


**Stress, Coping and Mental Health:
Applications to Adolescents in Custody**

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I declare that this report is my original work and that the contributions of
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Literature Review

Stress, Coping, and Mental Illness in Adolescents: Theoretical Approaches and Empirical Findings

Rosie Bickel (B.A. Hons.)

Abstract

Stress and coping are some of the most widely studied phenomena in psychology today.

Several important theories concerning stress, resilience, and coping have been postulated.

Careful review of the literature in this area suggests that firstly stress is a heterogeneous set of environmental situations or events which can be classified and which require different responses and result in different effects; secondly a relationship between types of stress, levels of perceived control, styles of coping and measures of well-being or maladjustment exists.

Further review of research concerning the link between mental illness and coping strategies reveals that adults and adolescents at risk of, or currently suffering from depression or anxiety are more likely to use less problem-focused coping and more emotion-focused coping. It is suggested that conduct disordered adolescents are more likely to have experienced chronic severe stress and therefore use more emotion-focused coping responses. Further research is necessary, linking coping responses of conduct disordered adolescents with different types of stress, and differentiating between pure and comorbid conduct disordered youth.

This review concerns the theories and empirical findings relating to stress, coping, and mental illness in adults and specifically adolescents. It has three main aims: first, to present and evaluate theoretical explanations of stress and resilience; second to present and evaluate theoretical explanations of coping, particularly as it applies to adolescence; and third to summarise and clarify empirical findings concerning coping and mental illness of adults and adolescents.

Stress and coping are some of the most widely studied phenomena in psychology today. A literature search reveals that over 90,000 papers on the subject words stress and coping have been published since 1977. This review can therefore not examine every paper, but rather focuses on several which are repeatedly referred to in the literature, are acknowledged as groundbreakers, and/or summarise well conducted studies on the subject. A definition of stress will not be offered at this point, but rather the evaluation of theories of stress offered below provides a variety of contrasting definitions of stress, depending on the theory.

Lazarus (1991, p. 112) defined coping as "... the cognitive and behavioural efforts to manage specific external or internal demands (and conflicts between them) that are appraised as taxing or exceeding the resources of a person." Theories of coping have been accepted as a way of understanding how people deal with life circumstances and how they can be helped to deal with these better, in a manner which improves their well-being.

The first area of interest concerns theoretical explanations of stress, resilience, and their functions on human behaviour and experience. This review supports the contention that stress is a heterogeneous set of environmental situations or events which can be classified and which require different responses and result in different effects.

Stress and Resilience

Stress

History of stress research. The strong interest in stress, starting in the 1970's, was partly precipitated by a turn in clinical psychology and psychiatry away from a strictly intrapsychic emphasis, in which the processes thought to underlie psychopathology resided primarily within the person, and towards an environmental focus. Literature concerned with stress reflected researchers' belief that stress is a major factor affecting people's lives, is intimately tied with mental health, and is very possibly linked with many problems of physical health.

Stress theories and definitions. Stimulus-response definitions were the first to be developed, often by physiologically focused researchers, notably Hans Selye (1950; 1956; 1974; 1975) who defined stress as an orchestrated set of bodily defences against any form of noxious stimulus (including psychological threats), a reaction he called the General Adaptation Syndrome. Lazarus and Folkman (1966) rejected this model as circular because one only knows something is stressful based on the response of the organism. However, Selye's definition included an understanding that stressors are those environmental stimuli which *commonly* produce psychological or physical distress in an organism, including severe stressors such as job loss, or loss of a loved one.

Spielberger (1966) further argued that what these events have in common is that they threaten the physical or psychological integrity of the organism. Thus, the organism was included in the model, but was not seen as important as the response, and especially the stimulus, which was assumed to have objective qualities resulting in stress for all equivalent organisms. This theory is most closely associated with the scientific discipline of structural

engineering, which suggests that certain environmental stressors place stress on an object, producing a strain. It is not often considered in modern stress literature, probably because it did not consider cognitive factors and the impact they have on the stress response.

Nevertheless, this theory may apply for more serious stressors, such as environmental disasters, which, it can be safely assumed, would constitute a stressful event for all people involved.

The stress as what is appraised model was coined by Lazarus (1966) and by Lazarus & Folkman (1984). They defined psychological stress as “a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being”. They posited that psychological stress and the reaction of people to it is not a simple process, but an organizing concept for understanding a wide range of phenomena concerning human adaptation, consisting of many variables and processes. In contrast to the stimulus-response model, Lazarus and Folkman suggested that the key to stress is the idiographic (individual) appraisal of the event, rather than its objective qualities. When confronted with environmental circumstances individuals make a primary appraisal of whether the event is threatening to them. They then make a secondary appraisal of whether they have the coping resources to combat the threat. If they judge that either the event is not threatening or they have the necessary resources to offset the threat, stress will not occur.

Lazarus and Folkman suggested that their model was most suitable to explain generic/normative stressors, which do not consistently produce a stress response in people, but for which there is a large variety of responses. In addition, the appraisal model suggested that coping is intricately linked to stress, and that coping also is dependent on appraisal, so emotion-focused coping is used when the stressor is appraised as being unchangeable, and

problem-focused coping is used when the stressor is appraised as amenable to change.

Lazarus and Folkman identified three major types of appraisal of a potential stressor: harm-loss, threat, and challenge. People who anticipate that a stressor is a chance for mastery or gain, and those who attribute the cause of the stressor to external and transient factors, may cope more actively and be more likely to experience positive outcomes. However, when a stressful situation, such as a rape or an accident, is seen as having been potentially avoidable, an internal attribution may be associated with better outcome. Bandura's (1977) self-efficacy model was widely applied to show that the appraisal of stressful events' permanence, and individuals' locus of control, leads to an event being judged as stressful or challenging. The stress literature generally considered Folkman and Lazarus' model to be too general to be transformed into operational definitions and empirically tested (Hobfoll, Schwarzer, & Chon, 1998).

Resource or resilience theories of stress focused on the notion of resilience, or why, given the number of stressors and pathogens in the environment, so many people remain healthy (Hobfoll, 1986, 1988; Hobfoll et al., 1998). Even psychophysiology and medicine moved away from the view that disease is strictly a product of environmental agents, such as bacteria, viruses, and damaging accidents and towards acceptance of the idea that vulnerability to disease or "host resistance" is also important. The previous concept of a disease being caused by only one external source gave way to a newer concept of illness, namely that a pathogen must be united with a susceptible organism. Rather than seeing coping resources as a secondary result of ideographic appraisal, resource-based theories of stress considered coping resources as a primary focus. They emphasised the importance of a match between the requirements of the stressful situation and the resources utilised by the individual, i.e. relevant resources. They thus focused on the importance of an individual

actually being capable of using relevant resources, rather than merely appraising their coping ability. They suggested that chronic demand on poor people's often weak resources is the critical factor in their higher prevalence of psychopathology. In contrast to Lazarus and Folkman (1984), their contention was that it is not the perception of resource demands, but their reality, which is important. They thus challenged the concept of free choice per se, as suggested by Lazarus and Folkman (1984) and Bandura (1977), allocating it a much smaller segment of the whole. Resource-based models of stress thus took the concept of stress into a wider, or ecological, arena. Instead of purely focusing on individual perception and reaction, they also took into account environmental factors, such as social support by family members, friends, or institutional figures, marital status, socio-economic level, employment and level of education. They argued that the degree of stress felt by an individual is dependant on both their internal and external resources, and the relevance of these resources to the external stressor.

Holahan and Moos (1986) expanded the resource-based models of stress by suggesting an interaction between internal and external resources, that a deterioration of internal resources may effect the availability of external resources, and vice versa. For instance, if interpersonal skills deteriorate, this may affect the availability of friends and family, and if a close friend or family member dies, this may deplete existing coping resources. Moos and Schaefer (1984) went further to outline how the environmental system (financial, home, and community living situation, and characteristics of relationships with family members, work associates, and friends), the personal system (sociodemographic characteristics, cognitive ability, health status, motivation, and self-efficacy), the stressor, cognitive appraisal and coping responses, and outcomes of the stressful situation all interact with each other, in an ecological model of stress and coping.

Ecological resource-based theories were extended by interpersonal resource-based models of stress theories focusing on interpersonal aspects of stress and coping, and their interaction, positing that these aspects were the most important components of the stress-coping interaction. Vaux (1988) viewed social support as a metaconstruct that contained many subconstructs involving social attachments, social assistance, and the perception of social aid. These models have the advantage of being more specific, and therefore empirically testable, and were thus the subject of extensive research. Several types of social support were investigated, such as instrumental support (assist with a problem), tangible support (donate goods), informational support and emotional support. The influence of close personal relationships on health and well-being, and of their absence on illness and premature death was well documented (Berkman, 1995; Berkman & Syme, 1979). The effect of individuals' social integration on their ability to manage stressors, and, ultimately on their mortality, also received considerable attention (Berkman, Leo-Summers, & Horwitz, 1992; Orth-Gomer, Unden, & Edwards, 1988; Ruberman & Weinblatt, 1984).

In their interpersonal model of stress and coping, Carpenter and Scott (1992) focused on the interactional dimensions of interpersonal stress. They pointed out that stress outcomes and stressors can be interchangeable, i.e. poor social functioning may lead to depression, but depression also leads to poor social functioning. Those with better interpersonal functioning are more likely to develop relationships with people who also have high functioning, which reduces the amount of stress in their environment. For example, marrying a high functioning partner can mean a well organised home life, or better family income due to higher earning power. A positive parent-child relationship means a child with good self esteem and sense of responsibility, and thus minimises family conflict and results in a sharing of household workload. Also, a person with good coping resources will be more likely to say no to a

situation likely to lead to high stress, such as partnership with an abusive partner or an unsupportable increase in workload. Carpenter and Scott proposed that a combination of relational competence and social support leads to either positive or negative beliefs about the self and others, which leads to an appraisal of the stressor, which leads to the kind of coping employed by a person, and is followed by relevant outcomes of the stressful situation. In this model social support and relational competence also affected coping responses directly. Carpenter and Scott thus proposed a combination of the stress as appraised and resource-based stress models, while focusing on interpersonal stress, which they believed to be the most important source of stress.

