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Current adoptions of strength-based approaches, as suggested by the positive psychology movement, asks professionals to develop different perspectives on familiar constructs. Given that we have little understanding how psychologists define and work with psychological phenomena, this current study sought to determine how Western Australian registered psychologists understand resilience. The 213 participants were asked to provide definitions and information about their understanding of resilience via an open-ended questionnaire. Demographic questions included the level and year of qualification(s) and nature of psychological work undertaken. The definitions obtained from the participants were rated against definitions of resilience in the literature. The participants understandings of resilience were also assessed against the constructs believed to underpin resilience, as presented in the resilience literature. Although the concept of resilience is widely researched and much information is published in psychological journals, participants in this study did not fully articulate the concept and its relevance to strength-based approaches. As resilience provides an important basis for interventions that improve client outcomes, the results of this study have

Individuals are confronted with difficult challenges at some time during their lives. Psychologists across a variety of domains deal on a daily basis with clients who are facing adversity or some difficulty and historically a deficit approach has been adopted, focusing on what has gone wrong for clients (Adame, & Leitner, 2008; Tedeschi & Kilmer, 2005). Psychologists are trained to assist individuals to develop strategies which will assist them to manage these difficulties. Many psychologists work on an individual basis or through group interventions. Postgraduate psychology training programs traditionally do not include a focus on the strengths of the individual and more often focus on the deficits of the individual. However, a strength-based approach asks different questions and extends the information sought from the client with a resultant increase in options for interventions (Harniss, Epstein, Ryser & Pearson, 1999), and the potential to reduce future interactions with the mental health system (Tedeschi & Kilmer, 2005).

In recent times, the positive psychology movement has gained ground and encourages psychologists to operate from a different model with research reporting that human strengths can act as buffers against mental illness (Seligman & Csikszentmihalyi, 2000). Seligman and Csikszentmihalyi (2000) indicated that psychology had become "a science largely about healing" and that the "disease model does not move psychology closer to the prevention of . . . serious social problems" (p. 5) such as increases in violence.

Indeed, some individuals encounter very challenging situations which place them at risk for serious negative psychological, physical, and social consequences. However, not all individuals respond similarly to these types of challenging situations. Some go on to engage in antisocial and risky behaviours (e.g., crime, violence or substance abuse) while others go on to lead healthy and productive lives. What distinguishes this

latter group is the presence of a set of skills and attributes which are generally described as resilience.

This paper provides a short literature review on resilience which includes an overview of defining resilience by numerous theorists, and considers the facilitators and inhibitors of the use of resilience strategies in psychological practice. A research project investigating psychologists' understanding of resilience is presented. The paper concludes with implications for the discipline of psychology and psychology practice.

What is Resilience?

Early resilience research focused primarily on children who were at-risk for developing psychopathology (Anthony, 1974). Anthony noted that, despite numerous and significant risk factors, not all children who were considered "at-risk" developed mental health issues (Cicchetti & Rogosch, 2007; Curtis & Cicchetti, 2007; Flores, Cicchetti, & Rogosch, 2005; Luthar, Cicchetti & Becker, 2000; Martinez-Torteya, Bogat, von Eye, & Levendosky, 2009; Ungar, 2005a; Ungar, 2005b). Early researchers focused on the potentially negative effect of adversity, defining resilience in terms of outcome (i.e., people were resilient if they did not develop problems) (Garmezy, Masten, & Tellegen, 1984). Recently much research has been published examining the factors or skills that constitute resilience.

More recently, a strengths-based approach has been adopted where resilience is considered an ongoing process that promotes the positive adaptation or outcome despite significant adversity or trauma. The history of resilience research has developed to encompass a lifespan approach rather than focusing on the personal characteristics and personal qualities of resilient children. This approach was followed by regarding resilience as a dynamic process which is contingent on context. Additionally some research has focused on the psychological, biological and environmental-contextual processes from which resilience eventuates. Finally there is

the view that individual attributes, family aspects and the social environment (as well as culture) are significant in defining resilience. Therefore considering these aspects, resilience can be viewed as a multidimensional construct (Friborg, Hjemdal, Rosenvinge, & Martinussen, 2003; Ungar 2008).

