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## How do they cope: Teaching students with learning difficulties in mainstream classrooms

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How Do They Cope: Teaching Students with Learning Difficulties in Mainstream  
Classrooms

Coralyn Dick

A report submitted in Partial Fulfilment of the Requirements for the Award of  
Bachelor of Science (Psychology) Honours, Faculty of Computing, Health and Science,

Edith Cowan University,

Submitted (May, 2010)

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## How do They Cope? Teaching Students with Learning Difficulties in Mainstream Classrooms

### Abstract

This study seeks to examine how teachers cope with the demands of teaching students with and without learning difficulties (LD) in mainstream classrooms. The relationship between psychological coping and teachers stress, self efficacy and adaptiveness was examined in a sample of 151 mainstream primary school teachers from Perth, Western Australia. Teaching experience ranged from 1 to 35 years. Three multiple regression analyses were conducted using the psychological constructs of problem-focused coping, emotion-focused coping and avoidant coping as criterion variables. Results indicated that, time management, professional investment, and instructional practices were predictors of problem-focused coping; work related stress was a predictor of emotion-focused coping; while student discipline and motivation, and years of teaching were predictors of avoidant coping. No significant relationship was found between psychological coping and adaptiveness. Limitations were noted in relation to the nature of a convenience sample and self report. The results indicated that it is necessary to match coping resources such as self efficacy and adaptiveness with respective coping strategies as each construct may influence coping strategies separately. The findings from this study add quantitative strength to the existing body of qualitative knowledge.

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## How do They Cope? Teaching Students with Learning Difficulties in Mainstream Classrooms

Over recent years there has been increased interest in how teachers cope with the demands of teaching students with and without learning difficulties (LD) in mainstream classrooms (Horne & Timmons, 2007; Polychroni, & Kotroni, 2009; Signor-Buhl, LeBlanc, & McDougal, 2006). Evidence indicates that teaching is a stressful job (Kyriacou, 2001) particularly for those teachers who are required to provide individual instruction for students with LD while simultaneously attending to class instruction as a whole (Male & May, 1997; Baker & Zigmond, 1995; Paterson, 2007; Vaughn & Linan-Thompson, 2003). In Australia, students with LD have always been a vulnerable part of the mainstream student population (Paterson, 2007) who consistently fail to have their learning needs met through conventional teaching methods (Vaughn & Linan-Thompson, 2003).

While students with LD commonly demonstrate average or above average intelligence, underlying processing disorders produce consistently poor academic achievement in learning areas such as spelling, reading or mathematics (Prior, 1996). The terms 'learning difficulty', 'learning disability' and 'students at risk' are used interchangeably across the literature (Westwood, 2007) in reference to these students. Given the diversity of terminology and definitions used, students with LD in this study will be defined as those whose experience persistent learning difficulties in one or more areas of literacy, numeracy and learning how to learn (Elkins, 2002; Watson & Boman, 2005).

It is expected that when individual learning needs are met, most Australian students should be able to meet minimum educational standards measured in terms of standardised testing and national Benchmarks (Milton & Rohl, 1998). Evidence indicates that the most effective method of teaching is differentiated instruction,

specifically designed to meet individual learning needs (Rock, Gregg, Ellis, & Gable, 2008). Many teachers who provide this method of instruction however, report concerns over constraints placed on teaching and preparation time, lack of adequate resources and the feeling of reduced accountability towards the class as a whole (Forlin, 2001; Lambert, McCarthy, O'Donnell, & Melendres, 2007). Left unresolved, these concerns tax the coping resources of mainstream teachers and frequently become teaching stressors. While many teachers utilise coping strategies which successfully overcome these stressors, others find it harder to cope.

A number of studies have identified a variety of coping strategies teachers use in response to teaching stressors (Green & Ross, 1996; Griffith, Steptoe, & Cropely, 1999; McCarthy, Lambert, O'Donnell, & Melendres, 2009) and the extent to which these strategies reduce teacher stress (Austin, Shah, & Muncer, 2005). The underpinning theory most frequently quoted in these studies is that of Lazarus and Folkman (1984) who defined psychological coping in terms of problem-focused, emotion-focused and avoidant, as a dynamic relationship between a person and the environment which is appraised by the person as threatening or exceeding his or her resources. The relationship is dynamic in that it continues to change as a function of the individual acting on the environment and the environment acting on the individual.

Coping therefore, involves the thoughts and behaviours individuals use to manage the internal and external demands of situations that are appraised as stressful. Teachers of students with LD are required to cope with meeting the demands of a frequently challenging classroom environment which often operates within a rigid educational system. While many teachers cope with these demands and function well, for others, the inability to cope can reduce a teacher's motivation with detrimental effects such as alienation between teacher and students (Kyriakides, Creemers, & Antoniou, 2009) teacher absenteeism, burnout and attrition (Howard & Johnson, 2004).

As such there exists a fundamental need to further understand how teachers cope with classroom stressors in order to provide effective education for students with LD.

This aim of this review is to examine the psychological coping strategies used by mainstream primary teachers who teach students with and without LD, in relation to classroom stressors, teacher self efficacy and adaptiveness. This review provides a brief outline of the issues related to definition, prevalence and identification as well as historical developments in educational policy and mainstreaming of students with LD. The role of mainstream teachers will be discussed in relation to the challenges and stressors they experience as demonstrated in the literature. Models of stress and coping used in previous studies will then be reviewed from a psychological perspective as will the evidence related to teacher self efficacy and adaptiveness.

### **Definition and Prevalence of Learning Difficulties**

Construction of a universal definition of learning difficulties has proven challenging over the years for educational and governmental authorities both internationally (Elkins, 2000) and in Australia (Rivalland, 2000). In the United States of America (USA) the term 'learning disability' which is sometimes referred to as 'specific learning disability' has wide acceptance and is often tied to funding (Elkins, 2000). In Australia, the term learning 'difficulties' is preferred to define this cohort of students in contrast to learning 'disabilities'. However to date there is no single definition used nationally or internationally to define the difficulties this heterogenous group of student's experience (Watson & Boman, 2005).

In Australia, the term 'learning difficulties' was introduced by the 1976 Select Parliamentary Committee (Cadman, 1976) which took a non categorical approach to the definition and recommended the use of the broader term to describe the difficulties experienced by students whose learning needs were not adequately met. The committee emphasised that focus should be directed towards providing appropriate educational

environments designed to meet the learning needs of these students (Elkins, 2000). The general understanding of learning difficulties according to the National Health and Medical Research Council of Australia (1990) is that they are not due to physical, intellectual or sensory deficits or the result of physical disability, genetic predisposition or a neurological condition (Westwood, 2007). In addition, the *DSM-IV* (American Psychiatric Association, 1994) states that;

Learning Disorders are diagnosed when the individuals' achievement on individually administered, standardised tests in reading, mathematics, or written expression is substantially below that expected for age, schooling, and level of intelligence. The learning problems significantly interfere with academic achievement or activities of daily living that require reading, mathematical, or writing skills (p.46).

It is common for students with LD to also experience co-existing social, emotional and behavioural problems (Rivalland, 2000) that can further impede learning and social acceptance by their mainstream peers and teachers (Frederickson & Furnham, 1998). In combination, these functional discrepancies and behavioural problems can present ongoing challenges for teachers as they seek to ensure that all their students receive an effective education (Bartak & Fry, 2004; Signor-Buhl et al., 2006).

It is estimated that 16 to 20 percent of mainstream students in Australian classrooms experience learning difficulties (Paterson, 2007) with some classrooms reporting more that 30 percent of their students as having problems in learning (Westwood, 2007). While evidence indicates significant differences in prevalence between classrooms, controversy persists over the accuracy of reported prevalence due to the lack of a universally accepted definition and agreed upon criteria for identification (Jenkins, 2007; Rivalland, 2000). Exact prevalence rates for LD are difficult to ascertain because the definition of 'learning difficulty' is not consistent

across different countries or across different Australian states. These issues frequently compromise accurate identification which is crucial for the implementation of appropriate teaching interventions and additional support as well as the provision of funding and resource allocation (Rohl & Rivalland, 2002).

### **Identification of Learning Difficulties**

Identification of LD in Australia is guided by national education policies which require the use of basic skill tests such as the National Assessment Program Literacy and Numeracy (NAPLAN; Department of Education and Training, 2008) to identify those students who fail to meet age related academic benchmarks in literacy and numeracy. It is common for teachers to identify students with LD in the first instance as those who experience speech difficulties, lack concentration and demonstrate behaviours that single them out from other students (Gash, 2006).

In Western Australia, the identification of students with LD in mainstream classrooms is based primarily on the professional judgement of teachers who are guided by policy based on the recommendations outlined in the 1993 Report of the State Government Task Force on the Education of Students with Disabilities and Specific Learning Difficulties (Prior, 1996; Rivalland & House, 2000). Teachers also use the NAPLAN results in addition to standardised tests and informal techniques such as class observation, checklists and parent interviews to make assessments and implement appropriate remediation. Students with chronic or specific LDs are usually referred to educational psychologists or the Dyslexia SpELd Foundation (DSF) for a more comprehensive assessment and support. A recent report by Klassen, Neufeld, and Munro (2005) indicated that school psychologists in Western Australia spend less time on psychometric assessment of students with LD than their North American colleagues and more time engaged in counselling activities.

Early identification of LD is often challenging for teachers of younger students who commonly present as verbally engaging and socially active in a way that can mask cognitive impairments (Prior, 1996). As such, the emphasis on early diagnosis creates additional pressure for both experienced and beginning teachers (Gash, 2006) who seek to achieve successful educational outcomes, based on national standard guidelines outlined for all students in mainstream classrooms (Elkins, 2001). Many beginning teachers report concerns over their ability not only to identify students with LD but also their capacity to meet the needs of all diverse learners and whether or not it is possible to reach and teach all students with different learning styles in mainstream classrooms (Rieg, Paquette, & Chen, 2007). The following section provides an overview of mainstreaming of students within the traditional classroom.

### **Mainstreaming**

The mainstreaming of students with LD involves the education of these students in regular classrooms alongside their non LD peers rather than in separate specialised classrooms (Fredrickson & Furnham, 1998). Mainstreaming has been the traditional practise adopted in Australian primary schools as a means of providing multiple levels of education for students of all abilities in one classroom (Jenkins, 2007). Up until the late 1980's however, supplementary lesson remediation was provided for students with LD in separate resource rooms by specialised teachers in conjunction with their mainstream learning. With the move towards inclusion, mainstreaming became policy. While students with LD were now expected to receive all their education in mainstream classrooms, limited additional support was given to mainstream teachers. As a result, teachers were required to work with limited resources within an often inflexible curriculum to meet the educational needs of all students. Peterson (2007) argued that mainstreaming students with LD placed excessive demands on teaching time and resources. This view was shared by McCarthy and colleagues (2009) who found that

some teachers indicated a preference for the provision of instructional support in a withdrawal context where students receive supplementary teaching in a separate classroom with a specialised teacher.