Finally, Compas (1987b), who emphasised the effects of stress on adolescents in particular, considered stress as a heterogeneous set of environmental situations or events which vary along a number of dimensions. These dimensions include the degree to which the stressor is normative or atypical, large or small in magnitude of occurrence, and acute or chronic in nature (Compas, 1987b). Considering these dimensions, Compas (1995) organised stress into three broad categories important for understanding mental health outcomes and coping responses for adolescents – generic or normative stress, severe acute stress and severe chronic stress.

Generic or normative stress includes daily stress and hassles, as well as major events such as transition to a new school. Family experiences and parent-child relationships have been found to relate to children's and adolescents' psychological development (Patterson, 1982; Rutter, 1981a; Rutter & Giller, 1983). Normative stress also appears to lead to internalising and externalising symptoms during adolescence, as established in several longitudinal studies (Compas, Howell, Phares, Williams, & Giunta, 1989a; DuBois, Feiner, Brand, Adan, & Evans, 1992; Wagner & Compas, 1990). Normative stress has been found at

times to be even more important in adaptation and health, than in maladjustment (e.g. DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982; Kanner, Coyne, Schaefer, & Lazarus, 1981), and the relationship between this type of stress and maladjustment has been modest compared to more severe types of stress (Compas, 1995).

Severe acute stress includes events such as serious illness or injury, cataclysms and other disasters, and loss of a loved one through death or parental divorce. Hetherington (1980) and Wallerstein and Kelly (1980) discovered relationships of prior parental divorce with severe emotional and behavioural problems in children and adolescents. Diagnosis of cancer in a mother or father often results in depression and/or anxiety for adolescents (Compas et al., 1996) as does the death of a loved one (Bowlby, 1969; Lindemann, 1944; Parkes, 1972). Severe chronic stress includes ongoing exposure to poverty, neighbourhood or familial violence, racism and parental psychopathology. Risk factors particularly for behavioural problems such as conduct disorder and substance abuse are commonly cited as including abuse, domestic violence, unemployment and homelessness, poverty, imprisonment of parents, disability of parents (Commonwealth Department of Health and Aged Care, 2000; Fuller, 1998; Hemphill, 1996). These risk factors in turn have been suggested by a multitude of studies investigating commonalities amongst people suffering from mental health problems. Parental psychopathology, especially parental depression, has been found to create a strong risk for depression in adolescents, but also for a variety of other internalising and externalising problems (Downey & Coyne, 1990; Hammen, 1991). It makes sense that severe chronic stress has been found to be related to the most severe pathologies, in childhood, adolescence and adulthood (Compas, 1995).

Resilience

A major understanding in the literature occurred with the realisation that not everyone perceives stressful situations as stressful. Although the risk of depression following disturbing life events is increased, it is usual for most people not to become depressed in spite of the stressful experiences (Paykel, 1978). This understanding introduced the concept of resilience, which Rutter (1985) defined as a resistance to stress which is relative, based on environmental and constitutional factors, and the degree of which varies over time and according to circumstances.

Research into resilience took place particularly in the area of depression, in the search for buffering agents which would serve a protective function in the face of a stressor. Protective factors reduce the likelihood that depression, or another mental illness will develop. They can be protective, reducing the exposure to stress, or they may be compensatory, reducing the effect of stressors (Rutter, 1985). The presence of more protective factors, regardless of the number of stressors, has been shown to lower the level of risk of developing a mental illness. Protective factors currently understood to underlie resilience are summarised in Table 1.

Table 1

Protective factors potentially inhibiting the development of mental health problems and mental disorders in individuals (particularly children) (Commonwealth Department of Health and Aged Care, 2000)

Individual factors	Family factors	School context	Life events and situations	Community and cultural factors
<ul style="list-style-type: none"> • easy temperament • adequate nutrition • attachment to family • above-average intelligence • school achievement • problem solving skills • internal locus of control • social competence • social skills • good coping style • optimism • moral beliefs • values • positive self-related cognitions 	<ul style="list-style-type: none"> • supportive caring parents • family harmony • secure and stable family • small family size • more than 2 years between siblings • responsibility within the family (for child or adult) • supportive relationships with other adult (for a child or adult) • strong family norms and morality 	<ul style="list-style-type: none"> • sense of belonging • positive school climate • prosocial peer group • required responsibility and helpfulness • opportunities for some success and recognition of achievement • school norms against violence 	<ul style="list-style-type: none"> • involvement with significant other person (partner/mentor) • availability of opportunities at critical turning points or major life transitions • economic security • good physical health 	<ul style="list-style-type: none"> • sense of connectedness • attachment to and networks within the community • participation in church or other community group • strong cultural identity and ethnic pride • access to support services • community and/or cultural norms against violence

Table 1 shows that resilience depends on a wide field of factors, ranging from several kinds of environmental influence to individual differences. Furthermore, in line with Carpenter and Scott's interactional model (1992), the factors interact with each other, so that, for instance, a secure and stable family life will lead to a child developing a good coping style, which will in turn affect which outcomes are chosen from stressful situations, thus affecting the child's environment. Environmental factors have been largely considered to be outside of the individual's control while, particularly in the field of therapy, individual factors are

perceived to be more amenable to change, improving individuals' resilience and thus leading to improved mental health. It is for this reason that the understanding and measurement of coping responses, and their classification into productive (i.e. generating well-being) and unproductive (i.e. decreasing well-being) coping responses has received considerable attention, both in the literature, and in applied psychology.

Summary

The above chapter summarises the history and more current theories of stress and how it relates to personal distress. Most of these theories build on each other and overlap, however the most important concepts are that stress, and therefore its effect on individuals and the strategies required to cope with it, varies in terms of its severity and duration. Also, the concept that not everyone finds the same stressors stressful and that this depends on their inherent or learnt resilience, or personal resources, is significant. The final section lists both external and internal factors which contribute to resilience, or an ability to cope with stressors.

Coping in Adolescence

Adolescence is a developmental period in which the individual is confronted not only with a dramatic change in body contours, but also with a series of complex and inter-related developmental tasks (such as autonomy from parents, establishing heterosexual relationships and developing an occupational identity). There is growing evidence that youth are experiencing stress as never before (Diekstra, 1995). Reviews of psychosocial disturbances in children and youth (Rutter, 1985; Rutter & Smith, 1995) highlighted the many social and situational determinants of their distress. Given the inevitable nature of some sources of stress, the skills and resources that adolescents bring to bear on trying to cope with the stresses they face, will be important determinants of the course of their psychological adjustment

during adolescence and adulthood. Efforts to alter stressful conditions, strategies for managing negative emotions experienced under stress, and support received from family and friends will all contribute to successful resolution of stress. On the other hand, some attempts at coping and certain types of interpersonal relationships will serve to worsen the impact of stress and contribute to maladaptive development.

The next section will investigate theories of coping. Most of these focused on adolescent coping responses, as many interventions addressing coping skills were designed for adolescents, because adolescents are seen as having the cognitive ability to apply learning in this area (as contrasted with children), and because they are more flexible and open to change (as compared to adults).

Coping Theories

Coping theories can be distinguished on two main dimensions: a) the permanence of coping and coping styles; and b) the classification of components hypothesised to comprise coping.

The permanence of coping and coping styles. Two main traditions have been documented in the literature: firstly, theories assessing coping as a relatively stable characteristic of the individual, and secondly theories assessing coping as an episodic response (Cohen, 1987). The first approach was a trait approach, emphasising the individual's tendency to use a particular mode of coping across a variety of situations. For example, Krohne (1993) differentiated between individuals on the basis of the type of situational aspects that are stressful or threatening to them, using a classification which is based on repressive (avoidant) and sensitised (vigilant) coping strategies. The second approach was a state approach, conceiving of coping as a dynamic process that involves

evaluations and reevaluations of the situation as well as possible reactions, which, in turn, affect both actual behaviour and threat appraisals. This type of orientation, originating in Lazarus' cognitive theory of stress and coping (1984), contended that coping behaviour should be observed in specific contexts as the stressful encounter unfolds, and in relation to different aspects of the same episode.

Classification of coping strategies. Two main classifications have been used to summarise coping responses: firstly the problem-focused versus emotion-focused coping model and secondly the approach versus avoidance coping model. The problem-focused versus emotion-focused coping model has been widely used and classifies coping responses according to their function (Compas, 1995; Folkman & Lazarus, 1980; Frydenberg, 1999). Coping efforts can focus on modifying the stressor (problem-focused) or on regulating emotional states that may accompany the stressor (emotion-focused). Brotman Band & Weisz (1988) called problem-focused coping "primary control", and emotion-focused coping "secondary control".

The approach (or active, oriented towards threat) versus avoidance (or passive, oriented away from threat) coping model emphasised the orientation of coping. Approach coping strategies include cognitive attempts to change ways of thinking about the problem and behavioural attempts to resolve events by dealing directly with the problem or its aftermath. Avoidance coping strategies include cognitive attempts to deny or minimise threat, and behavioural attempts to escape from or avoid confronting the situation or to relieve tension by expressing one's emotions (Moos, 1993). Frydenberg & Lewis (1993) distinguished between productive coping, which includes focusing on the problem, seeking relaxing diversions and physical recreation, and non-productive coping, which includes worry, tension reduction, and

ignoring the problem. Their classification can thus be seen as roughly similar to the approach versus avoidance distinction.