Defining Resilience

There is controversy in the literature as to whether resilience is a characteristic/ personal quality, a process, or an outcome (Ahern, Ark, & Byers, 2008). As a result, defining resilience has been a challenge and a variety of definitions have been proposed. One reason for this challenge may be that resilience is a phenomenon that has been investigated by a variety of different professionals, in particular teachers, social workers, and psychologists.

In defining resilience as a *personal quality*, Ahern et al. (2008) mention that resilience is an "adaptive stress resistant personal quality that permits one to thrive in spite of adversity" (p. 32). In relation to resilience as defined by *process* Curtis and Cicchetti (2007) point out that resilience is "a dynamic process that is influenced by both neural and psychological self-organisations, as well as the transaction between the ecological context and the developing organism" (p. 811). Resilience has also been defined as a "dynamic process among factors that may mediate between an individual, his or her environment, and an outcome" (Ahern et al., 2008, p. 32). In relation to *outcome*, resilience has also been described as "a class of phenomena characterised by good outcomes in spite of serious threats to adaptation or development" (Masten, 2001, p. 228). Additionally, Rutter (2007) mentions that the concept of resilience "implies relative resistance to environmental risk experiences, or the overcoming of stress or adversity" (p. 205).

Other authors emphasise that resilience is a phenomenon that is characterised by *both* outcomes and processes. For example,

Leipold and Greve (2009) characterise resilience as a phenomenon which is defined by "the success (positive developmental outcomes) of the (coping) process involved (given the circumstance)" (p. 41). Rather than being guided by a specific philosophical orientation, a range of qualitative studies (Hegney et al., 2007; Schilling, 2008; Ungar et al., 2007) have investigated the concept of resilience, by asking participants how they would define the concept of resilience.

One adult participant in Hegney et al.'s (2007) study on individual resilience in rural people in Queensland Australia mentioned: "I tend to think of resilience a bit like a rubber ball. If it's under pressure or something it can actually spring back to its size and shape and carry on without sustaining undue damage" (p. 6). Interestingly this image of resilience as a 'rubber ball' and 'bouncing back' is an expression that has been used in other research and literature (see Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008 who developed a Brief Resilience Scale assessing the ability to 'bounce back').

A further conceptualisation of resilience is proposed by Ungar (2008). He outlines an ecologically focused definition:

> *In the context of exposure to significant adversity, whether psychological, environmental, or both, resilience is both the capacity of individuals to navigate their way to health-sustaining resources, including opportunities to experience feelings of well-being, and a condition of the individual family, community and culture to provide these health resources and experiences in culturally meaningful ways.* (p. 225)

In an attempt to encompass a broader understanding of resilience which acknowledges the context and the developing nature of resilience over the lifespan. Pooley and Cohen (2010) offer a new definition of resilience as 'the potential to exhibit resourcefulness by using available internal and external recourses in response to different contextual and developmental challenges" (p. 34).

Through the array of definitions, it is apparent that defining resilience has been a challenge. Nevertheless, despite the vast range of definitions, to determine if someone is displaying a resilient profile two elements must co-occur: *adversity* (i.e., high-risk situation or threat) and *successful adaptation/competence* (Luthar et al., 2000; Masten, 2001; Schilling, 2008). As maintained by Schilling (2008), adversity is evaluated according to negative life circumstances. Adaptation, on the other hand, is defined as successful performance on age-developmental tasks.

Effects for Research and Practice

The lack of a concise definition of resilience has resulted in numerous and varied inconsistencies between research studies and may be hindering an understanding and creating some confusion within the helping professions (Lightsey, 2006; Smith, 2006). For example, it is difficult to compare the results of a study that measured outcome versus one that measured process. Importantly, research in this area may even be *hindered by the lack of a clear definition* of resilience and what gives rise to it (Harvey, & Delfabbro, 2004). To date, most definitions have been developed according to an individual researcher's philosophical and professional orientation. This definitional bias can directly influence a study's methodology including the choice of participants, measures and variables of interest.

