I didn't have the time or the energy to also be dealing with a brother, I know some people would take on the whole lot but I just didn't, it was only me because my parents moved away and my marriage broke up, so there's me and the three children and it was a full time job, I just didn't have time to fit anybody else in (Participant 2)

I had to turn my back on him... as far as I was concerned I didn't have choice and ...after all the other times I told him he had to leave and he came back, we both knew that this time it was different and that there wasn't gonna be a comeback unless he was clean and even then it was gonna be really really hard, he stole from me, he stole from my friends, he stole from our whole family, he hurt everybody, he helped my bastard of a partner hurt me and defy me and I think that in itself was the worst thing he did with me (Participant 3)

I realise that it's not about anything that we do, sometimes I think that holding on and caring so much actually makes it worse cause they think 'I can go as far as I want, there's always going to be someone to catch me when I fall'....but that's a hindsight thing isn't it, you don't see that at the time and if you did you probably would deny it and still keep doing everything you can (Participant 3)

I guess I just tried so many things and nothing worked....and I think it was actually to save myself, rather than to help him, because after (that) I decided that I needed to save myself because I couldn't deal with it anymore (Participant 4)

Boundaries: Behavioural disengagement

Behavioural disengagement is one way that participants attempted to limit the stress and impact of engaging with their user sibling. Participants discussed using behavioural strategies such as moving away from the user, finding ways to limit face to face contact, not answering phone calls, or finding other ways of placing geographical and temporal distance between themselves and the user. Behavioural disengagement was a process that participants went

through to try to put boundaries around their user sibling's behaviour at times when they felt they could not cope, or could not cope well. As it was a process, rather than the end point, participants found trying to disengage difficult and they were not always successful.

I just basically distanced myself and didn't call (user sibling), couldn't be bothered with her. Again I was angry, I just thought, nuh I've just gotta stay away from her otherwise I'll just get pissed off with her or upset (Participant 1)

She's got my mobile number, that's it. And she's got my mum's mobile number cause we haven't changed those, you can screen the calls a little easier with that (Participant 6)

it was almost impossible for me to cope with (user sibling), so I would sometimes be physically shaking when she'd finished... but most of the time I would just say '(user sibling), I'll speak to you another time' and hang up, never rudely, I would never slam the phone down or whatever, but that's what I'd do (Participant 7)

just keeping him at distance even when he's staying with me and taking from me, my finances, and even if I just go for a walk or if I just go out to the shops by myself just to get away from him, to have spaces in my life away from him because he can be very all consuming and I can lose a sense of myself and my own life. It's very easy for everything to get tumbled into this sense of despair that I have to think well he owns all that and at the end of the day I have stuff that is separate and aside to all that and I always will (Participant 8)

I actually in a funny kind of way was pleased that I was a long way away from it, for my own and my own family's safety. And maybe that's my over reactive imagination but these sort of things go through your mind (participant 17)

Boundaries: Emotional disengagement

Emotional disengagement was the psychological process of trying to put distance between oneself and the user. Participants described strategies that limited the intensity and duration of emotional experiences related to the impact from the user sibling. As with behavioural disengagement, this is a process so participants also struggled and were not always successful. Emotional *disengagement* is distinct from emotional *detachment* as it suggested that there still remained a bond characterised by high affectional closeness and a sense of the attachment in

the sibling relationship, which did not remain once a participant became emotionally detached. Additionally, behavioural and emotional disengagement can be seen as coping strategies, whereas participants tended to describe emotional detachment as an end point with a permanent shift in the way the sibling bond was characterised.

I think for my own well-being I just couldn't, it was taking too much energy, time and emotional energy and so I suppose there was a bit of relief letting it go from that standpoint, but you never fully let it go, I don't think, it just becomes a little easier because you decide, well that I can't... I'm gonna have to be wise and realise that this energy I'm putting in, I'm not going to make a lot of difference, the best thing to do is be supportive and positive when we have communication (Participant 17)

I spose I'm far enough away for him to be another human being for most of the time and as long as I don't know about it, I don't get upset... I know that sounds really awful but it's a survival thing (Participant 2)

Boundaries: Emotional detachment

As described above, rather than being a coping strategy per se, participants tended to describe emotional detachment as the end point in the appraisal process with a significant shift in the sibling bond. Participants tended to describe less emotional and physical involvement in their user sibling's life. They tended to describe a significant withdrawal in a willingness to engage in unconditional or indiscriminate support for the user, suggesting a shift in the sense of mutual caring and protection in the sibling relationship. Therefore, the sibling bond tended to become characterised by low affectional closeness. However, participants whose sibling bond was characterised since childhood by low affectional closeness tended to reach emotional detachment either without engaging at all, or engaging in limited support for the user. Consequently, these participants tended to not identify with the appraisal process, or described a less conflicted and less intensely emotional appraisal process.

it doesn't change unless you change things yourself, cause they're not going to change until they're ready to change, if at all. The only way you can change it is if you change, your reaction to it, your expectations (Participant 2)

And:

well it started out as a survival thing and we just have lives apart now. And we hear of each other, he visits mum and I visit mum and occasionally we'll see each other at mum's, but we don't talk about things (Participant 2)

it helped me realise...that I can't fix people. And for so long I thought...I didn't think I could, but I bloody well was gonna try, you know what I mean, and I realise that I can't and that people have got to do it themselves and I can't change (user sibling), and I never will be able to change him, only he can do that...and I've let him know in my own way (Participant 4)

now I just accept it this is the life that he's chosen and it's like he's not going to get better unless he decides in his mind that he can get better, otherwise no one else can help him but himself (Participant 5)

Participants' descriptions of emotional detachment tended to show a sense of acceptance and peace in having the emotional distance. Therefore emotions such as grief, worry, and hope may occur but are of less intensity and duration. Although the reward is less stress in the participant's life, the cost is the loss of a sibling bond characterised by high affectional closeness.

Provisional model and theory

The themes outlined above have been developed into a provisional model (See Figure 2 and see also Appendix B for larger figure) and theory of the sibling relationship when at least one sibling has an illicit drug use problem. The model and theory began to develop during axial coding through noticing the links and relationships between themes. The use of logic diagrams aided making these relationships explicit by naming themes as the subcategories used in the paradigm. This was a difficult process due to the complexity of the data. I found that many themes could be named as several categories. This also highlighted the reciprocal, cyclical, and complex nature of the emerging model. The main relationships identified in the logic diagrams seemed to suggest that user siblings' behaviour (those themes listed under *user factors*) impacted significantly on participants' *emotional experiences*. The presence of a significant bond and a *high sense of obligation* led participants to engage in *support for the user*. However, intervening conditions such as *family dynamics* would also impact on participants' decisions or willingness to continue supporting their user sibling (*boundaries*). The Selective coding process aided pulling together several logic diagrams into a unifying theory through

explicating the story line. At the heart of this research is the participants’ perspective of their sibling relationship and how the quality of this relationship is impacted by one sibling’s illicit drug use. Therefore, the higher order theme of the *sibling bond* became the core category to which all other categories were related using the coding paradigm. The properties and dimensional range under the *sibling bond* (from *high* to *low affectional closeness*) and properties and dimensional range under role expectations (from *high* to *low sense of obligation*) provided the three main contexts to ‘ground the theory’ (Strauss & Corbin, 1990). This conclusion was also reached because the data suggested that these themes were the main psychological ‘pulls’ or drivers underlying participants’ experience of the sibling relationship, including the extent to which they felt stress and the extent to which they struggled with decision making regarding boundaries in order to cope with that stress.

Furthermore, the model and theory outline the process of change the participant goes through in trying to cope with the impact of their sibling’s illicit drug use. As well as showing the stressors and coping responses, the model shows how the sibling bond and sense of obligation (context), impact of use on the relationship, family dynamics, need to protect self and others and the appraisal process (intervening conditions) influenced the path the participant progressed through (strategies and consequences). The model also accounts for the possibility of no change or no progression depending on the success or failure of attempted action/interactional strategies.

Provisional model

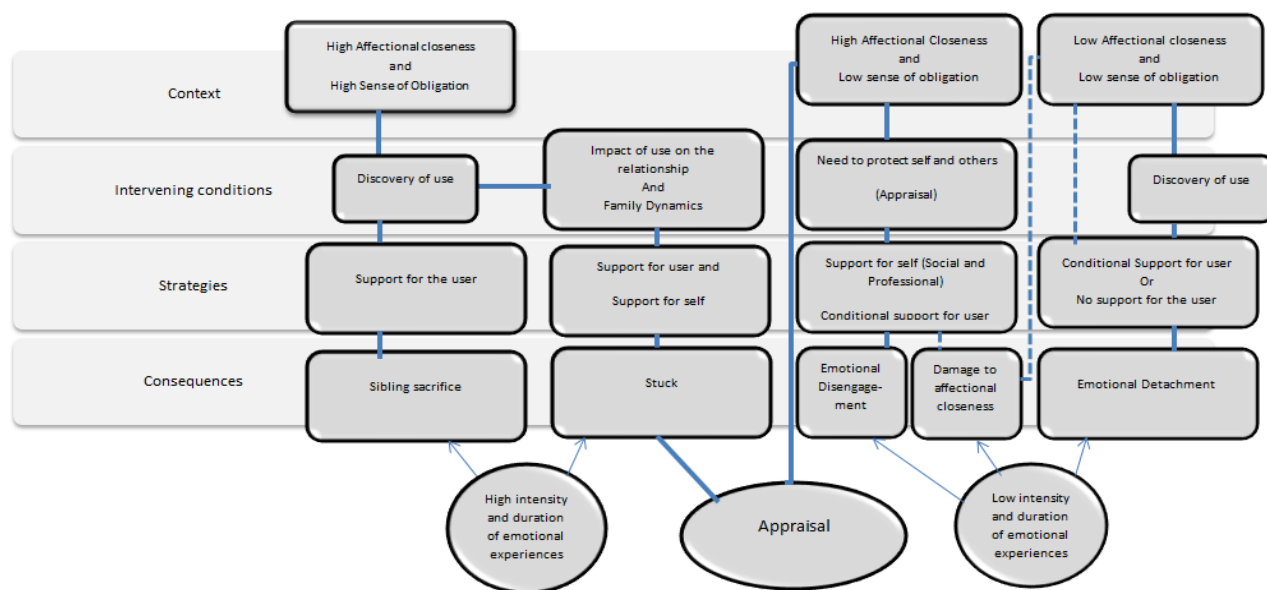


Figure 2 Provisional model of the sibling relationship impacted by illicit drug use

Provisional theory

The theory is explained under each of the three contexts of the sibling bond; 1) high affectional closeness and high sense of obligation, 2) high affectional closeness and low sense of obligation, and 3) low affectional closeness and low sense of obligation. A participant's journey might have commenced and terminated at any of the following three contexts, or commenced at the first context and progressed through each pathway. If a participant's experience was commensurate with progressing through each pathway to the following context, the consequences at the end of each pathway became the conditions for the next context (process of change).

A possible fourth context not outlined in this model was low affectional closeness and high sense of obligation. It has not been included in this model a) because this characterisation of the sibling bond was not reflected in the data and b) it does not make logical sense to have a strong sense of obligation to someone for whom you do not feel close or care deeply. I speculate that one context where this characterisation of the sibling bond may exist is in collectivist cultures that emphasise care and protection of the group (i.e., the family). Hence a sense of obligation to a sibling will be more influenced by family dynamics (cultural family values) rather than individual factors. As stated this is mere speculation as my data do not account for this context. However, should further research support this notion, this illustrates the strength of this model as it can accommodate such a context by adding another pathway and exploring relevant intervening conditions (such as family dynamics), strategies, and consequences.

1) The sibling bond under the high affectional closeness, high sense of obligation context

Based on the history of the sibling relationship the **sibling bond** was characterised by **high affectional closeness** (sense of mutual protection and caring, commonalities, positive regard) and due to shared family upbringing and family values there was a **high sense of obligation** (participant felt obliged to support sibling as part of **role expectations**). When the participant **discovered use** and observed the impact of use on the user (**perception of sibling**) he/she experienced several emotions including **worry, hope, shame or embarrassment**. The participant engaged in **support for the user (practical support and support for the user's children)**. Support for the user sibling often involved significant sacrifices (**participant sacrifice**).

When the **sibling bond** was characterised by **high affectional closeness** and a **high sense of obligation**, but there were intervening conditions related to **user factors (impact of use on the relationship, boundary breaches, and perception of sibling)** and **family dynamics (observing impact on others, family focus on the user and use of family resources)** the participant often experienced additional emotions such as **anger** and **hurt and betrayal**. The experience of intense and long lasting emotion raised awareness in the participant of his/her support needs (process of change). Therefore, participants engaged in **support for self (social and professional support)**, whilst continuing to engage in **support for the user**. Furthermore, to avoid negative emotional experiences such as **anger** and **hurt and betrayal**, the participant became **stuck** in a cycle between trying to maintain boundaries through **behavioural disengagement** and continuing **participant sacrifice** in order to alleviate potential or actual **guilt** from disengagement and fulfil their **sense of obligation** to their user sibling.

This experience often led to **appraisal** by the participant, a cognitive process of weighing up the effort put in to help the user versus a lack of positive outcomes (e.g. remission of use, stability and lack of conflict in sibling and family relationships). This process also involved an appraisal of the participant's own capacity to continue to provide help to the user and took into consideration levels of stress, a judgement of the user's readiness and capacity to change (including user's capacity to recognise impacts of their behaviour and show contrition-**wanting sibling contrition**) and reprioritisation of their own lives and families. This process facilitated a 'letting go' of the sense of obligation to the user sibling (process of change), leading to the next context:

2) *The sibling bond under high affectional closeness, low sense of obligation context*

When the Sibling Bond was characterised by **high affectional closeness** but a **low sense of obligation** due to cognitive shifts found in **appraisal**, that was also heavily weighted by intervening conditions such as the **need to protect self and others**, in particular the participant's own children and the user's children, especially in the Forensic context (**observing impact on others, supporting others, and support for user's children**), the participant engaged in **support for self (social and professional support)**. Due to the Appraisal process and letting go of the sense of obligation to the

user, as well as the importance of protecting self and others, the participant was able to **emotionally disengage**- that is decrease the intensity and duration of emotional experiences by maintaining clear boundaries and escaping the cycle of behavioural disengagement and sibling sacrifice. Due to this the participant was also able to provide **conditional support** to the user- that is support that is conditional on helping the user in ways conducive to a stable and prosocial lifestyle, such as support for treatment, maintaining positive but honest interactions between the participant and user, limiting giving the user anything that could be used to maintain drug use lifestyle such as free accommodation and money etc. Participants also chose to provide conditional support so that the user's children's needs were met.

However, for some participants the appraisal and letting go of the sense of obligation process might have led to significant disengagement from their user sibling. This resulted in the relationship between the user and the participant being so damaged that there was a loss of affectional closeness and therefore a loss of the sense of a strong sibling relationship and bond. Usually this happened through major contraventions of the siblings' boundaries, or very high importance placed on protecting self and others. This resulted in a process of change where there was a shift from high affectional closeness to low affectional closeness in the sibling bond.

3) *The sibling bond under the low affectional closeness and low sense of obligation context*

When the sibling bond was characterised by **low affectional closeness** and **low sense of obligation** (which may have been present since the beginning of the sibling relationship or was arrived at after progressing through the previous contexts) the sibling was clear about maintaining boundaries and chose to provide either **conditional support** or **no support to the user** (dependent on if there is any relationship/communication between siblings). The sibling remained **emotionally detached** (due to low affectional closeness and low sense of obligation) and therefore experienced low intensity and duration of emotional experiences.

Chapter Six: Discussion for study one

A tentative first draft of a model and theory of the sibling relationship where at least one sibling has an illicit drug use problem has emerged from data analysis thus far. The themes generated from the analysis of the first phase of data collection indicated significant impacts on participants who have a sibling with an illicit drug use problem. All participants identified that their sibling relationship had been important since childhood. This indicated that participants felt a strong sense of a bond with their sibling, although with varying degrees of closeness. When participants discovered that their sibling was using illicit drugs to a degree that became problematic, they experienced fluctuating and intense emotions related to the processes of engaging in support for the user, feeling the impacts of use on the sibling relationship and observing the impacts on family members. The impetus for engaging in support for the user was expressed by participants to be directly related to a sense of obligation to the sibling, shaped by the sibling bond as well as by family values and expectations. Participants sought ways to minimise and cope with the impacts by engaging different types of support. Participants often became stuck in conflicting desires to help the user and to protect themselves from the impacts through withdrawing, distancing, and avoidance strategies. The appraisal process and the need to protect oneself and others were identified by participants as relevant factors that swayed the decisional balance toward seeking behavioural and emotional disengagement. Some participants identified a loss of closeness in the sibling bond and therefore a release from the sense of obligation to their sibling. This might be an iterative, mutually dependent process. For example, where participants sought behavioural distance from their sibling, this allowed for psychological distance (loss of closeness) and a release from the sense of obligation. In turn, the release from the sense of obligation led to further loss of closeness and further psychological distance. Unless the sibling relationship was already characterised by low affectional closeness, this process resulted in some participants describing a sense of becoming emotionally detached.

An integrated model

The provisional model that has emerged from phase 1 not only fits with known and accepted psychological theories as outlined in earlier chapters such as family systems theory and stress and coping theory, but also appears to have drawn together and integrated these theories and previous research into a larger, more cohesive theory. Previous research in the area of families

and the impacts of illicit drug use is limited where it only draws on one explanatory theory. Orford and colleagues' research drawing on stress and coping theory acknowledges the impact on individual family members. However, there is scant exploration of how the family system as a whole either adapts and changes or maintains equilibrium where there is a stressor such as one family member's drug use problem. Equally, the family therapy literature that draws on family systems theory acknowledges circular causality but neglects to examine how individuals or specific relationships amongst members such as the sibling sub system are impacted within or outside of the family system. This provisional model and theory acknowledges that the sibling relationship is part of the larger family system. However, the themes that have emerged from the data, and the relationships between those themes, also provide significant insight into the adult sibling relationship as a sub system of the family system. Furthermore, the significance of the attachment relationship is evident in participants' exploration of the significance of their sibling relationship both in childhood and in experiencing changes in the relationship in adulthood. Additionally, there are several themes that indicate not only the level of stress on the individual participant and the sibling relationship, but also participants' cognitive processes that influence coping responses. Therefore this provisional model and theory appears to elaborate and explain more than has previously been explained in literature underpinned by one psychological theory, as has been the focus of previous research. Furthermore, in order to understand the complexity of adult sibling relationships when there is a stressor such as drug use, it appears necessary to draw on and integrate multiple accepted psychological theories to adequately explain the psychological significance of themes and the relationships between those themes in the emerging theory. However, as the grounded theory process is both inductive and deductive, the themes that have thus far emerged from the data and appear to fit with accepted psychological theories (as is explored in this next section) require further exploration and closer application of those theories. This is the focus of the second phase of the research.

Attachment theory (contemporary psychodynamic and social learning theory perspectives)

The theme of the *sibling bond* relates closely with both psychodynamic and social learning perspectives of attachment theory. The sense of mutual caring and protection inherent in participants' stories highlight the notion that both a younger or older sibling became an attachment object in early childhood, with one participant even describing her sister as 'like a mum'. In this significant care-giver role, from the psychodynamic perspective, the sibling as

the attachment object becomes a self-object that was introjected to represent both a 'good' self and a 'good' other in terms of being lovable, cared for, and protected, and as seeing oneself as a carer and protector. This self-object representation may be the driver to continue to engage in caring for a user sibling even though it results in significant self-sacrifice.

From a social learning theory perspective, many participants described instances of an older sibling modelling helping and caring behaviour. This behaviour is organised around the attachment figure, where the participant is motivated to stay around the sibling as an attachment object to meet the goals of both affection and protection. This results in the development of internal working models of self and other as both committed caregivers and worthy of receiving care. This was in both cases of an older user sibling modelling this behaviour to the participant in childhood, or the participant as the older sibling caring for and protecting the younger user sibling in childhood. These internal working models, or mental representations of self and other, generate schemas or scripts that direct mutually dependent and caregiving roles within the sibling relationship. When information generated from events became inconsistent with these schemas, as occurred during *boundary breaches*, this forces a cognitive reappraisal of the schemas and one's role in the sibling relationship.

Whether from a psychodynamic perspective or social learning theory perspective, relationships with attachment figures are regarded as significant relationships that help develop a mental model of oneself, of other people, and of close relationships. Attachment theory suggests that when there is a loss of an attachment or affectional figure then there is a grief process. In adulthood, if the sibling relationship became so damaged that the damage led to *emotional disengagement*, then this represented a loss of an attachment or affectional figure and a subsequent grief process. This was highlighted in participants struggle with letting go and the intensity of *emotional experiences* such as guilt and grief whilst going through this process. In the context of *low affectional closeness*, arguably the user sibling is not a significant attachment figure. Hence there was less impact (less intensity and duration of *emotional experiences*) on the participant. The participant's decision to provide *conditional support* under this context may be due to other intervening factors such as the influence of *family dynamics*, i.e., family values and viewing the impact on others.

Stress and coping theory

Specific themes appear to be consistent with stress and coping theory. The themes *boundary breaches* and *impact of use on the sibling relationship* are consistent with the notion of stress in Orford and colleagues' Stress-Strain-Coping-Support (SSCS) model. The theme *emotional*

experiences is consistent with the notion of Strain in the SSCS model. My model accounts for similar coping responses described by Orford and colleagues. Similar coping responses described in 'Withdrawing from it' can be seen in *behavioural disengagement* and *emotional disengagement*, 'Putting up with it' can be seen in *support for user*, and 'Standing up to it' as can be seen in *appraisal*, *emotional disengagement* and *conditional support*. Lastly, access to support in the SSCS model is reflected in *support for self*.

However, the model proposed here gives more weight to the cognitive process of appraisal that is part of stress and coping theory and integrates stress and coping theory clearly with attachment theory. *Appraisal* links with attachment when the emotional significance of the attachment within the sibling relationship (as part of the *sibling bond*) is a factor that carries much weight in a participant's decision making when choosing coping responses. The *sibling bond* is a clear factor that presents difficulty in *behaviourally* and *emotionally disengaging* or *detaching* from a sibling when a participant experiences what they perceive as excessive strain. In social learning theory terms, it is difficult to adjust the mental representation of mutually affectionate and caring roles in the schema of the sibling relationship due to conflict between the pull of the sibling bond and the strain of perceived stress. This conflict between attachment and appraisal are at the heart of the theme *stuck* and this link is more explicitly stated in this model than in the SSCS model.

Family systems theory

Family systems theory can be seen under the higher order theme *family dynamics*. Participants observe their parents funnelling psychological and physical resources into caring for the user in the theme *family focus on user* and *use of family resources*, suggesting that they are observing a coalition in a parent-child dyad. This was the same even when one participant who identified herself as also a drug user, identified her user sibling brother as the focus of the family resources. This participant made conscious decisions to limit the impact of her own drug use in order to limit the stress and claim on parental resources that she viewed as being prioritised for her brother, thus not disrupting the careful equilibrium of the family system.

Family systems theory is further linked in the model with stress and coping theory where the data suggest that some participants take up the role of a caregiver to the user sibling when parents decide to disrupt equilibrium in the family system by withdrawing support for the user when they are unable to cope. Participants also closely monitor their parent's level of stress and coping (*observing impact on others*) and focus on providing support to them to ensure the

functioning of the system is not disrupted (*supporting others*). The decision made by participants on whether or not to provide support to others may be mutually influenced by stress and coping factors, where he/she judges if they have the necessary resources available to provide support to others in order to maintain functioning of the system.

However, family systems theory is limited in acknowledging the strength of the subsystem of the sibling relationship, especially in adulthood. The sibling subsystem is viewed usually in terms of sibling rivalry which indicates that one sibling believes his/her sibling is receiving more of the parental resources. In family systems theory this is viewed as significant because it highlights possible breaches of boundaries of the spousal subsystem if inappropriate coalitions exist in a parent-child dyad. Therefore the sibling subsystem is placed in the context of reciprocal influences on other subsystems in the family. However, in adulthood, the sibling subsystem might be influenced by larger family systemic issues such as family rules and values regarding care of members (including the user's children). But as siblings become adults the subsystem is less reciprocally influenced by the larger family system. The sibling subsystem has more freedom to change without necessarily impacting on the larger family system and the sibling relationship is not so reliant on the family system to provide stability in that relationship. Indeed changes in the relationship may be more dependent on attachment (degree of affectional closeness) or stress and coping factors. This is evident in the data where a participant may become emotionally detached (a significant change of the status quo in the sibling relationship) but this does not reciprocally influence the level of care or support provided to the user from the other family members. However, more data are needed in order to understand the different contexts and the extent to which the properties and dimensions of family dynamics reciprocally influences and is influenced by the sibling sub system.

Conclusions

The emerging grounded theory of the experiences of adult siblings of illicit drug users integrates several major psychological theories. These theories are contemporary psychodynamic and social learning theory perspectives on attachment theory, stress and coping theory, and family systems theory. Integrating these theories gives greater explanatory power to participants' experiences than any singular theory. Furthermore, the reciprocal influences of each theory lends a greater understanding to the factors that influence the meaning participants give to their experience and the subsequent actions and process of

change they undergo to adapt to their experience. This change may be an internal psychological experience as understood through stress and coping theory, or interpersonally within the sibling relationship as understood through attachment theory and stress and coping theory, or other significant relationships as understood through family systems theory and stress and coping theory.

Aims for Study one phase 2

Some themes and relationships between themes developed in phase one are limited in their conceptual depth and density. There is limited information on the types of support that participants find helpful, including social and professional support. The conditions under which participants are more likely or willing to access support, or the barriers to accessing support, also require elaboration. As noted above the higher order theme of *family dynamics* requires more information to understand the reciprocal influences of family systems and the sibling subsystem, its interaction with stress and coping factors, and how these factors maintain homeostasis or influence changes in the adult sibling relationship. In order to test and elaborate on the provisional model and theory, a second phase of data collection using discriminate sampling was required. As outlined in the methodology section, the second phase of data sampling recruited a further fifteen participants drawn from an Australia-wide population and was led by information given in radio interviews in order to collect more detailed information that elaborated on the themes identified above and to develop the grounded theory.

Chapter Seven: Study one phase 2

Analysis for study one phase 2

The analysis for Study one phase 1 used *open, relational and variational sampling* to gather data that were analysed using *open, axial, and selective coding* in order to identify categories of theoretical relevance and develop the provisional model and theory. In this second phase of analysis I used *discriminate sampling* in order to seek saturation of the data and verify the provisional model and theory by developing current themes in terms of their properties and dimensions, integrating any new themes that arose and validating the statements of relationships between themes. Strauss and Corbin (1990) state that *discriminate sampling* targets the population, site, or documents that will maximise the opportunity to verify or develop categories and the relationships between categories. *Discriminate sampling* can involve going back to previous participants, sites, or documents or choosing new participants, sites or documents where the relevant data can be sourced. The first phase of this study analysed transcripts from Western Australian participants recruited through snowball sampling, advertisements and featured stories in local newspapers and flyers on the university campus. The second phase of this study analysed data from a new site. A further fifteen Australia-wide participants (including some new Western Australian participants) were recruited through an appearance on the national radio station Triple J and Western Australian ABC radio. The author discussed themes and stories that arose from the first phase of analysis and requested adult siblings with a range of experiences that were both similar and different to contact me in order to fulfil the aims of discriminate sampling. Thus saturation in the data was reached when no new themes emerged by the end of the second phase of analysis, categories were developed in terms of conceptual depth and density, relationships between themes were verified and the final model and theory of the experiences of adult siblings of illicit drug users was validated.

Results of study one phase 2

I identified seven new categories and clarified ten original themes that reflect conceptual depth and density from this second phase of analysis. Broadly, these categories and themes pertained to the sibling relationship and participants' support and coping strategies, including influences on appraisal and dynamics within the family system. These findings reflect the greater range of stories and depth of information gathered from the theoretical and

discriminate sampling generated from the Triple J and ABC radio interviews. Thus, the seven new themes were included in the descriptive theme summary. These were *Rivalry*, *Attitudes* and *Re-establishing relationship* (under Sibling bond), *Barriers to support* (under Support for self), *Differences in family members' coping*, *Family rules/values*, and *Alliances* (Under Family dynamics). A further nine themes under the Sibling Bond, Support for User, Support for Self, Role expectations, Family dynamics, and Coping (Boundaries) were further developed and/or subsumed under other themes (see highlighted cells in Figure 3 for all new and developed themes and see Appendix C for larger version). The new and developed categories are discussed under each higher order theme below. Some themes were shifted from User Factors and Emotional Experiences to be subsumed under other themes. However, as there are no new or developed categories under these higher order themes, they are not discussed here. The relationships between all themes were further verified and clarified and the final model and theory of the experiences of adult siblings of illicit drug users is presented.

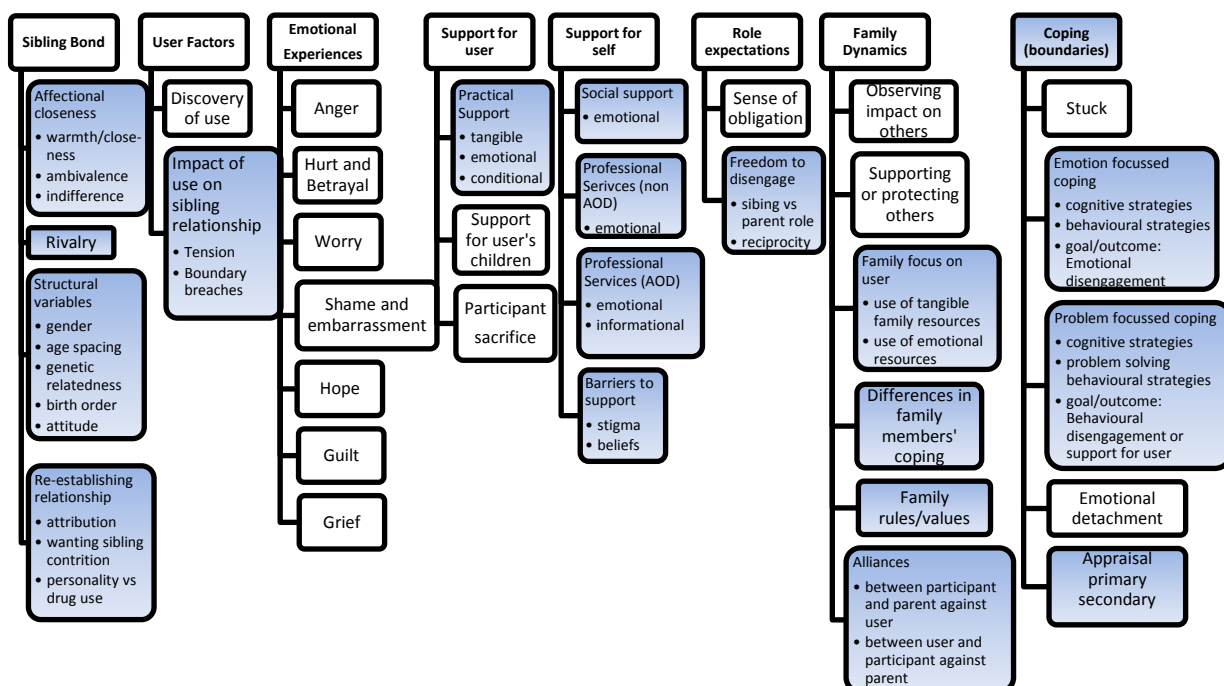


Figure 3 Descriptive theme summary Study one phase 2

The sibling bond

The sibling bond: Affectional closeness

The second phase of data collection gathered a greater range of experiences of the sibling relationship. Descriptions of the relationship in the narrative accounts were consistent with the general literature on sibling relationships. Accordingly, additional subordinate themes under affectional closeness were developed; *warmth/closeness, ambivalence, and indifference.*

In phase 1 results, the sibling relationship was described in terms of mutual caring and protection garnered through common interests, shared family history and shared important events. Consistent with the literature on sibling relationships, these relationship factors are encapsulated under the subordinate theme *warmth/closeness.*

The following quote from participant 14 highlights the idea of closeness and mutual caring and protection that continued throughout her brother's drug use:

Our relationship changed I guess over that period but we remained really close throughout the entire period. I guess that was something that never changed. We always knew that whatever happened he could tell me, he could sort of rely on me

Participants also discussed how closeness with their sibling developed from common interests and shared history in childhood.

Everyone used to describe (user sibling) and I as like thick as thieves basically because we were so close in age and we did everything together and we're kind of on the same wavelength, so we were both sort of really active and always sort of keen to learn and explore (Participant 14)

We used to play a lot, we used to fight a lot, just like normal brothers and sisters do. It was a good relationship. My brother and I had one really big common ground and that was always music. We both played and all that sort of stuff, but we had this big commonality going on (Participant 11)

Furthermore, the emotional climate in childhood set the tone for closeness in adulthood, as illustrated in this quote from participant 14, despite normal developmental changes in the participant's life and her brother's drug use:

Obviously (my brother) sort of went into his teenage years and he changed- I suppose all teenagers do and I didn't think it was unusual but he came out in his twenties obviously being a user. But I think what was really interesting is while he was at home we were really close but obviously when I got married I was living away, my focus was different every day. And I still think we're really close but it's just different, I mean I don't see him every day but I'd still say we're equally as close

Ambivalence was more likely to be become a factor in relationship quality amongst adult siblings whose relationship was characterised by warmth and closeness in childhood, but became impacted by the factors related drug use such as boundary breaches and mistrust.

That's what it is for me with (my user brother) and the way that I feel about him. I love him. I love him to death, but I hate what he did to my family. I just hate it. I hate what he's done to our mother, or hate what the drug's done to our mother. It's just an awful, awful, awful thing (participant 11)

Participants often felt tied to the relationship through family values or bonds:

when we are around each other (user brother is) relatively nice and we can get along...and we laugh and watch tv shows together and you know I feel quite a lot of sadness that it can't be like that all the time, but yeah, that's it, I just figure he's gonna be around and...he's not somebody I would choose to be friends with, like if he wasn't family I certainly wouldn't have him in my life. If it wasn't for my parents I wouldn't have him in my life (participant 10)

Lastly, the sibling relationship was also described in terms of *indifference* in both childhood and adulthood. Often, this was due to the impact of the user sibling's behaviour from when the participant was very young. This affected the opportunity to develop a close bond from an early age.

I never really connected with (user sister)...and I always held her accountable for a lot of the stuff that's gone on in my life...she's almost like an acquaintance not a sister I guess.... I have no emotion towards her. If she left my life now as an adult and didn't come back into it, I don't think there'd be any impact on me as a person or on my life or anything. I don't have that emotion, that relationship with her that I have with my other two sisters (participant 21)

The sibling bond: Rivalry

The sibling relationship literature tends to categorise rivalry as one of the qualities of the sibling relationship. However, instead of categorising *rivalry* under Affectional closeness with the other qualities of *warmth/closeness*, *ambivalence* and *indifference*, rivalry was categorised as its own theme because it can be present in sibling relationships where there is both high affectional closeness and low affectional closeness.