The approach/avoidance model has been considered equivalent to the problem/emotion focused model, in that approach coping has been equated with problem-focused coping and avoidance coping with emotion-focused coping (Moos, 1993). Thus, emotion-focused coping includes taking drugs and alcohol (Spangenberg & Campbell, 1999) and distraction (Broderick, 1998), which Moos (1993), in his Coping Responses Inventory, called “seeking alternative rewards”, and classed as a behavioural avoidance coping strategy. Another emotion-focused coping response is withdrawal (Weickgenant, Slater, Patterson, Atkinson, & Hampton, 1993), which Moos (1993) called “Acceptance/Resignation”, and classed as a cognitive avoidance coping strategy. Tension reduction and focusing on and venting emotions (Broderick, 1998; Vollrath, Alnaes, & Torgerson, 1996) have also been classified as emotion-focused coping responses, and these were called “emotional discharge” by Moos (1993) and classed as a behavioural avoidance coping strategy. Problem-focused coping includes solving the problem, focusing on the positive, and seeking social support (Compas, 1995), and these coping skills were called problem solving, positive reappraisal, and seeking guidance and support by Moos (1993), and classed as approach coping. It is therefore suggested here, that the classifications of emotion-focused coping and avoidance coping are largely equivalent, as are problem-focused coping and approach coping, and they will be used interchangeably in this review.

Coping and Control

All studies investigating coping have used self-report coping inventories to assess coping strategies. Problem-focused coping has been found to be related to individual perceptions of control over the stressor, while emotion-focused coping was related to the level

of distress experienced by the individual (Compas, Malcarne, & Fondacaro, 1988; Forsythe & Compas, 1987; Speirs & Martin, 1999; Worsham, Ey, & Compas, 1996). Thus, the more control individuals felt they had over a stressor, the more they engaged in problem-focused coping. The more distress they felt, the more they engaged in emotion-focused coping. These findings have also been related to depression, in that those people who felt they had more control, and used more problem-focused coping, had lower levels of depression than people who felt they had less control and used more emotion-focused coping (see also Seligman, 1991).

Other authors suggested that this approach is true, but too simplistic: that the factor of the stressor needs to be built in to the equation as well. They suggested that problem-focused coping is not all good, and emotion-focused coping is not all bad. Problem-focused efforts have been found to be more adaptive when they are directed towards aspects of the person-environment relationship that are perceived as changeable, whereas emotion-focused efforts are more adaptive when a situation is recognised as uncontrollable. For example, Brotman, Band and Weisz (1988) found that school failure evoked high levels of problem-focused (or primary control) coping, whereas medical stress elicited emotion-focused (or secondary control) coping. Weisz (1986) suggested that a key task engendering well-being involves learning to distinguish between situations (usually situations of generic stress) where persistence, which can be understood as the continued use of problem-focused coping, will be successful and situations (usually situations of acute or chronic severe stress) where it would be fruitless. Thus, when adolescents thought they had control over the chronic severe stress of their parent's depression, they engaged in more problem-focused coping, but also became more depressed. Those who realised they had little control over this situation engaged in more emotion-focused coping, and were less depressed (Beardslee & Podorefsky, 1988).

Similarly, when adolescents experienced the acute severe stress of the diagnosis of a parent's cancer, those who had higher levels of perceived control and problem-focused coping also had higher levels of psychological symptoms of anxiety and depression (Worsham et al., 1996).

It has been hypothesised that particularly the emotion-focused coping strategies of distraction and emotional discharge can be useful in severe stress situations (Compas, 1995). When Ben-Zur and Zeidner (1995) compared the coping strategies of 462 Israelis during the Persian Gulf war (an acute stress situation) with those of 822 Israelis 3 months after the war, they found that the former used a more emotion-focused coping, while the latter used more problem-focused coping. Another study investigating how patients suffering from post-traumatic stress disorder (N=44) differed in the use of coping strategies from depressed patients (N=54) and a control group (N=17) found that the former used considerably more distraction than the latter two groups (Reynolds & Brewin, 1998). These findings were consistent with previous research which suggested that distraction is associated with a reduction in the frequency of unwanted intrusions, a symptom of post-traumatic stress disorder (Salkovskis & Campbell, 1994).

Other researchers have generalised these results to cover all emotion-focused avoidance coping strategies and their effects on the mental health status of 78 survivors of childhood sexual abuse (Sigmon, Greene, Rohan, & Nichols, 1996). Those who said they had used more emotion-focused avoidance coping during their traumatic childhood years currently reported a greater sense of well-being and less symptoms of mental illness than those who had not. The authors suggested that given the lack of control and helplessness associated with childhood sexual abuse (a chronic stress situation), avoidance may be the most practical and advantageous coping option in response to those traumatic situations. Ben-Zur and Zeidner (1995) also found that those Israelis who used emotion-focused coping during the war

suffered from less symptoms of anxiety than those who used problem-focused coping. The powerlessness associated with a war could again be used to explain this phenomenon. These studies are in line with the models of Weisz (1986) and Compass (1995) who suggested that severe acute and chronic stress situations are often characterised by lack of control and therefore require different coping skills than generic stress situations.

Severe chronic stress is more likely to have an impact on long-term future coping behaviour than severe acute stress. A longitudinal study examined how the chronic severe stress of living with an alcoholic or depressed spouse for several years affects their partners (Moos, Finney, & Cronkite, 1991). If their spouses had been alcoholic for two years, patients were more likely to consume alcohol after 10 years, and if their spouses had been depressed for two years, patients were more likely to suffer from depression after 10 years. These stressors were more closely associated with patients alcohol consumption or depression than were patients' demographic characteristics and symptoms at treatment intake. In a review of the effects of problem-solving coping on well-being in acute and chronic severe stress situations, Schaefer & Moos (1992) concluded that given a person has strong resilience, they may be able to effectively cope with an acute severe stress situation and end up becoming happier, stronger and wiser. However chronic severe stress usually leads to a corrosion of resilience, or a failure to develop resilience, and is therefore unlikely to result in an outcome of well-being. Rutter (1987) suggested that human beings need a small amount of stress to develop appropriate coping skills and gain a sense of self-efficacy in the face of stress. However when stress becomes too severe or the quantity of it overwhelming, successful adaptation does not take place and resilience is diminished.

Generic stress, however, results in a different picture: when adolescents, college students, and non-psychiatric samples of adults were faced with interpersonal and academic

stress, high perceived control was related with problem-focused coping and low levels of distress. Low perceived control was related with emotion-focused coping and high levels of distress (Compas et al., 1988; Forsythe & Compas, 1987; Vitaliano, DeWolfe, Majuro, Russo, & Katon, 1990).

Summary. It appears from this summary, that the types of stress are related to levels of perceived control, styles of coping, and measures of well-being or maladjustment. Compas (1995) developed a model to explain these relationships, which is reproduced in Figure 1.

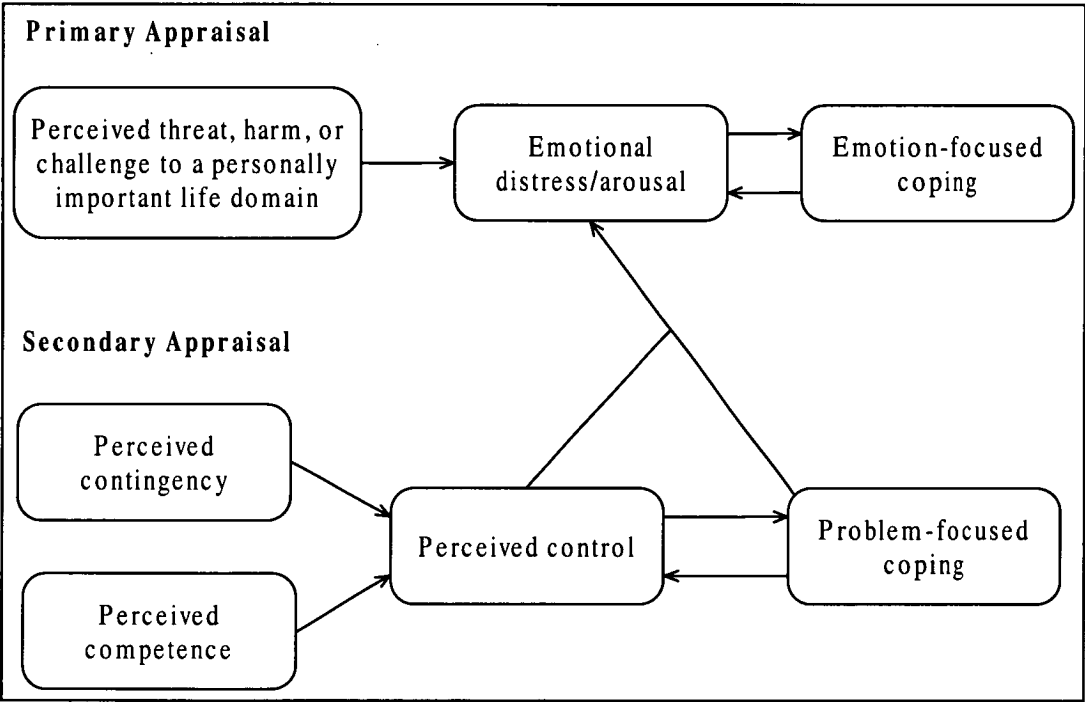


Figure 1. Model of control-related beliefs, coping, and emotional distress.

Mental Illness and Coping

A mental illness is a diagnosable illness that significantly interfere with an individual’s cognitive, emotional or social abilities (Commonwealth Department of Health and Aged Care, 2000). The connection between mental illness and the use of coping strategies has been established in three ways. Firstly, there has been considerable research

into the hypothesis that adults and adolescents suffering from a mental illness are more likely to have deficiencies in coping. Secondly, research has hypothesised that people using non-productive coping are more likely to either contract a mental illness, or recover more slowly from one. Thirdly, outcome studies of interventions teaching productive coping strategies have found that people's resilience to mental illness increases with the use of productive coping skills.

Coping Responses of Adults with a Mental Illness

A considerable number of studies have reported that depressed adults use significantly more avoidance, or emotion-focused coping responses than controls. Most of these studies found that there was also a moderate to strong tendency for depressed adults to use less approach, or problem-focused coping responses than controls, but only in about half of these studies did this tendency reach statistical significance. Table 2 lists only the most recent studies and their key findings.