Resilience and related skills vary with context, time, age, gender, and cultural origin (Garmezy, 1985; Garmezy, & Rutter, 1985; Rutter, 1985; Werner & Smith, 1992); however the focus on children and adolescents by some researchers has meant that practitioners may not see the relevance for other populations (Lightsey, 2006). Resilience research has demonstrated the existence of several factors which characterize the concept. These factors may include courage, future mindedness,

optimism, interpersonal skill, faith, work ethic (Seligman & Csikszentmihalyi, 2000), equanimity, perseverance, and meaning in life (Wagnild & Young, 1990). Loss of meaning for the individual can be related to mental pain (Frankl, 1963, cited in Lightsey, 2006) and meaning in life has been inversely related to mental pain (Orbach, Mikulincer, Gilboa-Schechtman, & Sirota, 2003). Bonanno (2004) reiterates that resilience is more than just recovery from an adverse event and, although research focuses on the pathological symptoms and how they should be addressed. Practitioners therefore may not always understand that resilience can affect how an individual reacts to events such as bereavement or trauma. Additionally, Bonanno indicates that there are multiple and unexpected pathways to resilience and practitioners should consider the factors that negatively affect how individuals may react to adversity. This information could then be used in a positive manner to produce the potential protective factors.

Resilience as a Counselling and Psychological Medium

There has been considerable debate in the literature about the use of strength-based counseling and interventions with several theorists intimating the need for the helping professionals to adopt such a direction, moving away from a pathological approach (Kaczmarek, 2006; Smith, 2006; Tedeschi & Kilmer, 2005; Wartel, 2003). Wellness and prevention programs are becoming increasingly important in the community (Miller, 2001). Positive affect enhances health, produces fewer symptoms and less pain (Pressman & Cohen, 2005); increased life satisfaction and protection against negative emotion (Cohn, Fredrickson, Brown, Mikels & Conway, 2009). A bi-directional relationship between positive affect and success has been reported (Lyubomirsky, King, & Diener, 2005). Although much of the research involving resilience has been undertaken with children and youth, there is recognition that resilience across the lifespan is an important construct for general well-being and that even in old age, facing death,

resilience has a role (Neimeyer, 2005).

Other aspects of resilience such as family resilience also influence well being (Walsh, 2003). Resilience can also be improved through non-directive person-centred therapy (Friere, Koller, Piason, & da Silva, 2005). Other examples include the use of resilience as a moderator of chronic pain treatment as opposed to the use of prescription drugs (Karoly & Ruehlman, 2006); and resilience as applied in the understanding of trauma (Goodman & West-Olatunji, 2008).

Health professionals are encouraged to self care to ensure that they operate effectively. Operating from a strength-base has been promoted. Osborn (2004) discusses this strength-based approach in terms of stamina as opposed to the negative or pathological dimensions of stress and coping. Therefore there are two aspects which have emerged as significant for the use of strength-based approach; its importance and relevance when working with clients, and for self care in the health professionals themselves.

Facilitators and Inhibitors for the Application of Resilience in Psychological Practice

According to the diverse literature that is available, psychologists working in a variety of contexts with clients of different ages and backgrounds should be aware of and understand the construct of resilience. However, there are several issues that may impact on the practical application of this knowledge by psychologists. Issues such as organisational requirements, the climate within the organisation to adopt new methods or strategies may reduce opportunities for psychologists to apply new knowledge. The culture of organisations towards the adoption of new initiatives or innovation can affect the successful implementation of innovation (Klein & Sorra, 1996). This issue is discussed further by Simpson (2002) who presented a review of the situation into the acceptance of research in practice and suggested that organisational practices are often inhibitory.

There is also a divide between research and practice whereby empirical findings are not

always adopted by clinicians for many reasons (Cohen, Sargent, & Sechrest, 1986; Cook, Schnurr, & Foa, 2004; McLeod, 2003) such as the generalisability or applicability of the research (Stricker & Trierweiler, 1995), consistency with the clinician's expectations (Morrow-Bradley & Elliott, 1986) and cultural applicability (Castro, Barrera, & Martinez, 2004). Time constraints also affect the ability of practitioners to locate and implement research findings that also need 'translation' into intervention strategies (Morrow-Bradley & Elliott, 1986; Saul et al., 2008a). Although the scientist-practitioner model is promoted in psychology courses, in reality a variety of organisational and/or personal issues impact on its application (McLeod, 2003; Stricker & Trierweiler, 1995); and although researchers should include practitioners in research to facilitate the applicability of research to practice, this is not often achieved (Castro et al., 2004; McLeod, 2003) or may be addressed with considerable effort from both parties (Saul et al., 2008b).