The data indicated that rivalry was connected to low affectional closeness in the sibling relationship. Consistent with the idea that the emotional climate of the sibling relationship in early childhood sets the tone for later years, some participants identified a strong sense of *rivalry* or conflict in their relationship with their sibling. Participant 19 discussed the distance and conflict he has felt with his user brother since childhood that was then further exacerbated by the impact of his brother's drug use:

I never really got along with (my user brother) that well. But it was once I found out what he was doing and things like that, at the start it didn't really - like, it bothered me but not as much as it does now cause I didn't know how much he was doing of (the drug use).

Consistent with the literature on parental differential treatment *rivalry* and conflict in the sibling relationship is closely connected with family systems. The way parents manage their relationship with each child impacts on the quality of the sibling relationship. Participant 19's rivalry with his user brother demonstrated how rivalry can be viewed as not only a sibling relationship factor but also a systemic factor where the sibling subsystem reciprocally influences and is influenced by the greater family system, especially when the participant observed the impact of drug use on other family members:

To be perfectly honest I hate my brother and I've hated him from a very early age for that fact, but not so much what he's doing to himself but the pain he inflicts on everyone else.... I think my mum's been a lot stricter on me because of that. I think she didn't want another (user sibling), so.... there was a lot of restriction from mum because of (user sibling) sort of thing, so I naturally rebelled against that

Other participants who described their relationship with their user sibling as close in childhood (high affectional closeness) also expressed a feeling of rivalry. However, rivalry was discussed in relation to systemic factors such as the family's focus on the user as a result of the drug use and a sense of missing out when their user sibling consumed most of the family's resources:

mum and dad have often apologised to me and said that they feel terrible because they know that I probably won't have much of an inheritance because of all the money that they've had to spend on (user sibling) with the legal problems and things like that. I've had to try and reassure them that I don't want their money but, you know, I do feel resentful towards him for those things as well (participant 10)

These quotes illustrate the research findings on parental differential treatment that integrates equity theory and justice evaluations. The researchers suggested that the quality of the sibling relationship deteriorates when one sibling judges that differential treatment is unfair, inequitable, or when one sibling is extremely favoured or disfavoured (i.e., they claim more of the psychological resources). Linking *rivalry* with Family dynamics themes *family focus on user* and *alliances*, participants felt that their user sibling consumed most of the family resources. As a consequence participants felt that their parents either do not have any other resources to give to them or they could not or should not demand more resources from their parents. This led to feelings of resentment and alliances within the family system which impacted on the quality of the sibling relationship.

The sibling bond: Structural variables

As discussed in phase 1 results, siblings who were closer in age and genetic relatedness tended to describe relationships characterised by higher warmth and closeness. However, siblings were able to develop and maintain close relationships regardless of structural variables such as gender, age spacing, genetic relatedness and birth order. This trend was verified on phase 2 analysis. Indeed some participants described having closer relationships with siblings of opposite gender and large age spacing than with closer age (even a twin in one case) and same gender siblings. Consistent with the literature, this indicated that structural variables might

influence shared time, space, and common interests and these factors are more likely to influence the development of a closer sibling bond and the quality of the sibling relationship. The data supported the notion that though closeness in age, closer genetic relatedness, and same gender are likely to be the context in which close sibling relationships develop, these structural variables were not prerequisites to, nor did they guarantee, the development of a close sibling relationship. Rather, factors such as shared time, space, and common interests influenced the quality and characteristics of the sibling bond which tended to endure into adulthood.

Attitude

The new theme *Attitude* consolidated discussions from phase 1 and 2 participants regarding beliefs and feelings about their own drug use and being around people using drugs. By viewing the acute and longer term impacts of their user sibling's drug use many participants made a conscious decision to abstain. This was due to experiencing the impacts of their sibling's drug use and also because of concerns of becoming addicted or dependent like their sibling.

as a thirteen year old it quite affected me, I mean I don't drink alcohol and I'd never ever do drugs or anything like that (participant 18)

I never did hard drugs because I think subconsciously I wondered if I'd end up like her (participant 21)

That really encouraged me even more not to even think about going down that track. I've never smoked a cigarette in my life or anything like that. I've always had a bit of a fear of becoming addicted to something, just because I've seen it happen with my brother... I've always thought what would happen if I had one, I'd become addicted to it? I suppose it gives you a bit of a fear that maybe somewhere inside I'm like him as well...(participant 22)

Other participants who engaged in some alcohol and illicit drug use (most commonly peer norms around marijuana use) held conservative attitudes toward what they perceived as the harder drugs that their sibling was using:

I knew he was smoking weed because I smoked weed as well and it's pretty harmless. Some people definitely it affects and it affected him badly; it made him crazy, it made

him violent and depressed. But I knew that because I had used it and most of the people I know do it every now and then (that) it could be fine. It wasn't actually that much of a big deal. I've never tried any hard drugs really. They just freak me out a bit (participant 23)

I mean everyone thinks that marijuana is a fairly safe drug and I mean, in some respects it is. But even marijuana's moved a long way from its grass roots, you know what I mean? It's no longer something that's cultivated out the bush. People are growing it with chemicals and how safe is that for you? It's a lot of things like that that sort of make me think why would I want to do that? And in a way, (user sibling) probably has shown me a side of life that I know that I don't want to have anything to do with (participant 24)

Participants also discussed feeling extremely uncomfortable in social situations where people are intoxicated and actively avoiding anything to do with alcohol and other drug use due to the reminders of the stress and trauma:

I'm more likely to just going out for lunch or for breakfast cause I just hate being in situations where people are drunk, it makes me really really uncomfortable. And if there's any drugs around I'm just not interested in being there at all. I think it's really changed my attitude towards things....The way I'm trying to set my life up for the future is definitely linked to not wanting to live through what I lived through before (participant 10)

I mean (user brother) used to drink and I remember coming home once from a friend's house, my parents were out at dinner and he was completely drunk and I tried to sober him up putting him in the shower and giving him coffee and all that stuff. And I was probably like about fifteen, so, you know, you go out with people, with men or guys, eighteen or whatever and they just drink and it just reminds you of that so I guess I wasn't really comfortable being reminded of that (participant 18)

By witnessing their user sibling's intoxication from alcohol and other drugs and living through the larger impacts of their sibling's longer term severe drug use participants were less likely to want to use alcohol and other drugs (or what they perceived as harder drugs) and often actively avoided situations in which people use drugs. Furthermore, some participants also

commented that they chose friends or partners that do not use alcohol and other drugs in order to feel safe and avoid experiencing situations similar to what they had lived through with their sibling.

Re-establishing relationship

This new theme was developed to encompass factors that participants posited influenced their willingness to re-establish contact or engage in a less guarded relationship with their user sibling. As phase 1 data suggested and phase 2 data supported, participants indicated that the consequences of the impact of their user siblings' drug use was a lack of trust and a need to protect oneself or others from further hurt or harm that might result from interaction with the user sibling. The theme *wanting sibling contrition* identified in phase 1 indicated that participants needed to see that their user sibling was taking responsibility and seeking to make reparation for transgressions. Until the user sibling was able to do this to the participant's satisfaction they were less willing to re-engage in the relationship. Two further themes were developed that indicated beliefs that participants have about their user sibling's capacity for change that influence their willingness to re-establish a relationship. These were *attribution* and *personality versus drug use*. These themes indicated that when participants hold a belief that their user sibling is either unable or unwilling to change, due to permanent changes from the impact of drug use or perception of their user sibling's locus of control, they were less willing to re-establish the sibling relationship.

Re-establishing the relationship: Attribution

Participants varied in their attribution of responsibility for the impacts of the user sibling's drug use. Participants who attributed an internal locus of control to their user sibling viewed their user sibling as making a choice to use drugs and responsible for the negative consequences to themselves and other family members. Participants who attributed an external locus of control to their user sibling were also less compassionate toward their user sibling and less willing to re-establish a relationship.

I think some of the stuff that she did she brought it on herself... At the end of the day there is always a choice I think and she chose to smoke marijuana and she chose to take the (other) drugs and I don't think it was shoved down her throat in all honesty (participant 12)

I was just like, "You know what? It doesn't matter, plenty of people have things go wrong, plenty of people have their lives not turn out the way they thought they would and they don't become violent, aggressive drug dealers who steal your shit and it's just not okay to behave this way (participant 23)

(Mum) was saying "Oh, but it's the disease" and I said "Mum, it's not a disease".. (user sibling) had choices in his life...it's an addiction, it's not a disease. And she was saying "No, no, no, it is a disease. It is because they have no control over it" and I said "Mum, they do have control over it. They, regardless of who it is, there is a level of control that they have over their own actions"... And I think she's manipulated even by the help groups and stuff that she goes to because a lot of them do sympathise with the drug user and it's not that they don't deserve any sympathy, it's just my belief is that these people had a choice and they have had choices all the way along. And as I said, (user sibling) refuses to get psychological help; he refuses to look at the causes of why he is addicted to drugs and especially for drugs like heroin. It becomes a coping mechanism because it blocks all of your pain receptors. So when things are too hard, it's very easy to stick a needle in your arm and forget about all the problems in the world, whereas reality and real life is dealing with them, you know? (Participant 24)

Participants who attributed an external locus of control to their sibling's behaviour viewed their sibling as victims of negative family circumstances or as using substances to cope with an underlying mental illness. These participants were more likely to be compassionate toward their sibling and remain engaged in the relationship.

a lot of gossip went around in the family and they all decided that it was her own fault, that she was in this situation. She had abused drugs and alcohol and that's why she was mentally ill, but they wouldn't listen when I tried to say that it wasn't like that at all. It was actually the other way around and that we needed to support her and they weren't interested (participant 16)

However, even though most participants recognised that negative family circumstances may have influenced the uptake of their sibling's drug use, they were more likely to identify that

their sibling had control over dealing with the underlying psychological issues and resolving drug use issues. This led to attributing an internal locus of control to the user sibling.

What I'm really conscious of is not treating him like a victim because he's not, but he has made a mistake and he has to fix it. I don't judge him and I just think anyone can make a mistake and sometimes you make choices in life that aren't right and that's exactly what he did. I just don't buy into it and I just think that anyone can make anything of the cards they've been dealt (participant 14)

(user brother)'d usually cut contact....there'd usually always be a phone call where he was irate at my mum or my dad or something that they've done and that they were the reason that everything had happened, so he could never accept responsibility for his actions I suppose...I think he was very self-centred in the fact the he could never see the way he was affecting everybody else, he always thought everyone was affecting him (participant 22).

Attribution of internal versus external locus of control influenced participants' beliefs about their sibling's capacity for change. An external locus of control was attributed when user siblings were seen as victims of circumstances, less able to change, but still deserving of support. An internal locus of control was attributed when participants believed that their sibling was responsible for choosing to continue to take drugs, even though they may initially have used drugs to cope with adverse family circumstances. Until the user sibling was willing to recognise the impact of their use and choose to cease use, participants viewed their sibling as less capable of sustained positive change and were less willing to re-establish the relationship or engage in support for their user sibling.

Re-establishing the relationship: Personality versus drug use

This theme encapsulated and expanded on the ideas presented in phase 1 under the theme *perception of sibling* that showed how participants perceive the effects of drug use on their sibling. Therefore, the theme *perception of sibling* is now subsumed under this new theme *Personality versus drug use*. As discussed in phase 1, participants observed the signs of acute effects of drug intoxication and withdrawal symptoms through to long term impacts of regular drug use. In phase 2 participants' ideas were supported regarding whether underlying psychological vulnerabilities caused their sibling to use drugs. Also supported in phase 2 were

participants' comments on the consequences of their user sibling's drug use such as permanent negative personality and behavioural changes. Participants' beliefs regarding the permanence of their sibling's negative traits reduced their willingness to maintain or re-establish the relationship.

Some participants attributed underlying personality and psychological vulnerabilities as influencing their sibling's uptake of use. This can be seen in participant 16's perception of her sister with schizophrenia:

as she was growing up she learnt to cope with the voices and things in her head by just simply not admitting to them and started to abuse drugs and alcohol to actually get away from them, but they actually ended up compounding her situation

Participant 18 also views her brother as using drugs to cope with underlying personality characteristics:

I think he (was) always quite sensitive...he was an artist and you know how sometimes artists are very sensitive people? I think he was one of those sensitive, overly sensitive people. So maybe, I don't know, at the beginning it started to, drugs kind of nulled the sensitivity of himself or something like that

Participant 23 viewed her user brother as more vulnerable to the negative impacts of drug use:

I think he probably had some kind of learning difficulty or whatever at school that was never really identified specifically, so he wasn't great at school anyway. Then we moved house... and I think that unsettled him... I knew he was smoking weed... because I smoked weed as well and it's pretty harmless. Some people definitely it affects and it affected him badly; it made him crazy, it made him violent and depressed.

Participants commented that often drug use would exacerbate underlying negative traits in their sibling.

(User brother) is a very angry person, so as soon as something happens he'll start yelling and swearing, you know, even with his children the rare times he sees them he

gets angry with them so quickly... he just has so much anger and yeah....and it depends if he's been on drugs or off drugs as well you know (participant 19)

Other participants expressed how severe drug use had permanently changed their sibling:

I just think the drug is incredible in that it completely removes any trace of the person's soul. And I find that really hard to see... my brother, this amazing guy, just soulless, just the fact that he's empty, so, yeah that's pretty hard (participant 14)

Regardless of whether these negative traits are an inherent part of the user sibling's personality or as a consequence of severe drug use over time, the perception that these traits are enduring influenced participants' reluctance to re-establish the relationship.

But it's the same situation, he can't hold down a job. He can't save any money. He can't hold down a relationship because drugs have made him very, very selfish...(Mum) was saying how regretful and how sorry (user brother) was for sending that (abusive text) message (to participant) and (I) don't know how he feels about it and stuff. And I said "Well Mum, regardless, it's done. I don't want to have anything to do with him because at the time, yes, he meant it. And there will be a time in the future where he will mean it again". (Participant 24)

These quotes supported data from phase 1 that showed that participants were struggling to understand the underlying causes and consequences of their sibling's drug use, but they were also keenly aware of when their sibling is affected by drug use. When participants perceived that their sibling has always displayed negative personality traits or behaviour, or that their sibling has been unalterably changed by the severe impacts of drug use, participants were less willing to re-establish the relationship. This theme interacts with themes under *coping (boundaries)* in influencing decisions to disengage or detach from the sibling relationship. When participants perceived that their sibling was unable to change these traits or behaviour, they disengaged from the relationship because they were no longer enjoying the interaction with their user sibling (the sense of the bond and the person they once knew was gone) and/or they were unwilling to expose themselves or others (i.e., children) to further risk of harm or negative influence.

Overall, the *Sibling Bond* theme highlights the significance of the early attachment or affectional bond between siblings. The quality of the early sibling relationship, i.e., whether or not it is characterised by closeness and warmth, ambivalence, or indifference, the nature of the relationship in childhood appears to endure and characterise interactions between siblings in adulthood. This is consistent with the literature on sibling relationships over the lifespan. The nature and quality of the sibling relationship is an intervening condition that influenced participants' sense of obligation to their user sibling, what type and what level of support participants gave their user sibling, how much they struggled with ambivalence and the process of detaching or disengaging from their user sibling.

Those participants who characterised their sibling relationship by high affectional closeness tended to engage immediately in support for their sibling when they discovered their sibling was using and tended to remain engaged in support longer than those participants who described childhood and adult sibling relationships characterised by rivalry and indifference. Participants who characterised their sibling relationship by high affectional closeness also tended to become stuck in ambivalence and found it difficult to find their way out of the cycle of support versus disengaging or detaching. The final deciding factor for these participants appeared to be when there was a need to protect others and when participants sensed an inequity in the unspoken laws of reciprocity in the sibling relationship. This overrode the sense of obligation toward one's sibling that was shaped by closeness in the sibling bond and family values. Those participants tended to describe coping strategies that involved detaching or disengaging from their sibling.

Participants who characterised their sibling relationship as rivalrous still had an emotional attachment to their sibling, but it was described by participants in terms of hate or jealousy rather than warmth. These participants became less stuck in ambivalence, found detaching or disengaging easier, and were very concrete about not re-establishing their relationship with their sibling until they were assured that their sibling would not pose a threat to them or others. Participants who were indifferent toward their sibling were not emotionally connected and were less likely to engage in support for their sibling. If they did engage in support, it was likely to only be conditional support guided by a sense of obligation shaped more by family values than the sibling bond.

User factors

User factors: Impact of use on sibling relationship

This theme has been rearranged to better encapsulate the totality of experiences related to the user that impact on the sibling relationship. No further themes were identified in phase 2. However, the impact of use on sibling relationship has become a higher order theme. The ideas originally identified in this theme from phase 1 such as the tension and anxiety participants felt when they interacted with their user sibling has been renamed as the theme *tension*. The themes *tension* and *boundary breaches* are now placed under this higher order theme. This theme now shows how tension, anxiety and transgressions such as stealing, experiencing violence or abuse impacts on closeness, warmth and trust in the sibling relationship.

Support for user

Support for user: Practical support

Consistent with data from phase 1 participants discussed the types of support they provided in order to help their user sibling during times of use and to help him or her to access treatment or recover from use. These types of support were further delineated in terms of *emotional support* and *tangible support*. *Conditional support* as described in phase 1 has been subsumed under this theme as participants in phase 2 also described consistent emotional and tangible support strategies that were contingent on the user sibling showing progress or that could not be misused by the user sibling.

Emotional support

Participants provided emotional support during times of use, but especially encouraged and praised their user sibling when they perceived he or she were making efforts to recover from use. Participant 14 described the importance of striking a balance between remaining non-judgemental and not allowing her brother to think of himself as a victim lest he not take responsibility for his own recovery:

there was no way I was going to support him if I was going to be there as, you know, the judge. And I do think what's really important is that he's not the victim either because I think any user that falls into the trap of thinking they're a victim will never recover either....

I think the sort of withdrawal from heroin in itself is a major sort of feat, I think if anyone can withdraw from heroin, I think its the most difficult thing anyone could probably ever do in life, so I think that (I was) definitely very empathetic during those stages, but also because I was unsure of if he felt so guilty or embarrassed about (the use), how that would also impact his recovery

Tangible support

Participants in phase 2 described tangible supports consistent with data from phase 1.

Tangible supports were given when participants perceived their user sibling was suffering or in pain whilst the drug use was still ongoing. Participants also provided support for accessing or remaining in treatment.

I used to give him money also, which my partner at the time used to berate me for, because he didn't obviously understand it either. And it's like, yeah, but he's my brother and I want to help, which I guess, I've heard a lot of people with siblings do exactly the same thing because they don't know what else to do. And I tried to get him accommodation. (participant 11)

(User brother) would live with us and we would just monitor him very closely and so during that time obviously he was withdrawing, so there was lots of visits to the emergency ward... then in the meantime I basically went and looked for sort of options for rehabilitation, I went to...a few clinics locally... one was very expensive, so that was probably out of our reach....

Recently I've noticed that he's really depressed so I'm happy to pay for the psychiatrist just cause I don't want him to not go there cause he feels that it's really costly (participant 14)

I have given him money on a couple of occasions when he was trying to dry himself out; "Oh, I just can't do it" and he was shaking and he was really ill and every excuse under the sun. And I've actually driven him out to go and get drugs (participant 24)

Conditional support

As per phase 1 data, phase 2 data showed that participants engaged in support that was contingent on the user sibling demonstrating that they were actively abstaining or recovered

from use, or that tangible supports such as financial assistance could not be misused by the user sibling.

Participant 24, who characterised his relationship with his brother as rivalrous, described emotional support for his user brother when he perceived that his brother was recovering from use. However, this type of emotional support is categorised as conditional as this participant only interacted with his sibling when he displayed signs of recovery:

And I actually went and visited him with mum and I was saying to him that "You're doing really well, I'm really happy for you, I haven't seen you like this for a long time"

Participant 23, after describing many instances of providing her user brother and his girlfriend with money that had been misused, agreed to pay for an abortion for her user brother's pregnant girlfriend only if she (the participant) could pay the clinic directly:

(User brother)'s like, "Can you pay for the abortion?" I'm like, "Okay. I'm not giving cash to anybody. I will ring up the clinic and I will pay for it while she's there over the phone, but no one's getting any money. I'm paying the clinic only and that's how it is going to work."

Phase 2 data supported phase 1 findings that showed that participants engaged in providing practical support for their user sibling. Emotional and tangible supports are provided whilst the drug use is still ongoing and particularly to support the user to access treatment, remain in treatment, or remain abstinent. When the sibling relationship is fractured, or is characterised by rivalry or indifference, some participants still chose to engage in conditional support for their user sibling. This conditional support was contingent upon seeing evidence of recovery in their sibling or finding ways to help that limited the sibling misusing support (i.e., money to access drugs).

Support for self

Themes under *Support for self* were further clarified and delineated. Types of support in the general stress and coping and support literature were emotional, informational, and tangible. Under *Social support* the only type of support identified by participants was *emotional support*. Under *Professional services* (both non AOD and AOD services) participants described accessing *emotional support* and some *informational support*. No tangible supports from these services

were discussed. The theme *Barriers to support (stigma and beliefs)* was added under this higher order theme as participants were able to identify concerns and beliefs that presented as barriers to accessing support. Those data were consistent with data identified but not developed in phase 1 and allowed this theme to be developed and further clarified in this phase.

Support for self: Social support

Participants described the type of emotional support that they found most beneficial in helping them cope with stress. In particular, it was very important for participants to feel that they could speak freely with someone who understood their situation and/or would not judge them or their user sibling. Usually emotional support was accessed from partners, close friends and family members (e.g. other siblings, parents). On some occasions participants discussed their situation with people they were less close to, but this was only when they felt safe to do so because the other person was experiencing a similar situation.

I definitely think maybe the two friends that I spoke to and my partner, they definitely didn't understand but I didn't actually expect them to cause I never had comprehension... until I went through it... I guess all I expected was someone that would listen and kind of be there...it's a really a strange thing, yeah, unless you kind of go through it, it's like anything in life you don't really get the sort of complexity of it...With my best friends, one of the first questions they always ask me is how's your brother and there's always like a check in for him...so that's obviously a great support for me. And then I've got other friends which I'm... I don't know, I just don't talk about it...yeah I don't want them to think that my brother's a junkie basically (participant 14)

one of my girlfriends, her sister was quite a heavy drug user and I used to talk to her about it quite a bit...that was good, we could kind of relate to each other, but then her sister got clean and is okay now, so its quite hard to talk about it now cause I don't think she likes thinking about when it was like that (participant 15)

I'm at the point in my life, my girlfriend knows, you know, sort of the whole story of the family...I'm one of those people, I just like to get it out of the way and so it's... not a big dirty secret you know what I mean? I won't tell people who I just meet off the street, it's my close friends (who) know about it...people who are in my life a lot know about it and that's it really (Participant 19)

I suppose to understand the problem you had to know the person and if they didn't know the person they wouldn't understand. All you really wanted is for somebody to understand- didn't need any formal sort of counselling or anything, you just wanted somebody who'd understand really...to vent I suppose...you didn't want to hear the same old response like from your parents like he's your brother and you're meant to love him and all that sort of stuff you know. You wanted somebody to go yeah that is really bad and he's such a prick (participant 20)

I work with a lady now who had a brother who was a drug addict...she told me not long after we started working together about her experience and I suppose I kind of felt like it was a relief to have somebody who really understood what it was like....you'd automatically know that there's someone there who's really open to it and who understands and anything that I say is not gonna seem silly. It would be like that with my mum and my partner but having someone who's got a different experience to me would still understand anyway (participant 22)

Support for self: Professional services (non AOD)

Consistent with data from phase 1, counselling or other professional services were often sought in the context of other issues in the participant's life. A good experience appeared to provide an opportunity to socialise the participant toward the benefits of talk therapy and increase the chances of him or her accessing services in the future. However, a negative experience presented as a barrier to accessing services. This is further discussed under the theme *Barriers to support*.

Participants described accessing emotional support from counselling services in the context of other stressful events in their life, such as the death of a family member. The emotional support and skills learnt in therapy assisted them to cope with the stress from their user sibling as well. This was either whilst they were engaged in treatment or through generalising skills to other events once treatment ceased. Participants did not describe obtaining informational or tangible supports from non AOD professional services.

As far as professionally, at the university we've got the corporate psych. I had spoken to them on a number of occasions. I went to see a grief counsellor when my father died and I had a lot of remembered skills from that situation. I've always been fairly

open about it. And I realised that when my father died actually, that keeping it in didn't help, because that's what I was doing which is why I sought the help of a grief counsellor. And she was fantastic. And I went to her, I think, for about six months trying to get over his death, because his death was a major shock. And so getting over that and the skills that she gave me there, were things like, I suppose more cognitive thinking and a lot of that stuff, there's shades of grey and it was just a lot of all of that cognitive therapy (participant 11)

I did speak to somebody at university, at the Uni counselling place, but that was after my uncle died and I really think that issue I was having, not being able to do my work or whatever, I put that down to my uncle rather than my brother (Participant 23)

Support for self: Professional services (AOD)

Accessing AOD treatment services specifically for support for self (as opposed to helping the user into treatment) were rarely discussed in phase 2. However, participants' perspectives were consistent with phase 1 data that suggested participants' beliefs present as a barrier to accessing services. This is further discussed under the theme *Barriers to support*. Only one participant discussed informational support that could be provided by drug education services:

I mean in high school they teach you about drugs and how they're wrong, well not wrong but how they're bad for you and illegal and all that sort of stuff, but I mean no one really says well okay if someone you know is taking drugs here's what to do, they don't do it (participant 18)

Support for self: Barriers to support

Participants were able to identify themes consistent with phase 1 data that suggested that they perceived significant barriers to accessing either social or professional support. Participants benefited most from emotional supports when they perceived the person would understand or not judge them or the user sibling. Perceived stigma and participants' awareness and beliefs about accessibility or effectiveness of supports were found to be the main barriers to accessing services.

Stigma

Phase 1 data identified the shame and embarrassment that participants felt with regard to their user sibling's appearance or behaviour. When participants perceived that the stigma associated with having a user sibling would result in feeling that they or their user sibling would be judged, they were less likely to access supports socially or professionally.

It felt like a very personal problem and I guess just trusting people with that and hoping that they didn't think any differently of you....I used to always worry are they gonna think I'm just like my brother or are they gonna think I'm gonna go down that road too....I think it was also... other people not realising the impact that it had, like you could explain it to somebody but that person... might think that it's no big deal or that it's not an issue when I knew how much of an issue it really was so I guess it was also a little bit of a fear of being underestimated or thinking that you're making a fuss out of nothing.... I suppose as I've got a bit older I'm more willing to share with people because I know better now...you know some people quite often have a strange sibling for a certain reason so I know now that it's not really a big deal, but when I was growing up it wasn't happening for anybody else around me (participant 22)

Beliefs

Participants' previous negative experiences of counselling contributed to beliefs that they would not benefit in the future from professional services. Other participants already held negative beliefs or attitudes regarding the effectiveness of both non AOD and AOD professional services. Consistent with data from phase 1, participants had often only accessed services (either AOD or non AOD) for only one session and dropped out of treatment early because of a negative experience or because they believed they would not benefit from services offered such as group therapy.

I haven't been to counselling since I think it scarred me and I am bit scared to do it (participant 12)

I don't think counselling is quite my bag anyway. Even when we did have... victims of crime counselling... they started talking about the processes of grief and you're up to this stage and then the next... I remember just going, "Can you shut up. Like you don't know anything about me, you don't know anything about what I feel for this person, you don't understand anything"... it makes me almost cry now thinking about that. It just made me so angry... they were just like, right it's just a process and you'll go through these stages and then you'll be fine. And I was like, "I'm sorry, I'm not

coming back. This is the end.” So yeah, I don’t know. I think counselling is a very tricky thing because people are different, everybody’s different (participant 23)

But I suppose there hasn’t been any real direct support. Like my mum has sought out every type of support that she can get. She’s been to (AOD treatment service) and all that sort of stuff and she’s told me quite a few times “You should come, you should come, you should come” but to me it would be wasted (participant 24)

Also consistent with phase 1 data, many participants felt that there was a lack of support available for siblings of illicit drug users. Many also commented that there was a lack of services, or it was difficult to access services for their user sibling and other family members. Though many AOD treatment services do provide counselling to family members, it appears that most participants were not aware that they can access those services. As stated above, those participants who have accessed those services have had an invalidating or frustrating experience and dropped out of treatment.

I just generally feel like that there’s not enough support for siblings, but primarily for users ultimately. There’s just not a lot of good resources at all (participant 14)

Therefore, it appears that participants benefited most from accessing emotional support through social contacts, especially when they felt understood and validated. Optimally, participants believed that they could gain this emotional support from people who have had the same experience because they will understand the complexity and nuances of the stress they feel. However, they discussed still receiving benefit from emotional support from people who do not completely understand on the condition that the relationship partner is empathic. Participants have benefited from emotional support from professional services, but this has usually been in the context of coping with other stressful life events. To a limited degree participants have also expressed a need for better informational support both for themselves to help understand and cope with the stress and in order to support their user sibling.

The stigma attached to having a sibling with an illicit drug use problem led to beliefs about emotional support needs not being met from social and professional support sources. Additionally, negative experiences in counselling were experienced by participants as frustrating, traumatising, and invalidating. These previous experiences and beliefs regarding

the availability and effectiveness of professional support services presented as significant barriers to support.

Role expectations

Phase 2 data supported phase 1 themes of *sense of obligation* and *freedom to disengage*. Integrating supporting phase 2 data with phase 1 data, the theme *freedom to disengage* was developed and further delineated into *sibling versus parent role* and *reciprocity*.

Role expectations: Freedom to disengage

Sibling versus parent role

This theme is consistent with ideas that participants from phase 1 discussed regarding the obligation that parents have to provide unconditional love and support to their child who uses illicit drugs.

I guess it is just the difference between a parent's love for their child and a sibling who can go, "Well, I'm drawing the line and I don't have any more compassion, that's it." (Participant 23)

Reciprocity

The idea of reciprocity and equity in the sibling relationship is tied to the egalitarian and mutually caring and supportive nature of the sibling bond. A sense of obligation to support one's sibling was lessened when reciprocity became unbalanced, when a participant felt betrayed, and when the relationship became characterised by inequitable exchange between siblings. When reciprocity was violated, participants expressed more freedom than parents to disengage, detach, or withdraw support from their user sibling.

I just thought every single thing he does hurts somebody or hurts himself. It's all just bad. Why would you keep on with this? "We've just got to support him. We've got to love him." I'm done with that and it's not working and it's not my responsibility. If you, as parents, feel like that is the best way to deal with it, then good luck to you, but I'm not being a part of it. I can't (participant 23)

Two o'clock in the morning he sent this message to me on my phone telling me how I was selfish and I've had everything given to me in my life and "I don't want to ever see your fucking kids and if I see you, I'm going to punch you in the head" and so on and so forth. It was about three pages on a mobile, so you can sort of see how much

he'd gone into it and it was a real diatribe of just "this is how much I hate you and how much you ruined my life". I came home and rang my older brother (non-using sibling with schizophrenia), who I get along with very well despite his problems, and also rang my mum and just said, "You know, that's it. I'm cutting ties with him. I don't want to have anything more to do with him" (participant 24)

Linking this theme with re-establishing the relationship, participant 24 mirrored sentiments expressed by other participants that if their sibling's drug use was still ongoing there was not likely to be balance and reciprocity in the relationship and therefore they were less willing to reengage with their user sibling.

if you open the door with (user sibling), he wants it open wider and I just don't want that right now. As I said, I've got too many other competing things in my life to focus more or to move focus away from what's important to me right now. And like I said, if he was stable and normal, then yes, I wouldn't think for one moment about having a relationship with him, but he needs to do something to fix it for himself and he's just not doing that. He hasn't had any interest in it (participant 24)

Therefore, inequity, violations of reciprocity, and impairments in the user sibling's capacity to give back in the sibling relationship became key factors that influenced participants' sense of obligation to support their sibling and legitimised his or her withdrawal from the sibling relationship. Participants perceived that this was a freedom afforded through the sibling status that was not necessarily present in the parent-child relationship.

Family dynamics

Family dynamics: Family focus on user

Phase 2 participants also observed their user sibling absorbing the focus and resources of the family. The theme from phase 1 *Use of family resources* has been subsumed under *Family focus on user* and delineated into *Use of tangible family resources* and *use of emotional family resources*.

Use of tangible family resources

This theme was consistent with phase 1 participants' observations that their user sibling frequently consumed more than their share of tangible family resources such as time, financial assistance and other practical supports.

So she fell pregnant practically straight away so obviously stayed off the drugs again for another nine months plus and then unfortunately she started asking my mum for money again and it was always the same amount: \$40. My mum would go "look I will buy you anything you need. If you need nappies I will buy it for you". My mum was really good. She used to financially help her a lot (participant 12)

Basically he's got three children to two different women. Two of (the children) have been taken away from their parents and one currently lives with us at the moment. As a result of that he's full time with us, so basically I mean they're two of the hugest impacts, you know especially on mum and dad (Participant 19)

Use of emotional resources

Participants were further aware of the emotional support directed toward user sibling.

Participants expressed holding back from demanding emotional support from their parents lest it cause further stress and distress on top of what they were able to cope with from their user sibling. This was consistent with phase 1 data that showed how much of the psychological focus of the family was directed toward the user.

I mean I've gone through my stuff. I was 18 and got caught for stealing and went to court and stuff and that's the worst thing I've ever done.... but you know I wouldn't put my mum through stuff like that. And then when I did go into hospital my mum was the one that took me. I feel so guilty. I remember laying in the hospital and just thinking why I am doing this to her. Just do everything my sister would do. It's just like everything my mum has gone through, so much [cries]. I am definitely open with my mum now that she is in a better place. But when she was going through that stuff with my sister... I'd keep a lot to myself (participant 12)

There's been other instances where, you know, we've planned to go out somewhere with my dad or whatever and it gets cancelled cause something's happened to my brother and all that sort of stuff. I mean I understand that stuffs going in with him and that they do need to help take care of him, but I mean I guess it still hurts (Participant 18)

The impacts of missing out on emotional and tangible resources intensified sibling relationships already characterised by jealousy and rivalry:

He had so many problems due to his drug habits, it obviously demanded a lot of my parents attention and I suppose we all sort of were a bit jealous of that...So much of their time was taken up in looking after him....it is very hard for us to see him get so much attention and so much help from our parents because, you'd sort of think well he's doing the wrong thing and we're doing the right thing and it kind of feels a bit like you're being punished for doing the right thing. Even though I was jealous of the time they spent with (user sibling) I also felt I couldn't take any of their time because they were so under the pressure with him...when I was in that situation I really didn't feel like there was anybody I could talk to (participant 20)

This theme links with other themes *alliances* and *differences in family members' coping* in highlighting how much of family life is organised around the user. Participants' family experiences and relationships become characterised by frustration, anger, discord, and a sense of either being unable to demand support or sensing that support is not available from parents.

Family dynamics: Differences in family members' coping

Participants expressed frustration and anger when they viewed family members using coping strategies that participants believed were ineffective. Usually this was because they believed that the way their parents coped was neither optimal for their parents' well-being, indicated that they were not dealing well with the issue, nor helpful in assisting their sibling to take responsibility and recover from use. This theme was also linked with *alliances* as the parent or other siblings may be viewed as aligned with the user by tolerating drug use through provision of money and accommodation, or by using withdrawal or avoidance coping strategies.