Two of these studies found similar effects for adults suffering from anxiety disorders (Matson, 1994; Spangenberg & Campbell, 1999). Genest et al. (1990) compared 56 patients suffering from anxiety disorders with 87 controls and found that the former used specifically less cognitive restructuring, less physical stress relief, faced the stressful situation less than controls, and used more distraction than controls.

Coping Responses of Adolescents with a Mental Illness

Depression and Anxiety. Fewer, but more recent studies exist which investigate a relationship between emotional mental illnesses and coping responses for adolescents (see Table 3). Nevertheless, the studies outlined below have sampled a total of approximately 1800 adolescents, and, as for studies with adults, have found without exception that depressed

or anxious adolescents use more avoidant, or emotion-focused, coping strategies. Again, as in studies with adults, only approximately half of these studies reported also that depressed or anxious adolescents use less approach, or problem-focused coping. In most of these studies a moderate to strong tendency was detected, but in some this tendency was not strong enough to reach statistical significance.

Table 2

Recent studies investigating the relationship between coping and depression in adults

Study	Participants	Key Findings
(Bombardier, D'Amico, & Jordan, 1990)	101 patients with chronic conditions	Depressed patients used more emotion-focused coping than non-depressed patients
(Weickgenant, Slater, Patterson, & Atkinson, 1993)	77 males suffering from chronic lower back pain	Patients suffering from depression used more passive-avoidant coping than those without depression
(Landreville, Dube, Lalande, & Alain, 1994)	225 adults older than 57 years	Adults with more depressive symptoms used more avoidant coping, particularly self-blame and escape
(Matson, 1994)	73 carers of disabled people	Depressed carers used more avoidant coping and less problem-solving coping than non depressed carers
(Catanzaro, Horaney, & Creasey, 1995)	96 adults older than 65 years	Adults with more depressive symptoms used more avoidant coping than those with less depressive symptoms
(Satija, Advani, & Nathawat, 1997)	50 depressives 50 controls	Depressives used less problem solving and more avoidance coping than controls
(Surmann, 1999)	70 female registered nurses	Nurses with high depression scores used less active coping than those with low depression scores
(Sears, Urizar, & Evans, 1999)	92 extension agents	Extension agents with high levels of depression used more emotion-oriented coping and less problem-focused coping than those with low levels of depression
(Spangenberg & Campbell, 1999)	53 detoxified alcoholics	Depressed alcoholics used more avoidant coping than non-depressed alcoholics

Table 3

Studies investigating the relationship between coping and depression or anxiety in adolescents

Study	Participants	Mental Illness	Key Findings
(Seiffge-Krenke, 1989b)	43 dysphoric adolescents 37 depressed adolescents 28 adolescent drug abusers	subclinical depression depression	79% of subclinical adolescents, 99% of depressed adolescents, and 93% of drug abusers used withdrawal as their preferred coping strategy
(Ebata & Moos, 1991)	38 controls, 49 depressed youth	depression	Depressed adolescents used more avoidance coping, in particular resigned acceptance, cognitive avoidance, and emotional discharge, than healthy adolescents
(Zeidner, 1994)	198 undergraduates	depression	Students who were depressed used more 'palliative' and less active coping, than non-depressed students
(Endler, Kantor, & Parker, 1994)	272 undergraduates	anxiety	Anxious students used more emotion-oriented and avoidance-oriented coping than non-anxious students
(Chan, 1995)	161 adolescents	depression	Chinese adolescents' depressive symptom levels were related to avoidant coping strategies
(Herman-Stahl, Stemmler, & Petersen, 1996)	603 students	depression	Students classified as approach copers reported the fewest symptoms of depression, while avoidance copers reported the most
(Nigro, 1996)	203 Italian adolescents	anxiety	Anxious adolescents used more avoidant coping and less problem-solving coping than non-anxious adolescents
(Cunningham & Walker, 1997)	94 students	depression	Depressed adolescents used more non-productive coping and less active problem-focused coping than non-depressed adolescents
(Speirs & Martin, 1999)	114 students	depression	Depressed adolescents used more non-productive coping and less productive coping than those who were not depressed
(Ayerst, 1999)	27 street youth, 27 controls	depression	Street youth had higher levels of depression than controls and used more emotion-focused coping, while controls used more problem-focused coping
(Giacobbi & Weinberg, 2000)	73 young athletes	anxiety	Anxious athletes used avoidant coping, such as behavioural disengagement, self-blame and denial, significantly more often than non-anxious athletes

Conduct Disorder. Conduct disorder is a mental illness of children and adolescents

which is identified by serious behaviours reflecting social-rule violations or acts against others leading to significant impairment in everyday functioning at home or at school (Hemphill,

1996; Mandel, 1997; Sanders, Gooley, & Nicholson, 2000). It is defined by overt behaviour problems (fighting, temper tantrums, teasing) and/or covert symptoms (stealing, fire setting, truancy). In the last few decades a large body of research has been accumulating concerning possible risk factors for the development of conduct disorder. Parental characteristics of young people with conduct disorder are particularly important, as they often result in young people suffering from posttraumatic stress disorder or chronic adjustment disorder. Parental characteristics include:

- parental psychopathology (parents suffer from depression, personality disorders, substance abuse disorders, or anti-social personality disorder);
- conflictual relationships (parents' relationships are characterised by discord, divorce, and family breakdown) or absence of the father;
- deficient parenting practices (negative attitudes towards children, verbal and physical abuse of children, lack of attachment between parents and children, ineffective punishment, inept use of positive reinforcers, coercive child behaviours are reinforced); and
- neglect, caused by changing relationships, single parent families, poverty, and parental stress due to domestic violence and financial insecurity.

As many as 70% of conduct-disordered children and adolescents are comorbid, that is they not only have conduct disorder, but also other disorders (Hemphill, 1996; Mandel, 1997; Sanders et al., 2000). The DSM-IV (American Psychiatric Association, 1994) suggests that conduct disorder can be associated with suicidality, learning disorders, attention deficit/hyperactivity disorder (ADHD), anxiety disorders (particularly posttraumatic stress disorder), mood disorders and substance related disorders.

The risk factors and comorbidities of conduct disorder suggest that conduct disordered adolescents would be more likely to use avoidant, or emotion-focused coping responses. According to Compas, and to Weisz (Compas, 1995; Weisz, 1986), people who experience

chronic stress are more likely to use emotion-focused coping, as they do not have control over changing the stressful situations. In addition, Schaefer and Moos (1992) suggested that people who have experienced chronic stress are likely to suffer a corrosion or reduced development of resilience and are therefore more likely to use avoidant, or emotion-focused coping responses. This is because they have a diminished ability to use approach, or problem-focused coping responses. Conduct disordered youth are, according to the literature, much more likely to have experienced chronic abuse, neglect, poverty, and ineffective parenting, than other young people. They are therefore more likely to use emotion-focused, or avoidant, rather than problem-focused, or approach, coping responses.

In the only study found investigating conduct disorder, specifically, and coping responses, Ebata and Moos (1991) discovered just such an effect. They compared the coping responses of 58 adolescents who had been diagnosed with conduct disorder with 38 controls and found that conduct disordered adolescents used more cognitive avoidance, emotional discharge, and seeking alternative rewards (all avoidance coping responses) than controls. When they compared the conduct disordered adolescents with 49 depressed adolescents, they found that the latter used more resigned acceptance and the former used more seeking alternative rewards, but apart from that they were similar in their use of cognitive avoidance and emotional discharge. Tiffany and Tiffany (1996) compared the coping skills of 52 adolescents they classified as suffering from an externalising mental illness (e.g. conduct and oppositional disorders) with 40 classified as internalising (e.g. depression and phobic disorders). The externalising adolescents used more self-directed coping in generic stress situations than the internalising adolescents, who tended to feel at the mercy of events beyond their control. However, they did not detail the coping behaviours, so self-directed coping may have included emotion-focused coping or problem-focused coping.

It is possible, applying Compas's and Weisz's (Compas, 1995; Weisz, 1986) theories to this finding, that in view of the fact that many of the externalising adolescents had probably experienced chronic severe stress, they chose to use emotion-focused coping because a) they had found it useful in severe stress situations in the past; or b) their resilience had been insufficiently developed and they had no access to problem-focused coping. Ludwig and Pittman (1999) examined the relationship between measures of self-efficacy and delinquency in 2,146 adolescents in more detail, and found that non-delinquent adolescents had a significantly higher sense of self-mastery and feeling trustworthy than delinquent adolescents, but the latter felt they had more personal power than the former. It makes sense that people with a history of experiencing chronic stress have a low sense of self-mastery, as experience has taught them that the environment produces stress over which they have no control. However, they appear to be effective in avoiding subsequent depression by taking life into their own hands and thereby experiencing a sense of personal power.

Other studies have examined the relationship between coping and approximations of conduct disorder, such as "social maladjustment" and "social disadvantage". One group of researchers (Curry, Miller, Waugh, & Anderson, 1992), who studied 41 psychiatric adolescent inpatients found that the more socially maladjusted they were, the more they used emotional discharge. Richard and Dodge (1982) asked 960 students to complete a battery of questionnaires and discovered that "deviant" boys were deficient in generating alternative solutions, a cognitive problem-focused coping response. Another study examined the difference in coping responses between 171 suburban, white, middle-class adolescents, and 72 inner-city, black, low-income youth (McKim, Weissberg, Cowen, Gesten, & Rapkin, 1982). The former used more means-ends thinking, social role-taking and alternative solution thinking, and this was related to teacher estimates of better adjustment.

Maladaptive Coping Leads to Mental Illness: Longitudinal Studies

Not only does exposure to chronic severe stress lead to diminished coping ability, but unproductive coping also leads to an increased risk of mental health problems. This has been suggested by a series of longitudinal studies examining the types of coping used by individuals, and resulting mental health outcomes. These studies typically apply a multitude of demographic and other environmental factors to the equation and are thereby able to isolate the relative influence of coping responses used. Several studies with adults have suggested that coping has an etiological connection with subsequent well-being, or mental illness. Miller et al. (1987) interviewed 106 women in Edinburgh and found that the use of “palliative” coping strategies such as use of alcohol or tobacco, rumination or expressed anger was related both to depression or anxiety at the time of interview. A further interview 12 months later revealed that even amongst those well at the first interview, maladaptive coping was related to an onset of mental illness 12 months later.