To explore this argument, Carlberg and Kavale (1980) conducted a meta-analysis that synthesised the findings from 50 efficacy studies which compared the educational outcomes for students with LD both in mainstream and special education classrooms. A mean effect size of  $-.12$  indicated a small negative effect associated with special class placement that suggested more beneficial educational gains were achieved by students in mainstream classrooms. However further analysis indicated that the educational gain achieved by students with LD was moderated by level of disability. Students with more complex cognitive processing issues required more intensive instruction delivered in a personalised format (Rivalland, 2000). These results highlight the significant role of the teacher in assisting students which is discussed further in the following section.

### **The Role of the Teacher**

The role of the teacher is to manage the educational, social, emotional and developmental needs of all mainstream students. Most teachers feel that it is a right and not a privilege to educate students with LD in mainstream classrooms (Forlin et al., 2007; Kavale, 2002; Rohl & Rivalland, 2002). However many teachers report that they lack confidence in their own abilities to meet the needs of all their students simultaneously (Baker & Zigmond, 1995; Greaves, 2006). It is common for teachers to perceive students with LD in mainstream classrooms as a homogenous group who exhibit the same range of characteristics and learning needs (Kavale et al., 2005). The problem with this popular reductionist perspective is however that students with LD are a heterogeneous group who experience a broad range of difficulties, some of which they



share with other students and others which are unique to themselves (Hallahan, Lloyd, Kauffman, Weiss, & Martinez, 2005).

For example, Rohl and Rivalland (2002) examined the case studies of six Australian primary school students who had been identified as having learning difficulties in literacy. Using a multiple method research approach which included interviews with teachers, school administrators and parents, analysis of school documents and classroom observations, the researchers found that while all students had learning difficulties in literacy, there was also a broad range of individual and contextual differences that required a diversity of interventions. The researchers concluded that no one intervention program would be effective for the diversity of learning difficulties yet, at the very minimum, effective education needed to be more explicit, intensive and supportive (Scott & Spencer, 2006) than general instructional approaches.

Mainstream teachers are required to monitor student progress so that adjustments can be made to instructional practises such as pacing, increased time and appropriate learning materials (Vaughn & Linan-Thompson, 2003). While popular in theory, these extra teaching requirements place heavy demands on teaching time and classroom management. As such, teachers often report that due to time constraints, practical teaching methods commonly override theoretical methods (Westwood, 2007). Tomlinson (2001) emphasised that classroom teaching should be a blend of whole class, group and individual instruction defined as differentiated instruction. According to Tomlinson, teachers need to be flexible in their approach to teaching and provide a variety of instructional approaches that adapt the curriculum to the individual and diverse needs of students rather than expect students to modify themselves to an inflexible curriculum.

In Australia, differentiated instruction underpins the development of many educational teaching policies as a means of providing all students with evidence based individualised instruction (Louden, et al., 2000). While evidence supports the efficacy of differentiated instruction however, Rohl and Rivalland (2002) point out that the provision of effective individualised instruction is more complex than merely adjusting the curriculum. In order to provide effective instruction that produces educational gain over the long term, teachers need to have a clear understanding of the nature of each student's learning difficulty to make appropriate adjustments (Greaves, 1999). Teachers with training and experience can successfully implement differentiated instruction yet many teachers report that they do not have a comprehensive understanding of the nature and diverse range of learning difficulties and therefore feel ill equipped to provide appropriate, individualised instruction for students who struggle to achieve (Forlin et al., 2008). Further evidence indicates that a consequence of this emphasis on individualised instruction has been an increase in the complexity of teaching and stress for mainstream teachers who have been responsible for teaching students with an increasingly diverse range of learning difficulties (Paterson, 2007). The following section provides an overview of students with LD in mainstream classrooms.

### **Students with LD in Mainstream Classrooms**

Students with LD often have problems following teachers' instructions in an environment where the distractions of competing classroom activities make it hard for them to concentrate (Rivalland, 2000). Teachers may move ahead too quickly with learning programs, use complex language when instructing and explaining or devoting too little time to practice (Abosi, 2007). As these students struggle to develop cognitive and metacognitive strategies that promote higher order learning, improved memory and organisational skills (Hay et al., 2005; Margolis & McCabe, 2003) they become frustrated, lose motivation (Watson, 2005) and spend less time engaged in active

learning (Whedon & Bakken, 1999). Over time, students who fail to have their learning needs met, experience diminished self efficacy (Klassen & Lynch, 2007; Margolis & McCabe, 2003) low self esteem (Lerner & Kline, 2006) and disengagement (Rowe, 2006).

In mainstream classrooms, teachers are inclined to perceive struggling students as unmotivated or lacking ability (Sideridis, 2005). Evidence indicates that little provision is made for those students who demonstrate avoidant learning tendencies or become withdrawn (Prior, 1996). Sideridis (2005) compared the everyday classroom practises of 230 year 5 and 6 primary students with and without LD. Of the 112 boys and 118 girls, 212 were deemed typical achieving students while 18 were teacher identified students with LD. One student was diagnosed with co-existing LD and ADHD while two other students experienced LD and psychological disturbances associated with family environment concerns. The findings indicated that all students shared similar motivations and goal orientations however students with LD who struggled to achieve a sense of mastery in some areas of learning, demonstrated reduced motivation and higher reported disengagement. Furthermore, feelings of helplessness, anxiety, depression and high levels of maladaptive motivation were reported by students both with and without LD who failed to succeed. Overall, the study indicated that students with LD benefit from mainstream classroom education however that benefit is contingent upon the degree to which teachers provide achievable levels of instruction (Sideridis, 2005).

In order to address chronic learning problems, many teachers tend to lower their expectations of students with LD and seek to address their learning challenges by providing a less demanding curriculum. This strategy has been a cause for concern over recent years (Rock et al., 2008). Evidence suggests that this leads to further feelings of alienation for students with LD as they strive to attain similar achievement outcomes as

that of their age related peers. Commonly labelled 'slow learners' many students become socially isolated, rejected or ignored (Bryan, 1994). As a marginal group of students they often have difficulty developing positive social relationships with both their peers and teachers (Pavri & Monda-Amaya, 2001) and frequently become the targets of victimisation and bullying (Mishna, 2003; Norwich & Kelly, 2004; Peterson, 2007).

A study conducted by Pavri and Monda-Amaya (2000) explored the phenomena of social loneliness experienced by students with LD in mainstream classrooms. Twenty, 4<sup>th</sup> and 5<sup>th</sup> grade students were interviewed using the Loneliness Interview Protocol (Pavri & Monda-Amaya, 1997) to determine their experience with school related loneliness and the coping strategies they used. When asked what they did when they felt lonely at school, 42% of the students reported engaging in a solitary activity such as drawing or playing with a coin, 37% endeavoured to 'seek out others' to play with, 16% preferred 'passive solitary activities' explaining for example "I don't talk to nobody" while 5% engaged in 'miscellaneous behaviour'. The students felt that their teachers could help reduce their loneliness by providing help (38%) both academically and in a social context, finding something to occupy them with (30%), engage in an activity (13%), entertain them (6%) or do nothing (13%). The most reported causes of loneliness for these students were boredom and a lack of companionship however the students did indicate that self initiated coping strategies were the most helpful in dealing with school related loneliness.

### **Social Emotional Problems of Students with LD**

Students with LD tend to lack social competencies and pro-social communication skills required for peer group membership (Coleman & Byrd, 2000) as such, they are often less accepted, frequently picked on and socially neglected by their peers who do not experience LD (Bartak & Fry, 2004). Communication is often

jeopardised by the challenges these students experience in identifying expressive and situational cues as well as decoding nonverbal cues (Agaliotis & Kalyva, 2008). They receive and send nonverbal emotional information in a way that differs from that of their non LD peers (Bauminger, Edelsztejn, & Morash, 2005). Due to their reduced ability to understand nonverbal aspects of communication because of difficulties with these social-cognitive processes, students with LD often misinterpret communication with their classmates and respond in a defensive manner (Vaughn, Elbaum, & Boardman, 2001).

It is common for students to be ostracised as the result of displaying characteristics that make them appear shy, nervous, or socially inept (Mishna, 2003), embarrassed or ashamed (Riddick, 1996) in response to consistent academic failures. While many students with LD become withdrawn as a result of academic failure and feelings of victimisation (Bauminger, et al., 2005) others commonly display irritating, aggressive or provocative behaviours that are not well tolerated by teachers as they often disrupt classroom activities and dominate teaching time (Bartak & Fry, 2004). Over recent years, concern has been raised about the lack of support available for these students. In Australia, a study of 1505 Victorian primary students (Bartak & Fry, 2004) found that 81% were deemed by their teachers to be in need of additional educational, behavioural or emotional support. Of those students, 74% had a problem with literacy, 78% with numeracy and 51% had reported social problems. Of most concern for these teachers were the students with LD and co-existing moderate (21%) and severe (7.2%) behavioural/emotional disorders (BED), who present ongoing challenges in mainstream classrooms yet fail to qualify for additional funded support.

Co-morbidity for LD and behavioural problems has been identified in 40 to 50 percent of students with LD (Westwood, 2007). The most common behavioural problems are classified as Attention Deficit Hyperactivity Disorder (ADHD), Conduct

Disorder, Oppositional Defiant Disorder and anti-social behaviour (Prior, 1996).

Disruptive behavioural problems, commonly associated with boys, manifest as 'acting out' or 'externalising' behaviours (Prior, 1996) present a constant challenge for teachers as they spend valuable teaching time focused on classroom management rather than instruction (Bartak & Fry, 2004). These students often demonstrate antisocial behaviours that include fighting, bullying, temper outbursts, disobedience and uncooperative behaviour as they struggle to cope with classroom demands for concentration and regulated behaviour (Westwood, 2007).

For example, a study by Bartak and Fry (2004) reported the prevalence of externalising behaviours demonstrated by mainstream primary students with LD that accounted for 9% of boys and 4% of girls. McGee and Feehan (1991) however argued that statistical differences such as these in the presentation of disruptive behaviours may be due to an underrepresentation of girls in the selection criteria. While it is common for teachers to report their concerns about the problems they experience as a result of disruptive behaviours by both boys and girls, Prior (1996) and Westwood (2007) point out that emotional problems associated with LD more commonly present in girls. Generally they manifest as internalised behaviours such as withdrawn behaviour, anxiety, fearfulness, sadness or depression (Sideridis, 2005) which are less overtly apparent or disruptive in the classroom. Emotional problems present different challenges for teachers and students as they can interfere with cognitive learning processes, reducing student confidence and motivation to learn (Fuchs, Fuchs, & Bishop, 1992).