I used to scream at them that he had to go, you know, kick him out... and dad was saying to me you really just don't understand, when you have a son of your own you'll realise that you can't kick them out onto the street, you know, he said I would never be able to live with myself... I could not understand how they could do that (Participant 10)

When my father found out where he was storing all his used needles and he went to the chemist and bought one of those sharps things and we kind of thought that was more of a support rather than a (safety) thing- we kind of thought that was a sign of support for (user sibling), so it was a bit upsetting (participant 20)

I wasn't that interested in his problems when I was living at home and in high school either, but, you kind of have to when living all under the same roof. But once that happened and I'd moved out, I was just like that's it, I can't deal with your shit and my own issues as well, so just go on your merry way and I don't want to know about what you're up to and I don't really want to talk to our parents about what you're up to because they just have this attitude of unconditional love or getting through and I just could not deal with that. I was like, whatever, it's working out great so far, isn't it guys? (participant 23)

When coping styles differed amongst family members, siblings that used similar coping styles or had similar attitudes toward the user became a subsystem within the family to support each other:

My (oldest sister) tries to help (user sibling) a lot and gives (user sibling) money and (second sister) has had a nervous breakdown because of it. Then (third sister) and I try to distance ourselves from it and then my mum and my dad don't talk because of it all either...We speak to our parents about it but my parents fight a lot about it. (User sibling) causes quite big arguments to happen about drug use and how (user sibling) is doing and how my parents are, like my mum will always help (user sibling), whereas my dad he gets quite strong on tough love and says nup, we're not doing it anymore....It annoys me that mum keeps going back there and the same things keep happening....I've said to mum so many times "just walk away" and I understand that it must be so hard for a parent to walk away from a drug user but I think there comes a point in time where you have to see she just keeps doing the same thing. And I get quite frustrated with my mum (participant 15)

We're all quite close together in age- only 18 months between me and my older brother who was the one with the problem with drugs and there's only 2 years between him and my oldest brother...we were all sort of at school at the same time and all knew each other's friends at the same time so you just got to see much more of (the drug use).... I suppose that's the other thing that's really hard as well- just how naïve my parents were to the situation was really really frustrating for me and my brothers...because we were around him and he didn't really hold anything back from us. We knew that when my parents thought that he was doing all right was actually probably because, you know, he was on the drugs. And in terms of what we could see

when there was a problem with money...that was when we found he got really bad in terms of the family situation with all of us, that was when life got really really tough
(participant 20)

Family dynamics: Family rules and values

Linking with the theme Role expectations (*sense of obligation and freedom to disengage*), participants discussed how shared family rules and values have influenced and shaped their sense of obligation to support their sibling.

My parents have been together forever, there were four kids in the family and we were always taught about how close you should be as a family. I suppose I feel guilty
(participant 20)

I put that aside for the sake of my nieces and nephews and when I have children I'll put anything aside for their relationship with (their user aunt) because it's (her) right to have that relationship with them...but it's hard to develop any closeness with anyone that you've only had fleeting relationships with over your lifetime

Q: Would that be the same if she was still using?

Not at all, I wouldn't have anything to do with her (participant 21)

These quotes highlighted the conflict that developed when values competed. Participants often felt *guilty* for contravening *family rules* that influenced one's *sense of obligation* when they sought to *disengage* from their sibling. When the sibling relationship was characterised by *high affectional closeness* (e.g. participant 20) and this value competed with threat appraisals, this led to the participant becoming *stuck (ambivalent)*. Sibling relationships that were characterised by *rivalry* or *indifference* (i.e., participant 21) still felt obligated to their siblings. However, their *sense of obligation* was influenced more by *family values* rather than the *sibling bond*. These participants were less likely to struggle with *ambivalence* for an extended time, found it easier to *disengage* from their sibling and were more likely to provide only *conditional support*.

Family dynamics: Alliances

Linked with the theme *Family focus on user* and drawing on family systems theory, the theme *Alliances* showed how the family mobilised itself around the user. Alliances or coalitions developed in the process of supporting the user between:

- a) the parent and the user, against the participant

I think I just always felt that they were making excuses for him and I just always felt so angry that he... just always seemed to be the most important person and I just sort of had to look after myself and had to get on with things and there was never any excuses when it came to me but there was always an excuse when it came to him. All I ever wanted was to just be a normal family, you know, with mum and dad at home and a brother that wasn't a drug addict. But we've just never been. And I think I hold them responsible for that and they should have done something to make it right, instead of always sort of pandering to my brother and life revolved around him. It was just like: there was four of us, not just one person (participant 10)

I guess I was probably in year 12 and my parents had gone overseas so I was at home by myself and my brother had been kicked out of the house but for that period that they went overseas they said that he could come back and stay there. And I remember thinking that I just felt that was absolutely horrible that they would agree to let him stay there with me. I felt that was a big, I don't know, breach of my trust, or that they would put me in that position, I didn't like that at all (participant 18)

- b) the participant and the user, against the parent/s

what (user brother and I) decided at the time was that we weren't gonna tell my parents and we actually then moved (user brother) into our mutual friend's house cause he lived on his own and he was happy to help and so... we were looking for somewhere where he could get treatment and a rehabilitation facility. It was just one of those things where we didn't think that (my parents) would fully understand the situation and probably not have been able to cope with it really very well...I don't know that (user sibling) was ready to tell them either. At that stage I thought he had to tell them (but) it wasn't really for me to say anything (participant 14)

Alliances also happen in the process of protecting family members from the user's violent or aggressive behaviour between:

- c) the parent and participant, against the user.

My brother (non-using sibling) took photos of my face because we called the police and we took restraining orders out on (user sister) and... it was really hard to take a restraining order out. I mean I remember because you have to talk to the judge...and he was like "it's your family" and it's like that's not the point.... It was like just because she is my sister why should she get away with it. I remember it was so difficult (participant 12)

My parents kicked him out of home a couple of times, I guess, trying to straighten him out. And when the drug use got really bad they got an AVO out against him for myself and my mother (participant 18)

Phase 2 data confirmed trends identified in phase 1 that showed shifts in family dynamics when there were differences or changes in support for the user. For example when a parent withdrew support, a participant aligned with their user sibling and replaced the support once given by the parent. If coping styles differed between participant and parent and the participant viewed their parent as tolerating the user and their use then the parent and user were aligned. If parents and participants were in agreement about ways to respond to the user and their coping styles were consistent, then they were aligned. Whatever the shift in family dynamics, the focus remained on the user and a large portion of daily family life was consumed by talking about, trying to understand, problem solve and trying to find the best way to respond to the user in order to support the user or protect family members. These shifts in dynamics showed how the family mobilised itself and adapted in response to change within the system in order to maintain equilibrium.

The focus of the family on the user could be so powerful that some participants discussed the impact on their behaviour and choices in life in an effort to differentiate themselves from their user sibling. In competition with their sibling for family attention, many participants discussed seeking parents' approval through striving to achieve:

I guess I feel quite a lot of responsibility to get everything right and, you know, to get married and to have the children and to have the good job and not do anything wrong (participant 10)

Other participants were also aware of the stress their parents' were already experiencing and became consciously aware of maintaining good behaviour in order to not further contribute to their parents' worries:

Because of my (user brother) I kind of put upon myself that I need to be, you know, the perfect child that never creates any problems (participant 18)

I think I felt a bit of anxiety throughout all of my teens to do the right thing by my parents as well. And because I'd seen how much pain and hurt (user brother)'d caused them I always tried to make sure that I never did anything that would hurt them...I felt like I needed to do the right thing. I think that's in my personality anyway, I've always been a bit like that but I think that may of escalated it to the point where if my parents were telling me something that I was doing that they didn't like I would get really really upset about it (participant 22)

Some participants discussed acting out as a response to the family dynamics:

My mum's been a lot stricter on me because of that... I think she didn't want another (user sibling), so I think she was a lot stricter on me because of that. I rebelled quite a lot as well, again cause there was a lot of restriction from mum because of (user sibling) sort of thing, so I naturally rebelled against that (participant 19)

When I was in my late teens I shoplifted and things like that and I personally think that was a cry for attention, that's all I can put that down to. I dated older guys, always doing things that were screaming for attention (participant 21)

All of these quotes confirmed themes from phase 1 data that show how keenly participants felt that they were missing out on family resources. In an effort to gain a share of resources participants shaped their behaviour in ways that differentiated themselves from their user sibling and hoped to gain parents' attention or approval.

Coping (boundaries)

The new theme of *Coping* was integrated with the theme *Boundaries* developed in phase 1. A range of coping responses consistent with stress and coping theory and trends identified in phase 1 were delineated. Types of appraisals that participants made and the appraisal process

were clarified, as well as emotion focussed coping strategies that were employed when seeking emotional disengagement and problem focussed coping strategies that were employed when seeking behavioural disengagement. As per stress and coping theory, participants described employing several strategies at the same time, often mixing cognitive and behavioural responses. Therefore in many of the quotes several strategies can be identified, though they are separated here for the purpose of theme description.

Coping (boundaries): Emotion focussed coping

Emotion focussed coping strategies were described by participants when they felt helpless, hopeless or when situational factors such as chronicity of drug use were present.

Cognitive strategies

Participants engaged in cognitive strategies of distancing, minimising, and withdrawing in an effort to limit worry and rumination about their user sibling.

I haven't spoken to him in years....a good four since I've seen him....I don't like it but I suppose not having contact with him is keeping me safe, it's not making me have to think about those things all the time and wondering if he was okay....I mean I wonder, but not having any knowledge I suppose I just hope that he's going along the right track and he's happy and he's well and he's doing the right thing (participant 22)

Participants who had lost a sibling to overdose discussed limiting the impact of grief through cognitive distancing:

I guess once he did die, I guess I tried to... put it behind me I guess... I felt he'd hurt my life enough as it is, I don't want to have anything to do with that anymore. I remember I refused to at the funeral, I was like I will not cry for this....As much as I tried to be strong and not think about it and put it behind me, it was still there. I suppose trying to be strong and I guess suppress it in a way wouldn't of helped, but I didn't know of any other way of dealing with it (participant 18)

The same participant also described an emotion focussed cognitive strategy of taking positives from the situation as part of dealing with her grief:

So you know I still think about it. I think about it now and try and remember the good times we had. And he was a good artist, so I've got some of his pictures up around the house to remind me of that he was a good person before this happened he was a smart person and he had skills and all this sort of stuff. And that he wasn't just an addict (participant 18)

Behavioural strategies

Participants described behavioural strategies they employed to create psychological distance from the stress they felt and to improve well-being, including exercise, prayer, venting emotions and seeking emotional support.

I think I sort of realised the importance of my faith and my religion through all of this as well and I think that you sort of turn to your religion... I don't go to church every Sunday but you find that you pray more and that you do become a bit more spiritual because of it, so... like I said I cry a lot, I talk about it with my husband even if he doesn't- I just... need to sort of get it out otherwise I think if I internalise it I don't think I'd cope with it all (participant 14)

I realised that I had become fairly distant from friends, from my own family, from myself and I decided to stop seeing my sister and that was the hardest decision I have ever tried to enforce on myself because I wanted to see her. So I got into this internal battle, forcing myself not to and I used to go out in the garden and run myself ragged with a shovel, picking up massive rocks, moving things I shouldn't have moved and I ended up injuring my body in so many ways.(participant 16)

The outcome or goal (because some of these coping strategies may or may not have been successful) of employing emotion focussed cognitive and behavioural strategies was to seek relief from emotional stress identified in the theme *emotional experiences* from phase 1 such as worry, hurt, anger, grief and guilt. The ultimate aim was to seek the psychological boundary of *emotional disengagement* as described in phase 1.

Coping (boundaries): Problem focussed coping

Participants described employing problem focussed coping strategies for both challenge and threat primary appraisals. Problem focussed coping in response to challenge appraisals especially occurred as an initial reaction after first discovery use. Participants were keen to problem solve by seeking information, treatment services and ways to support their user

sibling. Participants also employed problem focussed strategies in response to threat appraisals and when they noticed that previous responses to their sibling were unhelpful or unrewarding. Thus, appraisal and coping were influenced again by situational factors such as whether it was novel (first discovery of use) or chronic, as well as the level of commitment to the relationship and beliefs about one's coping resources.

Cognitive strategies

Participants described using a combination of cognitive strategies such as adjusting expectations of self with behavioural responses to problem solve interactions with their sibling:

Each time we'd have a confrontation I'd go what's the point of this? And then it would get less and less and now I've gotten to a point where I can just walk away, like she'll come up and try to work me up and wind me up and get me to get quite angry with her and I can just now go you know what I don't need to deal with this and I can get in my car and go...I have to, I get so frustrated with how stupid she's being...I used to retaliate and get physical and violent but I've gotten to a point where I'm like you know I don't need to do this, I'm better than that I don't need to react in that (participant 15)

Behavioural strategies

Participants discussed using problem solving strategies such as weighing pros and cons, removing barriers, and taking action:

I just found I was in the thick of it, my full focus just how do I get help, what am I gonna do, did research and sort of be looking at the options and probably at times I was a bit disconnected but um, I as pretty conscious of that to make sure that, you know, I didn't disconnect myself entirely (participant 14)

it was very bad and angry when I was living at home and then just because of the situation I decided I had to go to (another state) to go to university, I just had to get out of not just the house but out of the state and just put that sort of distance. I wasn't, you know every day listening to phone calls of my mum talking to him or him coming to the house or whatever, I just needed to get away from that (participant 18)

If the primary appraisal was a threat appraisal, the goal or outcome of problem focussed cognitive and behavioural strategies is to seek *behavioural disengagement* as described in phase 1. However, participants also showed that challenge appraisals, such as seeking the reward of helping or healing their user sibling, also led to engaging in problem focussed coping strategies. In this case, due to the novel situation and the level of commitment to the relationship, the primary goal or outcome was support for the user sibling.

Appraisal

Participants' stories showed the process of primary and secondary appraisal and reappraisal of the type of threat and what coping responses needed to be mobilised in order to cope with the stress and impact of having a sibling as an illicit drug user. As discussed above, primary challenge appraisals on first discovery of use often mobilised problem focussed coping. However, over time with chronicity of drug use problems, deterioration in the quality of the sibling relationship and wearing down of coping resources, threat appraisals became more prevalent and different coping responses were employed in order to seek some psychological protection from the stress. The following quote from participant 16 illustrated the appraisal-reappraisal process:

Last year I got quite upset for a long period of time and my husband said maybe you should go and visit (user sibling). And days went by and I was considering it and the phone rang. When I picked it up it was my sister and she said, "I want you to come and get me" and she used to say that to me all the time. For years, every time she rang it was "come and get me, I need to get out, come and get me, take me for a drive, take me somewhere" and when I heard her say that, I said to her, "I'm sorry, (user sibling), I can't. I've been affected by your illness and I can't see you at this time" and I said "if you want to contact me, I would prefer you to write me a letter just for the time being because I need to get myself back together and I can't do that if I come and get you". And I hung up the phone and I didn't hear from her any more, but I felt a release take place and I came to the realisation that I could not, I didn't have it in me, I could not go back into that situation. There was nothing in any cell of my body that had any energy for it again. That's how I felt from that phone call and that kind of sealed it for me. I was looking around at how it was, at what point, what culminating point had that come to now, I just felt really hopeless and that was the beginning of my decision that I had to stop going to see her as often (participant 16)

The above quote and the following quote highlighted some of the influences on appraisal and coping, such as how coping resources, situational factors (novelty or chronicity), and level of commitment (value and meaning of relationship such as sibling bond, sense of obligation, and family values) impacted on appraisal and coping responses:

We'd begin to reform the bond that had broken down and there'd be an attack at the end and a breakdown of whatever you'd built up and the next time then it's harder to do it.

My feelings of my brother are....I know that if he turned up on my doorstep I know that I wouldn't be able to not talk to him or close the door in his face but I would have these really mixed feelings of whether I'd let him in to my house or, you know things like that...it would be like having a stranger in your house but this person's blood-related to you, like its one of those things I think that you don't really know how you're going to react until the time....

Lack of trust all round, even if he did turn up I wouldn't know if what he was telling was the truth...it would make me feel anxious...I think it would make me feel very anxious as to whatever decision I did make if that was the correct decision, whether I'd let him in, whether I'd turn him away...I think a lot about the decisions I make and if they're correct or not, if they're gonna have a good outcome or not (participant 22)

The following quote demonstrated how the combination of situational factors, coping resources, and level of commitment to the relationship, interacted with other themes identified in phase 1 such as *Protecting others* and phase 2 such as *attribution* to influence appraisal and coping responses:

If you open the door with (user sibling), he wants it open wider and I just don't want that right now. As I said, I've got too many other competing things in my life to focus more or to move focus away from what's important to me right now. And like I said, if he was stable and normal, then yes, I wouldn't think for one moment about having a relationship with him, but he needs to do something to fix it for himself and he's just not doing that. He hasn't had any interest in it (participant 24)

These last themes highlighted the complexity and depth of the data and how many themes are linked through influential relationships. As identified in phase 1 the central theme of the *Sibling bond* is the starting point for the journey that participants progressed through and continued to influence the experience and choices made by participants. This journey has been

clarified and developed through integrating phase 1 and phase 2 data to validate the theory and model of the experience of being an adult sibling of an illicit drug user.

Final theory and model of the experience of being an adult sibling of an illicit drug user

Data from phases 1 and 2 of study One have been integrated to validate and finalise the model and theory of the experiences of adult siblings of illicit drug users (Figure 4 over page and see Appendix D for larger version). The use of logic diagrams clarified the role of the types of primary and secondary appraisals participants made and their choices of coping strategies, as influenced by situational factors and coping resources, in response to the stress created by the user sibling. The use of logic diagrams also clarified systemic factors such as the influence of family dynamic variables on participant's sense of obligation to family and sibling and how this influenced participants' experiences. Strauss and Corbin (1990) recommended identifying process (progression of change) and the use of a conditional matrix in order to explicitly link conditions with consequences in an explanatory framework that captures the levels of systemic influence on the phenomenon. These analyses were performed and validated the influence of the sibling bond, family systems factors, and stress and coping factors on participants' decisions to disengage from their sibling and willingness to re-establish the relationship. These analyses also confirmed the influence of community attitudes (related to the theme *stigma*) and access to community supports (related to the themes *Support for user and Support for self*) on sibling's coping responses and resources. However, these analyses did not further clarify or contribute to the results, nor were they able to more elegantly or comprehensively explain the data and ground the theory. Therefore only the final model is presented.

Final model

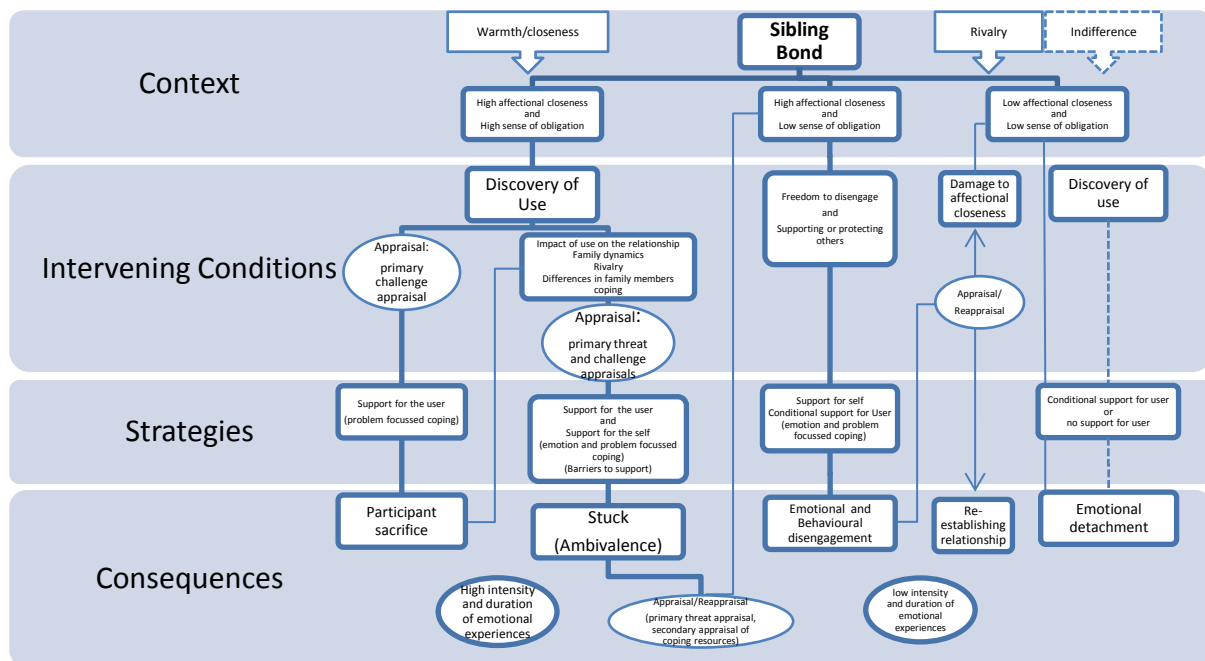


Figure 4 Experiences of adult siblings of illicit drug users

Final theory of the experiences of adult siblings of illicit drug users

As with phase 1, the final theory is presented under the three main contexts of the sibling bond. In the first context of *high affectional closeness* and *high sense of obligation*, the sibling relationship is characterised by *warmth and closeness*. The *sense of obligation* to one's sibling is influenced both by a sense of closeness (mutual caring and protection) and *family rules or values*. In the second context of *high affectional closeness* and *low sense of obligation*, the sibling relationship is also characterised by *warmth and closeness*. However, the *sense of obligation* to one's sibling has been moderated by the *impact of use on the relationship*, contraventions in *reciprocity*, and *family dynamics* that lead to permission to *disengage* from the relationship. In the third context of *low affectional closeness* and *low sense of obligation*, participants felt rivalrous (*rivalry*) or *indifferent* toward their sibling and their *sense of obligation* is influenced by *family values* rather than mutual care and affection for their sibling as a factor of a *warm and close sibling bond*.

As speculated in the first phase, the fourth possible context of *low affectional closeness* and *high sense of obligation* might exist in situations where the care and protection of the group is emphasised above dyadic relationships. Partial support for the influence of *family values* on *sense of obligation* has been found in the data. However, this was accounted for in the third context of *low affectional closeness* and *low sense of obligation* as these participants found it

easier to *detach* from their sibling due to *indifference* or *rivalry*. These participants had either no emotional connection or a negative emotional connection to their sibling. If these participants chose to engage in support for the user it was because of sense of duty to other family members, indicating some sense of obligation. However, they were not distressed or ambivalent about withdrawing support, especially if they appraised threat to themselves or other family members. Hence, the fourth possible context has not been accounted for in the second phase analysis, though the model can still accommodate this possibility should further research support this notion.

Rivalry in the sibling relationship was present in the first and second contexts when there was still *high affectional closeness*. *Rivalry* in these contexts became a relevant factor in the quality of the sibling relationship when the drug user's behaviour drew on *family resources*. Therefore, in a sibling relationship with *high affectional closeness*, *rivalry* becomes a factor that disrupts the sibling relationship more in adolescent and adult years when the user's drug use becomes a strain on the family. *Rivalry* was a factor in the third context if it was present since childhood and participants described the sibling relationship more in terms of hatred or jealousy (*low affectional closeness*). *Rivalry* was still influenced by the user sibling's drug use as well as family dynamics and fighting for a share of parents' psychological resources. However, in this context the data showed that *rivalry* was a variable related to the existing *sibling bond* rather than arising specifically from the impact of drug use.

The final theory

1) The sibling bond under the high affectional closeness and high sense of obligation context

Context:

The history of the sibling relationship in childhood set the tone for the adult relationship. A sibling attachment or affectional bond (**sibling bond**) characterised by **high affectional closeness** developed in childhood was sustained throughout the developmental trajectory. Participants who described their relationship with their sibling as close in childhood continued to recognise the quality of their sibling relationship as warm and close in adulthood. This sense of mutual caring and affection in a warm and close sibling bond influenced a **high sense of obligation** toward one's sibling. The sense of obligation was also influenced by **family rules or values** (a systemic factor) that set an unspoken expectation that family members care for and protect one another.

Intervening conditions:

As stated in phase 1, when a participant discovered that their sibling was using, or discovered that their sibling's use was more severe than anticipated (**discovery of use**), they experienced several emotions of high intensity and duration (**emotional experiences**), including **worry, hope, shame and embarrassment**. The level of commitment to the relationship (value and meaning of the sibling relationship and high sense of obligation), the novelty of first discovery of use, and a judgement that one has the necessary coping resources led to primary challenge **appraisal** in anticipating positive feelings such as a sense of reward for helping one's sibling and relief resolving a loved one's distress, and secondary appraisal of mobilising a coping response, primarily problem focussed coping.

Strategies:

Problem focussed coping strategies (identifying possible solutions, weighing up costs and benefits and taking action) were mobilised to **support the user**. These strategies included **practical support** in the form of **tangible support** such as gathering information in order to understand the drug problem and how to respond, financial and accommodation resources, and **emotional support** such as encouragement and positive regard to help the user access or sustain treatment and rehabilitation. As identified in phase 1, Support for the user at times also involved **support for the user's children** when the user's ability to care for their children was impacted by intoxication or longer term impairment from severe or dependent drug use.

Consequences:

As identified in phase 1, a consequence of providing support to the user was significant **participant sacrifice**. Participants invested emotional and psychological energy as well as financial, time, and other practical resources in the process of supporting the user and their children. Again, the process of supporting the user resulted in high intensity and long duration of emotional experiences such as hope and worry.

When the use was ongoing for a period of time or when the impact of use was sustained close to the time of discovering use, this led to a secondary pathway linked via intervening conditions under this first context:

Intervening conditions:

The **impact of use on the relationship** such as **tension** and **boundary breaches** led to mistrust and distance in the sibling relationship. Furthermore, **family dynamics** such as **observing the impact on others, protecting and supporting others** and **alliances** against the user created further distance in the sibling relationship. **Rivalry** became a factor that created distance in the

sibling relationship when the participant observed his or her user sibling consuming **tangible and emotional resources** when the **family focussed on the user**. Additionally, participants felt frustrated if their **coping strategies differed from other family members** especially if this led to **alliances** between family members and the user against the participant. These experiences were accompanied by additional high intensity and long duration of emotions such as **anger, hurt and betrayal**. The rollercoaster of mixed emotions and being caught between a desire to help the user and a need to protect oneself and others led to both challenge and threat primary appraisals. Secondary appraisal processes mobilised both **emotion focussed** and **problem focussed coping strategies** and resources.

Strategies:

Participants continued to engage in **Support for the user** as outlined above. Primary threat appraisals led participants to also engage in the **problem focussed** and **emotion focussed coping strategies** outlined in **support for self**. As outlined in phase 1 the goal of problem focussed strategies in support for self is to seek some safety and distance from the impact of the user sibling's behaviour through **behavioural disengagement**. Participants also sought **emotional disengagement** by accessing **emotional social support** through speaking with close family, friends, and partners about their sibling. Participants felt comfortable to speak with colleagues or acquaintances if they knew the other person had a similar experience. Participants found emotional social support to be the most beneficial when they perceived that the other person listened empathically, understood, and did not judge them or their sibling. Participants felt frustrated when the need for emotional support was not met. Participants also sought **emotional support** from non **AOD professional services** such as psychologists, counsellors, and psychiatrists. However, this was usually only in the context of other stressors in their life and not specifically sought for coping with the impact of their user sibling. Participants who accessed these services in the past and had a positive experience perceived these services as beneficial to them and were willing to access them again in the future. Participants were also able to extrapolate skills already learned in therapy to the situation with their sibling. When participants were aware of **AOD professional services**, they sought **informational** and **emotional support**. However, there were significant **barriers** associated with accessing support. First, some participants felt there was a **stigma** attached to having a sibling who is an illicit drug user. The expectation that they or their sibling would be judged presented as a barrier to disclosing their experience to both social and professional supports. Second, participants' **beliefs** about support services also presented as a barrier. Many siblings were not aware that they could access support from AOD services. If participants were aware, they believed that those services would not provide them with the support

services they needed. Many participants who had previous negative interactions with these services were unwilling to access any services in the future.

Consequences:

Participants continued to engage in support for the user, driven by a sense of obligation, worry, and hope. However, continued interaction with the user resulted in further impacts on the relationship and feelings of anger, and hurt and betrayal. Participants became **stuck** in a cycle between supporting the user and seeking to **emotionally and behaviourally disengage** in order to protect themselves and others. Participants felt **guilt** when they disengaged from their sibling and often re-engaged in support for the user in order to fulfil their sense of obligation, even though this resulted in further psychological and practical sacrifices. The cycle of interaction and disengagement with the user sibling and **observing the impact on others** resulted in love/hate feelings toward the user sibling. **Ambivalence** then became a dimension of the sibling bond. Participants could remain stuck in this cycle for a long time until situational factors influenced the appraisal/reappraisal process. These situational factors were chronicity of use, a re-evaluation of level of commitment to relationship and depletion of coping resources that lead to an adjustment of expectations and a lessening of one's sense of obligation to the user sibling.

2) *The sibling bond under high affectional closeness and low sense of obligation context*

Context:

Under the high affectional closeness and low sense of obligation context, situational factors influenced the cognitive shifts that reassessed expectations of the self and meaning and value of the sibling relationship that kept participants engaged in support for the user.

Intervening conditions:

Assessing one's sense of obligation toward a sibling that one felt ambivalent about was further influenced by the need to **support or protect others** and **freedom to disengage**. As outlined in phase 1, participants felt that their family members and children, as well as the user's children, required support and protection from the impacts of their user sibling's behaviour. The desire to protect others was more important than the desire to help their user sibling. Furthermore, continued impact of use on the relationship resulted in contraventions in the laws of **reciprocity** in sibling relationship. An imbalance in the exchange between siblings, and the perceived differences in the obligations of the **sibling versus parent role**, legitimised the withdrawal from the sibling relationship.

Strategies:

Siblings continued to engage in support for self, particularly emotional support (emotion focussed coping strategy), in order to cope with **grief** and guilt that arose from the withdrawal process. Participants also engaged in problem focussed coping strategies in order to problem solve the withdrawal process and find ways to maintain boundaries between themselves and their user sibling. As outlined in phase 1, some participants chose to provide conditional support to their user sibling in ways that maintained boundaries, but supported the user to remain in treatment or maintain abstinence. Some participants also chose to provide conditional support in order to help the user's children.

Consequences:

When participants were able to successfully maintain boundaries they were able to **emotionally and behaviourally disengage**. This is not to suggest that they were no longer impacted at all by their user sibling. Rather the emotional experiences were of lower intensity and shorter duration. For example, hurt or anger could flare up briefly when there were reminders of events or news of the user through family or friends, but, with social support, the emotional experiences were not a significant stressor.

Over time, opportunities presented for participants to **re-establish the relationship** with their user sibling. Participants then engaged in another reappraisal process that was weighted by situational factors such as beliefs and the value of the relationship. Phase 2 data supported phase 1 data that showed that participants desire their user sibling to demonstrate genuine contrition and acknowledge the impact of their behaviour. However, many participants believed that their sibling was unable to do so. Furthermore, participants' **attributions** regarding their user sibling's locus of control and willingness to change, as well as permanence of negative personality or behavioural traits in **personality versus drug use**, presented as significant concerns for participants that led them to feel reluctant or wary about re-establishing or increasing contact with their user sibling. Many participants expressed a desire for their user sibling to demonstrate stability and abstinence for a significant period of time before they would be willing to be vulnerable to the possible negative experiences that might arise from re-establishing the relationship. However, as shown in phase 1 some relationships became so damaged that there was a loss of affectional closeness and a deterioration of the sibling bond.

3) *The sibling bond under the low affectional closeness and low sense of obligation context*

Context:

In this third context some sibling relationships arrived at low affectional closeness through being significantly impacted by the user's behaviour. Other sibling relationships were characterised by jealous rivalry, dislike, or hate since childhood and others by indifference since childhood. The sense of obligation in this context was influenced by family rules and values and not by feelings of mutual caring and protection found in the warm and close sibling relationships.

Intervening conditions:

Discovery of use became an intervening condition at this point of the model and theory if indifference and rivalry was present since childhood, rather than arrived at via the participant's journey through the previous pathway.

Strategies:

Due to the low sense of obligation to one's sibling, participants engaged in either conditional support for the user or no support for the user. Those participants who chose to engage in conditional support tended to be very concrete and clear in the types of support they would provide their sibling and were able to maintain distinct boundaries.

Consequences:

Participants who were indifferent (either since childhood or through deterioration of the relationship over time) toward their sibling experienced low intensity and duration of emotional experiences as the sibling relationship did not carry the same meaning and relevance compared with sibling relationships characterised by high affectional closeness. Participants who experienced rivalry and low affectional closeness since childhood experienced anger related to observing the impact on others and the family focus on the user (competing for resources). Again, in comparison to the emotional experiences under the high affectional closeness conditions, they were of low intensity and duration. However, with chronicity of use, these participants placed more importance on protecting family members and became emotionally detached from their sibling. If contact was established with their sibling it was only influenced by family values (i.e., wanting their children to know their aunt or uncle) and with satisfactory evidence that it was safe for their children to be around their user sibling. But these participants no longer sought or felt they could find any emotional connection to their sibling.

Chapter Eight: Discussion of the final model and theory

Consolidating phase 1 and 2 data has validated a dynamic model and grounded theory of the experiences of adult siblings of illicit drug users that draws on and integrates accepted psychological theories and paradigms. At the heart of the theory is the sibling bond that draws on psychodynamic, social learning, and attachment theory perspectives to understand how close affectional bonds develop and influence close relationships over the lifespan. The quality of the sibling bond sets the tone for the sibling relationship over the developmental trajectory and influences the way adults experience the impact of their sibling's drug use. Stress and coping theory, social exchange and equity theories that draw on the social learning theory paradigm explicate the reciprocal nature of cognition, emotion, and behaviour in how adults perceive and cope with the impact of their sibling's drug use. Lastly, family systems theory shows how the sibling relationship is not isolated, rather the relationship itself (the sibling subsystem) and adults' decisions regarding support or disengagement reciprocally influences and is influenced by the larger family dynamics.

The final model and theory show how the sibling relationship remains a significant close relationship even in adulthood. Adults who characterise the quality of their sibling relationship as warm or close are particularly affected by their sibling's drug use, but adults who are indifferent or feel rivalry toward their sibling are also drawn in through the greater family system. Though these adults may be less affected, they are nonetheless witness to heartache and struggle within the family.

High affectional closeness

Adults with a warm and close affectional bond also have a high sense of obligation to protect and care for their siblings. This high sense of obligation is influenced both by the close sibling bond and by the greater family rules and values that set the expectation to remain close and care for each family member. Drawing on the expectation of mutual care and protection, adults' first reaction upon discovering that their sibling is using illicit drugs, or that their sibling's drug use is more severe than first thought, is to cope with the shock, fear, worry, shame and embarrassment by investigating ways to understand and help the user while they are still using, or to investigate and facilitate the user to access treatment. At this stage adults are engaging in primary challenge appraisals and secondary appraisal of the necessary coping resources to engage in problem focussed coping strategies. However, adults sacrifice their own

psychological and tangible resources such as time, energy, finances, and accommodation in the process of providing support to the user.