A group of English researchers (Hynes, Callan, Terry, & Gallois, 1993) investigated the psychological well-being of 100 infertile women and 73 controls before and after a failed in vitro fertilisation attempt by the infertile women. Those women who had used problem-focused coping had higher levels of well-being, while the use of avoidance coping and seeking social support was associated with low levels of well-being. Bifulco and Brown (1996) conducted a rare coping study in which the severity of the stressor was objectively categorised. Of 375 women suffering from depression at the first interview, 150 women, who had suffered a severe stressor before the second interview 12 months later, were studied. The non-productive cognitive coping responses of denial, self blame and pessimism were related to an increase in their depression at interview 2. In a study of 155 psychiatric outpatients, Vollrath, Alnaes and Torgersen (1996) followed up participants 6 and 7 years after initial

assessment and found that patients suffering from anxiety disorders improved with the use of active goal-oriented coping strategies, and patients suffering from depression improved by seeking social support. Depressed patients' symptoms increased with the use of distraction, focusing on, and venting emotions, while anxious patients' symptoms increased with the latter two strategies.

Two longitudinal studies have investigated the effects of coping on mental illnesses of adolescents. Catanzaro and Greenwood (1994) asked 222 adolescents to complete questionnaires on coping and symptoms of dysphoria twice with an 8 week interval and found that the use of active coping resulted in lower levels of dysphoria, and the use of avoidance coping resulted in higher levels. In another short longitudinal study Herman-Stahl, Stemmler and Petersen (1996) surveyed 603 adolescents twice with an interval of 1 year and classified participants as either approach or avoidant copers. Students who changed over time from approach to avoidant coping showed a significant increase in depressive symptoms, and students who changed from avoidant to approach coping displayed a significant decrease in depression over the year.

Teaching Successful Coping Prevents Mental Illness

Further evidence for the link between mental health and a healthy coping style comes from outcome studies of programs teaching successful coping to adolescents. Programs focusing on generic coping skills, called social competence, life skills, or coping skills, have resulted in an improvement in participants' ability to effectively solve social problems, interact with peers, and achieve in academic areas (Caplan et al., 1992). They have also resulted in reduced misbehaviour and lower perceptions of stress, as reported by the adolescents themselves. Programs focusing on addressing specific problems have also been beneficial in increasing well-being. The Life Skills Training approach to the prevention of

substance abuse was successful in deterring substance abuse and increasing participants self reported well-being (Botvin & Dusenbury, 1989). Parenting skills programs have been found to be effective in reducing behaviour problems of children in at-risk families, subsequently improving families' mental health (Connell, Sanders, & Markie-Dadds, 1997).

One meta-analysis of 130 preventive interventions with children and adolescents suffering from subclinical mental illness concluded that educational behavioural and cognitive behaviour programs significantly reduced problems and significantly increased young people's competencies (Durlak & Wells, 1998). Of particular interest was that programs targeting externalising problems, which are commonly cited to be least amenable to change, were most effective, with a high mean effect of 0.72. The recent focus on the importance of prevention in mental health has resulted in a number of school-based programs designed to promote resilience and optimism. These have been effective in preventing anxiety and depression in children and adolescents. Resilience was improved through encouraging an optimistic outlook and teaching better coping skills. Effective programs in the prevention of anxiety include the Coping Koala Programme and the Friends Programme (Barrett, Dadds, & Rapee, 1996; Dadds, Holland, Barrett, Laurens, & Spence, 1999; Dadds, Spence, Holland, Barrett, & Laurens, 1997). A currently widely-used program targeting adolescents and prevention of depression is the Resourceful Adolescent Program (RAP). Preliminary findings showed reduced levels of depressive symptoms at post-intervention and 10-month follow-up, particularly for those adolescents who initially showed high or moderate levels of depressive symptoms (Shochet, Dadds, Harnett, & Osgarby, 2001; Shochet & Osgarby, 1999).

Summary

Adults and adolescents suffering from depression or anxiety are more likely to use less problem-focused coping and more emotion-focused coping. Conduct disordered adolescents

are more likely to have experienced chronic severe stress. It is suggested, and supported with limited research, that because they a) do not have control over changing the stressful situations and b) suffer from reduced development of resilience they would use more emotion-focused coping responses. Longitudinal studies and outcome studies of educational coping interventions provided evidence for a possible etiological link between the use of certain coping strategies and mental illness or well-being.

Conclusion

This review has addressed the following areas of interest concerning stress, resilience, coping, and the relationship between coping and mental illness. First, the most important theoretical explanations of stress, resilience, and their functions on human behaviour and experience were presented and evaluated. This review supported the contention that stress is a heterogeneous set of environmental situations or events which can be classified and which require different responses and result in different effects.

Second, theoretical explanations of coping, particularly as it applies to adolescence, were presented and evaluated. The classifications of coping responses into either problem-focused versus emotion-focused, or approach versus avoidance coping, were investigated, and it was concluded that multiple differing classifications are confusing, and largely equivalent. A more useful distinction was considered to be primary (approach and tackle the problem) versus secondary (avoid the problem and deal with emotions) coping. The importance of perceived control was acknowledged and a complex relationship between types of stress, levels of perceived control, styles of coping and measures of well-being or maladjustment were proposed. In particular, it was suggested that chronic severe stress affects coping in two ways. Firstly individuals have little control over it and therefore are more likely to use emotion-focused coping responses which are seeking alternative rewards and emotional

discharge. The use of emotion-focused coping in chronic severe stress situations results in a decrease of subjective distress. Secondly chronic severe stress results in either a corrosion of existing resilience or deficient development of resilience for individuals, which in turn results in limited problem-focused coping strategies.

Third, empirical findings concerning coping and mental illness of adults and adolescents were summarised and clarified. One body of research suggests that adults and adolescents suffering from depression or anxiety are more likely to use less problem-focused coping and more emotion-focused coping. Research suggesting risk factors for conduct disorder was presented, followed by research linking conduct disorder and deviance with an investigation of coping strategies. It was concluded that conduct disordered adolescents are more likely to have experienced chronic severe stress. It was hypothesised that because they do not have control over changing the stressful situations, and because they suffer from reduced development of resilience they would use more emotion-focused coping responses. This was supported by a limited number of studies. Longitudinal studies and outcome studies of educational coping interventions provided evidence for a possible etiological link between the use of certain coping strategies and the subsequent development of mental illness, or a subsequent increase in well-being.

Further research is needed to substantiate research concerning coping strategies used by conduct disordered adolescents. In the only study to date of the coping strategies of conduct disordered adolescents, Ebata and Moos (1991) do not classify types of stress with which adolescents are coping. In view of research which has clearly distinguished between coping responses required for different types of stress, it would be important to include this variable in a future study. Furthermore, in view of the fact that conduct disorder is often comorbid with a number of other mental illnesses, it is important to differentiate between purely

conduct disordered adolescents, and those also suffering from an emotional mental illness, such as depression or anxiety. The coping strategies of depressed adolescents have been differentiated from those of conduct disordered adolescents and differences have been found. It is therefore likely, that comorbid conduct disordered adolescents would have even greater deficiencies in coping responses, than purely conduct disordered youth. A study clearly classifying primary and comorbid mental illnesses is needed, to provide greater clarity on this question.

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Empirical Study

Coping Responses and Mental Illness of Adolescents in Custody

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Abstract

It has been suggested that reacting to a chronic severe stressor with avoidance, particularly behavioural avoidance coping responses is adaptive, and that a background of chronic severe stress leads to low resilience and a low level of approach coping skills. Residents (N=50) of a youth detention centre completed the Coping Responses Inventory – Youth (CRI-Y) and the Adolescent Psychopathology Scale (APS) , and 61 students from state schools completed only the CRI-Y. As expected, residents used more avoidant coping, more behavioural coping, and less approach coping than controls. Most of the stressors reported by residents were chronic and severe (98%), as compared to 6.5% of controls' stressors. As many as 57% of Ashley participants scored positive for at least one emotional disorder and they used less behavioural approach coping strategies than those suffering from conduct disorder only. It is suggested that the adaptiveness of avoidant coping as a reaction to chronic severe stress must be recognised and that specialised coping programs could help address low approach coping abilities in this group.

This project concerns coping strategies of adolescents in custody. To provide a better understanding of coping, classifications of coping are reviewed. These adolescents are shown to come from background characterised by uncontrollable chronic severe stress. Theories and research combining type of stressor, degree of control over the stressor, and resultant degree of well-being are therefore summarised. Because a large proportion of young offenders are known to suffer from mental illness, findings concerning the coping strategies of adolescents with a mental illness will then be presented.

Theories of coping

Lazarus (1991, p. 112) defined coping as "... the cognitive and behavioural efforts to manage specific external or internal demands (and conflicts between them) that are appraised as taxing or exceeding the resources of a person." Theories of coping have been accepted as a way of understanding how people deal with life circumstances and how they can be helped to deal with these better, in a manner which improves their well-being.

The process of developing self-report coping inventories to assess coping strategies has lead to attempts to classify coping responses. Two main classifications have been used: firstly the problem-focused versus emotion-focused coping model and secondly the approach versus avoidance coping model. The problem-focused versus emotion-focused coping model is widely used and classifies coping responses according to their function (Compas, 1995; Folkman & Lazarus, 1980; Frydenberg, 1999). Coping efforts can focus on modifying the stressor (problem-focused) or on regulating emotional states that may accompany the stressor (emotion-focused).