### **Challenges for Mainstream Teachers**

The literature suggests that students with LD face many educational and social challenges in mainstream classrooms and that their capacity to thrive or not is largely contingent upon their teacher. In an era of accountability (Lambert & McCartney,

2006), teachers have expressed concerns (Forlin, 2001) about their capabilities of delivering effective educational programs that cater for the needs of all their students. The evidence discussed above indicates that, while students with LD face a number of challenges in mainstream classrooms, so do their teachers. How then is it that some mainstream teachers prosper in their profession while others in the same or similar environments fail to cope and over time experience stress, exhaustion and burnout (McCarthy, Lambert, O'Donnell, & Melendres, 2009)?

To answer this question it is necessary to understand the nature of teacher stress as it is difficult to define and has different implications for each individual (Smith, 2004). For example, a situation which is considered stressful for one teacher may not cause concern for another. Such is the debilitating nature of teaching stress; it has generated much scientific research over the past twenty years. Definitions of stress vary considerably across the literature ranging from single word statements such as tension, pressure, strain or stress to more complex psychological and physiological explanations. Fontana and Abouserie (1993) refer to Seyle's (1976) theory to define stress as the "demand made upon the adaptive capacities of the mind and body, which if continued beyond the ability of the individual's capacity to respond, leads to psychological and physical exhaustion and possible collapse" (p. 248).

Vanderberghe and Huberman (1998) later defined stress as the response to the mismatch between demands made upon an individual and the individual's capacity to cope with those demands. Kyriacou (2001) explained teacher stress in terms of unpleasant, negative emotions experienced by teachers such as anger, anxiety, tension, frustration or depression as a result of some challenging aspect of their work as a teacher. More recently, Lambert and McCartney (2006) explored teacher stress in terms of work related pressure and demands. In this study, teachers reported the deficit they

experienced between teaching demands and personal resources as a strain on their capacity to cope.

These definitions demonstrate the ongoing conceptual problems evident across the stress literature for describing stress in terms of a cause or an effect. As such, researchers continue to debate the theoretical questions of how the term 'stress' should be defined and the impact such variation has on the empirical, interpretive reliability and validity that the operational definition of stress has across comparative studies (Forlin, 2001; Jenkins & Caloun, 1991; Montgomery & Rupp, 2005). Irrespective of how stress is defined, it continues to be a prominent, problematic construct, reported by mainstream primary teachers who are required to teach a variety of subjects within a restrictive curriculum (Forlin, 2001; Loudén et al., 2000). Over recent years, a number of qualitative studies have reported the experience of teacher stress in terms of negative feelings and emotions that often present a threat to self esteem or wellbeing (Howard & Johnson, 2004).

### **Sources of Stress**

Sources of stress in mainstream classrooms differ according to the individual differences of each teacher, the goodness of fit with their students and the work related demands they perceive as challenging or threatening. Sources of stress identified in the literature as compromising for teachers of students with LD include, lack of resources and funding (Louden et al., 2000) workload, pupil attitudes and behaviour (Almog & Shechtman, 2007; Bartak & Fry, 2004), poor relationships with colleagues and superiors (Travers & Cooper, 1993), as well as changes in the working and organisational environment (Forlin et al., 2003). Other concerns raised by the teachers have been adequacy of teacher preparation and training (Kearney & Durand, 1992) and the ability to provide equal attention to all students (Buneau-Balderrama, 1997).



In their study of 41 mainstream (44%) and special education (56%) teachers in the United Kingdom (UK), Williams and Gersch (2004) explored the perceived stress associated with teaching students with LD. No significant difference was found in overall level of stress between mainstream and special education teachers however mainstream teachers reported greater perceived stress associated with noisy and disruptive students, poor student attitude to work as well as lack of time to spend with individual students. Many teachers reported feelings of frustration, anger, anxiety, misery and exhaustion. These feelings were associated with headaches, feeling ill, loss of appetite and desire not to attend work. Others felt that they had no one to talk to, resulting in low tolerance and lack of concentration. Special education teachers reported only one perceived stressor as lack of resources together with significantly lower levels of frustration, anxiety and exhaustion (Williams & Gersch, 2004).

Accordingly, Male and May (1997) proposed that mainstream teachers experience greater levels of emotional exhaustion due to their interaction with a broader range of students with more complex educational needs. Utilising both quantitative and qualitative methodology, the study indicated that teachers of students with moderate LD expressed feelings of reduced personal accomplishment with individual teachers reporting that they felt “confused, incompetent, exhausted” “inarticulate and ineffective” “totally drained, angry, depressed and inadequate”. Yoon (2002) supported this view and added that teachers who fail to cope with these stressors frequently experience reduced classroom effectiveness as student/teacher relationships are compromised, student achievement is reduced and increased levels of student anxiety become apparent (Kyriakides, Creemers, & Antoniou, 2009). Prolonged high levels of teacher stress are associated with job dissatisfaction, absenteeism, burnout and work turnover (Jenkins & Caloun, 1991; McCarthy et al., 2009).

### **Coping Strategies**

In order to understand how teachers cope with these stressors, it is necessary to understand the nature of the coping process. Coping refers to the cognitive and behavioural strategies teachers use to manage stress. (Lazarus & Folkman, 1984). Evidence indicates that teachers use a variety of coping strategies to manage, master, tolerate, reduce or minimise occupational demands appraised as taxing or exceeding their individual resources (Carver, Scheier, & Weintraub, 1989; Endler & Parker, 1990). In situations where demands exceed the teacher's resources, coping strategies may be employed according to the demands of the situation and preferred coping style (Lazarus & Folkman, 1987).

Folkman and Lazarus (1980) proposed that coping strategies could be differentiated into three styles defined as 'problem focused', 'emotion focused' and 'avoidant'. In more general terms, teachers who take direct action to deal with the source of stress and alleviate stressful circumstances use the problem focused style of coping, whereas those who attempt to manage thoughts and feelings associated with the stressor in order to regulate the emotional consequences of stressful events employ an emotion focused style. Others however, may try not to think about the problem or deny the source of stress by engaging in avoidant behaviours such as recreational or self distracting activities or alcohol and/or drug consumption (Williams & Gersh, 2004). The literature indicates that teachers use all or a combination of these coping styles to deal with most stressful events (Folkman & Lazarus, 1984; Griffith et al., 1999).

Coping strategies have been the focus of much research over the years in relation to teacher stress (Chan & Hui, 1995; Griffith et al., 1999; Markham, Green, & Ross, 1996; Polychroni & Kotroni, 2009). Research indicates that problem-focused coping strategies such as making a plan of action, setting realistic expectations, concentrating on what needs to be done next and seeking additional assistance for

students with LD (Forlin, 20010) contribute to increased levels of personal accomplishment, achievement and engagement (Austin et al., 2005) as well as reduced levels of stress, burnout, absenteeism and attrition (Howard & Johnson, 2004).

Emotion-focused strategies on the other hand, are frequently used to ease pressure and reduce distress in the short term by changing the way teachers think and feel about their situation, however they do not directly deal with the source of stress and therefore over the long term, lead to higher levels of anxiety, decreased sense of control and lower levels of classroom engagement and personal wellbeing (Kyriacou, 2001; Parker & Martin, 2009). The employment of these coping strategies however, may or may not lead to successful outcomes. The literature highlights that coping strategies deemed effective in one transaction may be ineffective in another.

For example, Chan and Hui (1995) found that avoidant coping strategies deemed effective in reducing teacher stress in the short term, significantly correlated with high levels of stress among Chinese teachers over time while seeking social support reduced depersonalisation. Using the Ways of Coping Questionnaire (Folkman & Lazarus, 1988) to investigate teacher stress and coping, it was found that avoidant coping strategies were also significantly related to high levels of emotional exhaustion, depersonalisation and low personal achievement. Problem-focused strategies such as planning and positive appraisal were positively related to a sense of personal achievement (Chan & Hui, 1995) yet did not relate to lower levels of teacher stress. These results suggest that the coping strategies used by teachers to reduce stress, as measured by psychological measures, do not seem to reduce stress.

It is increasingly evident in the literature that problem-focused strategies are commonly presented as more positive strategies while emotion-focused or avoidant coping strategies are less effective (Parker & Martin, 2009). Caution must be exercised however in generalising this assumption as equal consideration should be given to those

strategies which significantly reduce stress in order to operate effectively in the short term and those which contribute to wellbeing and productivity over the long term (Jenkins & Calhoun, 1991).

To investigate this argument, Austin, Shah, and Muncer (2005) conducted a quantitative study to measure the stress levels and coping strategies of thirty-eight teachers in the United Kingdom (UK) used to reduce occupational stress. Correlational analyses identified relationships between coping strategies and levels of distress. They found that planful problem solving was the preferred way of coping with low levels of stress ( $M=1.35$ ,  $SD=0.58$ ) while escape avoidance was less popular ( $M=0.58$ ,  $SD=0.53$ ). The use of strategies such as escape avoidance behaviour correlated significantly with high levels of stress. Interestingly, no significant correlation was evident for the use of positive coping strategies such as problem solving, seeking social and emotional support, non competitive exercise, relaxation and creating positive meanings, and level of stress. These findings suggest that teachers with high levels of stress are more likely to use negative strategies more frequently as a means of tolerating the situation or decreasing involvement. This outcome supports earlier findings by Chan and Hui (1995) and Lazarus (1984) who proposed that palliative or emotion focused coping strategies commonly deemed useful in the early stages of a stressful situation as a way to reduce stress, may over time become maladaptive.

In light of these findings, it is necessary to consider the usefulness of avoidant coping and emotion focused coping strategies within the context of primary and secondary appraisal as argued by Lazarus and Folkman (1984). For example, following the decision by a teacher that a situation is stressful and requires action (primary appraisal) the decision that something can be done (secondary appraisal) is determined by how much control the teacher perceives they have over the situation. This theory suggests that where a situation is appraised as being controllable a teacher is likely to

employ problem solving strategies. Whereas when a situation is perceived as offering little or no means of control then the emphasis is likely to be on reducing emotional discomfort (Dewe, 1985).

In support of this premise, evidence indicates that teachers who believe that they have little or no control over their classroom situation struggle to cope as they are more inclined to experience higher levels of stress, reduced motivation and low self efficacy (Almog & Shechtman, 2007). Teachers of students with LD frequently report concerns over lack of control in their work environment where they are required to teach struggling students according to the guidelines of a formal curriculum often within an inflexible educational framework (Bartak & Fry, 2006; Forlin et al., 2003; Griffith et al., 2007; Paterson, 2007). In such situations where teachers perceive classroom stressors as recurrent and uncontrollable, research has found that they are more inclined to use avoidant coping strategies (Green & Ross, 1996).