Over time, with the cost of high intensity and long duration of the range of emotional experiences, the impact of the user's behaviour such as aggression, abuse and stealing, and without the reward of seeing their user sibling abstain from use or improve in functioning, adults begin to reassess their ability to meet these demands. This is further influenced by family dynamics such as observing the negative impacts on parents, the need to protect or support other family members, alliances between family members, and differences in family members' coping strategies. Additionally, the psychological focus of the family on the user and the user's monopoly on family resources can engender rivalry between siblings. The perception that these demands at times outweigh available coping resources results in the presence of both threat and challenge appraisals and engagement in emotion focussed and problem focussed coping strategies. These strategies include support for the user and support for self, particularly emotional support from other family members, partners, and close friends. However, adults experience significant barriers to support. These are: a fear of being judged due to the perceived stigma attached to having a sibling who uses illicit drugs; a lack of awareness of available support services; or a perception that support services will not be helpful. The pull of the sense of obligation toward one's sibling and genuine care and concern for their well-being conflicts with witnessing the costs to other loved ones and feeling drained of psychological and tangible resources. This leaves adults feeling ambivalent about their sibling and stuck between competing obligations and values. This conflict is behaviourally expressed as cycling between engaging in support for the user versus seeking to emotionally and behaviourally disengage.

Adults might remain stuck and ambivalent toward their user sibling for an extended period of time. However, situational factors such as chronicity of use and continued taxing of coping resources influence the appraisal/reappraisal process. The level of commitment and meaning of the sibling relationship is re-evaluated and lessens the sense of being obliged to provide a user sibling with support that is not reciprocated and does not result in positive outcomes or rewards. Adults feel that parents always have a continued obligation to engage with their child, whereas when the egalitarian sibling relationship is characterised by an imbalance of investment, costs, and rewards, adults feel permitted to disengage from the relationship. Furthermore, when vulnerable family members such as elderly parents or children require the adults' support this further legitimises withdrawal from the relationship and of those resources that were once funnelled toward the user. Adults continue to seek support for themselves,

especially to deal with feelings of grief and guilt. They also may choose to engage in conditional support for the user, especially if this is in order to help the user care for their children. However, at this stage, adults are clearer about the need to create a boundary around the impacts from their user sibling and use emotion focussed and problem focussed coping strategies to seek emotional and behavioural disengagement.

Again, adults might remain disengaged from their sibling for an extended period of time. When adults consider re-establishing the relationship with their sibling their attributions regarding their siblings' ability to take responsibility for using drugs and acknowledge and feel genuinely remorseful for the impact of their behaviour becomes critical to adults' willingness to re-engage. Furthermore, when adults judge that there are permanent negative personality and behavioural traits in their sibling (either pre-existing or as a result of drug use) they are less willing to re-engage due to continued threat appraisals. If the sibling relationship is so damaged by the impact of the user's behaviour and through adults' coping by withdrawing from the relationship, this may result in a permanent change in the level of closeness and affection in the sibling relationship.

Low affectional closeness

When the sibling relationship is characterised by low affectional closeness due to a lack of warmth and closeness, or the presence of indifference and rivalry since childhood, adults feel a low sense of obligation to care for and protect their sibling. Any sense of obligation present is influenced by the greater family values or rules rather than the sibling bond. Adults are able to maintain clear and concrete boundaries and provide only conditional support, if any support is provided at all. Adults who have been indifferent toward their sibling since childhood remain indifferent and emotionally detached. According to the theory these adults are the least impacted by events related to their user sibling. Adults whose sibling relationship has been characterised by high rivalry since childhood experience anger, hate, or jealousy toward their user sibling because of the observed impacts on other family members and family focus on the user. Due to the negative emotional climate of low affectional closeness sibling relationships characterised by high rivalry, the sibling relationship cannot be described as indifferent or emotionally detached. According to the theory, in order for these adult siblings to progress through this pathway to reach emotional detachment, there would need to be a reduction of the severity of the impacts of the user's behaviour and less claim on the family resources in order to reduce the rivalry and perception of unfair parental differential treatment. With a reduction in events and factors that induce feelings of anger, hate or jealousy toward the user sibling, these adults might develop a relationship characterised by indifference and

detachment. According to the theory, these adults will never develop a relationship characterised by high affectional closeness because the factors that assist development of a warm close bond were never present in childhood. If these adults choose to engage with their user sibling when they are no longer appraised as a threat, they are motivated by the greater family values rather than the pull of the sibling bond, for example they want their children to know their aunt or uncle. Once these adults progress through this pathway and become truly emotionally detached, this is not to suggest that they are cold and reproachful in interactions with their sibling. Rather, it is possible to establish a respectful and positive relationship as one would with any other human being. However, there will never be the affectional or attachment type of sibling bond characterised by meaningful and intense emotional experiences.

Linking the theory and research literature: The sibling relationship

Contemporary psychodynamic, social learning, and attachment theories

Contemporary psychodynamic and social learning theory perspectives of attachment and personality both acknowledge the significance of the early years to development of self-concept and models of close relationships. The sibling relationship is a significant relationship where early bonds develop in infancy and early childhood. Consistent with the literature on sibling relationships, the fact of having a sibling does not necessarily guarantee the formation of close and warm affectional bonds. The theory supports the findings in the literature that suggest that close affectional bonds can be formed with both brothers and sisters, siblings with large age gaps, adopted, step, and half siblings and caregiving and support can be provided to both younger and older siblings. Furthermore, the theory shows that low affectional closeness and indifference can exist between twins and adopted, half, and step siblings, as well as siblings close in age and far apart in age, and between sets of sisters, sets of brothers, and mixed gender dyads. However, the theory supports the findings in the literature that show that structural variables such as gender (having a sister), close age spacing, close genetic relatedness and birth order are likely to influence key factors such as amount of shared time, space, and common interests. These key factors are more likely to engender closeness in siblings rather than the structural variables per se.

According to the final theory, siblings can form warm and close affectional bonds that are consistent with Bowlby (1979) and Ainsworth's (1989) classification of an affectional bond;

being emotionally significant, seeking proximity or closeness, and being distressed when separated. Some affectional bonds may be classed as attachment bonds if a sibling becomes part of the attachment hierarchy in infancy. In adulthood the affectional and attachment bonds are more reciprocal and egalitarian with mutual caregiving and support. The theory shows the emotional significance of the adult sibling relationship as denoted by the intensity of emotional experiences related to the impact of a sibling's drug use. Adults are ambivalent about seeking proximity to one's sibling when contact comes with stressful and distressing experiences, yet they feel guilty and grieve for their sibling when they withdraw. Understandably, grief is especially intense when siblings are permanently separated through drug overdose deaths. The sense of the affectional bond remains after death, aided by reminders of the user sibling that help the adult maintain mental representations of their sibling as a whole person with positive attributes, not just as a drug user. This allows the adult to continue to gain comfort from the mental representation of his or her sibling and the sense of an ongoing bond.

This is not to suggest that sibling relationships characterised by low affectional closeness, such as rivalry or indifference, are not impacted by one sibling's drug use. In fact, the theory shows how different experiences of adults in these types of sibling relationships indicate the importance of drawing on systems theory to understand and contextualise the sibling and family experience. The absence of a warm affectional bond means that adults do not seek proximity to their sibling and are not distressed when separated from them. Adults do experience emotions such as anger (especially in the case of high rivalry), but these emotional experiences are of low intensity and duration and are linked with observing the impact on other family members, missing out on psychological and tangible resources when the family's focus is on the user, and becoming frustrated with parents avoidant or tolerant coping strategies. Because of the lack of a warm bond and intense emotional experiences related to caring for one's sibling, adults are concrete (i.e., there is no ambivalence) with the types of conditional support they are willing to provide, if they decide to provide any support. The provision of support is likely to be a factor of family rules or values that implicitly state that family members support one another, rather than a factor of the mutual caregiving and support present in warm and close affectional bonds.

Adults whose sibling relationships are characterised by indifference since childhood are the least likely to experience a tumultuous journey related to coping with the impact of their sibling's drug use. Apart from Gold (1989) who asserted that no bond exists between apathetic or indifferent siblings, sibling researchers (Bank & Kahn, 1982; Bedford, 1989; Cicirelli, 1995)

tended to classify indifference as a type of sibling bond. If adhering to attachment theory and the criteria for affectional bonds (Ainsworth, 1989; Bowlby, 1979), and consistent with Gold's (1989) notion, indifference suggests a lack of a bond. Siblings do not seek one another for comfort and security nor do they experience distress or grief when separated. There is a lack of emotional meaning and value placed on the relationship and therefore factors that disrupt close relationships such as impact of drug use do not pose a threat to this type of relationship.

Sibling relationships characterised by low affectional closeness due to high rivalry in childhood and adulthood are more akin to Bank and Kahn's (1982) description of a "disowning" sibling relationship. Childhood hate or jealousy leads to active efforts to distance oneself from one's sibling. According to Bank and Kahn these adults could be seen as 'bonded' through this negative emotional connection. However, if one adheres to attachment theory (Ainsworth, 1989; Bowlby, 1979), this type of sibling relationship would not meet criteria for an affectional or attachment bond because these adults do not seek comfort and security (regardless of whether or not it is met) from their sibling relationship, nor do they experience anxiety or grief when separated. These adults do have an emotional connection to their sibling, but this is related to the family system and is not a function of the presence of an affectional or attachment bond.

The sibling literature (Bank & Kahn, 1982; Cicirelli, 1995) suggests that some type of bond is always present in the sibling relationship due to the relationship's emotional significance and mutual influence of each relationship partner, though the sibling bond varies in emotional closeness. Attachment theory (Ainsworth, 1989; Bowlby, 1979) suggests that specific criteria must be met in order for a relationship to be categorised as an attachment or affectional bond. According to the final theory, a sibling bond can exist that can range from high to low affectional closeness. The relationship characteristics of that sibling bond can be close and warm, ambivalent, or indifferent. According to the theory, rivalry is a systemic factor that prevents the formation of a close and warm bond in childhood or disrupts the quality of sibling relationships in adolescence or adulthood. Sibling bonds that are characterised by high affectional closeness are likely to meet the necessary conditions to fulfil the criteria for an attachment or affectional bond. Sibling bonds that are characterised by low affectional closeness (rivalry and indifference) are less likely to meet criteria for an attachment or affectional bond. Therefore, the distinction between what the sibling literature refers to as a sibling bond and the conceptualisation of affectional and attachment bonds according to attachment theory can be both held and integrated in the theory of experiences of adult siblings of illicit drug users. In fact, the distinction between both conceptualisations and clear

understanding of attachment theory is required to understand the emotional significance and differences in the experiences of adult siblings. This highlights the importance of understanding these major psychological theories and of using empirically accepted psychological paradigms to underpin the final theory.

Rivalry

The concept of rivalry emerged in the final theory as a factor within the sibling relationship that goes beyond the normal conflicts, fighting and competition in which children engage to gain attention and resources from parents. Originating from psychoanalytic theory and Adlerian ideas of birth order effects and striving to overcome superiority, the sibling literature has typically viewed rivalry as one type of sibling relationship. However, as described above, rivalry is a factor that affects the quality of sibling relationships in both high and low affection relationships, rather than a type of relationship per se. In the final theory, rivalry emerged in high affectional closeness relationships when participants were adolescents or adults and when factors related to the user sibling's drug use (family focus on user) interfered with the quality of the sibling relationship. In low affectional closeness relationships, rivalry has been present since childhood, frequently due to the impact of the user sibling's drug use when the participant was still very young. The presence of problems related to drug use in the family since the participant's early childhood prevented the formation of a warm and close sibling bond. In both cases rivalry becomes a systemic factor related to relationships between the user, participant, and their parents.

The literature on parental differential treatment highlights the importance of equity theory in fairness judgements in childhood sibling relationships. When children feel that the differential treatment is fair or that one child is only slightly favoured, there are negligible negative impacts on the quality of the sibling relationship. When children feel that one child is extremely favoured or that differential treatment is unfair, there is less harmony in the sibling relationship. According to the final theory, equity theory and judgements of fairness appear to continue to be a factor in the adult sibling relationship. The presence of a drug using sibling means that one child is favoured in terms of absorbing the psychological focus and resources of the family. When this is judged as unfair, an alliance exists between the user and the parents. Rivalry and competition for resources between siblings either disrupts warm and close affectional bonds or prevents those close affectional bonds from forming in the first place.

In the context of sibling relationships characterised by warm and close affectional bonds rivalry can become a factor when the user sibling becomes the psychological focus of the family. This

usually occurs in the adult's late childhood or adolescence in line with the onset of the user's sibling's drug use. In particular, when there are alliances between the parent and the participant formed by parent's tolerant or avoidant coping and support for the user, adults perceive that the necessary psychological and tangible resources either cannot be demanded or are not available to them. In this context, competition for family resources engenders rivalry and conflict between siblings and impacts negatively on affection.

However, rivalry can also be present since early childhood in sibling relationships that are already characterised by low affectional closeness. In this study's sample, this occurred in sibling relationships when an older sibling's drug use impacted on the family while the participant was still a young child. For these participants the psychological presence of drug use in the family meant that the experiences of missing out on family resources and observing the impact on parents were salient memories linked with feelings of anger and hatred toward the user sibling. It is likely that negative emotions toward one's user sibling, as well as the behaviour of the drug user related to obtaining, using, and withdrawing from drugs, meant that the elements of shared time, space, common interests, mutual caregiving and protection did not foster the close emotional connection necessary for the formation of a warm affectional bond. Hence, rivalry is present since childhood in the context of low affectional closeness amongst siblings because of family systemic factors and remains characteristic of the sibling relationship into adulthood.

Modelling

Drawing on social learning theory concepts, Bandura (1977) posited that we can learn vicariously through observing how another person's behaviour is rewarded or punished. Siblings can serve as powerful models for observational learning. Much of the sibling literature in the drug and alcohol field has focussed on the influence of older sibling's drug use on initiating drug use in younger siblings (Barnard, 2005; Brook, Brook, & Whiteman, 1999; Conger & Reuter, 1996; Fagan & Najman, 2005; Low, Shortt, & Snyder, 2012; Needle, McCubbin, Wilson, Reineck, Lazar, & Mederer, 1986; Rende, Slomkowski, Lloyd-Richardson, & Niaura, 2005; Windle, 2000). The theme *attitude* shows that observing the impact of a sibling's drug use influenced beliefs and attitudes that favoured moderate use or abstinence. Those adults who already engaged in use of alcohol and marijuana at the time that the impact of their user sibling's drug use became severe were less tolerant of the use of perceived 'harder drugs' such as heroin, amphetamines, and cocaine. Other participants chose to abstain completely from any illicit drug use and even chose partners who did not use in order to avoid reminders of their user sibling and the consequences of drug use. Rather than influencing the

initiation to use, the theory shows that the role of modelling and observation of the negative impact of an older sibling's drug use can actually influence selection of prosocial peer groups and attitudes toward drug use that condones controlled or moderate use of legal or so-called 'softer' drugs such as marijuana or ecstasy, or abstention from illicit drugs and, for some siblings, from alcohol.

Linking the theory and research literature: Experiences of adult siblings

Social learning, stress and coping, and family systems theory

Support in adult sibling relationships

The literature on normative adult sibling relationships shows that the sibling relationship transitions from periods of closeness in childhood to less interaction in adolescence and early adulthood due to normal developmental transitions such as increased interest in peer and romantic relationships (Buhrmester & Furman, 1990; Deater-Deckard, Dunn, & Lussier, 2002; Scharf, Shulman, & Avigad-Spitz, 2005). In late adolescence and early adulthood there is an increased sense of support for life events such as leaving home, tertiary education, employment, marriage, having children, illness etc, in young and middle adulthood (Cicirelli, 1982, 1995; Cole & Kearns, 2001; Dunn & Kendrick, 1982; Ross & Milgrim, 1982). The literature on unwell siblings also shows that adult siblings are key support figures for people living with mental health issues and intellectual and physical disabilities, particularly in middle adulthood (Davys, Mitchell, and Haigh, 2011). The emotional climate in childhood sets the tone for the enduring sibling relationship. Siblings who are indifferent or are characterised by high rivalry are not likely to have contact with each other when life events occur that require support. According to the final theory, in close and warm sibling relationships, one sibling's drug use is an event that at least initially draws in support and increases contact amongst siblings.

The literature on support in sibling relationships shows that siblings provide instrumental support in the form of financial help, help during illness (Connidis, 1994), transportation, meal preparation (Avioli, 1989) and providing goods and services (Mikkelson, Floyd, & Pauley, 2011). Siblings also provide social support such as pleasurable sociability, advice, reassurance, self-validation (Avioli, 1989), expressions of concern, love, empathy, respect, and confidence in the other person (Mikkelson, Floyd, & Pauley, 2011). Instrumental (*tangible*) and social (*emotional*) support was found to be provided by participants as outlined in the theme *support for user*. Support included financial help, accommodation, transportation, providing food, assisting

access to treatment, expressions of respect and confidence in the user sibling, validation, encouragement, positive regard, concern, love, and empathy. Support was given either directly for the user whilst they were still using or during periods of recovery, or in order to support the user to care for their children. Support was given often at significant psychological and tangible cost to the participant.

Sense of obligation and reciprocity

The literature indicates that adults feel obliged to provide support to their sibling (Lee, Mancini, & Maxwell, 1990; Myers, 2011). This sense of obligation can be motivated by closeness and affection in the sibling relationship, as well as feelings of responsibility for the welfare of the sibling. Myers (2011) differentiated the reasons for siblings maintaining the relationship as by choice (as motivated by affection) and by circumstance (as motivated by family obligations and proximity). Lee, Mancini, and Maxwell (1990) also found that contact with a sibling by obligation or by choice was motivated by feelings of closeness and responsibility. However, Lee et al. (1990) posited that the onerousness of obligation was ameliorated by feelings of affection and closeness with one's sibling. *Affectional closeness* and a *sense of obligation* emerged in the final theory as the two main factors that influence whether an adult will engage in support for their sibling and what type of support they will provide. According to the final theory, sibling relationships characterised by warmth and closeness also have a high sense of obligation. The high sense of obligation is influenced by a sense of mutual caring and affection, as well as family rules and values. Linking with Myers' and Lee et al.'s conceptualisations, adults can be viewed as maintaining the relationship with their sibling by engaging in support *by choice* upon discovery of their sibling's drug use. Siblings who feel close are motivated to engage in behaviours that maintain closeness. According to the final theory, adults whose sibling relationships are characterised by low affectional closeness do not have a sense of mutual caring and affection with their sibling. As a result they tend to have a low sense of obligation influenced by family rules and values only. If they choose to provide support, these adults can be viewed as maintaining the relationship through engaging in conditional support *by circumstance* (i.e., proximity, protecting other family members). In both of these cases the status of the sibling relationship is maintained, even if that status is characterised by low affectional closeness.

However, the final theory shows that the sibling relationship is vulnerable to ruptures from the impact of the user sibling's drug use which affects the level of affection, closeness, and the sense of obligation toward one's sibling. A point raised in the literature showed two conflicting views regarding the voluntary nature of the sibling relationship. Connidis (1992) and Goetting

(1989) suggested that the sibling relationship is a voluntary relationship in adulthood and adults feel less obligated toward a sibling than toward a partner, child, or parent. This would suggest that adults feel some freedom and licence to withdraw from the adult sibling relationship when other close relationship partners require attention or resources. However, Mikkelson (2006) and Myer (2011) state that the sibling relationship retains an involuntary status from childhood to adulthood. As such, these authors posit that a sense of obligation or duty to one's family motivates continued engagement in the relationship. The theme *sibling versus parent role* under *freedom to disengage* reflects the alternate views found in the literature. Participants explored the role of a parent and felt that parents were expected to continually engage with their child, regardless of the quality of the relationship. This is in comparison to the role of a sibling where withdrawal from the sibling relationship was seen as more legitimate than a parent's withdrawal from a child. This view appears to lend support to Connidis (1992) and Goetting's (1989) suggestion that the sibling relationship is voluntary. However, as stated above, the theory also shows that all participants, regardless of relationship quality, felt some sense of obligation toward their sibling when they discovered that their sibling was using. Even those participants with low affectional closeness felt a low sense of obligation that was influenced by family rules and values, or, as conceptualised per Mikkelson (2006) and Myer (2011), a sense of duty towards one's family members.

It is therefore unclear what the factors are that legitimise and motivate withdrawal from such an emotionally important relationship that is heavily influenced by obligation when ruptures occur. According to the final theory, in sibling relationships characterised by low affectional closeness, adults have very clear boundaries on the types of conditional support they will provide to their sibling and the impact from their user sibling's drug use is limited. Conditional support fulfils a sense of obligation influenced by family values, does not overtax coping resources, and does not place vulnerable family members at risk of harm. Therefore, as these adults do not experience conflicting values or needs, they are able to maintain the level of support and distance/closeness in the relationship. In essence the status of low affectional closeness sibling relationships does not change. However, in sibling relationships characterised by high affectional closeness, withdrawal from the sibling relationship is motivated by more than the sense of duty to partners, parents, or children outweighing a sense of duty to a sibling as suggested by Connidis (1992) and Goetting (1989). When ruptures occur within warm and close sibling relationships as captured in the theme *boundary breaches* adults begin to reappraise challenge situations as threats to physical and psychological well-being. This impacts on secondary appraisal of coping resources that may have been overtaxed in the provision of *support to the user* as identified in the theme *participant sacrifice*. Drawing on

social exchange and equity theories as suggested by Avioli (1989) and Whiteman, McHale, and Soli (2011), the continued provision of support and resources to a sibling without reciprocation represents an imbalance in the ratio of investment, costs, or contributions to the relationship versus rewards and benefits gained from the relationship. *Emotional experiences* from the impact of *boundary breaches* such as hurt, betrayal, anger and a loss of trust leads to relationship dissatisfaction and loss of affectional closeness. With the loss of affection, fulfilling the sense of obligation becomes onerous (i.e., punishment rather than reward becomes a reinforcer); this further taxes coping resources. Cognitively, the scripts or schemas developed since childhood that prescribe what it means to be a sibling and predict how one interacts in the sibling relationship are challenged and an adjustment of the meaning and value of the relationship occurs. The lack of reciprocal support and resources from the user sibling violates the unwritten expectation of equitable exchange in the egalitarian sibling relationship and justifies withdrawal.

Thus, although a sense of obligation initially influences engagement in support for the user sibling in high affectional closeness relationships, the cumulative weight of the lack of reciprocity and a judgement that the necessary coping resources are not available ameliorates the sense of obligation and legitimises withdrawal of support. Furthermore, the perceived freedom for a sibling versus a parent to disengage and the need to protect other vulnerable family members reciprocally influences and is influenced by the lack of reciprocity and limits on coping resources. This allows a psychological 'release' from the obligations of the sibling bond that permits the adult to disengage from the sibling relationship.

Influences on behaviour: the interaction of cognition, affect, and behaviour

According to the final theory, the sense of obligation is not completely absolved in sibling relationships characterised by high affectional closeness, otherwise adults would not feel ambivalent and stuck in a cycle between engaging in support for the user and a desire to disengage. Drawing on social learning theory and theorists such as Rotter (1954; 1960), Bandura (1977) and Mischel and Shoda (1995; 1998), adults' behavioural responses to a situation are reciprocally influenced by cognition and emotion. The final theory is consistent with these principles. Cognitions such as beliefs, schemas, and mental representations of the sibling bond developed from early childhood, which prescribe the role of a sibling and how one acts in a sibling relationship, interacts dynamically with mood states, emotions, and physiological reactions. Siblings with a sense of mutual caring and affection hold an expectation or belief of reciprocal support within the sibling relationship. When situations arise that engender concern for the welfare of one's sibling, the emotional experiences of

hope and worry motivate adults to engage in behaviour that supports their user sibling. Because the discovery of use is a novel situation and support is influenced by the closeness of the bond, adults make primary challenge appraisals. When situations arise that impact negatively on the adult and breaches trust in the relationship, the emotional experiences such as anger, hurt and betrayal motivate adults to protect themselves. Furthermore, with repeated negative experiences, adults develop a belief that engaging in support for their user sibling will result in punishment and not reward. Adults react from these new beliefs and avoid punishment through withdrawal of support and contact. Primary challenge appraisals become threat appraisals when demands are perceived to outweigh resources when there is chronicity and predictability in the situational factors, i.e., there are no indications of change within the user sibling, the adult loses hope and begins to question the value, meaning and expectations of the sibling relationship. However, adults experience feelings of guilt when they consider withdrawing from their sibling and this inhibits establishing clear boundaries when trying to action problem solving coping through behavioural disengagement. For example, adults intend to not answer a user sibling's request for help, but will capitulate when they reflect on the possible harm that may occur to their sibling, for which they would feel responsible if they do not fulfil the request. Feelings of guilt are amplified when adults do begin to behaviourally disengage. As occurs in close relationships characterised by affectional or attachment bonds, the emotional cost of behaviourally disengaging is the experience of grief over the loss of relationship. Adults engage in emotion focussed strategies when they feel hopeless and helpless and when disengaging in order to cope with feelings of grief and guilt. Therefore the interaction of cognition (thoughts, beliefs, schemas, mental representations of the sibling and the bond) and affect (emotional experiences, physiological reactions, mood states) motivates behaviour within a given situation. Depending on the situation the behavioural outcomes might be support for the sibling, support for self, ambivalence, or withdrawal from the relationship.

Attribution

The theme *re-establishing the relationship* encapsulates participants' beliefs regarding the necessary conditions to re-engage in their sibling relationship. The most salient factors for participants were their user sibling's capacity to understand and make reparation for the harm caused by the impact of their drug use (*wanting sibling contrition*) and the permanence of negative personality or behavioural traits in their user sibling (*personality versus drug use*), including participant's perception of their user sibling's locus of control and capacity take responsibility for change (*attribution*). As another example drawing on broad social learning theory and specific stress and coping factors, participant's beliefs and situational factors (i.e.,

chronicity of use and predictability of the reinforcement outcomes when interacting with one's sibling) influence their willingness to re-engage in the sibling relationship. When optimal conditions are not present, i.e., when the user sibling is not remorseful, does not make overtures for reparation, is seen to continue to choose to take drugs, or is viewed as holding permanent negative personality or behavioural traits, participants continue to make primary threat appraisals, judge that they do not have the necessary coping resources in secondary appraisal, and use coping strategies that allow them to maintain boundaries through emotional and behavioural disengagement.

The interaction between participant's internal cognitive factors, user sibling's behavioural factors, and systemic factors become particularly salient when contrasted with participants' experiences with other siblings in the family who have also used drugs or who are otherwise characterised by impaired functioning, e.g. siblings with schizophrenia. The literature on adults with siblings with disabilities or mental illness indicates that there are worse relational outcomes when siblings' behaviour is less functional or more severe (Doody, Hastings, O'Neill, & Grey, 2010; Hodapp & Urbano, 2007; Orsmond, Kuo, & Seltzer, 2009; Orsmond & Seltzer, 2007; Smith & Greenberg, 2008; Taylor & Hodapp, 2012). There is a greater degree of reciprocity in sibling relationships when the unwell sibling's behaviour has higher functioning (Wilson, McGillivray, & Zetlin, 1992). Consistent with the literature, participants' experience of their relationships with other siblings were of better quality as their sibling was judged to be more functional (an attribution factor) and less demanding of family resources (a user factor linked to systemic factors). Therefore the relationship was characterised by less rivalry (sibling bond factor linked to family systems). There was also a greater degree of reciprocity compared to the relationship with the user sibling (a sibling relationship factor linked to role expectations and the sibling bond). These factors resulted in better relationship quality, retention of closeness and warmth, and mutual support between other siblings with impaired functioning versus the user sibling who was the focus of the interview.

This highlights the role of the severity of the behaviour related to the impact of drug use (*boundary breaches* and the *impact on the sibling relationship*) in longer term outcomes for the sibling relationship, rather than simply the presence of drug use per se. Regardless of the source or reason for impairment in one family member, those family members whose functioning is particularly low, or whose behaviour is particularly severe, tend to absorb the most resources and focus of the family. This is a systemic factor that influences the sense of rivalry in the sibling relationship. Furthermore, the diminished capacity of one sibling to meet the expectation for reciprocity in the sibling relationship, as well as continued threat appraisals

due to attribution regarding capacity and responsibility for change in the user sibling and lack of coping resources, impacts negatively on the level of warmth and affection and the willingness for one sibling to maintain contact and closeness, or engagement in the sibling relationship. Therefore, it appears that there are worse relational outcomes when the behaviour or functioning is worse in an unwell or impaired sibling. Furthermore, the relationship is less likely to recover from ruptures if there is an attribution of internal locus of control over those behaviours in the user sibling.

Family systems theory and family therapy literature

Systems theory has emerged in the current theory as integral to understanding the experiences of adults of siblings who use illicit drugs. Many of the relationships between themes and some themes themselves are influenced by systemic factors as explained above with *rivalry* and *obligation*. In the theme *rivalry*, reciprocal influences between the parents and the sibling subsystem in parental differential treatment impacts on the quality of the sibling relationship. In the theme *sense of obligation* feeling responsible for the welfare of one's sibling is influenced by family rules and values, regardless of the level of affection between siblings. The themes under the higher order theme *Family dynamics* illustrate the context in which adults' experiences occur by drawing on family systems concepts of circular causality, subsystems, and normal family processes that maintain stability and homeostasis in the system. Consistent with systems theory that views the system as greater than the sum of its parts the family system can only be understood through grasping the dynamics between each part of the system i.e., the relationships between themes and between family members. Integration of systemic factors in the current theory helps to explain adults' motivation to engage in support or withdraw from the sibling relationship.

The themes *alliances*, *differences in family members' coping*, and *family focus on the user* highlight how the family shifts and changes in order to maintain equilibrium. Alliances can shift and change depending on whether family members are trying to support the user or protect other family members. According to the final theory when an adult replaces support that is withdrawn by a parent the adult and their sibling are aligned. If there are differences in coping between the adult and their parents adults perceive that parents' avoidant or supportive coping strategies are a way of tolerating the user and their use and the parent and the user are aligned. If the adult and his or her parents perceive that there is a risk of harm to family members from the user and take steps to ensure appropriate boundaries are maintained then the adult and the parent are aligned. Regardless of the members of each coalition the shifts and changes in alliances are reciprocally in response to and influenced by the user and their

behaviour. Families spend a great deal of time, energy and resources responding to, trying to understand and problem solve situations related to the user. Family members therefore mobilise themselves around the user and maintain the focus of the family's processes on the user.

An interpretation of the theory drawing on literature from Steinglass and colleagues (Davis, Berenson, Steinglass, & Davis, 1974; Steinglass, Davis, & Berenson, 1977; Steinglass, 1979, 1980, 1981) would suggest that the family's focus on the user reinforces illicit drug use behaviour in order to maintain equilibrium. The authors suggested that maintaining the focus on the alcohol allows family members to continue to act in familiar, adaptive ways, that allow them to accomplish tasks such as problem solving. The theme *family focus on the user* highlights how much of the family's time and resources are absorbed through talking about, trying to understand and trying to manage problems related to the drug user. Constant impacts from the drug user's behaviour allows the family to engage in problem solving to return the family state to the status quo. The family's responses to the user could be seen as maintaining short term predictability, but sacrificing long term growth in the family.

In Kaufman's (1985) theory of alcohol maintenance in families he suggested that the focus of the family on the user allows family members to scapegoat the user for problems within the family. Reinforcement of alcohol use therefore allows the maintenance of the status quo. If one applies Kaufman's ideas to the final theory, the themes *alliances, differences in family members' coping* and *family focus on the user* can be viewed as ways of responding to the drug user that subsequently reinforces the drug use in order to continue to hold the user responsible for problems within the family. For example, when there is conflict within the spousal subsystem because of disagreements about how to respond to the user, the user can be seen as the scapegoat for family problems.

Kaufman (1985) further suggested that siblings are polarised as 'very good' and able to individuate through achievement or 'very bad' and enmeshed with the family by fusing with the original drug user by engaging in use also. Some support for this notion can be found in the theory where some adults report feeling pressure to behave well, be independent and achieve highly, in order to claim parental resources through positive attention, approval and recognition, or to not demand further resources at all from parents whom they perceive to be overtaxed. In a bid to differentiate themselves from their sibling, or to gain parental resources, other adults discussed engaging in externalising behaviour that broke family rules, such as shoplifting, their own drug use, or dating outside their age group. Although these adults may

be seen as 'very bad', adults' motivation for this behaviour was to differentiate themselves from their sibling. Adults are still seeking individuation and therefore they could not be described as enmeshed as per Kaufman's theory. Furthermore, the simplistic polarisation of adult's responses to their sibling's drug use does not acknowledge the variety of multiple, flexible, changing and sometimes apparently conflicting coping responses of family members over time.

Rather, adults' motivation for shaping their behaviour can be better understood through social learning and stress and coping theory concepts that acknowledge the role of cognition and affect in learning and shaping behaviour and the complexity of what are viewed as normal coping responses to a stressor (as emphasized by Moos and Billings (1982) and in Orford and colleagues' (2010) stress-strain-coping-support model). Normalisation of family members' responses is akin to McGoldrick and Shibusawa's (2012) and Walsh's (2012) notion of normative family process that acknowledges the transitions in family processes and changes in boundaries and roles as part of the normal family life cycle. Furthermore, as highlighted by the theme rivalry, in order to understand coping responses within the context of family systems one must acknowledge circular causality rather than the unidirectional influence on sibling behaviour that Kaufman's theory implies. For example, according to the final theory, when parents focus attention and resources on solving problems related to the drug user, the adolescent or adult feels that they are missing out on those resources. If they perceive that parents are overtaxed they shape their behaviour in ways that do not demand further resources from parents (i.e., behave extremely well). If they perceive that they are able to gain a share of parental resources, despite the demands of their user sibling, they behave in ways to gain attention through achievement and success or through externalising behaviours. This competition for parental resources results in rivalry within the sibling subsystem. If parents manage the demands of their children well (and adolescents or adults do not perceive that there is an inequity or unfairness in treatment) then this results in a healthier rivalry that does not negatively impact on the quality of the sibling relationship. If parents do not adequately manage the demands from their children (and adolescents or adults perceive inequality or extreme favouritism toward one sibling) then this results in high rivalry (hate and jealousy) that deteriorates the quality of the sibling relationship. When one family member monopolises the focus and resources of the family and this is not adequately managed by the parental subsystem; the sibling subsystem suffers.

As Walsh (1995) suggested healthier families respond flexibly with effective problem solving and coping responses that allows the family to adapt to change in order to maintain stability.

Positive and supportive family relationships contribute to growth (Walsh, 2012b). Ergo, positive and supportive relationships between family members (between parents and children and between siblings in engaging in *support for the user*) strengthens resilience and assists the family to cope with adversity. However, according to Minuchin (1974) an inappropriate alliance such as that between the parent and the user sibling would indicate enmeshment which sacrifices the development of autonomy amongst the members of that subsystem and disengages other family members. Demand for change that is too challenging results in rigid transactional processes and boundaries (Goldenberg & Goldenberg, 2008; Minuchin, 1974). According to the final theory, when there are severe *boundary breaches* and *differences in family members' coping* (especially when the adolescent or adult perceives that a parent is engaging in tolerant or avoidant coping strategies), then this results in *alliances* that engender *rivalry* and family and sibling relationships suffer. Rather than pathologising family processes, the application of social learning and stress and coping theory and normative family processes explains and normalises the experiences of families and of siblings of illicit drug users. These theories further acknowledge that family members often do not know the best way to respond but are trying to cope with family crises and stressors in the best way possible, though this can often result in further family distress.