The approach (or active, oriented towards threat) versus avoidance (or passive, oriented away from threat) coping model emphasises the orientation of coping. Approach coping

strategies include cognitive attempts to change ways of thinking about the problem and behavioural attempts to resolve events by dealing directly with the problem or its aftermath. Avoidance coping strategies include cognitive attempts to deny or minimise threat, and behavioural attempts to escape from or avoid confronting the situation or to relieve tension by expressing one's emotions (Moos, 1993).

The approach/avoidance model has been considered equivalent to the problem/emotion focused model, in that approach coping has been equated with problem-focused coping and avoidance coping with emotion-focused coping (Moos, 1993). Both emotion-focused coping and avoidance coping include taking drugs and alcohol, distraction, withdrawal, tension reduction and focusing on and venting emotions (Broderick, 1998; Moos, 1993; Vollrath, Alnaes, & Torgerson, 1996; Weickgenant, Slater, Patterson, Atkinson, & Hampton, 1993). Both problem-focused coping and approach coping include problem solving, positive reappraisal, and seeking guidance and support (Compas, 1995; Moos, 1993). It is therefore suggested that the classifications of emotion-focused coping and avoidance coping are largely equivalent, as are problem-focused coping and approach coping.

One field of coping research has been interested in how the nature of the stressor and the amount of control adolescents perceive they have over it interact with the type of coping strategies used. Compas (1987b; 1995) organised stressors into three broad categories – generic or normative stress, severe acute stress and severe chronic stress. Generic or normative stress includes daily stress and hassles, as well as major events such as transition to a new school. Severe acute stress includes events such as serious illness or injury, cataclysms and other disasters, and loss of a loved one through death or parental divorce. Severe chronic stress includes ongoing exposure to poverty, neighbourhood or familial violence, racism and parental psychopathology.

Approach coping efforts have been found to be more adaptive when they are directed towards aspects of the person-environment relationship that are perceived as changeable, whereas avoidance coping efforts are more adaptive when a situation is recognised as uncontrollable. For example, Brotman, Band and Weisz (1988) found that school failure evoked high levels of approach coping, whereas medical stress elicited avoidance coping. Weisz (1986) suggested that a key task engendering well-being involves learning to distinguish between situations (usually situations of generic stress) where persistence, which can be understood as the continued use of approach coping, will be successful and situations (usually situations of acute or chronic severe stress) where it would be fruitless. Thus, when adolescents thought they had control over the chronic severe stress of their parent's depression, they engaged in more approach coping, but also became more depressed. Those who realised they had little control over this situation engaged in more avoidance coping, and were less depressed (Beardslee & Podorefsky, 1988). Similarly, when adolescents experienced the acute severe stress of the diagnosis of a parent's cancer, those who had higher levels of perceived control and used approach coping also had higher levels of psychological symptoms of anxiety and depression (Worsham, Ey, & Compas, 1996). Also, survivors of childhood sexual abuse who said they had used more avoidance coping during their traumatic childhood years currently reported a greater sense of well-being and less symptoms of mental illness than those who had not (Sigmon, Greene, Rohan, & Nichols, 1996).

It has been hypothesised that particularly behavioural avoidance coping strategies can be useful in severe stress situations (Compas, 1995). When Ben-Zur and Zeidner (1995) compared the coping strategies of Israelis during and after the Persian Gulf war, they found that during the war they used more behavioural avoidance coping (seeking alternative rewards and emotional discharge), while after the war they used more approach coping. In addition,

those Israelis who used behavioural avoidance coping during the war suffered from less symptoms of anxiety than those who used problem-focused coping.

These studies are in line with the models of Weisz (1986) and Compas (1995) who suggested that severe acute and chronic stress situations are often characterised by lack of control and therefore require different coping skills than generic stress situations. In addition, severe chronic stress is more likely to have an impact on long-term future coping behaviour than severe acute stress. Severe chronic stress usually leads to a corrosion of resilience, or a failure to develop resilience, and is therefore unlikely to result in an outcome of well-being (Moos, Finney, & Cronkite, 1991; Schaefer & Moos, 1992). Rutter (1987) suggested that human beings need a small amount of stress to develop appropriate coping skills and gain a sense of self-efficacy in the face of stress. However when stress becomes too severe or the quantity of it overwhelming, successful adaptation does not take place and resilience is diminished.

Mental Illness and Coping

A mental illness is a diagnosable illness that significantly interferes with an individual's cognitive, emotional or social abilities (Commonwealth Department of Health and Aged Care, 2000). The connection between mental illness and the use of coping strategies for adolescents has been established in three ways. Firstly, there has been considerable research into the hypothesis that adolescents suffering from a mental illness are more likely to have deficiencies in coping. Secondly, research has investigated whether adolescents using avoidant coping are more likely to either contract a mental illness, or recover more slowly from one. Thirdly, outcome studies of interventions teaching productive coping strategies have found that adolescents' resilience to mental illness increases with the use of approach coping skills.

Several studies have investigated a relationship between emotional mental illnesses and coping responses for adolescents (Ayerst, 1999; Chan, 1995; Cunningham & Walker, 1997; Ebata & Moos, 1991; Endler, Kantor, & Parker, 1994; Giacobbi & Weinberg, 2000; Herman-Stahl, Stemmler, & Petersen, 1996; Nigro, 1996; Seiffge-Krenke, 1989b; Speirs & Martin, 1999; Zeidner, 1994). They sampled a total of approximately 1800 adolescents, and all of them found that depressed or anxious adolescents use more avoidant, or emotion-focused, coping strategies than controls. Only about half of these studies reported also that depressed or anxious adolescents use less approach, or problem-focused coping than controls.

Conduct disorder is a mental illness of children and adolescents which is identified by serious behaviours reflecting social-rule violations or acts against others leading to significant impairment in everyday functioning at home or at school (Hemphill, 1996; Mandel, 1997; Sanders, Gooley, & Nicholson, 2000). It is defined by overt behaviour problems (fighting, temper tantrums, teasing) and/or covert symptoms (stealing, fire setting, truancy). In the last few decades a large body of research has been accumulating concerning possible risk factors for the development of conduct disorder. Parental characteristics of young people with conduct disorder are particularly important, as they often result in young people suffering from symptoms of posttraumatic stress disorder or chronic adjustment disorder. Parental characteristics include:

- parental psychopathology (parents suffer from depression, personality disorders, substance abuse disorders, or anti-social personality disorder);
- conflictual relationships (parents' relationships are characterised by discord, divorce, and family breakdown) or absence of the father;
- deficient parenting practices (negative attitudes towards children, verbal and physical abuse of children, lack of attachment between parents and children, ineffective punishment, inept use of positive reinforcers, coercive child behaviours are reinforced); and

- neglect, caused by changing relationships, single parent families, poverty, and parental stress due to domestic violence and financial insecurity (Hemphill, 1996).

The risk factors and comorbidities of conduct disorder suggest that conduct disordered adolescents are more likely to use avoidant coping responses. Conduct disordered youth are much more likely to have experienced uncontrollable stressors, such as chronic abuse, neglect, poverty, and ineffective parenting, than other young people. They are therefore more likely to use avoidant rather than approach coping responses, both because this is their habitual mode of coping and because their resilience has not been fully developed in a life of chronic stress.

A literature search found only one study investigating conduct disorder and coping responses. Ebata and Moos (1991) compared the coping responses of 58 adolescents who had been diagnosed with conduct disorder with 38 controls and found that conduct disordered adolescents used more avoidance coping, such as cognitive avoidance, emotional discharge, and seeking alternative rewards than controls. When they compared the conduct disordered adolescents with 49 depressed adolescents, they found that the latter used more resigned acceptance (a cognitive avoidance strategy) and the former tended more towards seeking alternative rewards (a behavioural avoidance strategy), but they were similar in their use of cognitive avoidance and emotional discharge.

Not only may exposure to chronic severe stress lead to a diminished development of coping resources, but longitudinal studies indicate that avoidance coping may also lead to an increased risk of mental health problems. Catanzaro and Greenwood (1994) asked 222 adolescents to complete questionnaires on coping and symptoms of dysphoria twice with an 8 week interval and found that the use of approach coping at the first interview resulted in lower levels of dysphoria at the second interview, and the use of avoidance coping resulted in higher levels of dysphoria. Herman-Stahl, Stemmler and Petersen (1996) surveyed 603 adolescents

twice with an interval of 1 year and classified participants as either approach or avoidant copers. Students who changed over the year from approach to avoidant coping showed a significant increase in depressive symptoms, and the symptoms of those who changed from avoidant to approach coping decreased significantly.

Further evidence for the link between mental health and a healthy coping style comes from outcome studies of programs teaching successful coping to adolescents. Programs focusing on generic coping skills, called social competence, life skills, or coping skills, resulted in an improvement in participants' ability to effectively solve social problems, interact with peers, and achieve in academic areas (Caplan et al., 1992). They resulted in reduced misbehaviour and lower perceptions of stress, as reported by the adolescents themselves.

Programs focusing on specific problems have also been beneficial in increasing well-being. One meta-analysis of 130 preventive interventions with children and adolescents suffering from subclinical mental illness concluded that educational behavioural and cognitive behaviour programs significantly reduced problems and significantly increased young people's competencies (Durlak & Wells, 1998). Of particular interest was that programs targeting externalising problems, which are commonly cited to be least amenable to change, were most effective, with a high mean effect of 0.72. The recent focus on the importance of prevention in mental health has resulted in a number of school-based programs designed to promote resilience by teaching approach coping strategies. These have been effective in preventing anxiety and depression in children and adolescents (Barrett, Dadds, & Rapee, 1996; Dadds, Holland, Barrett, Laurens, & Spence, 1999; Dadds, Spence, Holland, Barrett, & Laurens, 1997; Shochet, Dadds, Harnett, & Osgarby, 2001; Shochet & Osgarby, 1999).