For example, a recent quantitative study by Polychroni and Kotroni (2009) used a cross sectional self report design to assess teaching stressors and coping strategies employed by 106 male and 52 female teachers of students with LD from 120 schools across Athens, Greece. Sixty-five percent of the teachers reported that they employed problem solving coping to deal with controllable work related problems whereas stressors perceived as less controllable, such as challenging students and restrictive teaching environments, prompted the use of emotion focused coping 47% percent of the time. Furthermore, the study found that male teachers engaged in more problem-focused coping to make their job more interesting while female teachers reported building more stable relationships with their colleagues, an emotion-focused strategy, yet no significant difference was evident in relation to coping style and gender.

Similar strategies were used by Western Australian mainstream teachers to cope with the challenges of teaching students with LD in a controlled educational system

(Forlin et al., 2003). The qualitative study conducted by Forlin and colleagues (2003) used semi structured interviews to explore the experiences of 43 primary school teachers both individually and in focus groups. The most beneficial coping strategies reported by 32% of the teachers were those related to problem solving (exchanging information with peers and seeking out resources), planning and collaboration. The stressors of most concern for these teachers were administrative limitations such as inflexible curriculum guidelines, time constraints for one on one teaching, lack of adequate resources and the extent to which these limitations made it harder for the teachers to cope with meeting the educational needs of students both with and without LD (Forlin et al., 2003). Evidence suggests that teachers with high self efficacy are better able to cope with these challenges and stressors of teaching in mainstream classrooms (Tschannen-Moran & Woolfolk Hoy, 2001).

### **Teacher Self Efficacy**

Self efficacy was defined by Bandura (1997) as a person's belief in their ability to successfully organise and execute a course of action to achieve a desired outcome. Research suggests that teacher self-efficacy can influence both the classroom environment and instructional practices (Tschannen-Moran & Woolfolk Hoy, 2001) particularly in relation to coping with the issues of educating students with LD (Woolfson & Brady, 2009) and the behaviour difficulties they commonly present (Almog & Shechtmanm, 2007). High self-efficacy assists teachers to cope with challenges, be less critical of student inabilities or errors (Ross, 1992) and work longer with struggling students (Gibson & Dembo, 1984).

For teachers to provide the same educational benefits for students with and without LD, they need to perceive themselves as capable of doing so. Evidence indicates that teachers with high self efficacy are capable and optimistic about teaching students according to different levels of individual need (Tschannen-Moran & Woolfolk

Hoy, 2001). Teachers with high self efficacy are resourceful, demonstrate better coping behaviours and report more optimistic views of their capacity to deal with stress (Folkman et al., 1979). The assumption here is that teachers who perceive themselves as capable of being instrumental in solving classroom problems have an advantage when faced with potentially stressful circumstances. As such teachers with high self efficacy are more inclined to overcome classroom stressors and provide effective instruction for students with and without LD.

Evidence has shown that teachers with high self efficacy tend to be more self determined, active, organised, engage with students, provide positive feedback and support for all students particularly those who struggle to learn (Guskey, 1988; Ghaith & Yaghi, 1997; Larrivee, 1985). Furthermore, teachers who believe that they are able to adapt the curriculum to meet the needs of individual students and use effective problem solving strategies to deal with behavioural problems, reflect a sense of control over their environment (Woolfson & Brady, 2009). These findings indicate that teacher beliefs influence teacher behaviours. It is therefore important to consider whether these beliefs also influence the teacher's capacity to cope with the issues they face when teaching students with LD in mainstream classrooms.

To investigate this, Woolfson and Brady (2009) examined the beliefs and attitudes of 199 mainstream primary school teachers in relation to teaching students with LD in mainstream classrooms. The researchers used a five part questionnaire which included the Brief COPE (Carver, 1997) and the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) which were adapted by the authors to focus on teacher self-efficacy in relation to teaching students with special needs. Adaptations made to the Brief COPE (Carver, 1997) was deemed good ( $\alpha = .84$ ) however the abbreviated questionnaire used only nine of the fourteen subscales which factored to one coping measure labelled problem solving. Concern for abbreviating the

Brief COPE to this extent has been raised by Carver (1997) who cautions that there is no such thing as an overall coping score.

In the study (Wolfson & Brady, 2009), teachers were asked to rate their beliefs about how effective they were at controlling disruptive behaviour and implementing alternative strategies for students with LD. Teachers with high self-efficacy demonstrated that they could cope with the challenges and provide effective instruction for students with LD as they believed that these students had the ability to change with the assistance of an adapted curriculum. However the same was not evident for teachers with low self efficacy who demonstrated more negative attributions and perceived themselves as having less control in facilitating positive academic outcomes for students with LD.

Research has also shown that teachers with high self-efficacy are confident that with extra effort, even the most difficult students can be educated (Gibson & Dembo, 1984) while teachers with lower self efficacy feel a sense of helplessness when it comes to dealing with difficult and unmotivated students. In addition, teachers with low self efficacy find it harder to cope with the social and behavioural problems which commonly co-exist in students with LD and prefer to adopt more restrictive approaches than helpful ones in responding to these problems (Almog & Shechtman, 2007). According to earlier research, the use of restrictive practises by teachers to solve behavioural problems is not only related to teacher self efficacy but also stems from insufficient knowledge, lack of experience, skills, time and resources (Elliot, Witt, Galvin, & Peterson, 1984).

To examine how teachers cope with behavioural problems of students with LD, Almog and Shechtman (2007) examined the individual strategies teachers use to deal with behavioural problems in mainstream classrooms in relation to their self-efficacy and democratic beliefs. The methodology included classroom observations and self



report. Data was collected from 66 teachers across 33 primary school classrooms in Israel. Results indicated that 83% of the teachers reported that they would adopt a helpful approach in response to social problems however observational reports suggested that only 60% actually did exhibit this approach. Classroom observations also revealed the tendency for teachers to respond without consistency to problems based on the need to 'put out fires' (Almog & Shechtman, 2007) indicating that teachers seem to experience difficulties adapting to the gap between theory (what they know) and practise (what they do).

These findings contradict claims made by many teachers that they lack the knowledge required to deal with behavioural problems and suggest that the failure to cope is more about an inability to adapt to the pressures of managing students with LD in mainstream classrooms. This evidence suggests that knowing what best to do or not to do under a particular set of stressful circumstances does not guarantee an adaptive response (Kohn, 1996). The overall concern about this inability to adapt to stressful situations is that inappropriate responses to behavioural problems can be detrimental to the students both with and without LD. Consistent with the theory of 'mastery' (Bandura, 1997), Sodak and Podell (1996) found that over time, teaching experience increased teachers' ability to adapt to classroom challenges due to increased self-efficacy. Experienced teachers reported less concern about providing individualised instruction and perceived themselves as having more control in the classroom.

On the other hand, many teachers perceive the classroom situation as largely uncontrollable and expect students with LD to perform poorly in class (Clark, 1997; Woolfson, Grant, & Campbell, 2007). Woolfson and colleagues (2007) found that mainstream teachers perceived students with LD as less stable than students without LD and demonstrated less positive views towards their propensity for change. It was also found that teachers with lower efficacy used different attributions to explain behavioural

and learning problems among students with LD who required ongoing personal supervision. Teachers with high self efficacy demonstrated better adaptation towards the stressors they confronted by adopting a range of positive action orientated coping skills and flexible teaching approaches (Woolfson et al., 2007). These findings suggest that one should consider the importance of other personal resources such as adaptiveness as a mediating construct in the coping process for teachers who manage and educate students with LD in mainstream classrooms.

### Summary

The evidence presented in this review initially outlines the problems associated with lack of consistency in terminology and identification of learning difficulties as well as the historical challenges teachers and students with LD have experienced moving in and out and back into mainstream classrooms. A review of the stress literature highlights the ongoing challenge for teachers who have reported similar concerns over the past 30 years yet still struggle to cope. The coping literature identified a variety of strategies teachers use including problem focused, emotional focused and avoidant coping to manage their concerns about classroom management and instructional practises and the impact self efficacy has on their ability to cope.

The aim of this study was to examine how teachers cope while teaching students with LD in mainstream classrooms by assessing the relationship between teachers' psychological coping responses in relation to classroom stressors, teacher self efficacy and adaptiveness. It is hypothesised that:

- (1) self efficacy, adaptiveness and classroom stressors are significantly related to psychological coping,
- (2) a significant relationship exists between years of teaching and number of students with LD in the classrooms.

The research question for this study is:

Do classroom stressors, teacher self efficacy and adaptiveness independently and significantly predict psychological coping in teachers who have children with LDs in their mainstream classrooms?

## **Method**

### **Research Design**

The current research used a correlational survey study design to examine the relationship between the psychological coping styles; problem-focused, emotion-focused and avoidant coping, used by teachers in relation to stressors, self efficacy, and adaptiveness. Three separate multiple regression analysis were performed to assess the relationships between eleven variables and three criterion variables; problem-focused coping, emotion focused coping and avoidant coping using the formula  $50 + 8n$  where  $n$  is the number of variables as suggested by Tabachnick and Fidell (2001).

### **Participants**

Teachers from 22 government primary schools across Perth, Western Australia were invited to participate in the research. Of those, 16 schools agreed to distribute the questionnaires to their combined teaching staff of 340. In total, 151 questionnaires from 93 female (61%) and 58 male (39%) teachers were returned complete. Teaching experience ranged from 2 years to 35 years ( $M = 16$ ,  $SD = 9.4$ ) while number of students with LD reported to be currently taught in their mainstream classroom ranged from 1 (0.05%) to 10 (40%). Participation in the study was voluntary and all information was treated confidentially.

### **Materials**

Each questionnaire pack consisted of a resealable, numbered envelope which contained an information sheet for the participant (Appendix B) and a five part questionnaire. The first part of the questionnaire contained sections regarding

demographic information (Appendix C) in relation to teacher gender, years of teaching, level of academic qualifications and number of students with LD currently taught in their classroom. The remainder of the questionnaire comprised of up to four freely available standardised questionnaires as described below. Short form versions were used where available in order to place fewer demands on participant time and thereby reduce the response burden of participants.

The Brief COPE (Carver, 1997) (Appendix D) is a reduced version of the original COPE inventory (Carver et al., 1989) designed to measure both functional and dysfunctional coping responses. It consists of 28 items and 14 scales and is arranged to allow researchers to select items to assess coping in the particular area of interest. Based on previous research, only 20 items were selected to make up 10 subsets that could be specifically related to coping with the demands of teaching students with LD in mainstream classrooms (Appendix B). Internal consistency for these subscales was reported as good by Carver (1997) with active coping ( $\alpha = .68$ ), planning ( $\alpha = .73$ ), positive reframing ( $\alpha = .64$ ), humour ( $\alpha = .73$ ), using emotional support ( $\alpha = .71$ ), using instrumental support ( $\alpha = .64$ ), self distraction ( $\alpha = .71$ ), Venting ( $\alpha = .50$ ), substance use ( $\alpha = .90$ ) and behavioural disengagement ( $\alpha = .65$ ). Responses were given to the 20 items according to a four point Likert scale ranging from 'I haven't been doing this at all' to 'I've been doing this a lot' which are coded 0 to 3 respectively. Higher scores indicated a greater use of the associated coping strategy.