Stress and coping literature

Orford and colleagues (Orford, Velleman, Copello, Templeton, & Ibanga, 2010) highlighted the notion of the coping dilemmas that family members experience when responding to stress in various and often conflicting ways. Orford et al. (2010) identified three main ways of coping, but emphasised that as family members often do not know the best way to respond they often mix or blend two or more ways of coping. The themes in the final theory such as *support for user* and *coping (boundaries)* identify ways of coping in adults that are consistent with the broad ways of coping (Putting up with it, Standing up to it, and Withdrawing from it) identified by Orford et al. However, the themes in the theory are more closely aligned to, and use the nomenclature of, stress and coping theory.

Orford, Velleman, Copello, Templeton, & Ibanga (2010) identified under Putting up with it that family members found ways to support the drug user or accommodate their behaviour, but reported feeling manipulated or as if they were giving in to demands from the user. Adults expressed similar sentiments as identified in the theme *participant's sacrifice* under *support for user*. Some adults reported facilitating their user sibling's access to drugs when they witnessed them in pain from withdrawal. However, many adults found ways to ameliorate feelings of giving in or of being manipulated by providing *conditional support* such as paying

bills or buying food rather than giving the user cash. Provision of *conditional support* required adults to engage in *problem focussed coping* to problem solve ways to maintain appropriate boundaries around the user sibling's taxing of *emotional* and *tangible support*.

In *Standing up to it* family members displayed confrontative and controlling or assertive strategies in an effort to protect self and family. Some adults reported using controlling strategies when they were younger, such as one participant's description of destroying her brother's marijuana plants. However, as described above, most adults aimed to contain the impact of the user sibling's drug use by using problem focussed coping through provision of *conditional support*, which can be categorised as an assertive strategy that respects both oneself and the user, and through *support for the user's children* and *supporting or protecting others*.

In *Withdrawing from it* family members displayed ways of coping that were avoidant or sought independent life and interests away from the user. Participants commented on a parent's use of avoidant coping strategies that suggested that they perceived their parents were not dealing with the problem. Many participants sought emotional and physical distance from their sibling through the use of both *emotion focussed* and *problem focussed strategies*. However, these strategies were used whilst adults were engaged in supporting the user, rather than avoiding the user and the problem. For example, drawing on social supports or using exercise to find stress relief and replenish taxed resources whilst living with the user sibling. According to the final theory when participants sought behavioural disengagement this was more akin to Orford and colleagues (2010) sense of gaining independence to improve quality of life rather than simply avoiding the user. For example adults reported moving interstate not only to get away from a tumultuous home life but also to seek higher education and employment opportunities, which is also part of the normative developmental transition in early adulthood.

The limited focus given to siblings' ways of coping by Orford, Rigby, Miller, Tod, Bennett, and Velleman (1992) found that siblings were tolerant and supportive of the user and did not typically use confrontative and controlling strategies or self-protective strategies. The theory shows that adults give support in ways that are aimed at facilitating well-being in the user-sibling. This is either by facilitating access to treatment or by providing the user with physiological needs in order to maintain health whilst they are still using. Prior to the *impact of use on the relationship* and *threat appraisals*, adults typically provide their sibling with support that is respectful and shows confidence in their sibling. If the impact of use on the relationship

results in a loss of affectional closeness, or for those siblings already characterised by low affectional closeness, if support is given it is *conditional support*. *Conditional support* still meets the aims of facilitating well-being in the user, but it is given on the condition that it does not tax the adults' resources nor do adults want to be perceived as tolerating or condoning drug use.

As described above adults tended to display assertive coping responses aimed at maintaining boundaries, but were not typically confrontative or controlling. However, a salient characteristic of the final theory is adults' use of self-protective strategies which is in contrast to the findings by Orford, Rigby, Miller, Tod, Bennett, and Velleman (1992). The difference between Orford et al.'s (1992) result and the current finding is perhaps due to a specific focus on the sibling experience rather than just focussing on four sibling experiences within a larger sample of family members. Adults' use of self-protective coping strategies, particularly seeking independence, is not surprising when placing it within the context of the normative sibling relationships. During the adolescent and early adult years sibling relationships are characterised by increasing distance. Siblings engage in support for one another when important life events occur and one sibling's drug use is an event that elicits support from siblings and increases contact and closeness in sibling relationships with high affectional closeness. The normative developmental tasks during late adolescence and adulthood require development of independence away from family of origin anyway. But if drug use interferes with one sibling's capacity to reciprocate support and is appraised as a risk to the safety and well-being of self and vulnerable others, then adults ameliorate that risk by using self-protective coping strategies that lead to emotional and behavioural disengagement. Disengagement allows the adult to use their resources to invest in their independent life, such as their own partners and children, because it is more meaningful and important to the adult than investing in a relationship that can result in psychological costs without reciprocal rewards.

However, as the theory suggests this process is not necessarily that simple or linear. Consistent with stress and coping theory, Orford and colleagues (2010) emphasise the notion that ways of coping are not categorical but can be mixed. Stress and coping theory states that coping responses can consist of cognitive and behavioural strategies that are both emotion focussed and problem focussed (Lazarus & Folkman, 1984). Coping strategies that occur simultaneously that impede rather than facilitate each other and Orford and colleagues' coping dilemmas are encapsulated in the theme *stuck*. According to the final theory in the appraisal/reappraisal process adults seek to fulfil two aims: 1) to fulfil a sense of obligation to help their user sibling,

even though there is a threat appraisal and 2) to emotionally and behaviourally disengage in order to protect oneself and others from harm related to the impact of their sibling's use. The disparate goals of the coping strategies leaves adults emotionally feeling ambivalent and behaviourally stuck in a cycle between continuing to support the user and trying to create emotional and behavioural boundaries. This is a coping dilemma because adults experience a sense of guilt from considering what it would be like to refuse to help a sibling and they are concerned that whatever coping response they choose will not benefit or may even lead to further harm for themselves or their sibling.

Drawing on the stress and coping literature on unwell siblings, Stalberg, Ekerwalk, and Hultman (2004) described caregiving as a specific coping strategy. The theme *Support for User* certainly indicates that adults are significant caregivers for their sibling and that seeking informational support in order to understand the problem and how to help the user assists the adult to cope. Stalberg et al. (2004) also stated that well siblings use avoidance strategies to create emotional and physical distance from their sibling with schizophrenia. According to the theory siblings do engage in coping strategies that create emotional and physical distance. However, rather than terming these avoidance strategies, which connotes denying or not dealing with the problem, the final theory shows that adults are aware of the stress and consciously choose coping strategies that actively deal with the problem and resolve coping dilemmas. Themes under the higher order themes *Emotional experiences* and *Coping (boundaries)* indicate adults' awareness of their own coping needs and efforts to find solutions to the problem which balances the need to help their user sibling and protect oneself and others from the risk of harm. The final theory suggests that due to the egalitarian and mutually respectful nature of high affectional closeness sibling relationships, adults strive to find ways to balance boundaries and support for themselves to meet their own coping needs with ways to resolve the problem by supporting the health and well-being in the user sibling.

However, there are times when the severity of boundary breaches and appraisal process leads to the adult choosing to cope by emotionally and behaviourally disengaging from the sibling relationship. The impact of use on the relationship reduces the level of respect for the user sibling, hope or belief in the user sibling's capacity for change and willingness to re-establish the relationship. Friedrich, Lively, and Rubenstein, (2008) found that an emotion focussed coping strategy used by adults living with a sibling with schizophrenia was realising that having the disease was not anyone's fault. Furthermore, Stalberg, Ekerwalk, and Hultman (2004) found that emotion focussed cognitive strategies such as accepting the sibling's illness and accepting the individual will never recover assisted well siblings to cope. These factors

attribute an external locus of control to the unwell sibling. As discussed in the section on *Attribution* these cognitive strategies are not meaningful for adult siblings of illicit drug users. The final theory indicates that adults do not adhere to a moral model of drug use, nonetheless the theme *attribution* indicates that they see the user as choosing to take drugs and therefore as responsible for the harm to self and family. Therefore, drug use appears to be a specific factor that influences attribution of internal locus of control. When an adult attributes an internal locus of control and places responsibility for change with the user, there cannot be the same level of blamelessness with drug use as with other diseases or disorders. According to the theory this assists adults to protect themselves and others from stress by inhibiting re-engagement in the sibling relationship until such a time as the user can demonstrate that they do not pose a risk of harm or will be able to equitably contribute to the relationship.

The focus on the specific sibling relationship within the family system and the use of stress and coping theory has explained the often cyclical and reciprocal experiences of adult siblings when coping with the specific stressor of a sibling's drug use problem. Adherence to stress and coping theory nomenclature has clarified adult siblings' motivations for choosing certain coping responses, their reasons for experiencing dilemmas and what factors lead to assisting to either cope with or resolve those dilemmas. By applying accepted psychological theories, adults' motivation and behaviour in response to the impact from a drug using sibling has been able to be identified more in this final theory than has thus far been explored in the stress and coping literature on family members coping in the drug and alcohol field.

Stress, strain, and support

The themes *boundary breaches*, *participant sacrifice* and *emotional experiences* indicate that adult siblings experience similar stress and strain that research on other family members and siblings has found (Barnard, 2005, 2007; Cronkite, Finney, Nekich and Moos, 1990; Finney, Moos, Cronkite and Gamble, 1983; Jackson, Usher, & O'Brien, 2007; Moos and Billings, 1982; Orford, Velleman, Copello, Templeton, & Ibanga, 2010; The Parliament of the Commonwealth of Australia, 2007). Adult siblings report experiencing family violence, hurt, grief, fear, anger, guilt, worry, loss of trust, shame and stigma, social isolation, financial costs, and physical and mental health problems due to the impact of stress. Set within the context of the sibling relationship and the family system, adults experience stress and strain from direct contact with their user sibling, are impacted from observing the impact to parents and other siblings, and also miss out on support from the family when resources are absorbed by the user.

The most significant form of support that emerged from the final theory was *emotional support* in both the social and professional context. Adults expressed a desire to be able to talk openly about their sibling to someone who would understand their situation and not judge them or their user sibling.

Good quality and satisfying emotional support for adults was characterised by active listening, validation, non-judgement, and accurate empathy. Adults felt extremely frustrated when support was mismatched, for example when they sought emotional support but received informational support. This was both within the social and professional context.

Adults were more likely to seek support from social sources rather than professional services. When professional services were sought, it was more likely to be in the context of other life stressors, but where the impact from the user sibling was a significant contributor to the experience of stress. When adults had a positive experience engaging with professional services they were more willing to re-engage when further support was needed or they were able to extrapolate coping skills previously learnt in therapy. When adults had a negative experience with professional services due to a mismatch in the desired and actual support received they were less willing to re-engage with professional services.

Adults primarily sought support from non-Alcohol and Other Drug professional services. Logically this was due to the fact that the impact from the user sibling was not a primary presenting issue, rather it was a contributing factor. Thus general psychological support services were sought. When the impact from the user sibling was a primary presenting issue, most adults reported a lack of awareness of specific services for siblings of illicit drug users. When seeking support from Alcohol and Other Drug Services adults wanted *emotional support* and *informational support* in order to understand the problem and how to help their user sibling. Adults also stated that it would be helpful to have support for parents and family members in general from an Alcohol and Other Drug treatment service, but did not express a desire to access individual or group treatment specifically for themselves. After the Triple J Hack interview, which introduced a new web based peer support program, adults stated that having access to an online peer support site for emotional and informational support would have been beneficial especially around the time of *discovery of use, boundary breaches* and high intensity and frequency of *emotional experiences*.

Adults reported some coping strategies and supports that were consistent with other literature on unwell siblings (Friedrich, Lively, and Rubenstein, 2008; Stalberg, Ekerwalk, and

Hultman, 2004). As with other adults with unwell siblings, adults of illicit drug users sought quality informational support and actively invested in trying to get help for their user sibling. Adults also used emotion and problem focussed behavioural strategies such as exercise, spiritual activities, seeking emotional and geographic distance from the user sibling, and talking to other people and family members. According to the theory adults found talking with other siblings who felt the same way about the user sibling especially supportive. These strategies highlight the importance of primarily emotional support but also quality informational support as major components of adults' coping.

Clinical implications in support for self

Emotional support from social sources emerged as the most desired, most beneficial and most accessed. Quality emotional and informational support was also desired, though often not met through specific Alcohol and Other Drug Services. The theme *Barriers to support* indicate some of the reasons why adults' needs were not met. First, as found in the literature on the experiences of siblings and other family members in the drug and alcohol field (Barnard, 2005; Orford, Velleman, Copello, Templeton, & Ibanga, 2010; Jackson, Usher, & O'Brien, 2006-7) adults perceive that there is a stigma associated with having a family member with an illicit drug use problem. Adults expressed being concerned that they would be judged or affiliated with their user sibling's embarrassing and antisocial behaviour, yet they were also concerned that their user sibling would be negatively perceived and expressed a desire to protect them. Adults also expressed a fear that support people would minimise their experience rather than acknowledge and validate the nuances and the depth of the trauma they have experienced.

The fear of stigma was a barrier to accessing both social support and professional support. As the theme emotional support suggests, a clear need for siblings of illicit drug users is the need for validation. The final theory indicates that active listening, empathy, and understanding the specific impacts on adult siblings allow the normalisation of the adult sibling's experience. The final theory indicates that adults whose sibling relationships are characterised by low affectional closeness are likely to provide conditional support, if they provide any support at all, are clearer in setting boundaries, and are less likely to be significantly negatively impacted by their sibling's drug use.

Therefore, adult siblings who present at professional services are more likely to have a sibling relationship characterised by high affectional closeness. The clinician would need to be aware of validating the ambivalent feelings the sibling would be experiencing, simultaneously

allowing expression of hurt and anger toward the user whilst maintaining respect and positive regard for the user. Where adults have expressed negative experiences with professional AOD services, one of the reasons was due to feeling that one or other of those requirements were not met. This resulted in feeling misunderstood, frustrated, and dropping out of treatment. The other reason was a mismatch in support needs, i.e., where informational support was given when emotional support (understanding and validation) was sought.

Second, adults expressed a lack of awareness of appropriate or specific services for both themselves and family members in general, despite being extremely active in searching for treatment services for their user sibling. A factor that was not specifically mentioned by adults but may be relevant is the age of the sibling at onset or discovery of use. Many adults reported being a child or adolescent when at the time of discovery of use. Children and adolescents are unlikely to be able to access professional services due to dependence on parents for practical factors such as finances and travel. If parents are unaware of support services and do not facilitate access for other family members, then children will be not aware of the availability of specific services for them. By the time that siblings reach an age where they are more independent they are likely to have developed their own coping strategies including pursuing normative developmental tasks that take them away from the family of origin. However, as many adults reported engaging with Alcohol and Other Drug treatment services in order to assist their user sibling, it is curious that they were not aware of services for them even though many treatment agencies offer services to family members. This perhaps indicates a need for greater public awareness or for agency staff members to highlight their services when siblings contact them regarding the user.

In general, adults reacted positively to the idea that they could access a web-based peer support service that was integrated with quality informational support. This would meet the emotional and informational support needs highlighted in the final theory. The theory indicates that any professional service needs to focus on encouraging siblings of illicit drug users to develop and maintain good social supports with people who are empathic and understanding. Adults report that this can be beneficial with people who have not been through the same experience if they sense they will understand, but peer support instantly gives a sense of acceptance and implicit understanding of the nuances of the experience as well as circumventing the barrier of stigma. The final theory indicates the need for clinicians to understand how the specific impact from a user sibling contributes to general stress and coping issues, especially when there are other primary presenting issues.

Familiarity with the final theory and the underpinning psychological theories can guide clinicians to select the most appropriate strategies to cover in therapy. Knowledge and familiarity with factors related to the quality of the sibling relationship, specific impacts related to drug use, appraisal, coping, and systemic factors, will assist clinicians to assess where siblings of illicit drug users are in their process or journey. Are clients ready to engage in certain coping strategies i.e., are they ready to create boundaries, or are they stuck? Do they need to explore the factors related to sense of obligation and freedom to disengage? Do they need to have feelings of ambivalence, guilt, anger, or grief acknowledged and validated? Do they need assistance with developing assertive communication skills in order to assist with maintaining boundaries? Do they need to be taught specific emotion focussed or problem focussed coping skills such as problem solving? In order to adequately address the emotional and informational support needs of siblings of illicit drug users, clinicians will benefit from understanding the specific experiences of this population and being guided by the underpinning accepted psychological theories.

Limitations

Due to the conceptual depth and density of the model and theory and integration with empirically supported psychological theories and paradigms, the theory is able to explain the variation in the experiences of adult siblings of illicit drug users. However, as was noted in chapter one, research on siblings has emerged in a western individualistic context. It is possible that sibling relationships in other cultural contexts, for example collectivist cultures, hold different role expectations within the sibling relationship and within greater family relationships. The different dynamics between a sibling subsystem and the greater family system might influence sense of obligation or duty to family in ways that did not emerge in the current study. Siblings might be expected to provide support to each other regardless of the psychological or tangible impacts. Thus cultural sanctions might not legitimise freedom to disengage, even if there is a lack of reciprocity in sibling relationships. Cultural influences on the experience of stress and accepted ways of coping might also have different outcomes for sibling well-being.

Factors specific to drug use emerged in the current theory to influence adults' willingness to re-engage in sibling relationships. Adults' attitudes and attributions regarding a user's choice to engage in destructive behaviours and not take responsibility for behaviour that is perceived as amenable to change contributed to reluctance to engage with or support the user. This is in contrast to coping strategies that well siblings of adults with other disabilities or disorders

found helpful; where attitudes favoured acceptance of external locus of control factors. Cultural attitudes toward drug use, dependence, and drug users might influence different coping strategies and support for the user.

The conceptualisation of the sibling bond in other cultures might provide support for the fourth context that was not supported by the current data: low affectional closeness and high sense of obligation. However, as the final theory draws on and integrates several accepted psychological theories it is expected that the relevant systemic influences (including community and cultural influences) and stress, appraisal, and coping factors that influence adult siblings' experiences should emerge. Therefore, it is anticipated that if other data emerge to support this context, the theory would be able to accommodate and explain these new experiences.

Directions for future research

The current theory has drawn out factors specific to illicit drug use that influence the experiences of adults in the quality of their sibling relationship. Boundary breaches related to the user being intoxicated such as abuse and aggression, or to the user seeking to maintain use such as lying, stealing, or taking, deteriorates the level of trust and the quality of the sibling relationship. Attitudes toward drug use and the drug user and attributions regarding locus of control and negative personality or behavioural traits of the user inhibit willingness for adults to re-engage in their sibling relationships. Future research can extend on the issue of substance use by looking more broadly at the impacts on siblings when one sibling uses licit drugs, e.g. alcohol, at a problematic level. Even though alcohol is a legal drug, similar harms identified in boundary breaches can emerge when used at a problematic level. In the current study some participants identified that their user sibling has continued to use alcohol at a problematic level, often after ceasing illicit drug use. The types of boundary breaches identified in the theory might also be present in other dependence behaviours such as gambling. Therefore adults might have similar experiences when use of any substance or behaviour becomes problematic for a sibling and contributes to the types of severe breaches identified here. However, it is not known how factors such as stigma, attitudes, and attribution might influence support for the user and accessing support for oneself.

The current theory has also elucidated factors specific to the sibling experience versus the experiences of other family members. The different impacts on siblings versus parents, spouses, or children, and the nature of the sibling relationship, highlight specific needs for

adolescent and adult siblings of illicit drug users. Though social supports are most accessed by adult siblings of illicit drug users, the theory suggests that adult siblings are not aware of professional services available to them, or believe that those services will not be helpful to them. Adult siblings are more likely to access services when they feel they will not be stigmatised and their specific experience will be understood and validated. Though there is a small body of literature looking at coping in well siblings of adults with other disabilities and disorders, specific clinical needs have not been identified. Considering that the sibling literature and the current theory show that adults are significant support people and caregivers for their siblings, especially when parents are no longer able to care, protecting and promoting the health and well-being in the adult and the quality of the sibling relationship should remain a clear focus in the research. Integrating and extending the research on stress and coping in adults who care for or support a sibling who is not optimally functioning should identify ways to better meet the clinical needs of this population.

The final theory has also explicated the concept of rivalry as a systemic factor related to judgements of fairness in parental differential treatment, rather than a type or category of sibling relationship as conceptualised in the general sibling literature. The theory suggests that rivalry can be present in sibling relationships of differing affectional closeness, but is a factor that deteriorates the quality of sibling relationships at all ages when demand for parental resources is not adequately managed by parents. This idea would need to be investigated further in the general sibling research field. However, should this reconceptualisation of rivalry be supported by further research, this has implications for the family therapy field and any situation where rivalry amongst siblings causes disharmony and deterioration of family relationships.

Further, the presence of affectional or attachment bonds in siblings influences the level of support or what types of support are given to a sibling and the degree of impact on the sibling providing support. The distinction between the sibling bond and affectional bonds has never been delineated in the general sibling literature, nor has adult sibling attachment been adequately researched. Given that the final theory suggests that the presence of affectional bonds between siblings contributes to more intense emotional experiences and more likelihood of providing support, being able to identify and support these types of sibling relationships not only can assist with maintaining the quality of close important relationships, but also the health and well-being of each of the relationship partners. Considering that the sibling relationship is the longest lasting over the human lifespan, finding ways to protect and

improve the quality of the sibling relationship when one sibling's functioning is not optimal ought to remain a research priority.

Lastly, the current study has explored the previously somewhat hidden experience of the sibling relationship from the unique point of view of a sibling of an illicit drug user. However in order to understand more in depth the complexity of the sibling relationship when there is a stressor such as drug use, it is necessary to also understand how illicit drug users experience the impact of their drug use on their sibling relationship. Therefore it would be beneficial to interview the illicit drug user about how they feel their drug use has impacted on their sibling relationship. This would give a greater depth of understanding of the sibling relationship as a single construct and within the greater dynamics of the family system when there is a stressor such as illicit drug use. It might also explicate idiosyncratic stressors on the adult sibling relationship when one sibling's drug use is either ongoing or resolved. The findings from that research might discover whether the illicit drug user has insight into the impact on the sibling relationship, creates meaning from the impact on the relationship, what motivates the illicit drug user to seek to repair the relationship, or if there are factors that influence whether the quality of the relationship can be improved or if the relationship irrevocably dissolves.

Another area where the quality of the sibling relationship has important implications is forensic psychology, especially when adult siblings are involved in court and judicial processes. Adult siblings might be opposing parties in family court processes when one sibling applies for the custody of the child of a sibling who uses illicit drugs. A sibling might also be identified as a temporary carer or supervisor when a user sibling is involved in child protection matters. The forensic implications of the theory are discussed in the next chapter.

Chapter Nine: Forensic implications: Two case studies

The final theory indicates that adults provide significant support to their user sibling, especially the types of support that encourage health and wellbeing in users. However, the final theory also shows that the quality of the adult sibling relationship can deteriorate as a result of the impacts from the user sibling. One of the factors that contributed to withdrawing from the sibling relationship was the need to protect vulnerable family members. Many participants were involved in the care of their user sibling's children and sought ways to ensure that the user's children were cared for or protected from the impacts of their parent's drug use.

As established in the chapter on Impact of Drug Use on Family Members, children can be negatively affected by a parent's drug or alcohol use. Time spent by the parent obtaining, using, and recovering from drug use can impair parenting skills and leave children at risk of neglect or harm (Velleman & Templeton, 2007). During the interviewing phase of the current study, many stories emerged of adults caring for nieces and nephews when their sibling was involved in child protection or family court matters. Adults were named by courts or statutory authorities as either primary custodians, supervisors, or were unofficial carers living in the family home when grandparents had custody of the user's children.

A review of the literature revealed that the role of aunts and uncles is rarely considered in child protection and family law research. Most of the research focuses on general kinship care with aunts and uncles given the same context as grandparents (Boetto, 2010; Kiraly, 2011; Kroll, 2007; O'Neill, 2011). However, there is recognition in the literature on the impacts of substance use in straining and testing loyal family relationships (Kiraly, 2011; Kroll, 2007). Given that the sibling relationship spans the lifetime and can remain an integral part of an adult's social and kin network, it is surprising that the role of aunts and uncles has rarely been considered. As is evident from the data that emerged in the current study, forensic evaluators need to be aware of the involvement of adult siblings as relevant parties in legal matters, either as litigants or as key informants, and understand how the nature and dynamics of specific siblings relationships might inform a psychological forensic assessment.

The role of a forensic evaluator

The services of a forensic evaluator can be of assistance to child protection authorities, Children's court, or Family court to assist statutory bodies decide what is in the best interests of the child. Forensic investigations involve the evaluator gathering data using a number of psychological assessment devices including forensic interviewing techniques, use of

psychometric and actuarial assessment tools, observation, and review of case materials in order to address specific questions (Terms of Reference) related to each party's capacity to care for the child. Moreover, as an expert witness the forensic evaluator needs to draw on the science of his or her profession to support the opinions presented in the report (Cutler & Kovera, 2011; Kumar, 2011). A psychologist appointed as an expert witness would therefore need to draw on empirical psychological theory and research to provide the scientific basis of his or her opinion.

In the first case study, the participant (termed 'the aunt') is a litigant in family court proceedings against her user sister (termed 'the mother') and is seeking custody of her user sister's daughter (termed 'the child'). An example of the specific Terms of Reference that a forensic evaluator (termed a Single Expert Witness in Australian Family Courts) is outlined in Table 2 (see over page). In a child protection matter (the focus of case study two) a forensic evaluator would be guided by similar terms regarding each party's capacity to provide for the best interests of the child and the dynamics of the relationship between each party.

Number	Term of Reference
1	The relationships and perceptions of the Child with regard to their relationships with: <ul style="list-style-type: none"> a) The Mother b) The Aunt c) Any other significant persons.
2	The capacity of each of: <ul style="list-style-type: none"> a) The Mother; and b) The Aunt to recognise and provide adequately for the physical, emotional and intellectual needs of the Child.
3	The attitude to the Child and to the responsibilities of parenthood demonstrated by each of the Mother and the Aunt
4	The extent of the willingness and ability of each other the Mother and the Aunt to facilitate and encourage a close and continuing relationship between the child and the other party.
5	Whether the child is in any danger or at risk of being subjected to or exposed to abuse, neglect or family violence of any kind from <ul style="list-style-type: none"> a) The Mother b) The Aunt c) Any other significant persons
6	Any views expressed by the Child regarding the time that she spends with each of the parties and any other issues pertaining to her parenting, including the reasons expressed for those views and the strength of the views held.
7	Whether it is considered that the views of the Child has been unduly influenced by any person
8	The effect of separating the Child from <ul style="list-style-type: none"> a) The Mother b) The Aunt c) Any other significant person
9	Any recommendations as to what is considered most appropriate in relation to the extent and nature of the time that the Child should spend with each of the parties, including the extent to which this should occur overnight and the need or otherwise for supervision.
10	Subject to the issue of cost, any recommendations as to whether either of the parties and/or the Child would benefit from any therapy or counselling and, if so, the nature of the therapy or counselling and the reasons for those recommendations.
11	Any other matter considered relevant to the welfare of the Child.

As can be seen from the Terms of Reference, whether in court or in a child protection matter, the focus of a forensic investigation is not only the risk of abuse or harm to the child and each party's capacity to provide adequately for the child's physical, emotional, and intellectual needs, but also the nature of the relationship between each party and his or her capacity to encourage and facilitate the relationship between the child and the other party. When a sibling of an illicit drug user is a relevant party in the matter, the theory developed here can be applied to understand the dynamics of the relationship between each party, the underlying motivation or basis of each party's opinion about the other, or each party's behaviour toward the other. Furthermore, as the theory draws on accepted psychological theory and research, the forensic evaluator can draw on this theory as the scientific basis for opinions rather than drawing on either lay person's assumptions of the role of an aunt or uncle when children are in kinship care or on kinship care literature that mainly focusses on the role of grandparents. The two case studies examined here indicate how the model and the theory can be applied in the context of a forensic matter to guide or assist a forensic evaluator in his or her investigation.

Case study one

The participant for the first case was a female recruited during the first phase of the study to discuss her relationship with her user sister. At the time of the interview, the participant had been caring for her user sister's child for the previous two years and had progressed to formal custody proceedings in the Family Court. In order to address Terms of Reference that pertain to each party's capacity to support the relationship between the child and the other party (numbers 4 and 7), it is important to understand the history and the dynamics of the relationship between the sisters. In typical Family Court proceedings the forensic evaluator would be interested in the relationship between the parents of the child, or in some cases between a grandparent and parent. These close family relationships have different dynamics to a sibling relationship. Therefore an understanding of the general sibling literature is required to empirically underpin any expert opinion given, as well as an understanding of the trajectory of sibling relationships when life events threaten the quality of the relationship. This theory draws on the sibling literature and accepted psychological theory in order to understand how illicit drug use impacts on the relationship. Therefore the forensic evaluator can use the theory as the scientific basis for his or her expert opinion.

The general sibling literature indicates that the nature of the sibling relationship sets the tone for the relationship over the lifespan. Using the theory to explain the dynamics of the sibling relationship in case study one, prior to litigation the sibling relationship would be placed in the

context of *high affectional closeness* and *high sense of obligation*. The participant described her relationship with her sister as close growing up. Even as adults she stated that they never fought and would maintain frequent contact (*high affectional closeness*). Furthermore, she described her family as cohesive, very supportive and caring of one another. Therefore, her *high sense of obligation* is influenced both by the closeness of the *sibling bond* and also *family rules and values*. Furthermore her *high sense of obligation* motivates her to provide support to her user sister. She stated that she was aware of her sister's drug use and for a period of time would give her money so that her sister would be able to buy food for her and her daughter (*tangible support for user, support for user's children*). However, the participant discovered that her user sister was stealing from her employer and also taking money from their other sister (*boundary breaches*). At this point, the participant employed *problem solving behavioural strategies* in order to provide *conditional support* to her user sister such as buying her grocery store gift vouchers instead of giving her cash.

Prior to taking her niece into her care, the participant advised that though she was aware that her sister was using some substances, she was not aware of the extent of her sister's use. She noted that her sister was starting to withdraw and become more secretive about her life (*impact of use on the relationship*):

She had already withdrawn, or was starting to...up until then it was maybe she drinks a bit too much...smokes too much pot, drops an 'e' or whatever, which doesn't necessarily make you the worst parent in the world or anything, but at the same time I didn't know the extent of it and if I had of known, that kid wouldn't have stayed that long cause I wouldn't of let it happen

The participant described the event (*discovery of use*) that precipitated taking her niece into her care (reappraisal process shifting *challenge appraisals* to *threat appraisal* leading to *problem focussed coping strategy* that provides support for user's children):

(User sibling's) boyfriend had gone mental and was trashing the house and she called the cops but had taken (her daughter) to be watched by our other sister so she wouldn't get hurt or anything. So I went around there one day after work... and I said 'What's going on? Are you alright?' and (user sister) turned into a babbling crying mess: 'My life's falling apart and he trashed the house' and basically I said 'Do you want me to take (your daughter) for the school holidays?'... and yeah, she's never gone back....That's when (the family) started finding out things..... I was really concerned about her going

back because, you know, it wasn't a very nice environment. And then I found out they didn't have a fridge, I'm like, if you don't have a fridge, what are you eating? What's this poor kid eating?and I found out the kid wasn't eating regularly and ...she'd stay up all night cause she was scared to death of the boyfriend and so she didn't even have a bedroom, she didn't have a bed, she was sleeping on the couch in the lounge room, they hocked all her stuff

Using the theory as an empirical guiding framework, the forensic evaluator can ascertain that a once warm and close sibling relationship characterised by mutual caring and support has been negatively impacted by one sister's drug use. The behaviours associated with her sister's focus on illicit drug use contributed to *boundary breaches* and lack of *reciprocity* and the presence of vulnerable others influenced the participant to change the level of support given to her sister and redirect her resources to her niece. In effect, her *sense of obligation* to her sister was ameliorated and trumped by a sense of obligation informed by *family values* to care for her niece. As soon as the participant appraised that her niece was under threat, she took her into her care and her priority became the care of the child above maintaining the relationship with her sister. This illustrates how the forensic evaluator can be guided by the theory to understand a party's motivation for his or her behaviour. The theme *supporting and protecting others* ameliorates the *sense of obligation* and contributes to a sense of *freedom to disengage* due to continuing *threat appraisals*. This is illustrated in the following quote from the participant which described the events following her user sister's attempted suicide by overdose, an event that in other circumstances might elicit support for her sister:

Some random counsellor from Royal Perth rang up and she was trying to get me to take my niece into Royal Perth psych ward and I'm like "No, you're only thinking about my sister, you're not thinking about the impact it's going to have on a little kid and she's got nobody to fight for her other than me and I'm not taking her into the psych ward, I don't care if it's going to be beneficial for (user sister) cause it's certainly not going to be beneficial for an eleven year old", so the counsellor was then sprouting off at me about "she's got a right to see her child" and it's like yeah and she's had every opportunity to comply (with court orders)... she was blaming (the suicide attempt) on the fact that she hasn't been able to see her daughter, but she hasn't been able to see her daughter cause she hasn't been doing what she's supposed to do

Applying the theory in order to understand one party's motivation and subsequent behaviour a forensic evaluator would be interested in how a *sense of obligation* might influence whether

an uncle or aunt is distracted from focussing on the needs of the child and therefore whether his or her capacity to be protective and ameliorate risk of harm to the child is reduced. This quote indicates that this participant's sense of obligation to support her sister has been replaced by a sense of obligation to support her niece. Her focus firmly remains on protecting her niece from the psychological impacts that might occur from visiting her mother in a psychiatric facility, regardless of any benefit her user-sister might receive. However, if one party's sense of obligation to their user sibling remains high, his or her perception might be skewed to the point that the focus might become that it is in the best interests for the child to be with the mother. Therefore, where the participant for case study one is able to remain concrete and clear in prioritising the needs of the child without being influenced by a sense of obligation to her sister, another party may become aligned to their user sibling's desires because they are influenced by a high sense of obligation to support their sibling. This has the potential to blur how that party judges what is in the best interests of the child and the subsequent course of action that he or she might take, thereby potentially limiting that party's ability to be protective. A forensic evaluator therefore needs to understand how sense of obligation to a sibling might influence one party's capacity to meet the needs of the child through balancing being protective and facilitating the relationship between the child and the other party.