For example, Saul et al. (2008a) reported on a long process of discussion to identify barriers and solutions to the acceptance of violence prevention programs. McLeod (2003) suggested that revisiting the practitioner-researcher relationship would benefit all and that it is difficult for practitioners to combine the roles. Bridging the gap requires the involvement of funders, researchers, practitioners and clients with evaluations being conducted to determine their efficacy (Wandersman, 2003). Funding policies and accountability are also potential inhibitors of the acceptance of new programs (Wandersman et al., 2008). Similar criticisms about the research practitioner gap exist in medical research (Clancy & Cronin, 2005; Eagle, Garson, Beller, & Sennett, 2003). Information on the practices of American psychotherapists reported that they produced on average of one published research study and three non research publications and read about five work related research articles per month and attended one and a half research

conferences per year (Morrow-Bradley & Elliott, 1986).

A project was developed to elucidate a comprehensive definition of resilience which could be used to develop further research and to raise awareness of the potential for the development of resilience as a tool for psychologist practitioners using a strengths-based approach to clients. The aim of this project was to investigate the understanding of resilience in registered psychologists with a view to developing an industry based definition. To avoid bias the current research adopted two strategies to investigate and develop a definition of resilience. First, a literature review was conducted to examine various understandings and definitions of resilience. This literature review was undertaken independently by a researcher not involved in the design of the questionnaire in the second part of the research. Second, a survey was conducted by forwarding a questionnaire to all registered psychologists in Western Australia. This study is the first known to report on the understanding of the concept of resilience by registered practicing psychologists.

Method

This study was designed to examine the understanding of the term resilience by a group of registered practicing psychologists. Rather than be guided by a specific philosophical orientation, a novel approach was adopted by surveying professionals who were expected to have some familiarity with the concept of resilience and its psychological components.

Participants

Participants were 213 psychologists registered in Western Australia with the Psychologists Board of Western Australia. The publicly available Psychologists Board of Western Australia register indicated 2387 registered psychologists with varying levels of training and expertise. This response rate of 9% was lower than expected, however there were 191 (8%) questionnaires returned through the postal system as "not known at the address". Differences, if any, between respondents and non respondents are not known; however, the respondents were

psychologists working in a range of positions, such as clinical, counselling, school/educational, organisational, forensic, clinical neuropsychology, sports and general psychology with the highest number (27%) indicating that they were clinical psychologists.

Materials

Each proposed participant was mailed the following:

Information letter: This letter outlined the aim and methodology of the study and provided information regarding confidentiality and the voluntary nature of the study.

Questionnaire: The questionnaire included demographic information including years of practice and primary group of clientele worked with (e.g., children or adults). This enabled an examination of the relationship between years of practice or type of clinical experiences and beliefs about the construct of resilience. In addition, the questionnaire asked participants to define resilience, to list at least two core components (major themes) of resilience, and at least five constructs (sub themes) that comprise those core components. In order not to bias responses, this measure consisted of open-ended questions and participants were asked to write their answers.

Procedure

Participants' addresses were obtained from the list of registered psychologists in Western Australia. Participants were mailed the information letter and questionnaire. To participate, psychologists returned the completed questionnaire using the stamped addressed envelope provided. The questionnaire was expected to take approximately 5 to 10 minutes to complete and no identifying information or code numbers were recorded. As the sample was large and there was no method to identify non responders, a follow up request was not sent.

Data Analysis

Several methods were used to assess the data collected. First, descriptive information about the year qualified and specialist title were extracted as defined by the Psychologists Board of Western Australia. Second, all responses were recorded in a matrix to enable the research team

to assess the definitions provided and note those that appeared to demonstrate an understanding of resilience. The same matrix was used to record the components and constructs of resilience that were consistently endorsed by practitioners. A composite of definitions of resilience from the literature was used as a basis for measuring the definitions provided by the practitioners. Five major aspects of these definitions are shown in Table 1 and were used to score definitions from zero (no definition) to five, (a definition that included all aspects).