In conclusion, the literature suggests that people reacting to chronic severe stress tend to use avoidance, particularly behavioural avoidance coping strategies, and that this response is beneficial to their mental health, as it is not helpful to attempt to solve an unsolvable problem, but more helpful to deal with the emotions resulting from it. It is likely that young people with conduct disorder have a history of chronic severe stress due to the risk factors research has found to be associated with conduct disorder. It is therefore likely that young people with conduct disorder will use more avoidance, particularly behavioural avoidance coping strategies, but that this is an adaptive response to their environment, over which they have little control.

In addition, the above review supports a model presented by Holahan and Moos (1986), which posits an interaction between internal and external resources. Thus, if young people have experienced chronic severe stress through chronic abuse, neglect, poverty, and ineffective parenting, they will most likely have learnt a coping pattern characterised by avoidant coping. They will also have developed less approach coping strategies, due to a life characterised by rejection, frustration and distress. They will thus tend to use avoidant strategies even in generic stress situations, where approach strategies would lead to improved mental health. Their mental health will then deteriorate and they might develop depression, post traumatic stress, or other anxiety disorders. These disorders in turn will result in the use of further avoidant coping, such as seeking alternative rewards or distraction through crime or drugs, and this will result in depleted external resources such as decreased family and peer support, and decreased support of significant adults, such as teachers, in turn leading to further severe stress initiating further avoidant coping.

Rationale for the current study

Residents of youth detention centres represent the most extreme spectrum of conduct disorder. They have repeatedly offended despite cautions, warning, and support provided by youth justice staff, police and magistrates. It is therefore likely that their histories also show an amplified concentration of the risk factors for conduct disorder. As many as 70% of conduct-disordered children and adolescents are comorbid, that is they not only have conduct disorder, but also other disorders (Hemphill, 1996; Mandel, 1997; Sanders et al., 2000). The DSM-IV (American Psychiatric Association, 1994) suggests that conduct disorder can be associated with attention deficit/hyperactivity disorder (ADHD), anxiety disorders (particularly posttraumatic stress disorder), mood disorders, and other problems. A review of studies conducted on adolescents in custody suggests that 23 - 40% suffer from mood disorders and 17 - 40% from anxiety disorders (Curry, Pelissier, Woodford, & Lochman, 1988; Grisso & Barnum, 1998; Kosky, Sawyer, & Gowland, 1990; Richards, 1996; Teplin, Abram, & McClelland, 1998; Timmons-Mitchell et al., 1997; Ulzen & Hamilton, 1998).

Because of their history of chronic severe stress, is likely that adolescents in custody use more avoidance coping responses than normal adolescents. They have little control over this stress and therefore avoidant coping is an adaptive response. Although Ebata and Moos (1991) found no difference in approach coping between conduct disordered adolescents and normal adolescents, other studies with depressed adolescents have, and resilience theories and research suggest that a history of chronic severe stress results in diminished development of approach coping resources. It is therefore expected that adolescents in custody will use less approach coping responses than normal adolescents. In addition, research studying people in chronic severe stress situations and conduct disordered adolescents suggests that they are likely to use more behavioural avoidance coping than normal adolescents. It is also likely that

many would suffer from an emotional disorder and that those who do would use even more avoidance, particularly cognitive avoidance, and even less approach coping.

Method

Ashley Youth Detention Centre (Ashley) is located in northern Tasmania near Deloraine, and is the only youth detention centre in Tasmania, for young people aged 10 - 18. It has an average population of residents of about 25 - 35 males, and one to five females at any one time. Most residents stay at Ashley for three to twelve months, being convicted of offences such as burglary, armed robbery, aggravated burglary or robbery, assault, driving without a licence, fire lighting, and some serious offences, such as manslaughter or even murder. Some detainees have committed minor offences, but cannot be controlled in their parents' or foster parents' homes, and, due to a lack of alternatives, are placed at Ashley. Ashley has recently been rebuilt and now consists of four buildings of different security and privilege levels for mixed genders. The study was undertaken in conjunction with a pilot project by the Launceston-based Tasmanian State Government agency of Oakrise Child & Adolescent Mental Health Service (Department of Health & Human Services, Division of Community and Rural Health), which set out to determine the proportion of Ashley detainees with mental disorders. It received ethics approval from the University of Tasmania Ethics Committee.

Participants

Ashley residents. Participants were new admissions to Ashley and had been at Ashley for less than one month by the time testing was completed. During the period of this study, May 2000 to June 2001, 53 of these young people agreed to participate, representing 62% of

all admissions who were residents for at least two weeks. Of the 53 assessments carried out three were excluded because they returned invalid test profiles. Participants included 43 (86%) males, and 7 (14%) females. The young offenders were aged between 12 and 18, with an average age of 15.7 years.

Table 1 shows selected ability and demographic data for the 111 Ashley residents screened with the Secure Care Psychosocial Screening Tool (SECAPS; Putnins, 1999) between May 2000 and June 2001. The SECAPS is a multi-gate assessment tool used as a standard screening tool in Ashley, and developed in South Australia specifically as a screening instrument for young people on admission to juvenile detention facilities. It allows for an estimation of intelligence using the Ravens Coloured Progressive Matrices (Raven, Raven, & Court, 1998). In addition the SECAPS screens for drug & alcohol use, social dysfunction, school attendance, and provides some limited information on emotional problems.

The data indicate that these young people were more often than not subject to considerable disadvantage in their home lives. Only 29.7% had parents who were living together, 42.2% had a family member with a drug or alcohol problem, and 71% had a family member who had been in trouble with the law. 21% were subject to a child protection order and 20% lived either by themselves or were homeless. A large proportion (30%) of these young people entered the criminal justice system from a very early age. Many had reading problems with an average chronological age of 15.7 and an average reading age of 10.5. Nearly 22% had a significant degree of intellectual impairment and a further 26% had Borderline intellectual functioning.

Controls. The control group consisted of 61 school based adolescents, 17 of which attended Launceston College in Grades 11 and 12, and 44 of which attended Exeter High

School in Grades 8 and 9. 57.4% were female and 42.6% were male. Their ages ranged from 12 to 18, with an average age of 14.9. *Measures*

Adolescent Psychopathology Scale (APS; Reynolds, 1998). This 346 item self-report tool for adolescents aged 12 – 18 (see Appendix A) provides scores on 40 scales, four of which examine validity and response style, and 36 of which cover 20 clinical disorders and 5 personality disorders derived from the DSM-IV and psychosocial problem content. The current study will examine results pertaining to 11 of the 20 clinical disorders listed in Table 2.

The APS was developed in the USA from an item pool of DSM-IV symptom specifications, administration to adolescents in school and clinical settings (which included diagnoses by a psychiatrist), item selection based on content validity and statistical item analysis, and development of norm tables based on a standardisation sample of 1 827 school based adolescents, and a clinical sample of 506 adolescents.

The internal consistency of the APS clinical disorder scales for the standardisation and clinical samples was high, with a median coefficient alpha of .85 and .87, respectively. Item-with-total scale correlations for the clinical disorder scales were moderately high for both samples, with a median item-with-total scale correlation of .41-.61 and .40-.65 respectively. Intercorrelations among clinical disorder scales fell in the .30 to .69 range, which is to be expected when disorders have overlapping phenomenologies, or common comorbidities.

Table 1

Demographic Data of the Detained Adolescent Population (N = 111)

Age first charged/arrested:	
younger than 10	30%
average age of those older than 10	13.8 years
Parents living together	30%
A family member with drug/alcohol problem	42%
A family member who had been in trouble with the law	71%
Under a current care order by Child and Family Services	21%
Place of dwelling last month:	
with parents	45%
alone	15%
on street	5%
other (foster homes, relatives, friends)	35%
Aboriginal	27%
Average age	15.7 years
Average reading age	10.5 years
Suspended from school	75%
Non-verbal IQ:	
69 and below (below borderline)	22%
70 – 79 (borderline)	26%
80 – 99	20%
100 and above	32%

Table 2
APS Clinical Disorder scales

Externalising (behavioural problems)	Internalising (emotional problems)
Attention-Deficit/Hyperactivity Disorder (ADHD)	Anorexia Nervosa*
Conduct Disorder (CD)	Bulimia Nervosa*
Oppositional Defiant Disorder*	Sleep Disorder*
Adjustment Disorder*	Somatisation Disorder*
Substance Abuse Disorder*	Panic Disorder
	Obsessive-Compulsive Disorder
	Generalised Anxiety Disorder
	Social Phobia
	Separation Anxiety Disorder
	Posttraumatic Stress Disorder (PTSD)
	Major Depression
	Dysthymic Disorder
	Mania
	Depersonalisation Disorder*
	Schizophrenia*

* Not included in the current study

Criterion-related validity coefficients with the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1943) were moderately strong overall, and high ($r = .77 - .82$) with the Reynolds Adolescent Depression Scale (RADS; Reynolds, 1986), and the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). In an analysis where the clinical settings group was contrasted with the nonclinical settings group, highly significant differences were found between samples on both internalising and externalising scales, with F values ranging from 41.73 to 376.02. Comparison of specific diagnostic groups from the clinical settings group also yielded highly significant differences, with all mean differences greater than one standard deviation unit.

Coping Responses Inventory - Youth Form (CRI-Y; Moos, 1993). This 58-item self-report tool for adolescents aged 12 – 18 (see Appendix B), provides scores on 8 scales, which are listed in Table 3. The CRI-Y was developed in the USA by identification of coping domains and development of an item pool, revision of the inventory through pilot interviews, and two waves of field trials with a total standardisation sample of 147 boys and 168 girls. Because of its aim to allow comparison between nonclinical and clinical youth, the sample was composed of 163 healthy adolescents, a clinic sample of 49 depressed and 58 conduct disordered adolescents (diagnosed by psychiatrists), and 45 adolescents with rheumatic disease. 78 of the 163 healthy adolescents were siblings of the clinical adolescents. Scales were constructed by the following criteria: item meaningfulness, item distribution, item interrelatedness, and scale independence.