Teacher stress was measured using the Teacher Stress Inventory (TSI) (Fimian, 1985) (Appendix E). The TSI is a 36 item questionnaire with 7 sub scales. Five of these subscales were used to measure teacher stress due to their compatibility with stressors identified in previous qualitative data. Teachers were required to respond about how they felt according to a five point Likert scale ranging from "Not concerned" "Mildly Concerned" "Concerned" "Very Concerned" and "Extremely Concerned" and coded

from 1 to 5 respectively. Ratings of each subset were averaged to a single score. The Cronbach alpha internal consistency for the sub scales have been reported at .67 to .85 (Griffith, Steptoe, & Cropley, 1999). Whole scale alpha estimates of .93, .92, and .93 for combined, special education, and regular education teacher groups reported by Fimian and Fastenau (1990) indicate that these values maintain a high degree of overall internal consistency across samples.

Self-efficacy was measured using the Teachers' Sense of Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001) (Appendix F). The TSES is a 24 item scale designed to assess 'context specific' job related challenges, teachers confront in mainstream classrooms. Teachers were required to respond to "how much they can do" to 24 statements, indicating their opinion in a five point Likert scale from "Nothing" to "Very Little" "Some Influence" "Quite a bit" or "A great deal". Factor analysis of these items yielded three factors defined as Efficacy in Student Engagement, Instructional Strategies and Classroom Management with a reliability of .81, .86 and .86 respectively for each of the factors while an overall alpha value of .90 was indicated across all three factors (Tschannen-Moran & Woolfolk Hoy, 2001).

Adaptiveness was measured using the Personal Functioning Inventory (PFI) (Appendix G) developed by Kohn, O'Brien-Wood, Pickering, and Decicco (2003). The PFI is a 30 item questionnaire designed to measure individual styles of adaptiveness. Teachers were required to respond to all questions according to whether they "Strongly Agree" "Disagree" "Unsure" "Agree" or "Strongly Agree". The responses were weighted 1, 2, 3, 4 and 5 respectively, however questions 2,4,8,9,10,14,15,16,17,19,20, 22,&23 were reverse weighted for scoring. Reliability and validity of the inventory has been reported as satisfactory at .89 - .96 (Cronbach Alpha) (Kohn et al., 2003). Principal-axis factor analysis indicated that all 30 items loaded appreciably to a single

factor with values ranging from .38 to 0.62. The researchers interpreted the factor as 'adaptiveness'.

### **Procedure**

Following ethics clearance from the Faculty of Computing, Health and Science Ethics Committee and permission from the Department of Education and Training (DET) to conduct the current research, explanatory letters outlining the nature of the research (Appendix A) were sent to the principals of thirty government primary schools across Perth. These letters were followed up a few days later with a phone call. Questionnaire packs were delivered to those schools that indicated a willingness to participate. The researcher distributed the packs to all teachers individually at a staff meeting where a brief explanation of the study was provided and any questions answered. If staff were not present at the briefing, the questionnaire packs were placed in their mail boxes. Teachers were encouraged to complete their questionnaire individually and as accurately as they could. Completed questionnaires were placed in sealed numerically coded envelopes personally by the teachers to ensure confidentiality. All questionnaires were collected from the schools after one week by the researcher. Follow up calls were made to the schools which resulted in the completion of additional questionnaires. Of the 340 questionnaires handed out, 151 were returned complete which produced a response rate of 44%. Data were screened and calculated using SPSS Version 14.

In order to determine the sub scale reliability of the factors related to psychological coping prior to using the Brief COPE Inventory (Carver, 1997) a principle components analysis with varimax rotation was conducted. KMO = .67 and Bartlett's test of sphericity was significant. Three coping factors were extracted with eigenvalues > 0.01; problem-focused, emotional-focused and avoidant coping.

Interpretation of these factors was clear and consistent with previous findings by Carver (1997) therefore the factors were deemed suitable for analysis.

Three standard regression analyses were then conducted to investigate whether teacher stress, self efficacy and adaptiveness independently and significantly predicted problem-focused, emotional-focused and avoidant coping.

### **Results**

To test the hypotheses that (1) self efficacy, adaptiveness and classroom stressors are significantly related to psychological coping and (2) a significant relationship exists between years of teaching and number of students with LD in the classroom, three standard multiple regression analyses were conducted. The aim was to examine the relationship between criterion variables problem-focused coping, emotion-focused coping and avoidant coping, and eleven predictors defined as number of students with LD, number of years teaching, self efficacy variables; student engagement, instructional practices, classroom management, stress variables; time management, work related stress, professional distress, discipline and motivation, professional investment; and adaptiveness. Higher scores indicated a stronger correlation between the predictor variables and the associated coping style. Descriptive statistics are presented on Table 1.

Table 1

*Mean Scores and Standard Deviation for Teacher Coping Variables*

Variables	<i>M</i>	<i>SD</i>
Number of Students with LD	4.29	.66
Years of Teaching	16.05	9.39
Student Engagement	6.17	1.40
Instructional Practices	6.71	1.40
Classroom Management	6.21	1.65
Time Management	2.50	.82
Work Related Stress	2.81	1.04
Professional Distress	2.57	1.03
Discipline and Motivation	2.29	1.06
Professional Investment	2.03	.87
Adaptiveness	3.48	.61
Problem Focused Coping	3.21	.66
Emotional Focused Coping	2.52	.71
Avoidant Coping	2.13	.66

*N* = 151

Prior to conducting the formal analyses, data screening was performed. No missing data was evident and no suppressor variables were found. Using a  $p < .001$  criterion for Mahalanobis distance of 21.67 one multivariate outlier was identified for problem-focused coping. As this constituted less than 5% of the cases it was decided to retain it for analysis. No multivariate outliers were detected for emotion-focused coping or avoidant coping. Homoscedasticity was examined via scatterplots and histograms (Appendix H) which indicated reasonable consistency of spread through the distributions. Following Tabachnick and Fidell (2001), the assumption of normality was deemed satisfactory for all three analyses as a sample size of 151 with eleven dependent variables rendered them adequate.

Since no a priori hypotheses had been made to determine the order of entry of the predictor variables, a direct method was used for the standard multiple regression analyses. Three standard multiple regression analyses were run initially in which all



predictor variables were entered simultaneously to examine which predictors contributed significantly to each style of coping. Table 2 displays the unstandardised regression coefficients ( $B$ ) and intercept, the standardised regression coefficients ( $\beta$ ),  $R^2$ , and adjusted  $R^2$  for each of the three regression analyses. Once the significant variables had been identified, a standard multiple regression analysis was re run for each analysis to determine the relationship between the significant variables and each coping criterion.

Table 2

Summary of Standard Regression Analyses for Variables Predicting Coping Style in Teachers of Students with LD

	Problem-Focused			Emotion-Focused			Avoidant		
Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	2.27	.29		2.44	.52		2.17	.41	
Students with LD	-.02	.02	-.10	.04	.03	.13	-.01	.02	-.02
Years of Teaching	-.01	.01	-.09	.01	.01	.16	-.01	.01	-.20**
Student Engagement	-.03	.04	-.10	-.08	.08	-.15	.01	.06	.02
Instructional Practices	.08	.04	.27*	.01	.07	.01	-.08	.06	-.16
Classroom Management	-.01	.04	-.04	.07	.06	.16	.05	.05	.13
Time Management	.24	.06	.45***	.02	.11	.02	-.03	.08	-.03
Work Related Stress	-.10	.05	-.25	-.21	.09	-.31*	.03	.07	.05
Professional Distress	.08	.05	.26	.15	.09	.22	.09	.07	.14
Discipline & Motivation	-.04	.04	-.11	-.08	.07	-.12	.22	.06	.35***
Professional Investment	-.18	.06	-.36**	.07	.11	.09	.05	.08	.06
Adaptiveness	.08	.06	.11	-.02	.10	-.02	-.15	.08	-.14
<i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup> $\Delta$	.24	.24	.11		.11	.37		.38
<i>N</i>	151			151			151		

Note: \**p* < .05, \*\**p* < .01, \*\*\**p* < .001

Using problem-focused coping as the criterion for the first multiple standard regression analysis, all eleven predictor variables explained 24.1% (adjusted *R*<sup>2</sup>) of the variance of problem-focused coping with an *R* of .49 and *R*<sup>2</sup> = .24, (*F*(11, 139) = 4.00, *p* = 0.000). Three of the predictor variables, time management (β = .45, *t* = 3.86, *p* = .000), professional investment (β = -.36, *t* = -2.98, *p* = 0.003) and instructional practises (β = .27, *t* = 2.07, *p* = 0.04) made a significant contribution to predicting problem-focused coping. None of the other predictor variables were significant.

A second regression analysis was run to analyse the significant predictors. This produced a significant regression which had an  $R$  of .39,  $R^2 = .15$ , ( $F(3,147) = 8.63$ ,  $p < .000$  with all three predictors accounting for 13.2% (adjusted  $R^2$ ) of the variation. The final results indicated a positive relationship for both time management and instructional practises, and a negative relationship for professional investment. In other words, problem-focused strategies are used to manage increasing time management concerns by teachers with higher efficacy in their instructional abilities and who feel that they have a sense of control over the personal investment they have in the classroom.

The second standard regression analysis was conducted using emotion-focused coping as the criterion with all eleven predictor variables accounting for 4.6% (adjusted  $R^2$ ) of the variance. This result produced an  $R$  of .34 and  $R^2 = .12$ , ( $F(11,139) = 1.65$ ,  $p = .09$ ). One predictor variable work related stress ( $\beta = .32$ ,  $t = -2.38$ ,  $p = .019$ ) was identified as the only significant predictor of emotion-focused coping with a negative relationship. The regression analysis was re run using only work related stress as a predictor of emotion-focused coping. This produced a final result with an  $R$  of .19,  $R^2 = .04$ , ( $F(1,149) = 5.49$ ,  $p = .02$ ) indicating that work related stress ( $\beta = -.19$ ,  $t = -.2.34$ ) accounted for 2.9% (adjusted  $R^2$ ) of the variance. This standard multiple regression analysis indicated that as work related stressors increase teachers use less emotion-focused coping strategies.

The third standard multiple regression analysis was conducted using avoidant coping as the criterion with all eleven predictor variables entered simultaneously, the results indicated a significant regression with  $R = .6$ ,  $R^2 = .37$ , ( $F(11,139) = 7.54$ ,  $p = .000$ ). Together, all the variables accounted for 32.4% (adjusted  $R^2$ ) of the variation of avoidant coping. Two predictors discipline and motivation ( $\beta = .35$ ,  $t = 3.80$ ,  $p = .000$ )

and years of teaching ( $\beta = -.20, t = -2.77, p = .006$ ) made a significant contribution to predicting avoidant coping. No other predictor variables were significant.