Whilst the above table suggests a hierarchical scoring, in reality, each item mentioned scored a point. Therefore a definition that only mentioned "bounce back" scored one. Similarly one that only indicated "use of resources" would score one. A definition that included both "bounce back" and "use of resources" would score two.

The definitions were read and scored independently by two researchers with an inter-rater reliability for the scoring of 91%. Further analyses using the demographic data were conducted using ANOVA to determine the scores across year qualified and specialist title role.

Results

Demographic data on the respondents is shown in Tables 2 and 3 and demonstrates a reasonable spread of years qualified with a good balance of pre 1990 and post 2005.

The demographic information provided a cross section of the work undertaken by psychologists. Although 73 respondents did not claim a specialist title, they did often indicate the nature of their work which supported the diversity of work in which psychologists are involved. Other information indicated that there was considerable diversity in the nature of the work undertaken and ages of clients with a range between working with children and adults across the lifespan. These data suggest that although the response rate was low, the respondents appear to represent a cross-section of psychologists in Western Australia.

Results from the questionnaire responses

Table 1
Aspects of Resilience Definitions used for Scoring

Score	What does the definition include?
0	No definition provided
1	Bounce back,
2	Bounce back, Adversity and adaptation/competence,
3	Bounce back, Adversity and adaptation/competence, Internal and external resources,
4	Bounce back, Adversity and adaptation/competence, Internal and external resources, Context/culture,
5	Bounce back, Adversity and adaptation/competence, Internal and external resources, Context/culture, Growth/learning

Table 2
Year Qualified

	Pre 1990	1990-94	1995-99	2000-04	2005+	Unknown
Year qualified	20%	10%	14%	17%	21%	18%

Table 3
Specialist Title/Work Role

	Clinical	Education	Counselling	Others	Not Specified
Number of Responses	58	33	24	25	73

are presented in two parts. Of the 213 questionnaires returned 44 were incomplete and 14 were identified as having serious misunderstandings, especially in relation to the component and construct questions. Data from the incomplete questionnaires was included in the data as return of the questionnaires implied participation by the respondent.

First the definitions of resilience will be presented, followed by the components and constructs that practitioners considered relevant for resilience. A qualitative approach to the analysis of the definitions allowed the analysis to be supported by direct quotes from respondents' definitions.

Definitions of Resilience

The most common definition of resilience was the narrow understanding of the ability to 'bounce back' or recover from a significant life event/ trauma with minimal long term consequences. However, several respondents

provided definitions that extended beyond this narrow view. Some considered resilience as:

. . . a term of coping whereby a person accommodates the impact of a stressor by accepting the reality of the situation rather than resisting or avoiding, and stretches his or her resources beyond the previous norm.

. . . the ability a person has to deal with positively with stress and/or trauma. It is the degree to which one can assimilate (negative) events in our lives and "bounce back" in the face of adversity.

. . . an ability to survive, often in the face of multiple (or longstanding) stressors, or the ability to withstand difficult life circumstances. I think resilience can be seen when people adapt to extraordinary circumstances, perhaps by developing coping strategies (which need not be adaptive to later circumstances).

Ability to accept life's challenges and work with them in a positive way. Resilience recognises a strength of mind and body, and can be built in any life stage.

THRIVING – Resilience is the ability to 'bounce back' after a trauma, loss, major stress. It is the ability to feel the pain constructively, deal with it effectively, while growing from the challenge. Surpassing previous levels of functioning post the crisis/ trauma and thrive (not just survive).

The ability to meet obstacles in life, learn from them, take action to cope with them, and derive a sense of meaning from them.

The propensity of the individual or group of individuals (including a whole community) to maintain a stable mental set and competently manage both adversities and successes well. Self belief and values underpin the concept as so self management and appropriate skill sets.