In order to answer the terms of reference 4 and 7 it is important for the forensic evaluator to understand each party's perception of the other. The theory specifies participant attitudes toward the user sibling in the themes *attributions* and *perception of the user*. Inherent in the above quote is the significance of the participant's *attributions* regarding her user sister's capacity to take responsibility for her actions and her use of drugs. Due to the *attribution* of an internal locus of control, the participant still *appraises* her sister as a threat and because of prioritising the care of her vulnerable niece (*supporting and protecting others*) she uses *coping* strategies that maintain very clear *boundaries (behavioural disengagement)*:

I really don't want anything bad to happen to (my sister) but she puts herself in situations where bad things happen to her....I guess at some point you've gotta take some responsibility for the shit you're putting yourself in....She was going through a program, life skills management- but when at (a mediation) meeting, she admitted she had used heroin in the last four weeks whilst she was in a treatment program. So yeah, its not working, or you don't want it to work- ultimately I think that's what it is, she doesn't want it to work, she doesn't think she's got any problems...I think she uses those problems- I think she creates them so she gets attention

This participant's *attributions* regarding her user sister's locus of control and the *perception of her user sister* motivated her to be more protective and guard her niece from the risk of harm. Unfortunately, the effect on the sibling relationship is deterioration in the quality and level of affection. Though these sisters once were close and communicated well together, the experience of taking her niece into care and appraising her sister's behaviour as a continuing threat results in the sisters being at odds with one another rather than engaging in the typical mutually supportive egalitarian sibling relationship. The participant's feelings toward her sister are highlighted in the following quote:

If something did happen to her then all this shit would go away, you know, I mean like it would be horrible, but the problems would end, because she wouldn't be causing them anymore

The theory indicates that adults who disengage from their user sibling only consider re-establishing close contact if they no longer appraise their sibling to be a threat. Consistent with this, the participant would only consider re-establishing a close relationship with her sister with direct support if she saw signs of stability and abstinence:

No way would I be helping her to just continue what she's doing, I would need to see improvement, get her shit together, actually have a shower once in a while, that'd be nice. She needs to be not using. That's the thing, I don't think she wants to stop so if she doesn't want to stop, then even a little bit (of drug use is) gonna be too much

The quality of the sibling relationship and the perception of the participant are directly relevant to how well each of the parties facilitate and encourage the relationship between the child and the other party. As stated earlier, typically the forensic evaluator would be investigating the relationship between parents and between the child and each parent. The sibling relationship is a very different type of close family relationship which the theory indicates can vary in the level of closeness, affection, conflict, and ambivalence. In this case, the participant's focus on the care of the child has ameliorated any previous feelings of closeness or sense of obligation toward her sister (*low affectional closeness and low sense of obligation*):

There's no animosity, it's not like I hate her or anything like that, it's kind of nothingness now....could be worse I guess...

This quote indicates that the relationship between sisters has become so damaged that the participant has become *emotionally detached*. It appears that this emotional detachment allows the participant to maintain focus on the care of the child rather than providing direct support to her sister:

I want her to get better, but I don't think she will. And so because I don't think she will, there's no point in engaging...it's pointless. I've (niece) to worry about and she's way more important in the grand scheme of things than whether or not (my sister) gets her act together.... I've got other priorities and the big one happens to be her child....I don't have time or the effort to bother to deal with that if she's not going to help herself either...sort yourself out and then we'll talk

So how does understanding the status of the sibling relationship inform the forensic evaluator of one party's capacity to encourage and facilitate the relationship between the child and the other party? In this case, paradoxically, because the relationship between sisters has deteriorated to the point where the participant is now emotionally detached, the participant's behaviour is not motivated by anger or hurt and she emphasises her priority on engaging with the court process in order to ensure that her niece maintains the relationship with her mother. However, consistent with the theory, in order to balance facilitating the relationship with being protective, this is only in ways that do not present a threat to her niece (*attributions and threat appraisals leading to conditional support*):

(Niece) wants to see her mum but she doesn't want to live with her. I don't have a problem with that- I don't, it's a pain in the ass, but I don't have a problem with it as such and it's for her welfare so it's all good... I cannot see (my sister) ever getting out of this- I don't think it's gonna happen...especially considering she lost her kid and she sees things she'd have to do to fix that and doesn't do it. It seems like there needs to be a catalyst for change. This should be it (but) I don't see an end in sight....For a mother this should be the worst thing in the world, but because of the kind of mother that she is, it's not

This case illustrates that because this participant's relationship to her user sister is characterised as emotionally detached, this ironically allows her greater capacity to maintain the balance between facilitating the relationship between the child and mother and being protective. In a process (litigation and Family Court) that is by nature adversarial, emotional

detachment toward the other party becomes a quality that enhances this participant's capacity to meet the needs of the child. This is because the relationship dynamics are not characterised by either conflict (which could skew the participant toward being over protective, potentially influence denigration of the child's mother, and not encourage the relationship between the child) nor by a high sense of obligation (which could skew the participant toward alignment with the user sibling's desires and allowing the child access to a parent who presents a risk to the child without sufficient focus on being protective). Applying both the general sibling literature and this theory, which explains how the quality of the sibling relationship is impacted by drug use, can assist the forensic evaluator to understand how an aunt or uncle might interact with the parent of the child and how they might balance facilitating the relationship and being protective.

A forensic evaluator will often need to take into account the child's relationship to any other significant person in the child's life (terms of reference 1, 5, and 8). The evaluator will also need to consider the relationship dynamics between all parties (aunt/uncle, parent, child, and any other significant person) and the capacity for each party to facilitate those relationships for the child. In this case, because the participant's sense of obligation toward her sister had been ameliorated, she was not aligned to her sister's desire for the child to not have a relationship with her father. The advantage of having her niece in her care has allowed this participant to facilitate a relationship between her niece's father and extended family. The participant advised that her niece expressed a desire to meet her father with whom the child previously had never met due to her mother's decision to not continue a relationship with him:

(Niece's father) knew that he had a kid... and he found out later that she was a girl, but he hadn't even seen a photo of her until a year ago...(niece) said "I wanna meet my dad"...and I'm like "yeah okay, I'll see what I can do"...It wasn't that hard. His girlfriend is pregnant so we're trying to make sure that (niece) has the interaction...His family live in (suburb) so they're not that far away...I've spoken to his sister (and) his brother got married recently and sent (my niece) an invite...

The participant's focus on the psychological needs of the child is evident in the following quote that shows the motivation for engaging other members of her niece's family:

We were trying to have somebody there that was going to love her but it not be out of obligation, because from (niece's) point of view she might see that I'm doing it just because I had to kind of thing, not because I wanted her there, so at the same time I

wanted to make sure that she gets what she needs and make sure that she's got all the emotional (needs) covered

Therefore, using the general sibling literature and the theory developed here a forensic evaluator can empirically underpin expert opinion and explain the relevant psychological factors to the legal questions they are required by the court to investigate. Despite the sisters' relationship previously being characterised by high affectional closeness and high sense of obligation, which initially elicited direct support for the user, the priority of supporting the user's child has led the participant to emotionally and behaviourally disengage from her user sister. In this case, the impact of her user sister's drug use, the court process and the focus on the needs of the child has led to a decrease in the level of affectional closeness in the sibling relationship and ameliorated the sense of obligation to provide direct support to the user. The participant's attribution regarding her user sister's locus of control leads her to perceive that her sister presents a continuing threat to her niece's safety and well-being. However, being emotionally detached allows the participant to conditionally facilitate the relationship between her niece and her user sister, thereby balancing encouraging the relationship and being protective. The unique situation of having the sibling as a litigant in this case has allowed the child to establish and maintain relationships with her father and extended family from whom she had previously been excluded. Tracking the journey and trajectory of the sibling relationship according to the theory can inform a forensic evaluator as to the capacity for an aunt or uncle to meet the best interests of the child in the Family Court process. The next case applies the theory to a child protection matter.

Case study two

In a child protection matter a forensic evaluator is interested in many of the same factors relevant to a Family Court matter. In a child protection matter the Department for Child Protection might engage a forensic evaluator prior to any litigation to do an independent report that they can draw upon to assist regarding decisions on how to work with the family. In case study two the participant was specifically recruited to gather data from an adult with a sibling who is both an illicit drug user and is currently involved in a child protection or family court matter. In this case, the children have been temporarily removed from the care of the mother due to concerns regarding her capacity to be protective and risk of harm to the children. At this point there is not a court order placing the child into the care of the Department, rather the children are placed with their aunt by consent arrangements. However, there is still potential for litigation to occur should the Department decide to make

an application to the Children’s Court to make the child a ward of the state. In cases such as this the Department would therefore be seeking the expert opinion of a forensic evaluator to assist in determining the level of risk to the child, the capacity of the parent to work with the Department and other services, and what might be relevant to include in any safety plans. An example of the terms of reference the Department might set for a forensic evaluator is outlined in Table 3:

Table 3: An example of Terms of Reference set by the Department for Child Protection

Number	Term of Reference
1	Your opinion as to the risk to the children of being subjected to or exposed to abuse, neglect, or family violence of any kind from the mother
2	The capacity of the mother to work with the Department and other services to address impairment in parenting or her capacity to be protective
3	The value of the children continuing the relationship with their mother if they are placed into Departmental care
4	If placed into Departmental care, the frequency and nature, if any, of contact between the children and their mother
5	If placed into Departmental care, the likely long term impacts on the children’s relationship with their mother
6	Any relevant factors that would need to be included in a safety plan, including the need or otherwise for supervision and the nature of the supervision

As can be seen in the Terms of Reference for both the Family Court matter and a Child Protection matter there are many areas of overlap. In the first case the siblings were opposing litigants. In case study two the children were temporarily placed into the care of the participant (aunt) whilst the Department investigated the level of risk posed by the mother to the children. In this case, the participant is not a litigant in formal court proceedings. However, she is a key informant for the forensic evaluator as the children were temporarily placed into her care by the consent of the mother. Furthermore should the matter progress to litigation she potentially could be called as a witness by either her user sister (the mother) or the Department. As with case study one, because she is a key informant the participant’s attitude and perception of her user sister and the dynamics of the relationship between the siblings become relevant in informing the forensic evaluator’s opinion not only to answer the terms of reference but also how well any plans implemented might be facilitated by the participant and how the dynamics of the relationship might help or hinder that process.

As with case study one, the history and dynamics of the sibling relationship is relevant to understanding the motivation and attitudes of the participant. The participant in case study two described the relationship with her user sister as close during early childhood. However, she described her sister as favoured by parents and extended family. When her parents separated during her late childhood, her relationship with her sister became characterised by conflict and *rivalry*. During adolescence, despite spending a lot of time together, their relationship became increasingly distant:

When I first started high school she'd been going there for a year, there was only 14 months between us and she wanted to pretend that she didn't know me and I didn't know a single person besides her at this massive school. And she had her friends on the bus and they would ignore me or tease me. And at school, she would just put shit on my friends and me. And if she did come to say hello in a friendly way it was because she wanted food or money

At home, feelings of *ambivalence* toward her sister were further increased by family systemic issues:

We were still living together as teenagers with dad and putting up with his moods. It was horrible because he has chilled a lot now, but he can be a very angry man. It was like, well if he is pissed off with (user sister) it makes my life easier. So it was a horrible mix of feelings, because I didn't want him to be shouting at her, but if he was shouting at her it meant he wasn't shouting at me. And I think she probably felt the same way. So it was kind of a little unconscious game of trying not to be the one in the firing line. Which meant sacrificing each other, which sucked cause then we would sometimes comfort each other afterwards

This participant described herself as the family mediator who was expected to engender communication and fix relationships within the family (*family rules and values*). A forensic evaluator would be interested in the history of the relationship which indicates increasing distance, conflict, and rivalry between sisters, but with the sense of obligation influenced by family values that motivates the participant to care for vulnerable family members. This would place this participant into the context *low affectional closeness* and *low sense of obligation*. Due to ongoing family issues including problems related to her user sister (*boundary breaches* such as *stealing* and *lying*), this participant had already *behaviourally disengaged* by travelling

and living overseas for long periods of time. She stated that after returning from Europe three years prior she was expected to step back into the role of mediator:

When I got home they all started fighting with each other again and expected me to start fixing things again. Well, maybe this is why I have been so far away for so long?

Furthermore, when her user sister became pregnant, the participant was already aware of the possible need to provide care and protection to the children (*protecting others, sense of obligation to the children, influenced by family values*):

Before(nephew) was even born I foresaw problems and told myself that if the shit hit the fan then I would take on my nephew, you know I decided that before he was born, at a very young age, seventeen I think...there are adults who don't behave like adults and can't take care of themselves and yeah... I might need to step in one day

When the participant returned from overseas she noticed that her user sister's care of her children was characterised by lack of supervision and did not meet the children's physiological and psychological needs. She advised that she was aware the children were exposed to drug use and her user sister's drug using peers in the house. At this time she stated that her and her family (*family focus on the user*) were already discussing how they would intervene in order to ensure the children were protected and taken care of whilst in the care of their mother. Again, by applying the theory to understand this participant's motivation to care for vulnerable family members, the forensic evaluator can be informed as to this participant's attitude toward the mother and the participant's capacity to be protective and work with the Department in order to provide adequate supervision. However, before the family could take any action, a report made to the Department of Child Protection by an outside party initiated the separation of the children from their mother:

(user sister) and the two boys were in hospital cause the boys were being checked for bruises and the older one was fine. I got a call out of nowhere from mum saying "(user sibling) has had the boys taken off her. They're in hospital. Can you go and pick up the elder one?" But they weren't letting the younger one out yet, they hadn't finished checking on him. So (user sister) left the older one in my care.

After meeting with the Department, the two children were initially placed into the care of the participant and her father (the children's maternal grandfather). After a few days the older

child was placed into the care of his father who lived separately to the mother. The younger child remained in the care of the participant and her father. Part of the care plan involved the participant's user sister moving in with their mother, who lived separately to the participant and their father, before she could have custody of her children again. As a result of this, the participant became the primary carer for her nephew over the next few months and was the main supervisor during visits and overnight stays in either grandparent's household. This case highlights how the forensic evaluator needs to be increasingly aware of the involvement of adult siblings, especially when grandparents are separated but both involved in the children's lives. As this case illustrates the adult sibling therefore becomes a mediator and go-between for all family members. The theory developed here also suggests how adult siblings are drawn into forensic matters often without being immediately equipped to take on the care of young children and without the benefit of parenting experience that grandparents have. The participant described the impact on her life (*participant's sacrifices*):

(DCP) gave (younger nephew) to us and then we had to get clothes and nappies and potty, he needed toilet training and toys and what not... They gave us a couple of days to get all the paperwork...I think we were in a bit a shock at that stage, I think I was on autopilot just doing what had to be done... Me or dad had to be with (nephew) at all times, supervising him very heavily, in case he gets a scratch or a bruise...(child and mother) were allowed little visits and then they were allowed half a day together as long as me and dad were there, then they were allowed sleep overs as long as I was there at mum's or dad's...I did a lot of running around.

My life was not my life at that time, I did not have a life...I was living at dad's out in the country and waiting to find out if I'd got into uni and talking to dad about doing uni part time because of (nephew). I didn't see any of my friends. No, my life was totally not my life....the hardest part was living at dad's and spending so much time with dad again (but) it was a really intense situation anyway, we were both going a little stir crazy I think...disagreeing on things ...at first it was okay we were like equals, but then he sort of started being dad and sort of stomping me down and oh it was horrible, I got a bit depressed

Drawing on the general sibling literature and the theory, the forensic evaluator can understand that the typical trajectory of sibling relationships indicates that when in late adolescence and early adulthood adults pursue independence through higher education, employment, leaving home and their own romantic and peer relationships. As the theory suggests, in this case her

sister's drug use was a factor that engaged this participant initially in caring for her sister (*Support for user: practical support*), but also caring for her nephews to the point where she was considering putting off her independent pursuits (*support for user's children, protecting and supporting others, participant's sacrifice*):

I came home with intentions of getting (my sister) into new circles of friends, I had all these good intentions- I very quickly realised there is no helping her, but I could try and help the boys...

As in case study one, the forensic evaluator can apply the theory to understand this participant's attitude toward her sister through *perception of user* and *attributions*. This will assist in understanding the dynamics of the relationship and how well this participant will be able to both work with the Department to implement plans and to encourage the relationship between the children and their mother. This participant's attributions regarding her sister's capacity and willingness to change led to feelings of hopelessness. In this case, despite her ambivalent feelings toward her sister, the participant was motivated to assist her user sister to regain the custody of her children because she stated that this is what her nephew wanted. The forensic evaluator is informed by drawing on the theme *sense of obligation* as influenced by *family values* which indicate that despite the ambivalence in the sibling relationship, the participant's goals are aligned with her sister, the children, and the Department, whilst still maintaining a focus on being protective. However, once the children were returned to their mother, the participant *behaviourally* and *emotionally disengaged* through pursuing independent interests:

I realised that I couldn't- she wouldn't, she wouldn't let me, she didn't want to change, so it was a hopeless kind of idea. And then I was like I've gotta live my life, I can't let every aspect of my life be affected. Then I moved down here, going to uni and still trying to see them. But I got wrapped up in uni pretty quickly. I had the best intentions for every weekend or every second weekend to go and see them, but it didn't last very long...I was like okay I can start my life again, push the play button...my life was completely on hold while I had (nephew), completely. I was going a little bit crazy

This quote illustrates the normative transition that creates distance between siblings. However, the participant's perception of her user sister (*attribution*), continued *boundary breaches*, and *ambivalent* feelings toward her sister influence continued *threat appraisals* and

gives further weight to the desire to remain *behaviourally* and *emotionally disengaged*, despite a competing desire to *protect the children*:

(Dad and I) might not be able to get along with (user sister) but we still need to be present in the boys' lives for whatever might happen in the future so we will do what we can to make that happen.... (my sister's) just not a balanced person in any way and I see that reflecting on the boys and it's just really hard, really hard to be around her... when stuff she says doesn't make sense or she's repeated herself or she's falling asleep in the middle of a sentence ...it's just really hard

(I'm) so mad at her for not putting her boys first...and she still doesn't. And then she put on this big act like she knew she had to. And me and dad knew it was an act, but I guess we have this small hope that it wasn't just an act. Cause I thought, like when it happened me and dad were like "nothing else is gonna make her snap out of it and perhaps this is what she needs, to have her boys taken off her". That hasn't made her get her shit together so I don't see that anything will. If that wasn't enough....that's when I lost hope, when she went straight back to her old ways as soon as she got her boys back... After all me and dad did so that she would get her boys back...and I felt bad giving (nephew) back to her knowing that she hadn't really changed and that she'd just put on this whole act

Furthermore, as per the theory and as the above quote illustrates, the lack of *reciprocity* or recognition for all the support her user sister has received contributed to *anger* toward her sister and continued *threat appraisals*:

Well I'm not gonna (walk on eggshells), she's my sister, I'm not gonna see her and not tell her how things are, I can't....I refuse to...we have way to much history for me to be tiptoeing around her... I don't think she ever fully appreciated what me and dad did either in those two months...it makes it hard when you get nothing back again and again and again and she'll still lie to you and...you know, she hasn't had an opportunity to steal from me for a long time, but she would... I don't trust her, yeah...I'm still mad at her for not being a good mum and just being so fucking selfish and weak...

As opposed to the first case study where the participant was emotionally detached, the fact that this participant feels ambivalent toward her sister, as well as the added weight of protecting her nephews, leads her to being stuck in a cycle between engaging in support versus trying to emotionally and behaviourally disengage. The relevance to a forensic

evaluator is how these relationship factors impact on the best interests of the child. The participant has established an important protective role in her younger nephew's life and has contributed significantly to ensuring the safety and well-being of her nephew. However, continued threat appraisals and the normative pursuit of independent interests have led her to behaviourally disengage. Consequently, she has become an inconsistent presence in her sister's life and her nephew's life. As the theory indicates, the quality of the sibling relationship deteriorates with ongoing problems associated with drug use and this risks children losing a positive attachment relationship. At the time of the interview the participant had not seen her sister or her nephews since an incident approximately six months prior where the participant and her sister fought in front of the children:

(My sister) was wired and not making sense and I guess I wasn't as patient as I normally am... I was trying to talk calmly to her and she was like "get off your fucking high horse"... We just ended up shouting at each other and... cause I just couldn't have a conversation that made sense with her and my nephews were right there and I ended up just leaving. I told Dad about that because that for me was like... yeah I don't know what she'd been taking, but she wasn't recognisable as my sister. Even when she is fucked up she is still... there's still a little bit of hope that she'll work herself out. But that day I was like she's gone. She's gone is how I felt about my sister.... I haven't seen her since (then), I'm a bit torn I guess cause I want to see the boys, but I don't want them to see me and her not getting on

The participant's *attribution* regarding her sister's capacity for change and lack of recognition of the support she has received leads to continued anger and reluctance to engage in the relationship. Due to her *family values* and the bond and affection she has with her nephews, she still has a *sense of obligation* to ensure that her nephews are adequately provided for whilst in her sister's care (*supporting and protecting others*). The sense of obligation, ambivalent feelings toward her sister and the last experience of her sister described in the quote above led to continued *threat appraisals* that left the participant feeling *stuck* between seeking to disengage and remaining available as a support for the children. Due to the relationship with her sister she has found it difficult to arrange to see her nephews. As a result the children are missing out on a rewarding, protective, and positive relationship with their aunt. The forensic evaluator would therefore need to consider how the role of an aunt or uncle as a carer or supervisor might impact long term on the children, especially if significant attachment relationships are formed.

Discussion

Several of the participants interviewed for this study were involved at some level in the care of children of their user sibling. The two cases reviewed here involved adult siblings who were pulled into formal child protection or family court proceedings. The first case reviewed an adult sibling relationship that was once close and supportive, but through the process of formal litigation the participant had become emotionally detached from her user sibling. In the first case the siblings held opposing views and goals, in that the participant was seeking to formally take on the parenting role. In this case, the participant was concrete regarding the best interests of the child and focussed on ways to conditionally facilitate the relationship between mother and child, as well as with the child's father and extended family. However, this process involved significant sacrifice on the participant's behalf due to not only caring for the child (school, extracurricular activities, medical costs, etc.) but also covering court costs. In the second case the participant described her relationship as close with her sister when they were very young, but was increasingly characterised by conflict and rivalry. This led to feelings of ambivalence toward her sister. In the second case the participant, her user sister, and the Department's goals were aligned such that the focus was on returning the care of the children to their mother. The participant was the main carer and supervisor during child protection proceedings which also resulted in significant sacrifices due to covering the costs of providing for a child and limiting her personal pursuits. However, due to continued boundary breaches and conflicts with her sister, as well as the normative developmental transition of seeking independence, this participant found ways to emotionally and behaviourally disengage. Her ambivalent feelings toward wanting to help versus wanting to disengage from her sister, as well as her sense of obligation to protect her nephews, left her stuck in a cycle between engaging versus attempting to disengage. As a result she became an inconsistent presence in her nephews' lives with whom significant attachment relationships were formed.

The similarities and differences in both these cases highlight the importance of understanding the nuances of adult sibling relationships and the theory. In the first case study, the participant was seeking sole custody of her niece. According to the theory, the adult siblings' relationship had deteriorated to the point of emotional detachment on behalf of the participant. This actually represented a possible strength in the relationship dynamics between litigants as the participant expressed a willingness to cooperate with court orders that facilitated the relationship and contact between the child and her mother. Due to feelings of indifference toward her sister, there was a lack of intense emotional experience that could contribute to conflict and acrimony between parties. Although it appears, from what the participant reported, that her user sister still holds negative feelings toward her, the participant's

indifference toward her sister is a factor that could facilitate rather than impede successfully implementing court orders. In the second case study, the participant was an important person in her nephews' lives. However, her ambivalent feelings toward her sister and competing needs of wanting to disengage (due to the impact of drug use and normative development transitions) versus a desire to remain protective of the children led to the participant becoming an inconsistent presence in the children's lives. Additionally, the level of conflict and intense emotional experiences led to volatility in the adult sibling relationship, which according to the theory, risks the relationship becoming so damaged that the participant no longer wishes to be part of her sister's life. As her sister retains custody of her children this makes it very difficult for the participant to keep in contact with her nephews. The children therefore lose a significant protective and supportive relationship that could potentially exist for a greater part of their life than relationships with grandparents.

Familiarity with the normative transitions of adult sibling relationships and how this transition may be impacted by one sibling's drug use can assist a forensic evaluator to understand the dynamics and trajectory of the adult sibling relationship when an aunt or uncle is a significant person in a child's life. According to the theory, an aunt or uncle can be a positive role model, a protector, or a supporter of a parent who is struggling with a drug use problems. They can also be someone who prioritises the best interests of the child. Considering the sibling relationship is the longest lasting and siblings are a major support in older adults' lives, an aunt or uncle might be a lasting influence in a child's life. However, the normative transition of adult siblings means that an aunt or uncle will inevitably seek their own independent interests, perhaps meeting their own partners and having their own children, or taking care of their own families. According to the theory, one's own partners and children become prioritised over providing support to a sibling, especially when that sibling does not reciprocate support.

Furthermore, the process of litigation itself can be an event that influences movement along the pathway within the model. In the first case study, the participant's involvement as a litigant in the family court proceedings required her to reprioritise her resources to meet the needs of the child over the needs of her user sibling, taxing her psychological and practical resources in the process. Due to the adversarial nature of family court proceeding interacting with the underlying dynamics of the sibling relationship, litigation became an additional intervening condition that influenced the participant to emotionally detach from her user sibling. In case study two, the process of being involved in a forensic evaluation as a key witness also influenced movement along the pathway. Balancing the competing needs of wanting to return the children to their mother versus being intrinsically motivated and

extrinsically (overseen by DCP) motivated to be protective led to increased conflict and ambivalence in this sibling relationship. Again, the process of being involved in a forensic evaluation has interacted with underlying relationship dynamics and influenced this participant to struggle between trying to disengage from her user sibling to avoid conflict versus trying to find ways to remain engaged for the sake of the children. This highlights the importance of a forensic evaluator being familiar with both the underlying theory and model of sibling relationships when applying it to a forensic evaluation, how the process of litigation or evaluation can be an event that influences the dynamics and quality of the sibling relationship, and how that might impact each party's capacity to meet the best interests of the child.

Limitations and future research

One limitation in the current discussion of forensic applications of the theory is that the data used to illustrate the first case study were drawn from the initial sample used to develop the model and theory. The forensic implications became evident in the data when several participants from the first 25 participants spontaneously expressed events relating to child protection matters and Family or Children's Court. The participant for the second case study was specifically recruited to gather data from an adult with a sibling with an illicit drug use problem and was also involved in a child protection or Family Court matter. Therefore, future research would need to test the model and theory against other cases where adults are involved as litigants or key witnesses in child protection, Children's Court, or Family Court matters, especially when being involved in a forensic evaluation process becomes an event that influences the dynamics and quality of the sibling relationship and impacts on the outcomes for the child.

Chapter Ten: Conclusion

The literature on normative sibling relationships highlights how significant the sibling relationship is over the lifespan. The sibling relationship is governed by its own code of conduct that is influenced by a sense of egalitarianism and reciprocity of support and affection. In late adolescence and adulthood, siblings shift from being each other's constant companion in childhood to being sources of support for each other during major life events, whilst each sibling pursues individuation and their own developmental tasks. The theory is consistent with attachment theory that suggests that a sibling can become an affectional, attachment, or caregiving figure in childhood. However, the level of warmth and affection differs in each sibling relationship and family systemic factors can interfere with the development of a close and emotionally meaningful sibling relationship. The theory is also consistent with the normative sibling literature that suggests that the tone of the sibling relationship in childhood sets the tone for the sibling relationship over the lifespan.

How drug use impacts on the normative sibling relationship

According to the theory, one sibling's illicit drug use is a major life event that initially elicits support from one's sibling in high affectional closeness relationships. Consistent with the literature on support in normative sibling relationships, adult siblings provide significant emotional and tangible support to their user sibling. This theory showed that adult siblings provide support in ways that promote the health and well-being of the user, either whilst their sibling is still using or in order to help them remit from use. Often this level of support comes at significant psychological or tangible cost to the adult who supports their user sibling. Not only does this level of stress and strain lead to a deterioration of coping resources, health, and well-being in the adult sibling, but the impact from the user sibling, such as boundary breaches, can lead to deterioration in the quality of the adult sibling relationship. The reduced capacity for the user sibling to meet the expectation of reciprocity, as well as the perception that the user continues to threaten the adult's well-being, leads to adults choosing emotion focussed and problem focussed coping strategies with the aim of emotionally and behaviourally disengaging. Adults feel ambivalent about their relationship and become stuck in a cycle between engaging in support and trying to disengage from the relationship. This is because they still feel obliged to provide support and want to help their user sibling, yet they recognise the need to protect oneself and vulnerable others. When the user sibling's illicit drug use is chronic and the negative impacts such as stealing, lying, abuse, aggression, and imbalance of reciprocity continue to interfere with the quality of the sibling relationship, adults reduce their sense of obligation and focus more on protecting themselves and vulnerable

others. The costs of disengaging from the sibling relationship are feelings of guilt and grief and the loss of an important affectional relationship. Therefore the theory shows that even though siblings initially provide support, the ongoing impacts of illicit drug use contributes to continued threat appraisals and a deterioration of supportive and affectionate sibling relationships.

In adult sibling relationships characterised by low affectional closeness since childhood, adults do not experience intense emotional experiences related to their sibling's drug use. The lack of affection and mutual caregiving as a characteristic of the sibling relationship means that if adults choose to provide support they are concrete and clear in the types of conditional support they provide. Adults with this type of sibling relationship might feel obliged to provide conditional support to the sibling to fulfil values regarding a sense of duty to the family in general. The intent of conditional support is to send a clear message to the user sibling that the adult does not condone drug use or the behaviour related to drug use that transgresses boundaries such as stealing, taking, abusing, or in some other way disrespecting other family members. The emotional experiences (low intensity and short duration) that these adults experience relate more to the frustration that other family members are being hurt by the user sibling, rather than being directly impacted by the sibling per se. Over time, with significant distance and no contact, these adults might become emotionally detached and relate to their sibling as they would relate to any other human being. These adults do not experience a loss of a close relationship as a close, meaningful and affectionate relationship was never developed in the first place.

How the sibling experience is unique compared to other family members

The code of conduct of the egalitarian sibling relationship provides a specific context to the unique experiences of siblings versus other family members such as partners, parents, and children. As per the literature on normative sibling relationships, the theory that shows even when illicit drug use is a factor, the relationship is still subject to the rules of social exchange and the balance of investment and rewards. Even though adult siblings, as a function of the level of affection in the relationship and a sense of obligation, feel that they need to help their sibling, they also feel that they have more freedom than parents to disengage from the relationship and from the user. This is especially the case when those social exchange rules are contravened and one sibling continually fails to reciprocate in the relationship. Siblings have licence to 'opt out' of the drama. This highlights the unique position of adult siblings and how their experience of the phenomenon is different to that of parents, partners, or children.

However, it must be recognised that disengaging from the relationship and withdrawing support does not come without its own costs. For those adults with low affectional closeness relationships, they struggle to manage the differences in family members' coping and feel subject to judgement from others who dictate that they should be engaged. They also see other family members in stress and pain. For those with high affectional closeness relationships, they deal with the exact same factors, as well as their own stress and pain from observing their user sibling, someone whom they love, care about and have an attachment to, struggling. They feel frustrated with them for not changing and fear for what will happen if they do not change.

Considering there has never been any research on the experience of adult siblings there has never been any formal recognition of how much support is given by adults to their illicit drug using siblings. Even when parents are involved, adults give considerable resources to try to help the user. Not only are they then giving so much of their own time, energy, money, and effort to the user and the user's children (as well as the user obtaining resources from other family members), they cannot ask their parents for support when they need it. They miss out on getting help from parents to move out, to improve their own homes, to fulfil babysitting duties, for higher education costs, and sometimes for emotional support if they perceive their parents are not handling things well. Whichever way they turn and whichever coping strategy they choose, adults are faced with coping with their own emotional experiences or witnessing the hurt and harm to the family members they love. They also miss out on drawing on the support that a family would otherwise provide. The theory shows that the illicit drug user absorbs the focus of the family and the dynamics within the family shift in ways that maintain the status quo of the focus on the user. Therefore, even when the adult decides to disengage from the sibling relationship because the rules of reciprocity are contravened, the adult sibling is still unable to draw on the resources of the family and/or their resources are then absorbed by protecting others from the impact of the user. Whether or not the adult is in close contact or interaction with the user themselves, at some level the adult's life continues to be affected.

How adult siblings of illicit drug users differ from other adults of unwell siblings

A factor that differs with adult siblings of illicit drug users versus other unwell siblings is attribution. The literature on unwell siblings shows that the relationship quality deteriorates the worse the behaviour or functioning is in the unwell siblings. However, the literature indicates that adults' coping strategies include cognitive interpretations that ameliorate the

locus of control the unwell sibling has over their behaviour or functioning, i.e., recognising that the sibling has a disease; the causes of the behaviour is attributed to the disease and it is out of the control of the unwell sibling. Unwell siblings are viewed as being or becoming unwell because of chance, not because of anything they have done. Diseases or disorders are also viewed as permanent i.e., the disease or disorder (and its associated symptoms, functioning or behaviour) can only ever be managed, not cured or changed. According to the theory, adults see drug use completely differently and attribute an internal locus of control to their sibling. Their sibling is viewed as having chosen to use drugs, or continuing to choose to use drugs. Furthermore drug use, and its associated behaviour, is viewed as completely within their user sibling's control to change or cease. The theory shows that adult siblings perceive that illicit drug use is not a permanent disease that has to be managed and that it is possible for their sibling to lead a drug-free life and become 100% functional. However, some adults perceive that regardless of current drug use their sibling is characterised by permanent cognitive and personality limitations as shown in the theme *personality versus drug use*. When it is perceived that those permanent negative features are there (whether they were always there or are there now because of the impact of drug use), or when drug use is ongoing, adults continue to perceive their sibling as a threat and are less willing to be around them or let them be around their family and children.

How clearer linking to relevant empirical psychological theories can contribute to the knowledge in the sibling and drug and alcohol field

The literature on adult attachment in sibling relationships has not used a clear definition of an attachment or affectional bond and has only measured levels of closeness or warmth in the relationship. The first chapter of this thesis has given a definition of affectional and attachment bonds according to Bowlby and Ainsworth's attachment theory. Whether drawing on contemporary psychodynamic or social learning theory interpretations of attachment theory, the sibling relationship is recognised as being characterised by affectional bonds or even an attachment bond if a sibling is part of an infant's attachment hierarchy. This highlights the significance of the early sibling relationship as influential in a child's social and emotional development, as well as influential in the development of self-concept and mental representations of self, others, and close relationships. Given that the tone of the early sibling relationship sets the tone of the relationship over the lifespan, the presence of high affectional or even attachment bonds highlights the emotional significance of the sibling relationship. Attachment theory gives context to understand the intense emotions experienced when the capacity for each relationship partner to seek and provide comfort and security is impaired,

the experience of grief when they are separated through disengagement or even death, and the sense of an ongoing bond regardless of current contact. Therefore, integrating literature on sibling relationships with attachment theory has given clarity to the significance of the sibling relationship over the lifespan and contributes to understanding why this is such an emotionally significant experience for adult siblings.

Furthermore, linking family systems theory has given greater understanding to the complex role of rivalry and how it influences the quality of the sibling relationship. Where the literature on sibling relationship tends to characterise rivalry as a type of sibling relationship, it has emerged in the current theory as much more closely linked with systemic factors such as parental differential treatment and how parents manage the demands of their children for resources. By applying systems theory and examining the reciprocal influences of the parental, parent-child, and sibling subsystems, rivalry was indicated as a systemic factor that interferes with the quality of affectional sibling bonds. Family systems theory also gives greater understanding to the complexity of the sibling relationship and motivation to engage or withdraw support. Greater family rules and values contribute to a sense of obligation to provide support to one's sibling. When linked with attachment theory and the influence of affectional bonds, the differences in motivational influences in sibling relationships of differing levels of affection is further clarified. Lastly, family systems theory has clarified how alliances can affect adult siblings' experiences and how much the family adapts and arranges itself so the focus on the user is maintained, thereby maintaining equilibrium in the system.