The regression analysis was re run to examine the relationship between the two significant predictors and avoidant coping. These results revealed a significant regression with  $R$  of .56,  $R^2 = .32, (F(2,148) = 33.76, p < .000)$  with both predictors accounting for 31% (adjusted  $R^2$ ) of the variation. Discipline and motivation was a positive predictor ( $\beta = .474, t = 6.88, p < .000$ ) while years of teaching was a negative predictor ( $\beta = -.236, t = -3.43, p = 0.001$ ) of avoidant coping. These results indicate that teachers who experience increased levels of stress due to discipline and motivation problems tend to use more avoidant coping strategies however this reduces over years of teaching.

### Discussion

This study set out to understand how teachers cope psychologically with the challenges of teaching students with LD in mainstream classrooms by examining the relationships between three coping styles which theoretically underpin psychological coping. (Lazarus, 1989) The variables problem-focused, emotion-focused and avoidant coping were used as the criterion for each multiple regression model while teacher constructs self efficacy, stress, adaptiveness, years of teaching and number of students with LD in their mainstream classrooms were measured.

Contrary to expectations and previous research (Kohn et al., 2003) the results indicated that in response to the hypothesis (1) adaptiveness was not a significant predictor of psychological coping. A significant relationship was identified between problem-focused coping, time management and professional investment stress, and instructional practises. Work related stress was shown to be a predictor of emotion-focused coping, while a significant relationship was also found between avoidant coping and discipline and motivation stressors.

In response to hypothesis (2) no significant relationship was found between number of students with LD in mainstream classrooms and psychological stress however years of teaching was found to be a negative predictor of avoidant coping. To understand the nature of these relationships more fully, the three styles of psychological coping will be discussed separately.

Consistent with previous research these results revealed a positive relationship between problem-focused coping and time management stress (Griffith et al., 1999), as well instructional practices (Woolfolk & Hoy, 1990). This outcome shows that teachers reported a greater use of problem-focused coping strategies such as actively engaging in lesson planning, seeking additional assistance for students with LD and setting realistic expectations to cope with the of stress related to time management challenges. Evidence has shown repeatedly that time management pressures are a particular concern for mainstream teachers who endeavour to educate students with and without LD (Bartak & Fry, 2004; Paterson, 2007) particularly in relation to large class sizes (Forlin et al., 2008). Teachers in this study indicated concerns reflective of previous evidence in that they felt restricted by the stress of spending more time with one student while others required attention, become impatient when students with LD work too slowly, feel that they have to do more than one thing at a time and do not have enough time to get everything done (Fimian & Fastenau, 1990).

While problem-focused strategies were reported as the only significant strategies used to cope with time management stress, the employment of problem-focused coping was in part predicted by the stress of professional investment stress and the degree to which teachers felt confident with their instructional practises. Professional investment was measured using the Teacher Stress Inventory (Fimian & Fastenau, 1990). High scores indicated that teachers felt stressed due to a reduced sense of involvement and lack of control over decisions made about their teaching practises

within a restrictive curriculum. The current results indicated a negative relationship between professional investment and problem-focused coping which showed that, consistent with the literature, action orientated strategies were used by teachers who felt that they had greater control over teaching decisions.

Furthermore, the results indicated that the use of problem-focused coping was predicted in part by the teachers' instructional practises, a construct of self efficacy. These findings support those of an earlier study by Allinder (1994) who reported that teachers high in efficacy, tended to exhibit greater organisational skills, planfulness, fairness, enthusiasm and clarity of instruction for students with special learning needs. And further, that these teachers demonstrated a willingness to try a variety of materials and approaches to teaching, had a desire to find better ways of teaching and were more inclined to implement progressive and innovative techniques. Paterson (2007) referred to the use of adaptive instructional practises as 'in flight teaching' which many teachers use to meet the learning needs of students with LD yet are repeatedly compromised because of time management restraints and restrictive curriculums.

In sum, these results suggest that teachers with lower professional investment who demonstrate higher levels of efficacy in their capacity to differentiate instructional practices are inclined to use problem-focused strategies to cope with the stress of time management challenges. In contrast however, Griffith and colleagues (1999) found that problem focused coping did not significantly relate to teacher stress. In response to their findings, the researchers suggested that strategies such as active planning and taking constructive action to help students with learning needs may be part of the normal workload of a competent teacher rather than a deliberate coping strategy. It was suggested that affirmative responses to items such as 'I do what has to be done', 'I make a plan of action' and 'I think hard about steps to take' may be more related to effective teaching and the process of lesson planning and less about coping. The contrast in the

findings of these studies highlights the complex nature of the utility of different coping strategies and how individual differences and environmental challenges influence choice and outcome.

The second regression analysis found a positive relationship between work related stress and emotion-focused coping. These findings are contrary to other evidence which indicate that work related problems commonly lead teachers to employ problem-focused coping (Griffith et al., 1999). Previous studies (Male & May, 1997; Parker & Martin, 1999) have indicated a significant relationship between work related stressors such as workload problems related to insufficient planning time, the additional amount of time necessary to prepare for individual student learning needs, demands for accountability, excessive paper work and problem-focused coping efforts, such as taking direct action or seeking help from others. Relatively few studies identify work related stress as a predictor of emotion-focused coping.

Emotion-focused coping is an elusively defined construct used throughout the coping literature which in part could be due to variation in the labelling of the factor originally defined by Lazarus (1984). In the current study the variables 'seeking emotional support', 'seeking instrumental support' and 'venting' all factored under emotion-focused coping. Other studies however use terms such as 'seeking social support' (Griffith et al., 1999), 'support' (Forlin, 2001) and 'other directed coping' (Green & Ross, 1996). While these forms of coping include emotion-focused strategies the terms tend move the focus away from that of a coping style based on feelings and more towards taking action. According to Gersch (1996) teachers' feelings need to be examined more closely as a 'precursor to' other coping strategies.

In the current study, the strategy 'seeking instrumental support' was validated as a construct of emotion-focused coping using factor analysis. There is an apparent anomaly to this inclusion however according to theory (Lazarus, 1984) in that emotion

focused coping is based more on 'primary appraisal' where as 'seeking instrumental support' refers more to 'secondary appraisal'. As such, these findings, which identified work related stress as the only significant predictor of emotion-focused coping, may be explained by the inclusion of the anomaly as a secondary appraisal construct.

Consistent with these findings, recent studies have indicated that teachers frequently use emotion-focused coping, to reduce emotional discomfort in situations which are perceived as offering little or no means of control (Polychroni & Kotroni, 2009). It may be suggested therefore that these teachers reported the use of emotion-focused strategies to manage work related stressors which they perceived as uncontrollable. This indeed has been the case in a number of previous studies which have reported that teachers of students with LD felt stressed over lack of control and exhaustive workloads (Bartak & Fry, 2004; Peterson, 2007; Westwood, 2007). While it is evident that teachers use emotion-focused strategies to cope with work related stressors in order to get on with the job, the concern remains that left unaddressed, without the use of problem-coping strategies it may lead to emotional exhaustion, burnout and attrition (Folkman & Morowitz, 2003).

Similar concerns over work related stressors have been demonstrated in other Western Australian studies (Forlin, 2001; Forlin et al., 2008) by teachers of students with LD. The teachers in these studies also reported feeling a lack of control in relation to work related problems, yet indicated a significant use of problem-focused coping to manage those stressors. These conflicting findings provide evidence that teachers use both emotion-focused and problem-focused coping to manage classroom stressors. Furthermore, it is evident from the literature that emotion-focused strategies are most commonly used as a short term means of coping with most teachers moving on to problem-focused strategies, while others employ more avoidant strategies.



The final regression analysis results revealed a positive relationship between avoidant coping and discipline and motivation, as well as a negative relationship with years of teaching. These findings support previous research by Green and Ross (1996) who suggested that avoidance coping was more frequently used than problem focused coping in situations that are perceived as uncontrollable particularly in relation to behavioural problems and student motivation (Sideris, 2005). Similarly, the results of this study indicated that teachers responded significantly in favour of the use of avoidant coping, in relation to the degree of control they perceived they had over their capacity to regulate misbehaviour, and their ability to motivate students who experienced difficulty learning.

Evidence suggests that teachers who perceive the classroom situation as largely uncontrollable also expect students with LD to perform poorly in class due to lack of motivation or desire for engagement (Woolfson et al., 2007) and behavioural problems commonly associated with LD (Bartak & Fry, 2004). The results presented in this study appear to be reflective of these previous findings.

The current results also suggest, similar to previous research that teachers tend to use avoidant strategies to reduce the stress associated with behavioural and motivation problems demonstrated by students with LD rather than taking action to change the nature of those stressors. Sodak and Powell (1997) posited that with experience teachers increase their sense of mastery and ability to adapt to classroom challenges and report less concern about coping with behavioural problems and the provision of individualised instruction as they perceive themselves as having more control in the classroom. The current results lent some support to this proposal, however no significant relationships were evident between teacher self efficacy or years of teaching and avoidant coping.

Contrary to the current findings, Lewis (1999) reported that teachers used more problem focused strategies such as planning and taking positive action to cope with the stress of being unable to implement classroom discipline. However, it was indicated that teachers who experience higher levels of stress are most likely to employ avoidant coping which commonly includes maladaptive strategies. Expanding on an earlier proposal by Lazarus (1989) that avoidant strategies may become maladaptive over time, Lewis suggested that the use of maladaptive strategies may in fact undermine or negate the benefits that accrue from the use of more adaptive problem-focused strategies.

According to this perspective, the current results reflect not so much the absence of problem-focused strategies used to deal with discipline problems and lack of motivation demonstrated by students with LD, as teachers may well be using them to a large degree. Rather, in order to deal with the immediacy of reducing these stressors, avoidant strategies are easier to implement in the short term and therefore appear more beneficial than do problem-focused strategies. Avoidant coping provides effective strategies for teachers to reduce teaching stress as they focus on managing disruptive student behaviour and plan alternative teaching strategies for less motivated students and those who struggle with LD.

Furthermore, the results indicated that the use of avoidant coping to deal with the challenges such as student discipline and motivation problems decreased with years of teaching. These findings suggest the influence of experience, referred to in the coping literature as personal history (DeLongis & Holtzman, 2005). The personal history of a teacher is, in part defined by the presence of past experiences that are similar to present circumstances as well as the repertoire of potential coping responses developed by the teacher over time and the sense of efficacy that the teacher brings to the situation (Woolfolk & Hoy, 1990). From this perspective, it may be suggested that over the years, teachers learn what works and what doesn't work in terms of reducing classroom

stressors such as discipline and motivation problems and therefore with experience are less inclined to use avoidant coping strategies.

No significant relationship was evident between psychological coping and the number of students with LD irrespective of the fact that LD had been identified in up to 40 % of some classroom populations in this study. These findings support those reported in other Western Australian studies (Forlin, 2001) which suggested that psychological coping was not as much related to the number of students with LD in mainstream classrooms but rather to the challenge of providing effective education for students with and without LD simultaneously.