Adversity and successful adaptation/ competence have been identified as two necessary aspects of resilience (Luthar et al., 2000; Masten, 2001; Schilling, 2008). The above definitions were chosen by the researchers as the most definitive amongst those provided by the psychologists. They account for accepting the challenge and stretching of resources that the individual normally accesses to allow them to survive and thrive. Some of the definitions include different life stages, the concepts of growth (thriving), learning, and a sense of meaning.

Components and Constructs of Resilience as Identified by the Psychologists

The mean number of components within the definitions provided was two. Using SPSS Version 18, two ANOVAs, one for specialisation and the other for year of qualification, revealed no specific differences in the scores applied to the definitions provided. The responses of the psychologists providing information on the construction of resilience suggested 14 major themes and 24 subthemes. The number of themes may appear large; however, the intention of this research was to encourage a breadth of factors that underpin resilience. These major and subthemes are shown in Tables 4 and 5. As the literature review indicated three aspects to resilience (personal resources, family connections, and social resources; Tedeschi & Kilmer, 2005), each of the themes was categorised into one of these three themes). In

the remainder of this paper, the terms major themes and subthemes will be used to describe these dimensions.

The questionnaire asked respondents to provide three components (themes) and constructs (sub themes) for each component. Some respondents had difficulty differentiating between components and constructs and answered the construct question in the component spaces. As indicated in Tables 4 and 5 most of the components and constructs indicated by the psychologists were included in the personal resources category, with few responses indicating social and none indicating family resources.

Two one-way ANOVAs with Scheffe Post Hoc analyses were conducted using SPSS Version 18 to investigate any differences between the specialised areas of psychology and year of qualification in the provision of numbers of major themes and sub themes. Prior to analyses major themes and subthemes were reviewed for relevance to resilience and any items that were not relevant were excluded from the analyses.

For specialisation there were no significant differences between the groups for the number of major themes. However, for subthemes the numbers provided by those who had not specified a specialisation were significantly different to the numbers provided by both counselling and clinical psychologists. Descriptive data is shown in Table 6. It should be noted that Levene's test for Homogeneity of

Table 4

Major themes from WA psychologists' responses to resilience

	MajorThemes	
1	Independence	Personal
2	Emotional control/regulation	Personal
3	Self-awareness	Personal
4	Support networks	Social Resources
5	Good Social skills	Personal
6	Cognitive maturity	Personal
7	Logical thinking	Personal
8	Realistic Locus of Control	Personal
9	Confidence	Personal
10	Inner resources	Personal
11	Self-reliance	Personal
12	Connected to other people i.e., family, friends or community	Social resources
13	Optimistic attitude	Personal
14	Ability to tolerate discomfort	Personal

Table 5
Sub-themes from WA Psychologists' Responses to Resilience

Sub-themes	
Physical health	Self-efficacy
Positive Self-esteem	Problem solving abilities
Intelligence	Goal setting
Planning skills	Perserverance
Social skills	Access to resources**
Future oriented outlook	Self help effectively
Lack of anxious thinking—not catastrophising situations	Spirituality
Emotion management	Seeing a larger perspective
Accurate self assessment	Sense of humour
Self analysis	Emotional intelligence
Flexibility	Reflective thinking
Sense of humour	Adaptive coping

** This was the only subtheme considered to be a Social Resource, all others were considered personal

Variances was not significant for major themes but was significant for subthemes.

When analysed by year of qualification the only significantly different group for both constructs and components were the group who did not specify the year in which they qualified. This group provided significantly fewer components and constructs than the other groups.

Discussion

Resilience is an important concept in well-being and positive psychology. A review of the literature provided evidence that the concept of resilience is well documented across the journals in diverse contexts. Therefore, it was expected that practicing psychologists would be well placed to provide information on resilience. This expectation was only partly met. When a scoring method was applied to the definitions provided by the practicing psychologists, a low mean score of two was evident suggesting that many responses revealed only a basic understanding of resilience.

Although other responses indicated some understanding of resilience, it was concerning that 44 questionnaires were returned incomplete (mostly in relation to the components [major themes] and constructs [subthemes]) and that analysis of a further 14 suggested that the respondents had not understood the questions. Many respondents provided a narrow definition of resilience as the ability to 'bounce back' whereas the literature and evidence-based research suggests greater complexity.