Underpinning the theory are social learning concepts that inform why siblings respond the way they do, such as the role of punishment and reward and the mutual influence of cognition, emotion and behaviour. These social learning theory concepts also underpin social exchange and equity theories, as well as stress and coping theory. Representing a departure from pathology models that is more consistent with current stress and coping models, adherence to these accepted psychological paradigms and theories not only grounds the current theory in a strong empirical basis, but also normalises adult siblings experiences, clarifies why siblings are motivated to respond and cope the way they do, what factors influence them to be ambivalent or stuck, what factors influence change, and what factors lead to deterioration of relationships. By integrating and grounding the research in all of the empirical psychological paradigms and theories the current research has been able to get to the heart of the sibling experience and tease apart the various influences on motivation, decision-making, and behaviour, more so than has previously been explored or delineated in other research on the impact of drug use on any family member. Therefore, not only does the current research

inform a large gap in the knowledge of adult sibling experiences of illicit drug users, but there is potential to use these findings and theoretical underpinnings to extend the knowledge of adult experiences of other unwell siblings, the experiences of other family members of illicit drug users, or the experiences of any person who is faced with coping with the impact of a family member who is not optimally functioning.

Summary and future research

To conclude, the three critical areas that researchers need to focus on in order to validate the model and theory and extend the body of knowledge across the sibling literature and drug and alcohol field are: the unique experiences of siblings of illicit drug users as compared to the experiences of parents, partners, children, or other close relationships; the experiences of siblings of illicit drug users versus siblings of other unwell siblings; and to ground any future research in a strong theoretical basis, whether within a social learning theory or a contemporary psychodynamic paradigm. In order to extend and develop the body of knowledge in these areas, researchers need to find methodologies that test four main findings from the current research.

First, drawing on attachment theory (whether situated within a contemporary psychodynamic or social learning theory paradigm) sibling relationships can be categorised as an affectional or attachment bond. Being that the early years of the sibling relationship is critical to developing an emotionally significant affectional bond or attachment, researchers would need to focus on how the development of different types of sibling bonds occur in childhood and how this impacts on the quality of the sibling relationship over the lifespan. Consequently, the variable descriptions and typologies of sibling bonds (warm and close, rivalry and conflict, ambivalence and indifference) might be clarified, validated, and grounded in empirical psychological theory, rather than being atheoretical as is the current status of the general sibling literature.

Second, the theory suggests that a sense of obligation to one's sibling is a significant factor in why siblings become stuck in a cycle of engaging and disengaging. Sense of obligation emerged as a factor related to the sibling relationship, where the relationship is uniquely characterised by reciprocity of support and mutual caring and affection. However, sense of obligation also emerged as a systemic factor where family rules or values influence a sense of duty to assist family members in general. Researchers would need to investigate how sense of obligation contributes to a sibling's decision to provide support and what factors ameliorate that sense of obligation to legitimise withdrawal of support or withdrawal from the relationship, or indeed

keep siblings stuck in ambivalence. Furthermore, researchers would need to focus on how sense of obligation within a sibling relationship contributes to the unique experience of siblings versus parents, partners, children, or other close relationships.

Third, rivalry emerged as a systemic factor rather than just a type of sibling relationship. The general sibling literature suggests that rivalry can be present in most sibling relationships where siblings quarrel when competing for parental attention. However, where strong rivalry and conflict exists in childhood the theory suggests that this interferes with the development of high affectional closeness sibling bonds. Future research would need to extend the parental differential treatment literature, including justice evaluations and perceptions of fairness, to investigate how parents' management of children's demands and distribution of resources interfere with the quality of the sibling relationship in adolescence or adulthood, or even contributes to the development low affectional closeness sibling bonds in childhood.

Fourth, the role of adult's attributions regarding their user sibling's locus of control emerged as distinct from the attributions of adults of unwell siblings. The sibling literature and the findings from the current research suggest that when a sibling is more functionally impaired (and the behaviour is more severe) the quality of the sibling relationship deteriorates. However, the theory suggests that attributions regarding the permanence of negative personality or behavioural traits, or whether the sibling chooses to continue to use drugs, plays a role in adult's decisions regarding whether or not are willing to re-establish a relationship with their user sibling. Researchers would need to investigate the role of attribution and clarify how the perception of locus of control contributes to adult's decisions regarding whether or not to provide support, whether to withdraw from the relationship, or whether to re-engage in the relationship if it has already deteriorated. The focus could be broadened to include adult sibling relationships where one sibling is in some way functionally impaired, either with general health or mental health diseases or disorders, or with other dependent behaviours, including legal drugs such as alcohol, or gambling.

These four main findings from the research have significant implications for clinical and forensic practice. In order to assist families and siblings to cope with having a family member with an illicit drug use problem, practitioners would need to draw on empirically grounded research that explicates the unique experiences of siblings, such as understanding the type of sibling bond (affectional or attachment), the dynamics or quality of the relationship (high versus low affection, ambivalence, or indifference), and the role of obligation. Practitioners can draw on the model and theory to assist adults to understand where they sit in the

different pathways and what factors contribute to movement along the pathway (change) or to being 'stuck'. Furthermore, practitioners can draw on the specific coping strategies explicated in the theory to assist with general coping and support when a sibling is 'stuck' or when seeking to implement change. Change might occur through disengaging or detaching; therefore specific coping strategies are relevant to implementing those changes. Change can also occur through re-engaging in the relationship; therefore the role of attribution becomes relevant to an adult's willingness to re-establish the relationship. Practitioners can also draw on the model and theory to help parents understand the unique experiences of each of their children and how their management of one child's drug use problem might impact systemically, such as contributing to rivalry and deterioration in the quality of the relationship between their children. Lastly, where adult siblings are involved as litigants or key witnesses in child protection, Family Court, or Children's Court matters, a forensic evaluator can draw on the model and theory to provide an empirical basis for expert opinions and to understand how the forensic process can become an event that influences the quality of the sibling relationship and possibly impact on the outcomes of the best interests of the child.

References

- Abdel-Khalek, A. M., & Lynn, R. (2008). Intelligence, family size and birth-order: some data from Kuwait. *Personality and Individual Difference, 44*, 1032- 1038.
- Abend, S. (1984). Sibling love and object choice. *The Psychoanalytic Quarterly, 53*, 425-430.
- Abramovitch, R., Pepler, D., & Corter, C. (1982). Patterns of sibling interaction among preschool-age children. In M. E. Lamb, & B. Sutton-Smith, *Sibling relationships: Their nature and significance across the lifespan* (pp. 61-86). Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.
- Adams, B. N. (1972). Birth order: a critical review. *Sociometry, 35*, 411-439.
- Adler, A. (1927). Individual Psychology. *Journal of Abnormal and Social Psychology, 22*, 116-122.
- Adler, A. (1929). *The practice and theory of individual psychology*. London: Routledge & Kegan Paul.
- Ainsworth, M. D. (1985). Patterns of infant-mother attachments: Antecedents and effects on development. *Bulletin of the New York Academy of Medicine, 61*, 771-791.
- Ainsworth, M. D. (1989). Attachments beyond infancy. *American Psychologist, 44*, 709-716.
- Ainsworth, M. D., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a strange situation. *Child Development, 41*, 49-67.
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision*. Washington DC: American Psychiatric Association.
- Ansbacher, H. L., & Ansbacher, R. R. (1964). *The individual psychology of Alfred Adler: a systematic presentation in selections from his writings*. New York: Harper & Row.
- Arnett, J. J., Ramos, K. D., & Jensen, L. A. (2001). Ideological views in emerging adulthood: Balancing autonomy and community. *Journal of Adult Development, 8*, 69-79.
- Asher, R., & Brissett, D. (1988). Codependency: a view from women married to alcoholics. *The International Journal of Addictions, 23*, 331-350.
- Australian Bureau of Statistics. (2008, October 23). *National Survey of Mental Health and Wellbeing: Summary of Results, 2007*. Retrieved February 17, 2011, from Australian

Bureau of Statistics:

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/4326.0Main%20Features32007?opendocument&tabname=Summary&prodno=4326.0&issue=2007&num=&view=>

- Avioli, P. S. (1989). The social support functions of siblings in later life: a theoretical model. *American Behavioral Scientist*, 33, 45-57.
- Baker, L. A., & Daniels, D. (1990). Nonshared environmental influences and personality differences in adult twins. *Journal of Personality and Social Psychology*, 58, 103-110.
- Bandura, A. (1977a). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*. 84, 191-215.
- Bandura, A. (1977b). *Social Learning Theory*. New Jersey: Prentice-Hall, Inc.
- Bandura, A. (2000). Self-efficacy. In A. E. Kazdin, *Encyclopedia of Psychology*, Vol. 7 (pp. 212-213). Washington, DC: American Psychological Association.
- Bandura, A., & Walters, R. H. (1963). *Social Learning and Personality Development*. New York: Holt, Rinehart and Winston, Inc.
- Bank, S., & Kahn, M. (1982). *The Sibling Bond*. New York: Basic Books, Inc.
- Barnable, A., Gaudine, A., Bennet, L., & Meadus, R. (2006). Having a sibling with schizophrenia: A phenomenological study. *Research and Theory in Nursing Practice*, 20, 247-264.
- Barnard, M. (2005). *Drugs in the family: Impact on parents and siblings*. York: Joseph Rowntree Foundation.
- Barnard, M. (2007). *Drug Addiction and Families*. London: Jessica Kingsley Publishers.
- Beattie, M. (1987). *Codependent No More: How to Stop Controlling Others and Start Caring for Yourself*. New York: Harper/Hazelden.
- Beattie, M. (1989). *Beyond Codependency and Getting Better All The Time*. Burwood: Collins Dove.
- Becker, C. S. (1992). *Living & Relating: An Introduction to Phenomenology*. Newbury Park: SAGE Publications.

- Bedford, V. (1989a). Sibling research in historical perspective: the discovery of a forgotten relationship. *American Behavioral Scientist*, 33, 6-18.
- Bedford, V. H. (1989b). Understanding the value of siblings in old age: a proposed model. *American Behavioral Scientist*, 33, 33-44.
- Bedford, V. H. (1992). Memories of parental favoritism and the quality of parent-child ties in adulthood. *Journal of Gerontology*, 47, S149-S155.
- Bedford, V.H. (2005). Spotlight on theory: theorizing about sibling relationships when parents become frail. In Vern L. Bengston, Alan C. Acock, Katherine R. Allen, Peggye Dilworth-Anderson, & David M Klein, *Sourcebook of Family Theory and Research*(pp. 173-178). Thousand Oaks, California: Sage Publications, Inc
- Bedford, V. H., & Avioli, P. S. (2001). Variations on sibling intimacy in old age. *Generations*, 25, 34-40.
- Bedford, V. H., & Avioli, P. S. (2012). Sibling relationships from midlife to old age. In R. Bleiszner & V. H. Bedford (Eds.). *Handbook of Families and Aging*. 2nd Ed. (pp. 125-152). Santa Barbara, California: ABC -CLIO LLC
- Belsky, J. (1997). Attachment, mating, and parenting. *Human Nature*, 8, 361-381.
- Bluebond-Langner, M. (1996). *In the shadow of illness: Parents and siblings of the chronically ill child*. Princeton, NJ: Princeton University Press
- Boetto, H. (2010). Kinship care: a review of issues. *Family Matters*, 85 , 60-67.
- Boll, T., Ferring, D., & Filipp, S. (2005). Effects of parental differential treatment on relationship quality with siblings and parents: justice evaluations as mediators. *Social Justice Research*, 18, 155-182.
- Boll, T., Michels, T., Ferring, D., & Filipp, S. (2010). Trait and state components of perceived parental differential treatment in middle adulthood: A longitudinal study. *Journal of Individual Differences*, 31, 158-165.
- Bowlby, J. (1969). *Attachment and Loss Vol 1: Attachment*. New York: Basic Books.
- Bowlby, J. (1979). The Bowlby-Ainsworth attachment theory. *The Behavioural and Brain Sciences*, 2, 637-.

- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books, Inc.
- Bretherton, I., & Munholland, K. A. (2008). Internal working models on attachment relationships: Elaborating a central construct in attachment theory. In J. Cassidy, & P. R. Shaver, *Handbook of attachment: Theory, research, and clinical applications (2nd ed)* (pp. 102-127). New York: Guildford Press.
- Brody, G. H. (1998). Sibling relationship quality: Its causes and consequences. *Annual Review of Psychology, 49*, 1-24.
- Brody, G. H., Stoneman, Z., & Burke, M. (1987). Child temperaments, maternal differential behavior, and sibling relationships. *Developmental Psychology, 23*, 354-362.
- Brody, G. H., Stoneman, Z., & McCoy, J. K. (1994). Forecasting sibling relationships in early adolescence from child temperaments and family process in middle childhood. *Child Development, 65*, 771-784.
- Brook, J., Brook, D., & Whiteman, M. (1999). Older sibling correlates of younger sibling drug use in the context of parent-child relations. *Genetic, Social, and General Psychology Monographs, 125*, 451-468.
- Brussoni, M. J., Jang, K. L., Livesley, W. J., MacBeth, T. M. (2000). Genetic and environmental influences on adult attachment styles. *Personal Relationships, 7*, 283-289.
- Bryant, B. K. (1982). Sibling relationships in middle childhood. In M. E. Lamb, & B. Sutton-Smith, *Sibling relationships: Their nature and significance across the lifespan* (pp. 87-121). Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.
- Buhrmester, D., & Furman, W. (1990). Perceptions of sibling relationships during middle childhood and adolescence. *Child Development, 61*, 1387-1398.
- Burke, M. M., Taylor, J. L., Urbano, R., & Hodapp, R. M. (2012). Predictors of future caregiving by adult siblings of individuals with intellectual and developmental disabilities. *American Journal on Intellectual and Developmental Disabilities, 117*, 33-47.
- Campa, M. I., Hazan, C., & Wolfe, J. E. (2009). The form and function of attachment behavior in the daily lives of young adults. *Social Development, 18*, 288-304.

- Carpenter, B. N. (1992). Issues and advances in coping research. In B. N. Carpenter, *Personal Coping: Theory, Research, and Application* (pp. 1-13). Westport, Connecticut: Praeger.
- Cermak, T. L. (1986). Diagnostic criteria for codependency. *Journal of Psychoactive Drugs, 18*, 15-20.
- Cicirelli, V. (1978). The relationship of sibling structure to intellectual abilities and achievement. *Review of Educational Research, 48*, 365-379.
- Cicirelli, V. G. (1980). A comparison of college women's feeling toward their siblings and parents. *Journal of Marriage and Family, 42*, 111-118.
- Cicirelli, V. G. (1982). Sibling influence throughout the lifespan. In M. E. Lamb, & B. Sutton-Smith, *Sibling relationships: Their nature and significance across the lifespan* (pp. 267-284). Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.
- Cicirelli, V. G. (1989). Feelings of attachment to siblings and wellbeing in later life. *Psychology and Aging, 4*, 211-216.
- Cicirelli, V. G. (1991). Sibling relationships in adulthood. *Marriage and Family Review, 16*, 291-310.
- Cicirelli, V. G. (1994). Sibling relationships in cross-cultural perspective. *Journal of Marriage and Family, 56*, 7-20.
- Cicirelli, V. G. (1995). *Sibling relationships across the lifespan*. New York: Plenum Press.
- Cole, A., & Kearns, K. A. (2001). Perceptions of sibling qualities and activities of early adolescents. *The Journal of Early Adolescence, 21*, 204-227.
- Conger, K. J., & Little, M. L. (2010). Sibling relationships during the transition to adulthood. *Child Development Perspectives, 4*, 87-94.
- Conger, R. D., & Reuter, M. A. (1996). Siblings, parents, and peers: A longitudinal study of social influences in adolescent risk for alcohol use and abuse. *Advances in Applied Developmental Psychology, 10*, 1-30.
- Connidis, I. A. (1989). Siblings as friends in later life. *American Behavioral Scientist, 33*, 81-93.
- Connidis, I. A. (1992). Life transitions and the adult sibling tie: a qualitative study. *Journal of Marriage and Family, 54*, 972-982.

- Connidis, I. A. (1994). Sibling support in older age. *Journal of Gerontology, 49*, S309-S317.
- Connidis, I. A. (2007). Negotiating inequality among adult siblings: Two case studies. *Journal of Marriage and Family, 69*, 482-499.
- Connidis, I. A. (2010). *Family Ties and Aging*. Los Angeles, California: Sage Publications, Inc
- Connidis, I. A., & Campbell, L. D. (1995). Closeness, confiding, and contact among siblings in middle and late adulthood. *Journal of Family Issue, 16*, 722-747.
- Copello, A., & Orford, J. (2002). Addiction and family: is it time for services to take note of the evidence? *Addiction, 97*, 1361-1363.
- Copello, A., Ibanga, A., Orford, J., Templeton, L., & Velleman, R. (2010). The 5-step method: future directions. *Drugs: education, prevention and policy, 17*(S1), 203-210.
- Copello, A., Orford, J., Velleman, R., Templeton, L., & Krishnan, M. (2000). Methods for reducing alcohol and drug related family harm in non-specialist settings. *Journal of Mental Health, 9*, 329-343.
- Copello, A., Templeton, L., & Powell, J. (2010). The impact of addiction on the family: Estimates of prevalence and costs. *Drugs: Education, Prevention and Policy, 17*, 63-74.
- Copello, A., Templeton, L., Orford, J., & Velleman, R. (2010a). The 5-step method: principles and practice. *Drugs: education, prevention and policy, 17*(S1), 86-99.
- Copello, A., Templeton, L., Orford, J., & Velleman, R. (2010b). The 5-step method: evidence of gains for affected family members. *Drugs: education, prevention and policy, 17*(S1), 100-112.
- Corless, J., Mirza, K., & Steinglass, P. (2009). Family Therapy for substance misuse: the maturation of a field. *Journal of Family Therapy, 109-114*.
- Cox, M., & Paley, B. (1997). Families as systems. *Annual Review of Psychology, 48*, 243-267.
- Cronkite, R. C., Finney, J. W., Nekich, J., & Moos, R. H. (1990). Remission among alcoholic patients and family adaptation to alcoholism: a stress coping perspective. In R. L. Collins, K. E. Leonard, & J. Searles, *Alcohol and the Family* (pp. 309-337). New York: Guildford Press.
- Cutler, B.L. & Kovera, M.B. (2011). Expert Psychological Testimony. *Current Directions In*

Psychological Science, 20, 53-57.

Davis, D. I., Berenson, D., Steinglass, P., & Davis, S. (1974). The adaptive consequences of drinking. *Psychiatry, 37*, 209-215.

Davys, D., Mitchell, D., & Haigh, C. (2011). Adult sibling experience, roles, relationships and future concerns- a review of the literature in learning disabilities. *Journal of Clinical Nursing, 20*, 2837-2853.

Dear, G. (2002). The Holyoake Codependency Index: further evidence of factorial validity. *Drug and Alcohol Review, 21*, 47-52.

Dear, G., & Roberts, C. (2002). The relationships between codependency and femininity and masculinity. *Sex Roles, 46*, 159-165.

Dear, G., & Roberts, C. (2005). Validation of the Holyoake Codependency Index. *Journal of Psychology, 139*, 293-313.

Dear, G., Roberts, C., & Lange, L. (2004). Defining codependency: a thematic analysis of published definitions. In Shohov, S. *Advances in Psychology* (pp. 63-70). Hauppauge, NY: Nova Science Publishers

Deater-Deckard, K., Dunn, J., & Lussier, G. (2002). Sibling relationships and social-emotional adjustment in different family contexts. *Social Development, 11*, 571-590.

Degeneffe, C. E., & Burcham, C. M. (2008). Adult sibling caregiving for persons with traumatic brain injury: Predictors of affective and instrumental support. *Journal of Rehabilitation, 74*, 10-20.

Degeneffe, C. E., & Lynch, R. T. (2006). Correlates of depression in adult siblings of persons with traumatic brain injury. *Rehabilitation Counseling Bulletin, 49*, 130-142.

de Vries, B. (2012). Turning points in later life: grief and bereavement. In R. Bleiszner & V. H. Bedford (Eds.). *Handbook of Families and Aging*. 2nd Ed. (pp. 543-566). Santa Barbara, California: ABC -CLIO LLC

Dew, A., Balandin, S., & Llewellyn, G. (2008). The psychosocial impact on siblings of people with lifelong physical disability: A review of the literature. *Journal of Developmental and Physical Disabilities, 20*, 485-507.

Diderich, M. (2008). *Sibling relationships in step-families; a sociological study*. Lewiston, NY:

The Edwin Mellen Press

- Doherty, N. A., & Feeney, J. A. (2004). The composition of attachment networks throughout the adult years. *Personal Relationships, 11*, 469-488.
- Doody, M., Hastings, R., O'Neill, S., & Grey, I. (2010). Sibling relationships in adults who have siblings with or without intellectual disabilities. *Research in Developmental Disabilities, 31*, 224-231.
- Downey, D. B. (2001). Number of siblings and intellectual development. *American Psychologist, 55*, 497-504.
- Dunn, J. (1993). *Young children's close relationships: beyond attachment*. Newbury Park: Sage Publications.
- Dunn, J. (2005). Commentary: siblings in their families. *Journal of Family Psychology, 19*, 654-657.
- Dunn, J., & Kendrick, C. (1982). *Siblings: love, envy, & understanding*. London: Grant McIntyre.
- Dunn, J., & Munn, P. (1986). Siblings and the development of prosocial behaviour. *International Journal of Behavioral Development, 9*, 265-284.
- East, P. L., & Khoo, S. T. (2005). Longitudinal pathways linking family factors and sibling relationship qualities to adolescent substance use and sexual risk behaviors. *Journal of Family Psychology, 19*, 571-580.
- Erikson, E. H. (1985). *Childhood and society*. New York: Norton.
- Fagan, A. A., & Najman, J. M. (2005). The relative contributions of parental and sibling substance use to adolescent tobacco, alcohol, and other drug use. *Journal of Drug Issues, 35*, 869-883.
- Fairbairn, W. D. (1952). *An object-relations theory of the personality*. New York: Basic Books.
- Feinberg, M. E., McHale, S. M., Crouter, A. C., & Cumsille, P. (2003). Sibling differentiation: Sibling and parent relationship trajectories in adolescence. *Child Development, 74*, 1261-1274.
- Feinberg, M. E., Neiderhiser, J. M., Simmens, S., Reiss, D., & Hetherington, E. M. (2000). Sibling comparison of differential parental treatment in adolescence: Gender, self-esteem,

and emotionality as mediators of the parenting-adjustment association. *Child Development, 71*, 1611-1628.

- Feinberg, M. E., Solmeyer, A. R., & McHale, S. M. (2012). The third rail of family systems: Sibling relationships, mental and behavioural health, and preventative intervention in childhood and adolescence. *Clinical Child and Family Psychology Review, 15*, 43-57.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*, 117-140.
- Finney, J. W., Moos, R. H., Cronkite, R. C., & Gamble, W. (1983). A conceptual model of the functioning of married persons with impaired partners: Spouses of alcoholic patients. *Journal of Marriage and Family, 45*, 23-34.
- Fischer, J. L., Spann, L., & Crawford, D. (1991). Measuring codependency. *Alcoholism Treatment Quarterly, 8*, 87-99.
- Folkman, S. (1992). Making the case for coping. In B. N. Carpenter, *Personal coping: Theory, research, and application* (pp. 31-46). Westport, Connecticut: Praeger.
- Folwell, A. L., Chung, L. C., Nussbaum, J. F., Bethea, L. S., & Grant, J. (1997). Differential accounts of closeness in older adult sibling relationships. *Journal of Social and Personal Relationships, 14*, 843-849.
- Fonagy, P., Gergely, G., & Target, M. (2008). Psychoanalytic constructs and attachment theory and research. In J. Cassidy, & P. R. Shaver, *Handbook of Attachment: Theory, research and clinical applications (2nd ed.)* (pp. 783-810). New York: Guilford Press.
- Fortuna, K., Roisman, G. I., Haydon, K. C., Groh, A. M., & Holland, A. S. (2011). Attachment states of mind and the quality of young adults' sibling relationships. *Developmental Psychology, 47*, 1366-1373.
- Fraley, R. C., & Tancredy, C. M. (2012). Twin and sibling attachment in a nationally representative sample. *Personality and Social Psychology Bulletin, 38*, 308-316.
- Freud, S. (1920). *A General Introduction to Psychoanalysis*. New York: Horace Liveright.
- Friedrich, R. M., Lively, S., & Rubenstein, L. M. (2008). Siblings' coping strategies and mental health services: a national study of siblings of persons with schizophrenia. *Psychiatric Services, 59*, 261-267.

- Fuller, J. A., & Warner, R. M. (2000). Family stressors as predictors of codependency. *Genetic, Social, and General Psychology Monographs, 126*, 5-22.
- Furman, W., & Buhrmester, D. (1985). Children's perception of the personal relationships in their social networks. *Developmental Psychology, 21*, 1016-1024.
- Gierynski, T., & Williams, T. (1986). Codependency. *Journal of Psychoactive Drugs, 18*, 7-13.
- Glaser, B., & Strauss, A. (1965). Discovery of substantive theory: a basic strategy underlying qualitative research. *American Behavioral Scientist, 8*, 5-12.
- Goetting, A. (1986). The developmental tasks of siblingship over the life cycle. *Journal of Marriage and Family, 48*, 703-714.
- Gold, D. T. (1989). Sibling relationships in old age: a typology. *International Journal of Aging and Human Development, 28*, 37-51.
- Goldenberg, H., & Goldenberg, I. (2008). *Family therapy: An overview*. Belmont, CA: Thomson.
- Gomberg, E. (1989). On terms used and abused: the concept of codependency. *Drugs and Society, 3*, 113-132.
- Greenberg, J. S., Kim, H. W., & Greenley, J. R. (1997). Factors associated with subjective burden in siblings of adults with severe mental illness. *American Journal of Orthopsychiatry, 67*, 231-241.
- Greenberg, J., Seltzer, M. M., Orsmond, G. I., & Kraus, M. W. (1999). Siblings of adults with mental illness or mental retardation: current involvement and expectation of future caregiving. *Psychiatric Services, 50*, 1214-1219.
- Grossmann, K. E. (1999). Old and new internal working models of attachment: The organization of feelings and language. *Attachment and Human Development, 1*, 253-269.
- Grossman, K., Grossman, K. E., Kindler, H., & Zimmerman, P. (2008). A wider view of attachment and exploration: The influence of mothers and fathers on the development of psychological security from infancy to young adulthood. In J. Cassidy, & P. R. Shaver, *Handbook of attachment: Theory, research, and clinical applications (2nd ed)* (pp. 857-879). New York: Guilford Press.
- Haaken, J. (1990). A critical analysis of the co-dependence construct. *Psychiatry, 53*, 396-406.

- Hands, M., & Dear, G. (1994). Co-dependency: a critical review. *Drug and Alcohol Review, 13*, 437-445.
- Harkness, D., Swenson, M., Madsen-Hampton, K., & Hale, R. (2001). The development, reliability, and validity of a clinical rating scale for codependency. *Journal of Psychoactive Drugs, 33*, 159-171.
- Harper, J., & Capdevila, C. (1990). Codependency: a critique. *Journal of Psychoactive Drugs, 22*, 285-292.
- Harter, S. (2006). The self. In N. Eisenberg, W. Damon, & R. M. Lerner, *Handbook of Child Psychology Vol 3: Social, Emotional, and Personality Development (6th ed)* (pp. 505-570). Hoboken, New Jersey: John Wiley & Sons, Inc.
- Hatfield, A. B., & Lefley, H. P. (2005). Future involvement of siblings in the lives of persons with mental illness. *Community Mental Health Journal, 41*, 327-338.
- Heller, T., & Kramer, J. (2009). Involvement of adult siblings of persons with developmental disabilities in future planning. *Intellectual and Developmental Disabilities, 47*, 208-219.
- Hetherington, E. M. (1999). Family functioning and the adjustment of adolescent siblings in diverse types of families . *Monographs for the society for research in child development, 64*, 1-25.
- Hetherington, E. M., & Clingempeel, W. G. (1992). Coping with marital transitions: A family systems perspective. *Monographs for the Society for Research in Child Development, 57*, 1-242.
- Hetherington, E. M., Clingempeel, W. G., Anderson, E. R., Deal, J. E., Hagan, M. S., Hollier, E. A., et al. (1992). Coping with marital transitions: A family systems perspective. *Monographs for the Society for Research in Child Development, 57*, 1-238.
- Hetherington, E. M., Henderson, S. H., Reiss, D., Anderson, E. R., Bridges, M., Chan, R. W., et al. (1999). Adolescent siblings in stepfamilies: Family functioning and adolescent adjustment . *Monographs for the Society for Research in Child Development, 64*, 1-222.
- Hetherington, E., & Stanley-Hagan, M. (1999). Stepfamilies. In M. (. Lamb, *Parenting and child development in 'nontraditional' families* (pp. 137-159). Mahwah, New Jersey: Lawrence Erlbaum, Inc.
- Hodapp, R. M., & Urbano, R. (2007). Adult siblings of individuals with Down syndrome versus autism: findings from a large-scale US survey. *Journal of Intellectual Disability Research, 51*, 1018-1029.

- Hodapp, R. M., Urbano, R. C., & Burke, M. M. (2010). Adult female and male siblings of persons with disabilities: Findings from a national survey. *Intellectual and Developmental Disabilities, 48*, 52-62.
- Hopson, R. E. (1993). A thematic analysis of the addictive experience: Implications for psychotherapy. *Psychotherapy, 30*, 481-494
- Horney, K. (1950). *Neurosis and human growth: the struggle toward self-realization*. New York: Norton.
- Hurcom, C., Copello, A., & Orford, J. (2000). The family and alcohol: effects of excessive drinking and conceptualizations of spouses over recent decades. *Substance Use & Misuse, 35*, 473-502.
- Huston, T., & Rempel, J. (1989). Interpersonal attitudes, dispositions, and behavior in family and other close relationships. *Journal of Family Psychology, 3*, 177-198.
- Huston, T., & Robins, E. (1982). Conceptual and methodological issues in studying close relationships. *Journal of Marriage and Family, 44*, 901-925.
- Jackson, D., Usher, K., & O'Brien, L. (2007). Fractured families: parental perspectives of the effects of adolescent drug abuse on family life. *Contemporary Nurse, 23*, 321-330.
- Jung, C. G. (1960). *On The Nature of The Psyche (rev. ed.; R.F.C. Hull, Trans)*. London: Routledge Classics.
- Kaufman, E. (1985). Family systems and family therapy of substance abuse: an overview of two decades of research and clinical experience. *The International Journal of the Addictions, 20*, 897-916.
- Kernberg, O. F. (1984). *Object-relations Theory and Clinical Psychoanalysis*. New Jersey: Jason Aronson Inc.
- Kiraly, M. (2011). Commentary: kinship care. *Children Australia, 36*, 43-45.
- Klein, M. (1959). Our adult world and its roots in infancy. *Human Relations, 12*, 291-303.
- Klein, M. (1965). *Contributions to Psycho-analysis, 1921-1945*. London: Hogarth Press.
- Kohut, H. (1991). *The Search for the Self*. New York: International Universities Press.

- Kramer, L., & Bank, L. (2005). Sibling relationship contributions to individual and family well-being: introduction to the special issue. *Journal of Family Psychology, 19*, 483-485.
- Kristoffersen, K., Polit, & Mustard, G. W. (2000). Toward a theory of interrupted feelings. *Scandinavian Journal of Caring Science, 14*, 23-38.
- Kroll, B. (2007). A family affair? Kinship care and parental substance misuse: some dilemmas explored. *Children and Family Social Work, 12*, 84-93.
- Kumar, M. (2011). Admissibility of expert evidence: proving the basis for an expert's opinion. *Sydney Law Review, 33*, 427-457.
- Lamb, M. (1982). Sibling relationships across the lifespan: an overview and introduction. In M. Lamb, & B. (. Sutton-Smith, *Sibling relationships: Their nature and significance across the lifespan* (pp. 1-11). New Jersey: Lawrence Erlbaum Associates, Publishers.
- Lamb, M. E., & Sutton-Smith, B. (Eds.) (1982). *Sibling Relationships: Their nature and significance across the lifespan*. New Jersey: Lawrence Erlbaum Associates
- Lazarus, R., & Folkman, S. (1984). *Stress, Appraisal and Coping*. New York: Springer.
- Lee, T. R., Mancini, J. A., & Maxwell, J. W. (1990). Sibling relationships in adulthood: contact patterns and motivations. *Journal of Marriage and Family, 52*, 431-440.
- Liamputtong, P., & Ezzy, D. (2005). *Qualitative Research Methods (2nd Ed)*. South Melbourne: Oxford University Press.
- Lively, S., Friedrich, R., & Buckwalter, K. C. (1995). Sibling perception of schizophrenia: Impact on relationships, roles, and health. *Issues in Mental Health Nursing, 16*, 225-238.
- Lively, S., Friedrich, R., & Rubenstein, L. (2004). The effect of disturbing illness behaviors on siblings of persons with schizophrenia. *Journal of the American Psychiatric Nurses Association, 10*, 222-232.
- Lohrer, S. P., Lukens, E. P., & Thorning, H. (2007). Economic expenditures associated with instrumental caregiving roles of adult siblings of persons with severe mental illness. *Community Mental Health Journal, 43*, 129-151.
- Low, S., Shortt, J. W., & Snyder, J. (2012). Sibling influences on adolescent substance use: The role of modeling, collusion, and conflict. *Development and Psychopathology, 24*, 287-300.

- Lukens, E. P., Thorning, H., & Lohrer, S. (2004). Sibling perspectives on severe mental illness: Reflections on self and family. *American Journal of Orthopsychiatry*, *74*, 489-501.
- MacKinnon, C. E. (1989a). An observational investigation of sibling interactions in married and divorced families. *Developmental Psychology*, *25*, 36-44.
- MacKinnon, C. E. (1989b). Sibling interactions in married and divorced families: Influence of ordinal position, socioeconomic status, and play context. *Journal of Divorce*, *12*, 36-44.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton, & E. Waters, *Monographs for the Society for Research in Child Development*, *50* (pp. 66-104).
- McGoldrick, M., & Shibusawa, T. (2012). The family life cycle. In F. Walsh, *Normal Family Processes: Growing diversity and complexity (4th ed.)* (pp. 375-398). New York: Guilford Press.
- Michalski, R. L., & Shackelford, T. K. (2001). Methodology, birth order, intelligence, and personality. *American Psychologist*, *56*, 520-521.
- Mikkelsen, A. C. (2006). Communication among peers: Adult sibling relationships. In K. Floyd, & M. T. Morman, *Widening the family circle: New research on family communication* (pp. 21-35). Thousand Oaks, CA: Sage.
- Mikkelsen, A. C., Floyd, K., & Pauley, P. M. (2011). Differential solicitude of social support in different types of adult sibling relationships. *Journal of Family Communication*, *11*, 220-236.
- Mikkelsen, A. C., Myers, S. A., & Hannawa, A. F. (2011). The differential use of relational maintenance behaviors in adult sibling relationships. *Communication Studies*, *62*, 258-271.
- Minuchin, P. (1985). Families and individual development: Provocations from the field of family therapy. *Child Development*, *56*, 289-302.
- Minuchin, S. (1974). *Families and family therapy*. Cambridge, MA: Harvard University Press.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: conceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, *102*, 246-268.
- Mischel, W., & Shoda, Y. (1998). Reconciling processing dynamics and personality dispositions. *Annual Review of Psychology*, *49*, 229-258.