In contrast however, McCartney and colleagues (2009) found that number of students with LD was significantly related to coping resources. In particular, it was noted that teacher stress was related to increased number of challenging students in the classroom with the difference between high stress and moderate stress accountable to just a few students with special learning needs. It is evident from the literature that in spite of the findings with regard to the number of students in this study, concerns continue to be raised by teachers regarding the provision of effective education for all students in mainstream classrooms as a greater number of students with LD are identified and require individualised instruction.

### **Limitations and Future Considerations**

Consideration should be given to the nature of some of the questions included in the coping questionnaire and the manner in which they may be interpreted. In particular, those related to avoidant coping strategies. For example, coping strategies such as alcohol and drug use may be perceived as socially acceptable by a younger population who feel more comfortable reporting the use of these strategies. Others however, may experience conflict between their use of these strategies and cultural or social rules they are expected to adhere to, and therefore feel compromised with the reporting process.

This may have been the case for some of the participants in the current study which in turn influenced the nature of the results.

This study had several limitations including the convenience nature of the sample in relation to time constraints for the researcher. While sample size was deemed adequate, schools used in this study were located in urban settings where the schools had similar socio economic and student demographic compositions. Teacher experience in the sample ranged from 1 to 35 years of teaching therefore these findings may not generalise well to schools or systems where teachers have less variation in experience. As mentioned earlier, teacher experience influences many facets of teacher coping, it is therefore important to consider the limitations the convenience nature of this sample may present.

Data for this study were collected using self report instruments, the limitations of which have been repeatedly raised across the literature. However given the transactional model of stress and coping used to underpin the current research, consideration must be given to the cognitive process by which perceived stressors are weighed against coping resources, self report data are critical to understand psychological coping in mainstream teachers.

Future research should determine whether a larger and more diverse sample of schools result in, between school variability according to demographic, region and socio economic status. A larger and more diverse sample of schools may provide additional insight into the type of psychological coping strategies employed by teachers working with students in rural and lower socio economic environments. In order to access a broader demographic of teachers and gain important quantitative data, an alternative method of data collection should be considered such as an online questionnaire. Located at a central website, the questionnaire could be accessed confidentially away from the

school environment in the teachers own time which may alleviate response burden and the issues of distribution and collection.

### **Summary and Conclusion**

The present study investigated the relationships between psychological coping, self efficacy, stress and adaptiveness. Results lend support not only to the hypotheses above but also to previous research that has identified a link between the use of coping strategies, teacher stress and self efficacy. While the current results did not indicate a link between psychological coping and adaptiveness, further consideration should be given to investigating the nature of this relationship.

This study indicated that psychological coping strategies were predicted both positively and negatively by teacher stress, self efficacy and years of teaching which demonstrated that not only are these important constructs in predicting coping strategies but also that effective psychological coping requires different strategies for different situations.

The study also showed that it is necessary to match coping resources such as self efficacy, adaptiveness and teaching experience with respective coping strategies as each construct may influence coping strategies separately. Previous research has indicated that different coping strategies have different implications for success in coping with stress therefore given the current findings, future research could pay more attention to specific or different coping strategies and the way they function as a coping unit for teachers of students with LD.

This research adds support to previous evidence which indicates the need to identify and assist teachers of students with and without LD in mainstream classrooms who are at risk of maladaptive coping or experiencing negative outcomes as a result of stress. Moreover, interventions could be designed to develop teachers' adaptive coping strategies which could bring about more positive outcomes. However, there are still questions to be considered. Future studies could explore how effective the

psychological coping styles identified in the present study are for teachers of students with LD in Australian mainstream classrooms who bring with them the experience of different current social and cultural contexts.

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## Appendix A

Dear Principal,

My name is Coralyn Dick and I am currently undertaking a Bachelor of Science Psychology Honours degree at Edith Cowan University. As part of my degree, I am required to undertake a research project. The Faculty of Computing, Health and Science Human Research Ethics Committee has approved this research. I am interested in understanding how teachers cope with the challenges of teaching students with and without learning difficulties in mainstream classrooms.

I am requesting your permission to conduct the study in your school. I have received permission from the Department of Education and Training to approach the school. The research will require primary school teachers who currently teach students with and without learning difficulties in their classroom to complete a questionnaire. Participation is voluntary and confidential and no identifying information is required. Teachers will be required to complete a questionnaire which will take approximately 10-15 minutes.

I will telephone you in a week to clarify any questions or issues you may have about the research. If you are willing to permit the study to take place, please would you distribute the questionnaires to potential participants? If you have any queries please do not hesitate to contact me Coralyn Dick by email on [cdick@student.ecu.edu.au](mailto:cdick@student.ecu.edu.au) or alternatively on [REDACTED] or my supervisor Associate Professor Lynne Cohen on 6304 5575. If you wish to speak to someone independent of this study, please contact fourth year coordinator Justine Dandy on 6304 5105.

Thank you for taking the time to consider your involvement and I look forward to speaking with you further.

Coralyn Dick

## Information Letter

My name is Coralyn Dick and I am conducting this research project as part of my Bachelor of Science Honours Program in Psychology at Edith Cowan University. The Faculty of Computing, Health and Science Human Research Ethics Committee has approved this research. I am interested in understanding how teachers cope with the challenges of teaching students with and without learning difficulties in mainstream classrooms.

I have permission from the Department of Education and Training and your principal for your school to participate in the research. The research will require primary school teachers who currently teach students with and without learning difficulties in their classroom to complete a questionnaire. Participation is voluntary and confidential and no identifying information is required. You will be required to complete a questionnaire which will take approximately 10-15 minutes. If you are willing to participate in this study, please obtain a questionnaire from the principal. The completed questionnaire should be placed in the envelope provided and placed in the box located in the principal's office.

If you have any queries please do not hesitate to contact me Coralyn Dick by email on [cdick@student.ecu.edu.au](mailto:cdick@student.ecu.edu.au) or alternatively on [REDACTED] or my supervisor Associate Professor Lynne Cohen on 6304 5575. If you wish to speak to someone independent of this study, please contact fourth year coordinator Justine Dandy on 6304 5105.

Thank you for taking the time to consider your involvement and I look forward to your participation in this study.

Coralyn Dick

Appendix C

**Demographic Questions**

Demographic Information

Gender: M/ F

Number of Years Teaching

Educational Qualifications Achieved:

Training:

Grade taught:

Current number of students:

Number of students with learning difficulties in your classroom:

## Appendix D

**Brief COPE**

These items deal with ways you've been coping with the stress of teaching students both with and without learning difficulties in your mainstream classrooms. There are many ways to try to deal with problems. These items ask what you've been doing to cope with various problems. Obviously, different people deal with things in different ways, but I'm interested in how you've tried to deal with these particular problems. Each item says something about a particular way of coping. I want to know to what extent you've been doing what the item says. How much or how frequently. Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Use these response choices. Try to rate each item separately in your mind. Make your answers as true FOR YOU as you can.

- 1 = I haven't been doing this at all
- 2 = I've been doing this a little bit
- 3 = I've been doing this a medium amount
- 4 = I've been doing this a lot

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been using alcohol or other drugs to make myself feel better.
4. I've been getting emotional support from others.
5. I've been giving up trying to deal with it.
6. I've been taking action to try to make the situation better.
7. I've been saying things to let my unpleasant feelings escape.
8. I've been getting help and advice from other people.
9. I've been using alcohol or other drugs to help me get through it.
10. I've been trying to see it in a different light, to make it seem more positive.
11. I've been trying to come up with a strategy about what to do.
12. I've been getting comfort and understanding from someone.
13. I've been giving up the attempt to cope.
14. I've been looking for something good in what is happening.
15. I've been making jokes about it.
16. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
17. I've been expressing my negative feelings.
18. I've been trying to get advice or help from other people about what to do.
19. I've been thinking hard about what steps to take.
20. I've been finding fun in the situation.

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Self-distraction, items 1 and 16

Active coping, items 2 and 6

Substance use, items 3 and 9

Use of emotional support, items 4 and 12

Use of instrumental support, items 8 and 18

Behavioural disengagement, items 5 and 13

Venting, items 7 and 17

Positive reframing, items 10 and 14

Planning, items 11 and 19

Humour, items 15 and 20

## Appendix E

**Teacher Stress Inventory**

The following statements are a number of teacher concerns. Please read each of the following statements carefully and identify those factors which cause you stress in your present position. Then indicate how strongly you feel concerned about the issue by ticking the appropriate box;

‘Not Concerned’, ‘Mildly Concerned’, ‘Concerned’, ‘Very Concerned’ and  
‘Extremely Concerned’

If you have not experienced any feelings of concern about any of these issues or it is not appropriate please tick ‘Not Concerned’.

- 1 I easily over-commit myself.
- 2 I become impatient if others do things slowly
- 3 I have to try doing more than one thing at a time
- 4 I have little time to relax/enjoy the time of day
- 5 I think about unrelated matters during conversation
- 6 I feel uncomfortable wasting time
- 7 There isn't enough time to get things done
- 8 There is little time to prepare for my next lessons
- 9 There is too much work to do
- 10 The pace of the school day is too fast
- 11 My caseload/ class is too big
- 12 My personal priorities are being short-changed
- 13 I Lack promotion and/or advancement opportunities
- 14 I need more professional development opportunities
- 15 I need more status and respect on my job
- 16 I receive and inadequate salary for the work I do
- 17 I lack recognition for the extra work and/or good teaching I do
- I feel frustrated:
  - 18 because of discipline problems in my classroom.
  - 19 trying to keep all the students on task
  - 20 attempting to teach student who are poorly motivated
  - 21 when my authority is rejected by pupils/ administration
  - 22 My personal opinions are not sufficiently aired.
  - 23 I lack control over decisions made about classroom activities.
  - 24 I am not emotionally/ intellectually stimulated on the job.
  - 25 I lack opportunities for professional improvement.
- I respond to stress:
  - 26 by feeling vulnerable.
  - 27 by feeling unable to cope.
  - 28 by feeling depressed.
  - 29 by feeling anxious.

## Appendix F

**Teachers' Sense of Efficacy Scale<sup>1</sup> (short form)**

Teacher Beliefs		How much can you do?								
Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.		Nothing	Very Little	Some Influence	Quite A Bit	A Great Deal				
1.	How much can you do to control disruptive behavior in the classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2.	How much can you do to motivate students who show low interest in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3.	How much can you do to get students to believe they can do well in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4.	How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5.	To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6.	How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7.	How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8.	How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9.	How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10.	To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11.	How much can you assist families in helping their children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12.	How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

## Appendix G

**Personal Functioning Inventory**

This questionnaire is about individual styles of dealing with personal problems. Each item below concerns some aspect of your personal approach to such problems. There are no right or wrong answers except in terms of their accuracy in conveying how *you* deal with your problems. Therefore, for each statement below, please put the number in the slot to the right which best reflects how much you agree or disagree with that statement.