As there were no differences across specialisations or year of qualification this lack of knowledge appears to be a general issue across psychologists that may be impacted by the nature of psychological training, organisational expectations of those psychologists, and a lack of time to maintain

Table 6
Descriptive Data for Sub-themes provided by specialisation

	N	M	SD	Max Number constructs
Counselling	24	11.38	6.114	26
Clinical	58	10.76	5.472	21
Education	33	10.03	6.018	18
Others	25	9.40	5.530	23
Not specified	73	6.12	5.898	21
	213	8.97	6.458	26

and update new theoretical knowledge and application of that knowledge. The only published article located on the practices of American Psychotherapists was from 1986 (Morrow-Bradley & Elliott, 1986) and as over 20 years have passed and work has become busier, the low number of research articles produced and read is likely to have reduced further. It may be useful for research investigating the current practices of Australian psychologists to be undertaken as this can impact on the requirements of professional development which is an important part of maintaining professional knowledge and continuous improvement in work practices. This aspect is significant especially with the implementation of the National Accreditation Scheme and the appointment of the Psychologists Registration Board and the new requirements for professional development by psychologists to maintain registration.

In the identification of the major themes and subthemes of resilience the responding psychologists indicated mostly personal resources, which is understandable from a practice perspective as psychologists are for the most part trained to assess and work with the individual. This may however be a limitation of the training and work of the psychologist as the individual needs to be treated in the context of their environment. The impact of environment is explicit in many of the published articles and appears to be the underlying assumption of other professionals such as teachers, counselors, and social workers. The psychologists who responded to this research did not consider the environment/context as an important part of resilience. Of the 14 major themes proposed, 11 related to personal resources. An analyses of the subthemes revealed that 23 from the 24 cited again related to personal themes. This is in contrast to the literature on resilience that suggests that social networks are very important. The narrow definitions and the nature of the themes and subthemes provided suggests that psychologists are working with a limited perspective and it may be useful for professional development to be underpinned with theory in addition to providing practical competency based skills. The use of a skill without the underpinning knowledge of theory limits understanding, and therefore appropriate application. It may be useful for psychologists to interact with other professionals to gain knowledge of different perspectives and ways of working.

This research has highlighted several issues for the discipline and practice of psychology within the context of resilience. Some of the issues that have been demonstrated in this research may be relevant across other contexts. The importance of maintaining knowledge not only of practical interventions but the theory underpinning these practices may not be fully accounted for within the current

competency based professional development strategies and lack of underpinning theoretical knowledge can reduce the effectiveness of interventions.

Implications for the Discipline of Psychology and for Psychological Practice

1. Internationally, there is an increasing focus on the work in positive psychology and Western Australian psychologists need to ensure that they adopt or are at least aware of the strategies that support this type of practice.
2. Resilience is used by a variety of health professionals and is often based in a systems framework (Bronfenbrenner, 1979).
3. The scientist-practitioner model needs to be reinforced to encourage practitioners to apply research findings to their clinical practice and for practitioners to consider undertaking research as part of their daily practice.
4. Research psychologists should encourage the participation of practitioners in research projects. This will have the dual effect of reinforcing the scientist-practitioner model which is emphasised in the undergraduate curriculum, but less so in post graduate psychology courses. It would also assist in the development of client-appropriate interventions that are more easily adopted by practicing psychologists. Therefore such a strategy would reduce the scientist-practitioner gap that currently exists.
5. It would appear that a number of psychologists are not familiar with the concept of resilience and that professional development might encourage such psychologists to engage with strength-based interventions.
6. Resilience researchers should encourage the use of strength-based interventions by making their research relevant to particular groups of clients and addressing the need for practicing

psychologists to access interventions that work with a diverse range of people across the lifespan.
7. Resilience researchers need to locate their research in contexts that facilitate understanding of the concepts and the use of resilience strategies in addressing clients' needs. This involves the recruitment of industry partners for resilience research.

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Dr Catherine Ferguson is a researcher with varied interests in resilience in different groups, in particular in relation to the wellbeing of small business owners. She has been involved in a range of project with other members of the Lifespan Resilience Research Group since joining Edith Cowan University in April 2009.

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