- Mitchell, J. (2011). Psychoanalysis, siblings and the social group . *Psycho-Analytic Psychotherapy in South Africa, 19*, 46-71.
- Monat, A., & Lazarus, R. (1991). Introduction. Stress and coping-some current issues and controversies. In A. Monat, & R. Lazarus, *Stress and Coping: an anthology* (pp. 1-15). New York: Columbia University Press.
- Moos, R., & Billings, A. (1982). Children of alcoholics during the recovery process: Alcoholic and matched control families. *Addictive Behaviors, 7*, 155-163.
- Myers, S. A. (2011). "I have to love her, even if sometimes I may not like her": the reasons why adults maintain their sibling relationships. *North American Journal of Psychology, 13*, 51-62.
- Myers, S. A., & Bryant, L. E. (2008). The use of behavioral indicators of sibling commitment among emerging adults. *Journal of Family Communication, 8*, 101-125.
- Myers, S., & Goodboy, A. (2010). Relational maintenance behaviors and communication channel use among adult siblings. *North American Journal of Psychology, 12*, 103-116.
- Needle, R., McCubbin, H., Wilson, M., Reineck, R., Lazar, A., & Mederer, H. (1986). Interpersonal influences in adolescent drug use-The role of older siblings, parents, and peers. *The International Journal of Addictions, 21*, 739-766.
- Nelson, K. (2003). Self and social functions: Individual autobiographical memory and collective narrative. *Memory, 11*, 125-136.
- Nelson, K., & Fivush, R. (2004). The emergence of autobiographical memory: A social-cultural developmental theory. *Psychological Review, 111*, 486-511.
- Neyer, F. J. (2002a). Twin relationships in old age: a developmental perspective. *Journal of Social and Personal Relationships, 19*, 155-177
- Neyer, F. J. (2002b). The dyadic interdependence of attachment security and dependency: a conceptual replication across older twin pairs and younger couples. *Journal of Social and Personal Relationships, 19*, 483-503
- Neyer, F. J., & Lang, F. R. (2003). Blood is thicker than water: kinship orientation across adulthood. *Journal of Personality and Social Psychology, 84*, 310-321.

- Noller, P., Conway, S., & Blakeley-Smith, A. (2008). Sibling relationships in adolescent and young adult twin and nontwin siblings: managing competition and comparison. In J. P. Forgas, & J. (. Fitness, *Social Relationships: Cognitive, Affective, and Motivational Processes* (pp. 235-252). United States: Psychology Press.
- O'Bryant, S. L. (1988). Sibling support and older widows' well-being. *Journal of Marriage and the Family, 50*, 173-183.
- Offerman-Zuckerberg, J. (1992). The parenting process: a psychoanalytic perspective. *Journal of the American Academy of Psychoanalysis, 20*, 205-214.
- O'Neill, C. (2011). Support in kith and kin care: The experience of carers. *Children Australia, 36*, 88-99.
- Orford, J. (1987). Integration: a general account of families coping with disorder. In J. Orford, *Coping with Disorder in the Family* (pp. 266-293). London: Croom Helm.
- Orford, J. (2001). *Excessive Appetites: a Psychological View of Addiction*. Chichester: Wiley.
- Orford, J., Copello, A., Velleman, R., & Templeton, L. (2010). Family members affected by a close relative's addiction: the stress-strain-coping-support model. *Drugs: Education, Prevention and Policy, 17*, 36-43.
- Orford, J., Guthrie, S., Nicholls, P., Oppenheimer, E. E., & Hensman, C. (1975). Self-reported coping behavior in wives of alcoholics and its association with drinking outcome. *Journal of Studies on Alcohol, 36*, 1255-1267.
- Orford, J., Natera, G., Davies, J., Nava, A., Mora, J., Rigby, K., et al. (1998). Tolerate, engage, or withdraw: a study of the structure of families coping with alcohol and drug problems in South West England and Mexico City. *Addiction, 93*, 1799-1813.
- Orford, J., Natera, G., Velleman, R., Copello, A., Bowie, N., Bradbury, C., et al. (2001). Ways of coping and the health of relatives facing drug and alcohol problems in Mexico and England. *Addiction, 96*, 761-774.
- Orford, J., Rigby, K., Miller, T., Tod, A., Bennett, G., & Velleman, R. (1992). Ways of coping with excessive drug use in the family: A provisional typology based on the accounts of 50 close relatives. *Journal of Community & Applied Social Psychology, 2*, 163-183.
- Orford, J., Templeton, L., Patel, A., Copello, A., & Velleman, R. (2007). The 5-step family intervention in primary care: I. strengths and limitations to family members. *Drugs: Education, Prevention and Policy, 14*, 29-47.

- Orford, J., Velleman, R., Copello, A., Templeton, L., & Ibanga, A. (2010). The experiences of affected family members: a summary of two decades of qualitative research. *Drugs: Education, Prevention and Policy, 17*, 44-62.
- Orsmond, G. I., & Seltzer, M. M. (2007). Siblings of individuals with autism or Down Syndrome: effects on adult lives. *Journal of Intellectual Disability Research, 51*, 682-696.
- Orsmond, G. I., Kuo, H., & Seltzer, M. M. (2009). Siblings of individuals with an autism spectrum disorder: Sibling relationships and wellbeing in adolescence and adulthood. *Autism, 13*, 59-81.
- Pompeo, M. N. (2009). When your "problem" becomes mine: Adult female siblings' perspectives of having a brother with a disability. *Exceptionality Education International, 19*, 50-62.
- Prest, L. A., & Protinsky, H. (1993). Family systems theory: a unifying framework for codependence. *The American Journal of Family Therapy, 21*, 352-360.
- Pulakos, J. (1989). Young adult relationships: Siblings and friends. *The Journal of Psychology, 123*, 237-244.
- Reis, H. T., & Rusbult, C. E. (2004). *Close Relationships: Key Readings*. New York: Psychology Press.
- Rende, R., Slomkowski, C., Lloyd-Richardson, E., & Niaura, R. (2005). Sibling effects on substance use in adolescence: Social contagion and genetic relatedness. *Journal of Family Psychology, 19*, 611-618.
- Riedmann, A., & White, L. (1996). Adult sibling relationships: Racial and ethnic comparisons. *Advances in Applied Developmental Psychology, 10*, 105-126.
- Riggio, H. R. (2000). Measuring attitudes toward adult sibling relationships: the lifespan sibling relationship scale. *Journal of Social and Personal Relationships, 17*, 707-728.
- Riggio, H. R. (2006). Structural features of sibling dyads and attitudes toward sibling relationships in young adulthood. *Journal of Family Issues, 27*, 1233-1254.
- Rodgers, J. L. (2001). What causes birth-order-intelligence patterns? *American Psychologist, 56*, 505-510.
- Rodgers, J. L., Cleveland, H. H., van den Ord, E., & Rowe, D. C. (2001). Birth-order and intelligence: together for the last time? *American Psychologist, 55*, 523-524.

- Ross, H. G., & Milgram, J. L. (1982). Important variables in adult sibling relationships; A qualitative study. In M. E. Lamb, & B. Sutton-Smith, *Sibling relationships: Their nature and significance across the lifespan* (pp. 225-249). Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.
- Rothbart, M. K. (1976). Sibling position, sex of child, and maternal involvement. In K. F. Riegel, & J. A. Meacham (eds), *The Developing Individual in a Changing world, Vol 2: Social and Environmental Issues* (pp. 697-706). The Hague: Mouton.
- Rotter, J. B. (1954). *Social learning and clinical psychology*. New York: Prentice-Hall.
- Rotter, J. B. (1960). Some implications of a social learning theory for the prediction of goal directed behavior from testing procedures. *Psychological Review*, *67*, 301-316.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, *80*, 1-28.
- Rotter, J. B., Chance, J. E., & Phares, E. J. (1972). *Applications of a social learning theory of personality*. New York: Holt, Rinehart & Winston.
- Ryckman, R. M. (2008). *Theories of Personality (9th ed)*. Belmont, CA: Thomson Wadsworth.
- Samek, D. R., & Rueter, M. A. (2011). Considerations of elder sibling closeness in predicting younger sibling's substance use: Social learning versus social bonding explanations. *Journal of Family Psychology*, *25*, 931-941.
- Schaefer, J. A., & Moos, R. H. (1992). Life crises and personal growth. In B. N. Carpenter, *Personal coping: Theory, research, and application* (pp. 149-170). Westport, Connecticut: Praeger.
- Scharf, M., Shulman, S., & Avigad-Spitz, L. (2005). Sibling relationships in emerging adulthood and in adolescence. *Journal of Adolescent Research*, *20*, 64-90.
- Seltzer, M. M. (1989). The three R's of life cycle sibships: rivalries, reconstructions, and relationships. *American Behavioral Scientist*, *33*, 107-115.
- Seltzer, M. M., Greenberg, J. S., Krauss, M. W., Gordon, R. M., & Judge, K. (1997). Sibling of adults with mental retardation or mental illness: Effects on lifestyle and psychological well-being. *Family Relations*, *46*, 395-405.
- Shanahan, L., McHale, S. M., Crouter, A. C., & Osgood, D. W. (2008). Linkages between parents' differential treatment, youth depressive symptoms, and sibling relationships. *Journal of Marriage and Family*, *70*, 480-494.

- Shortt, J. W., & Gottman, J. M. (1997). Closeness in young adult sibling relationships: affective and physiological processes. *Social Development, 6*, 142-164.
- Slomkowski, C., Rende, R., Conger, K. J., Simons, R. L., & Conger, R. D. (2001). Sisters, brothers, and delinquency: Evaluating social influence during early childhood and middle adolescence. *Child Development, 72*, 271-283.
- Smith, M. J., & Greenberg, J. S. (2008). Factors contributing to the quality of sibling relationships for adults with schizophrenia. *Psychiatric Services, 59*, 57-62.
- Smith, M., Greenberg, J. S., & Seltzer, M. M. (2007). Siblings of adults with schizophrenia: Expectations about future caregiving roles. *American Journal of Orthopsychiatry, 2007*, 29-37.
- Stalberg, G., Ekerwald, H., & Hultman, C. M. (2004). At issue: Siblings of patients with Schizophrenia: Sibling bond, coping patterns, and fear of possible schizophrenia heredity. *Schizophrenia Bulletin, 30*, 445- 458.
- Starks, H., & Trinidad, S. (2007). Choose your method: a comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research, 17*, 1372-1380.
- Steinglass, P. (1979). The alcoholic family in the interaction laboratory. *The Journal of Nervous and Mental Disease, 167*, 428-436.
- Steinglass, P. (1980). Alcoholism and the family: a review. *Marriage & Family Review, 2*, 1-19.
- Steinglass, P. (1981). The alcoholic family at home: Patterns of interaction in dry, wet and transitional stages of alcoholism. *archives of General Psychiatry, 38*, 578-584.
- Steinglass, P. (1985). Family systems approaches to alcoholism. *Journal of Substance Abuse Treatment, 2*, 161-167.
- Steinglass, P., Davis, D., & Berenson, D. (1977). Observations of conjointly hospitalized "alcoholic couples" during sobriety and intoxication: Implications for theory and therapy. *Family Process, 16*, 1-16.
- Stewart, R. B. (1983). Sibling attachment relationships: Child-infant interactions in the strange situation. *Developmental Psychology, 19*, 192-199.
- Stewart, R. B., & Marvin, R. S. (1984). Sibling relations: The role of conceptual perspective-taking in the ontogeny of sibling caregiving. *Child Development, 55*, 1322-1332.

- Stewart, R., Kozak, A., Tingley, L., Goddard, J., Blake, E., & Cassel, W. (2001). Adult sibling relationships: Validation of a typology. *Personal Relationships, 8*, 299-324.
- Stocker, C. M., Lanthier, R. P., & Furman, W. (1997). Sibling relationships in early adulthood. *Journal of Family Psychology, 11*, 210-221.
- Stocker, C., Dunn, J., & Plomin, R. (1989). Sibling relationships: links with child temperament, maternal behavior, and family structure. *Child Development, 60*, 715-727.
- Stoneman, Z., & Waldman Berman, P. (1993). *The effects of mental retardation, disability, and illness on sibling relationships: Research and challenges*. Baltimore: Paul H. Brookes Publishing Co
- Strauss, A. (1987). *Qualitative analysis for social scientists*. Cambridge: Cambridge University Press.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: grounded theory procedures and techniques*. Newbury Park: Sage Publications, Inc.
- Suitor, J. J., & Pillemer, K. (2000). Did mom really love you best? Developmental histories, status transitions, and parental favoritism in later life families. *Motivation and Emotion, 24*, 105-120.
- Suitor, J. J., Sechrist, J., Plikuhn, M., Pardo, S. T., & Pillemer, K. (2008). Within-family differences in parent-child relations across the life course. *Current Directions in Psychological Science, 17*, 334-338.
- Suitor, J. J., Sechrist, J., Plikuhn, M., Pardo, S. T., Gilligan, M., & Pillemer, K. (2009). The role of perceived maternal favoritism in sibling relations in midlife. *Journal of Marriage and Family, 71*, 1026-1038.
- Taylor, J. L., & Hodapp, R. M. (2012). Doing nothing: Adults with disabilities with no daily activities and their siblings. *American Journal on Intellectual and Developmental Disabilities, 117*, 67-79.
- Taylor, J. L., Greenberg, J. S., Seltzer, M. M., & Floyd, F. J. (2008). Siblings of adults with mild intellectual deficits or mental illness: Differential life course outcomes. *Journal of Family Psychology, 22*, 905-914.

- Teti, D. M., & Ablard, K. E. (1989). Security of attachment and infant-sibling relationships: A laboratory study. *Child Development, 60*, 1519-1528.
- The Parliament of the Commonwealth of Australia, House of Representatives Standing Committee on Family and Human Services. (2007). *The Winnable War on Drugs: The impact of illicit drug use on families*. Canberra: Commonwealth of Australia.
- Thompson, R. A. (2006). The development of the person: Social understanding, relationships, conscience, self. In N. Eisenberg, W. Damon, & R. M. Lerner, *Handbook of Child Development Vol. 3: Social, Emotional, and Personality Development (6th ed)* (pp. 24-98). Hoboken, New Jersey: John Wiley & Sons, Inc.
- Torgersen, A. M., Grova, B. K., Sommerstad, R. (2007). A pilot study of attachment patterns in adult twins. *Attachment and Human Development, 9*, 127-138.
- Tucker, C. J., Barber, B. L., & Eccles, J. S. (1997). Advice about life plans and personal problems in late adolescent sibling relationships. *Journal of Youth and Adolescence, 26*, 63-76.
- Tucker, C. J., McHale, S. M., & Crouter, A. C. (2001). Conditions of sibling support in adolescence. *Journal of Family Psychology, 15*, 254-271.
- Updegraff, K. A., McHale, S. M., & Crouter, A. C. (2002). Adolescents' Sibling relationship and friendship experiences: developmental patterns and relationship linkages. *Social Development, 11*, 182-204.
- Van Volkom, M. (2006). Sibling relationships in middle and older adulthood. *Marriage & Family Review, 40*, 151-170.
- Velleman, R., & Templeton, L. (2007). Understanding and modifying the impact of parents' substance misuse on children. *Advances in Psychiatric Treatment, 13*, 79-89.
- Vogt Yuan, A. S. (2009). Sibling relationships and adolescents' mental health: the interrelationship of structure and quality. *Journal of Family Issues, 30*, 1221-1244.
- Volling, B. L. (2001). Early attachment relationships as predictors of preschool children's emotion regulation with a distressed sibling. *Early Education & Development, 12*, 185-207.
- Voorpostel, M., & Blieszner, R. (2008). Intergenerational solidarity and support between adult siblings. *Journal of Marriage and Family, 70*, 157-167.
- Voorpostel, M., & Van Der Lippe, T. (2007). Support between siblings and between friends:

two worlds apart? *Journal of Marriage and Family*, 69, 1271-1282.

- Walker, A. J., Allen, K. R., & Connidis, I. A. (2005). Theorizing and studying sibling ties in adulthood. In Vern L. Bengtson, Alan C. Acock, Katherine R. Allen, Peggye Dilworth-Anderson, & David M Klein, *Sourcebook of Family Theory and Research*(pp. 166-173). Thousand Oaks, California: Sage Publications, Inc
- Walsh, F. (1995). From family damage to family challenge. In R. H. Mikesell, D. D. Lusteran, & S. H. McDaniel, *Integrating family therapy: Handbook of family psychology and systems theory* (pp. 587-606). Washington, DC: American Psychological Association.
- Walsh, F. (2012a). The new normal: Diversity and complexity in 21st-Century families. In F. (. Walsh, *Normal Family Processes: Growing diversity and complexity (4th ed.)* (pp. 3-27). New York: Guilford Press.
- Walsh, F. (2012b). Family resilience: strengths forged through adversity. In F. (. Walsh, *Normal Family Processes: Growing diversity and complexity (4th ed.)* (pp. 399-427). New York: Guilford Press.
- Watts, S., Bush, R., & Wilson, P. (1994). Partners of problem drinkers: Moving into the 1990s. *Drug and Alcohol Review*, 13, 401-407.
- Watzlawik, M. (2009). The perception of similarities and differences among adolescent siblings: identification and deidentification of twins and nontwins. *Journal of Adolescent Research*, 24, 561-578.
- Weaver, S. E., Coleman, M., & Ganong, L. H. (2003). The sibling relationship in young adulthood: sibling functions and relationship perceptions as influenced by sibling pair composition. *Journal of Family Issues*, 24, 245-263.
- Weiss, R. S. (1994). Is the attachment system of adults a development of Bowlby's attachment system of childhood? *Psychological Inquiry*, 5, 65-67.
- Westen, D. (1998). The scientific legacy of Sigmund Freud: Toward a psychodynamically informed psychological science. *Psychological Bulletin*, 124, 333-371.
- White, L. (2001). Sibling relationships over the lifecourse: A panel analysis. *Journal of Marriage and Family*, 63, 555-568.
- White, L., & Riedmann, A. (1992). Ties among adult siblings. *Social Forces*, 71, 85-102.

- Whiteman, S. D., Bernard, J. M., & McHale, S. M. (2010). The nature and correlates of siblings influence in two-parent African American families. *Journal of Marriage and Family, 72*, 267-281.
- Whiteman, S., & Christiansen, A. (2008). Processes of sibling influence in adolescence: Individual and family correlates. *Family Relations, 57*, 24-34.
- Whiteman, S. D., McHale, S. M., & Crouter, A. C. (2007a). Competing processes of sibling influence: Observational learning and sibling deidentification. *Social Development, 16*, 642-661.
- Whiteman, S. D., McHale, S. M., & Crouter, A. C. (2007b). Explaining sibling similarities: Perceptions of sibling influences. *Journal of Youth and Adolescence, 36*, 963-972.
- Whiteman, S. D., McHale, S. M., & Soli, A. (2011). Theoretical perspectives in sibling relationships. *Journal of Family Theory & Review, 3*, 124-139.
- Wichman, A. L., Rodgers, J. L., & MacCallum, R. C. (2006). A multilevel approach to the relationship between birth order and intelligence. *Personality and Social Psychology Bulletin, 32*, 117-127.
- Wichman, A. L., Rodgers, J. L., & MacCallum, R. C. (2007). Birth order has no effect on intelligence: a reply and extension of previous findings. *Personality and Social Psychology Bulletin, 33*, 1195-1200.
- Wilson, C. J., McGillivray, J. A., & Zetlin, A. G. (1992). The relationship between attitude to disabled siblings and ratings of behavioral competency. *Journal of Intellectual Disability Research, 36*, 325-336.
- Windle, M. (2000). Parental, sibling, and peer influences on adolescent substance use and alcohol problems. *Applied Developmental Science, 4*, 98-110.
- Winnicott, D. W. (1965). *The maturational processes and the facilitating environment: Studies in the theory of emotional development*. London: Hogarth Press.
- Zajonc, R. B. (2001). Birth order debate resolved? *American Psychologist, 56*, 522-523.
- Zajonc, R. B., & Mullally, P. R. (1997). Birth order: reconciling conflicting effects. *American Psychologist, 52*, 685-699.
- Zajonc, R. B., & Sulloway, F. J. (2007). The confluence model: birth order as a within-family or between-family dynamic? *Personality and Social Psychology Bulletin, 33*, 1187-1194.

Zayas, V., Mischel, W., Shoda, Y., & Aber, J. L. (2011). Roots of adult attachment: Maternal caregiving at 18 months predicts adult peer and partner attachment. *Social Psychological and Personality Science*, 2, 289-297.

Appendix A

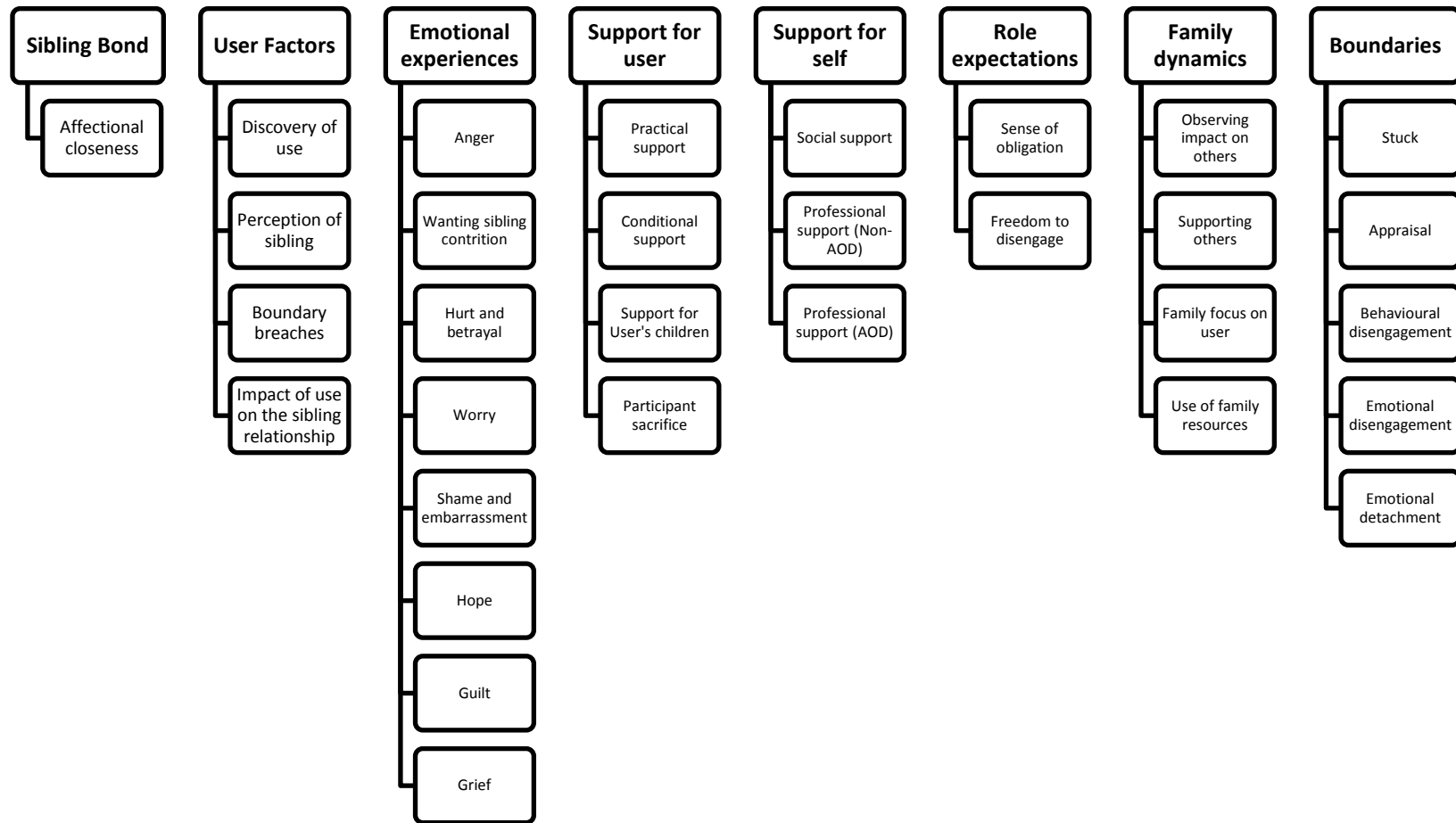


Figure 1 Descriptive theme summary

Appendix B

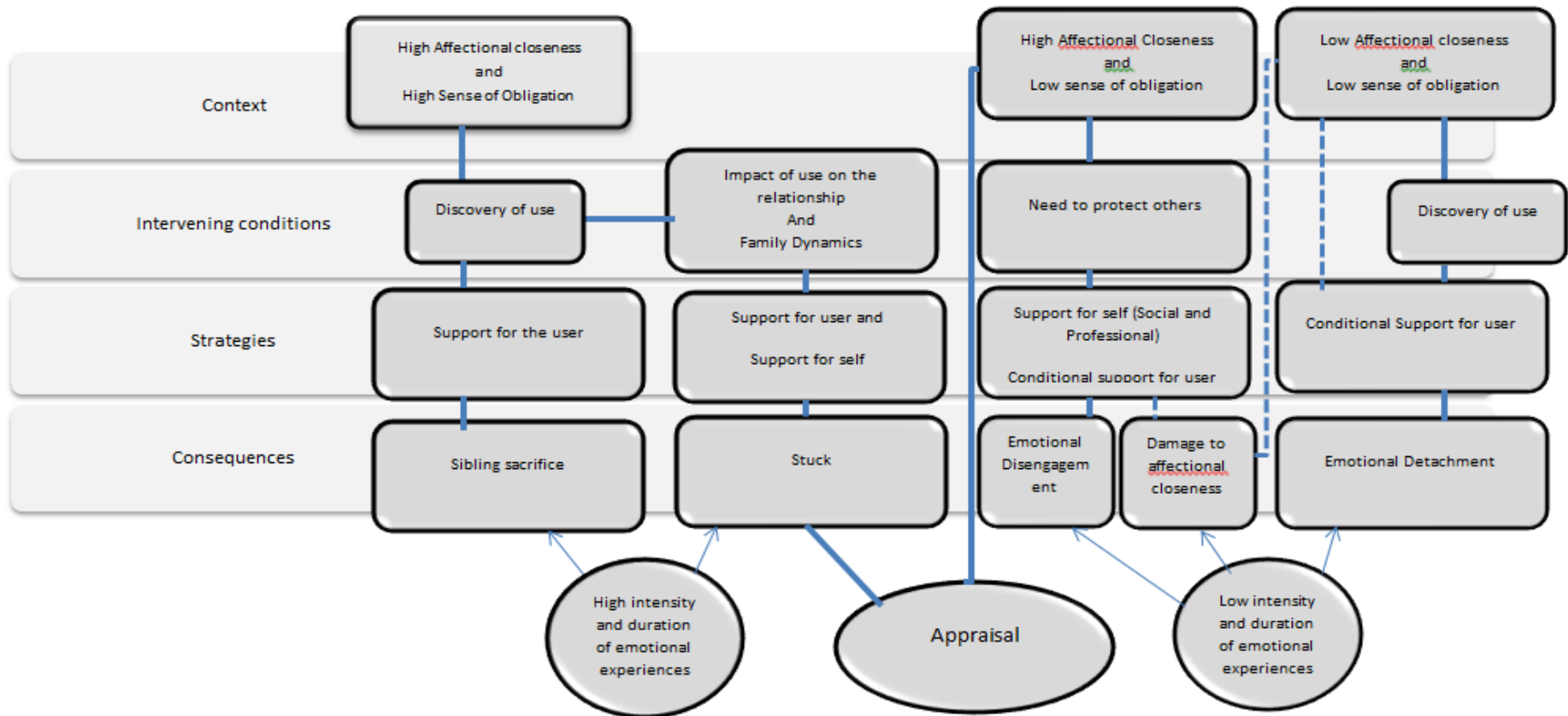


Figure 2 Provisional model of the sibling relationship impacted by illicit drug use

Appendix C

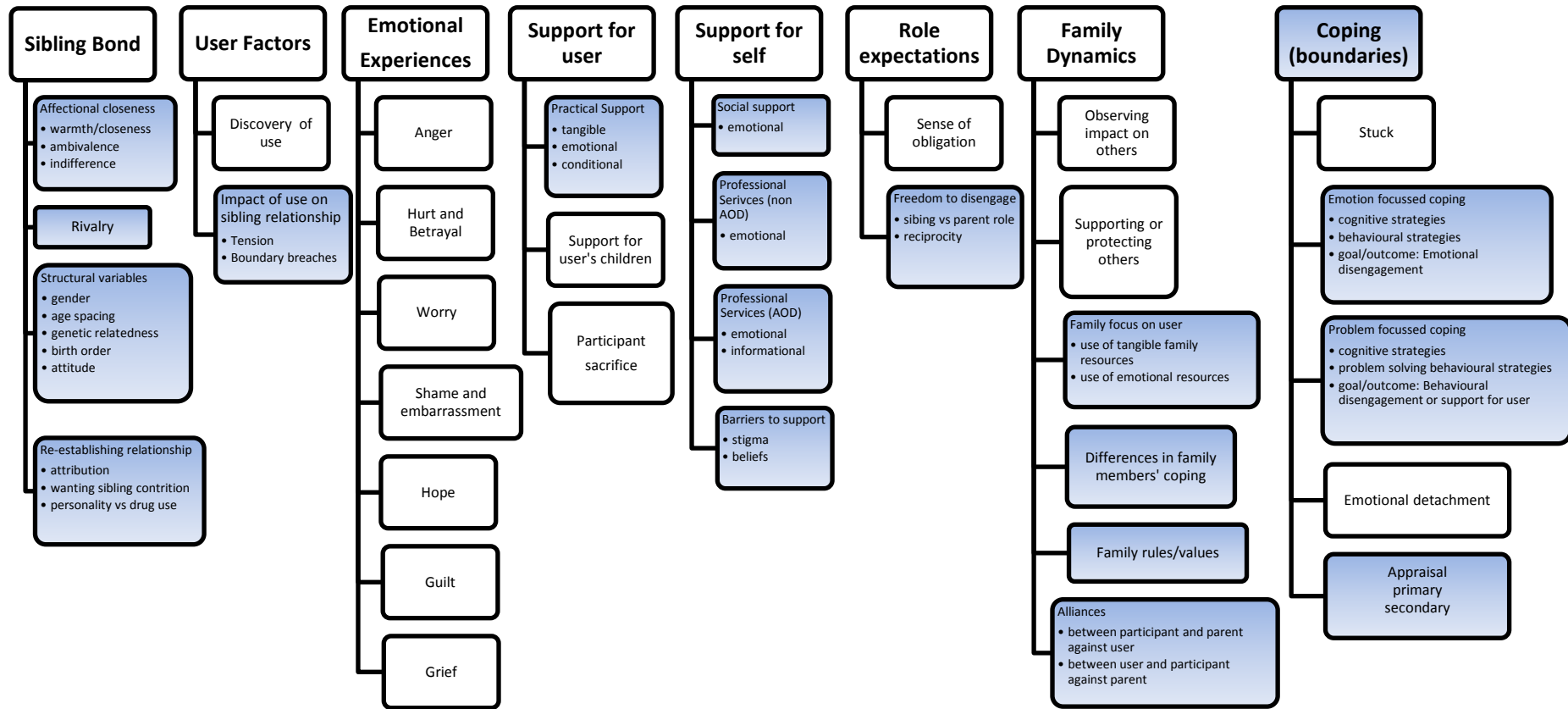


Figure 3 Descriptive theme summary Study one phase 2

Appendix D

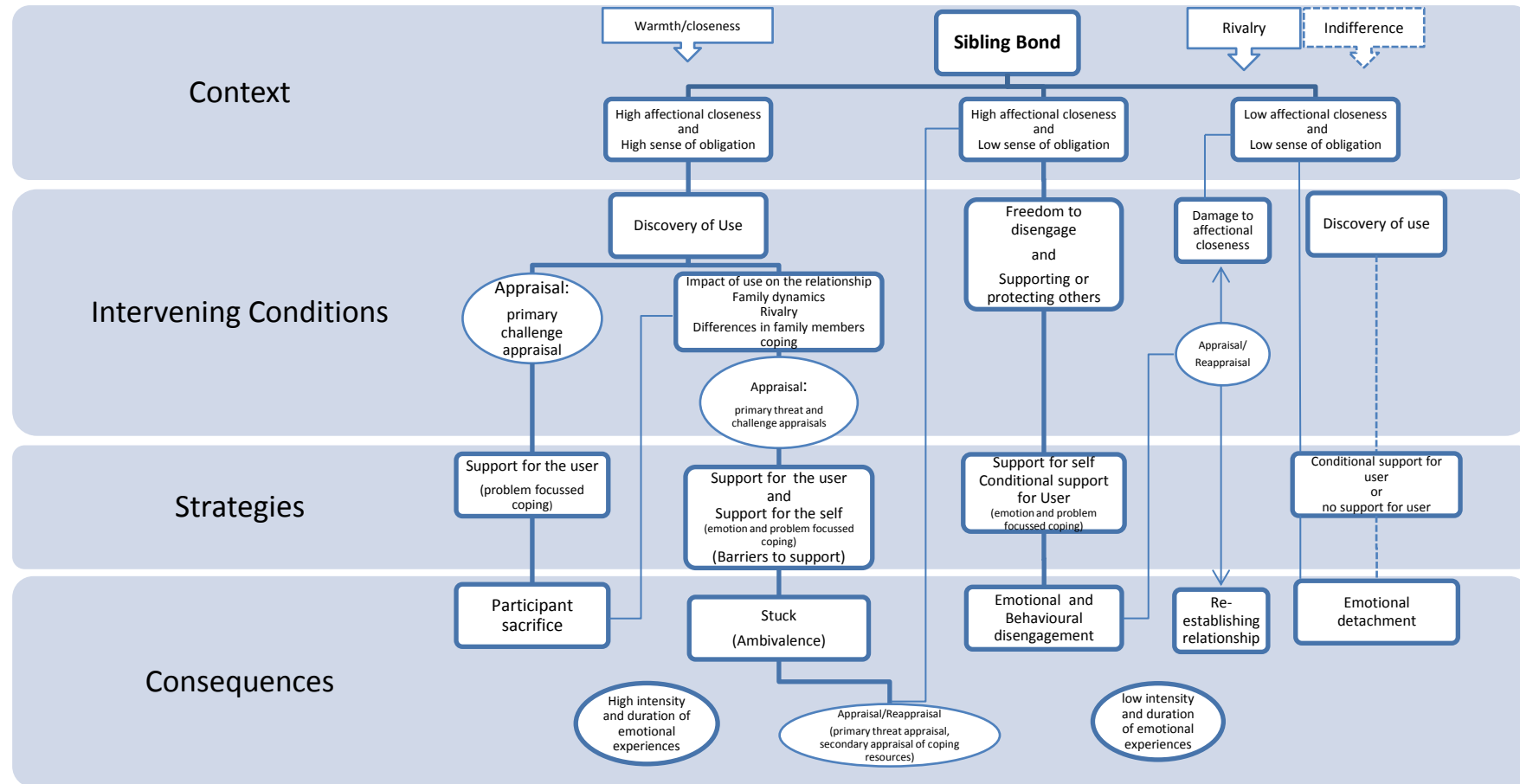


Figure 4 Experiences of adult siblings of illicit drug users