1 = Strongly Disagree; 2 = Disagree; 3 = Unsure; 4 = Agree; 5 = Strongly Agree

1. I have no trouble staying calm during differences of opinion with my friends.
2. Even remotely possible threatening events worry me.
3. I don't get too upset by the occasional social rejection.
4. I tend to worry too much about my problems, even ones which eventually go away by themselves.
5. If I think somebody wants to harm me, I often lose my cool.
6. I can relax and enjoy myself even when waiting to find out about something important.
7. I've learned not to get down on myself for minor mistakes I make.
8. The personal limitations of people I deal with often exceed the limits of my patience.
9. When my rights are threatened, I get too upset to act in the most effective way.
10. When things go badly, I find it hard to avoid even worse disaster.
11. I often lose my cool and detachment in dealing with interpersonal issues.
12. I resist getting bitter over minor slights by others.
13. I rarely permit criticism to make me angry.
14. When my productivity at work/school wavers or falls, I try to keep my cool.
15. I can't stop dwelling on people's criticism of me, whether it seems valid or not.
16. Under pressure, I tend to make hasty decisions.
17. I keep my temper under control in business negotiations.
18. I've been known to magnify my personal problems beyond their real level of seriousness.
19. When I'm waiting to find out about something important, I just can't get it out of my mind.
20. I try to be fully informed and thoughtful about the choices I have to make.
21. Past embarrassments tend to haunt me for a long time.
22. I generally stay cool, even when I think somebody else wants to harm me.
23. I often find it impossible to control my anger.
24. I generally learn from my mistakes more than I let them upset me.
25. Quite often, being emotionally upset impairs my dealing with major problems.
26. I rarely permit others to manipulate my anger to their own ends.
27. I'm not very practical in dealing with everyday problems.
28. Minor physical ailments don't upset me much.
29. If I can't control whether something bad is going to happen, I try not to worry about it.
30. I try to be calm and fair in dealing with interpersonal issues.

Appendix H

Figure 1  
*Scatterplot and Histogram of Problem-Focused Predictor Variables*

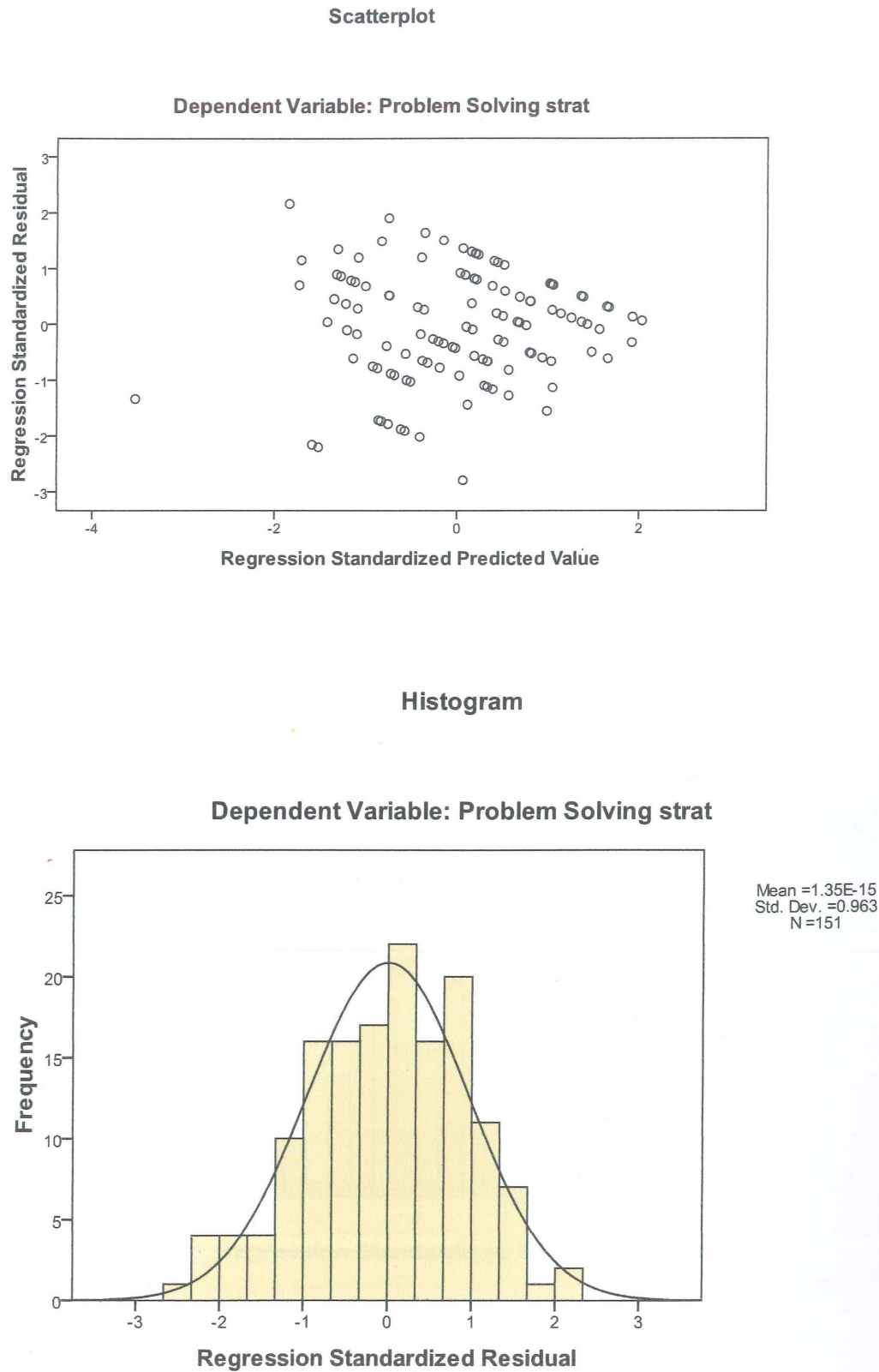




Figure 2

Scatterplot and Histogram of Emotion-Focused Predictor Variables

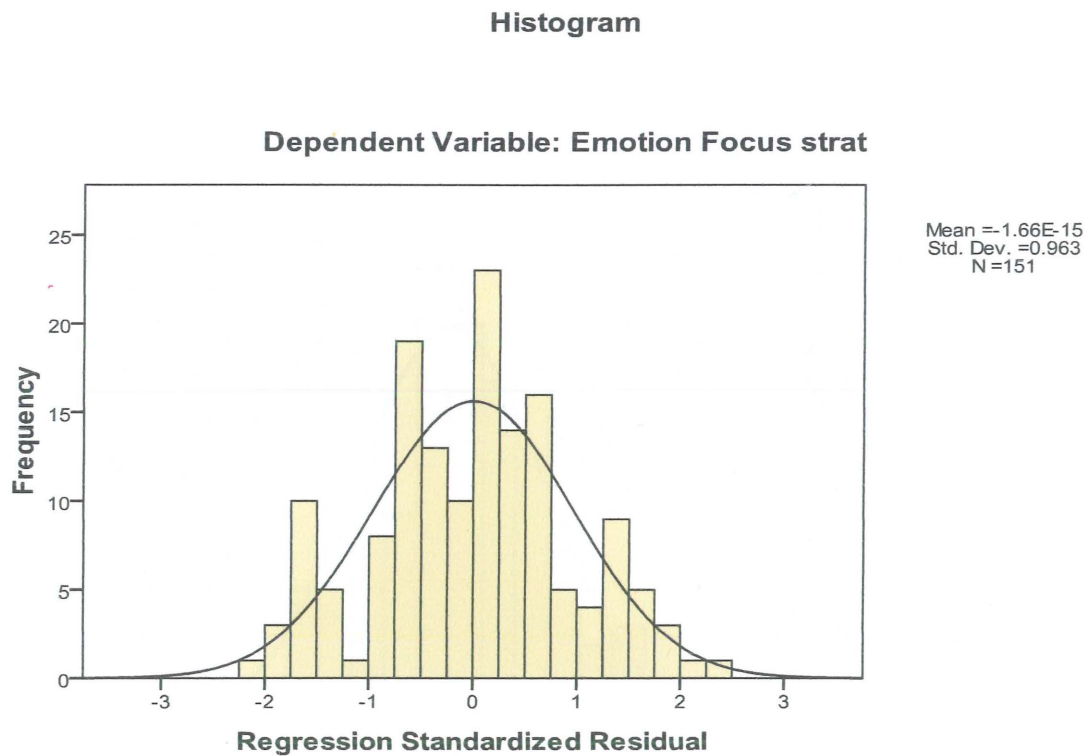
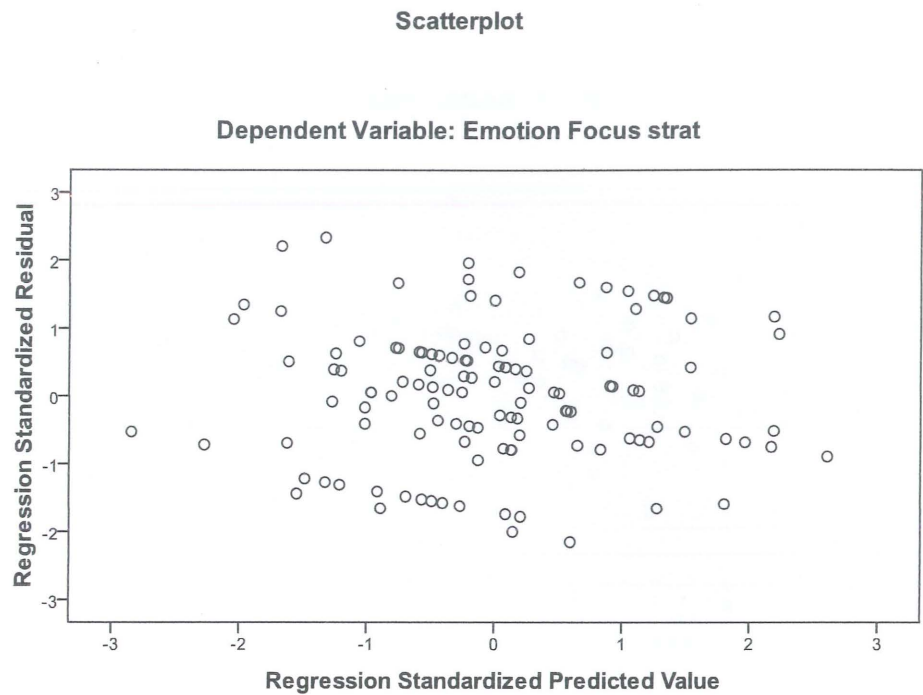


Figure 3

Scatterplot and Histogram of Avoidant Predictor Variables