Table 3

CRI-Y Scales

	Approach coping responses	Avoidance coping responses
Cognitive	1. Logical Analysis	5. Cognitive Avoidance
	2. Positive Reappraisal	6. Acceptance or Resignation
Behavioural	3. Seeking Guidance and Support	7. Seeking Alternative Rewards
	4. Problem Solving	8. Emotional Discharge

Scale internal consistencies were moderate for both waves. Average partial intercorrelations between the approach and the avoidance strategies were .31 for boys and .26 for girls, indicating that there is a small to moderate overlap between these coping strategies. Analyses of covariance and a-priori contrasts between the four groups composing the sample

found significant and specific differences between all four groups in coping strategies.

Groups identified with five measures of youth functioning, measuring depression, anxiety, alcohol and drug use, behaviour problems and self confidence, also had significantly different coping strategies.

Follow up of participants in Wave 1 and Wave 2 found that approach coping was related to better psychological adjustment, a result which was also confirmed by a longitudinal follow-up of the same sample (Holahan & Moos, 1986). After relocation, youth who relied more on approach coping showed better parent-rated adjustment to relocation.

Ravens Coloured Matrices (Raven, Raven, & Court, 1998). This instrument is a brief, but reliable and valid measure of non-verbal intelligence. It consists of 36 items of coloured patterns in which a section is missing and asks participants to select one of six designs to complete the pattern. It is particularly useful for young children and old people, and for people who are developmentally delayed, and takes only approximately 5 minutes to administer. It provides a standard score which is equivalent to an IQ score.

Procedure

Prior to testing, the parent or guardian of each potential participant was contacted with information about the study and only those young people whose parents signed a consent form were asked to participate in the testing process (see Appendix C).

Ashley residents. Participants read or listened to and signed an information and consent form (Appendix D). The tests were administered individually in a private and quiet room in Ashley by the author, with exception of the Ravens Coloured Matrices, which was administered as part of Ashley's intake procedure by the Senior Residential Care Worker currently on shift, and scored by the author. Participants were invited to continue with testing

until they wanted to stop, and then to continue during the next testing session one week later. Therefore, some participants completed the entire testing session in one sitting, while others took up to 3 sessions to complete it.

Both questionnaires were administered in a structured interview format, to allow for explanation of items if participants did not understand them, for discussion of appropriate responses, if participants were not sure, because of low literacy levels, which are common amongst Ashley residents. Total administration time was approximately 1.5 - 2 hours, starting with the APS and following up with the CRI-Y. In a follow-up interview, participants were provided with a brief and simplified summary of results, in both written and verbal form, debriefed, and provided with answers to any further questions.

Controls. Classes of participants read and signed an information and consent form during a normal school period, in the presence of their teacher (see Appendix E). They were also provided with verbal information on how to complete the CRI-Y, which was the only questionnaire administered. They then self-administered the questionnaire, which took approximately half an hour, after which classes were given a brief overview of coping strategies and invited to ask questions.

Results

In the opening section of the CRI-Y, a question asks respondents to note which was the most stressful event they experienced during the last year and their use of coping responses are related to this event. The events were classified by an independent judge into either chronic severe, acute severe, or generic stressors. As many as 98% of Ashley residents reported stressors which would be classified as chronic severe stress. For over three quarters

of Ashley residents the stressor was having been arrested and detained at Ashley. The remainder quoted other severe stressors, such as being present when friends or family members were seriously injured or killed, car accidents, and sexual abuse of their girlfriends and themselves. Only one Ashley resident reported a generic stressor of fighting with his brother. In contrast, only 6.6% of controls reported chronic severe stress, 6.6 % reported acute severe stress, and 86.8% reported generic stressors, including incidents such as fighting with parents, friends, breaking up with a boyfriend, and moving house. These findings indicate substantial differences in the nature and severity of the stressors to which the Ashley and control groups had been exposed.

In order to assess differences between the Ashley and control groups in coping styles, a repeated measures analysis of variance was carried out, with two repeated measures factors: 1) focus with two levels: approach versus avoidance coping, and 2) method with two levels: cognitive versus behavioural coping responses, and two between subjects factors: 1) group with two levels: control versus Ashley, and 2) gender with two levels: male versus female.

Gender was included to identify whether there were any differences in coping responses between males and females. There was a significant group by gender interaction, which showed that there was a difference between groups based on gender (see Tables 4 and 5). In the control group, males used less coping strategies overall, than females, while at Ashley there was no difference between groups (see Figure 1). None of the other interactions involving gender were significant, so they will not be reported further.

Table 4
Means and Standard Deviations for the Use of Four Groups of Coping Responses by Ashley and Control Males and Females

		Ashley		Control	
		Males	Females	Males	Females
		N=43	N=7	N=26	N=35
Cognitive Approach	<i>M</i>	35.92	34.21	44.63	52.30
	<i>SD</i>	5.42	1.63	8.84	8.83
Behavioural Approach	<i>M</i>	42.45	38.71	46.00	51.14
	<i>SD</i>	7.40	3.26	8.97	7.35
Cognitive Avoidance	<i>M</i>	64.31	62.07	50.42	55.04
	<i>SD</i>	6.31	7.84	10.23	8.49
Behavioural Avoidance	<i>M</i>	64.55	66.64	49.86	51.96
	<i>SD</i>	6.22	6.67	11.13	7.15

Table 5
Analysis of Variance for Coping Responses by
Ashley and Control Males and Females

Source	df	F
Between subjects		
Group (Grp)	1	0.42
Gender (Gen)	1	1.44
Grp x Gen	1	4.69*
<u>S</u> within-group error	107	(144.19)
Within subjects		
Focus (F)	1	277.97**
F x Grp	1	168.63**
F x Gen	1	0.01
F x Grp x Gen	1	2.53
F x <u>S</u> within-group error	107	(55.07)
Method (M)	1	6.22*
M x Grp	1	15.02**
M x Gen	1	0.30
M x Grp x Gen	1	2.19
M x <u>S</u> within-group error	107	(26.52)
F x M	1	6.68*
F x M x Grp	1	0.37
F x M x Gen	1	2.66
F x M x Grp x Gen	1	2.67
F x M x <u>S</u> within-group error	107	(16.32)

Note. Values enclosed in parentheses represent mean square errors. S = subjects.

* $p < .05$. ** $p < .01$.

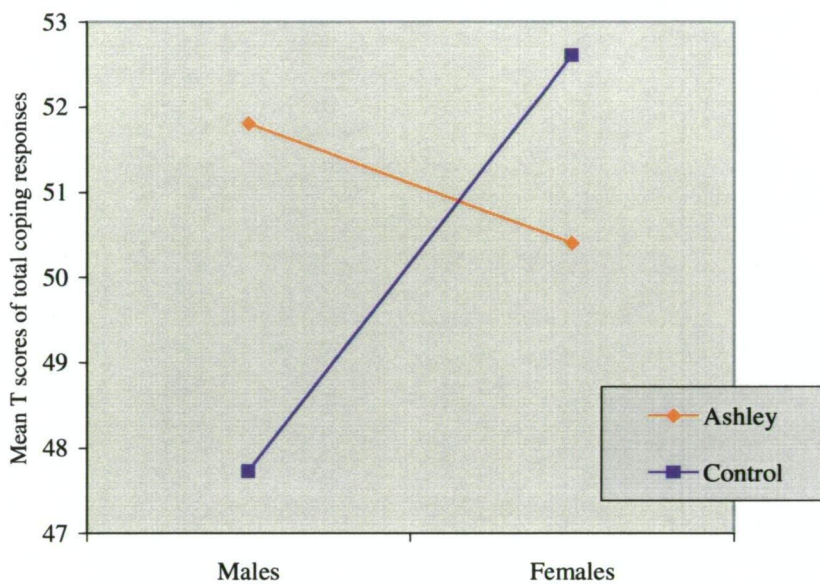


Figure 1. Mean T scores of total coping responses for Ashley and control males and females

The four factor and three factor interactions were not significant. However, group had significant interactions with both focus and method. Relative to controls, Ashley youth used less approach and more avoidance based coping methods, while controls used equivalent amounts of both (see Figure 2). Also, relative to controls, Ashley youth used less cognitive and more behavioural coping responses, while controls again used equivalent amounts of both (see Figure 3).

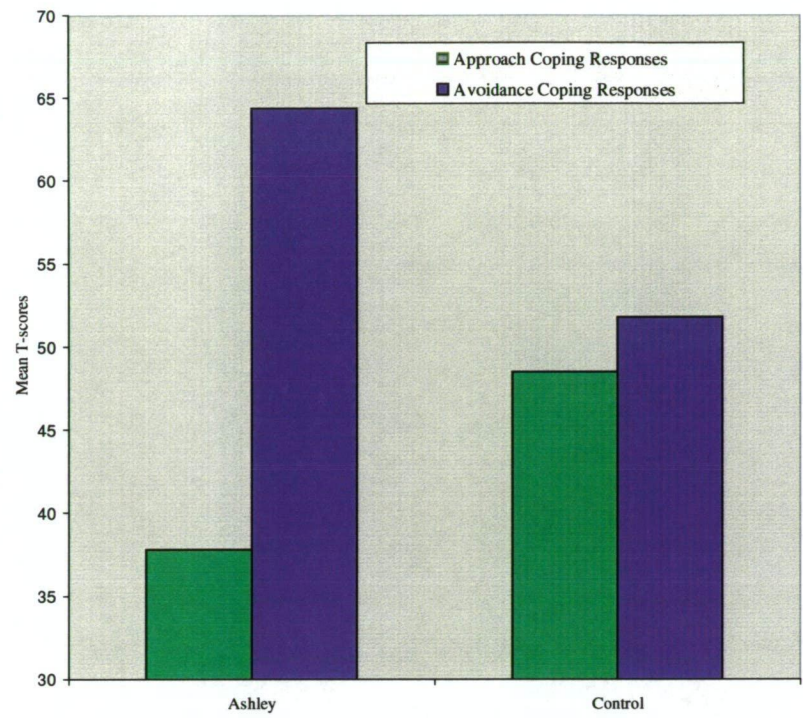


Figure 2. Mean T scores of coping responses classified by focus for Ashley and control groups.

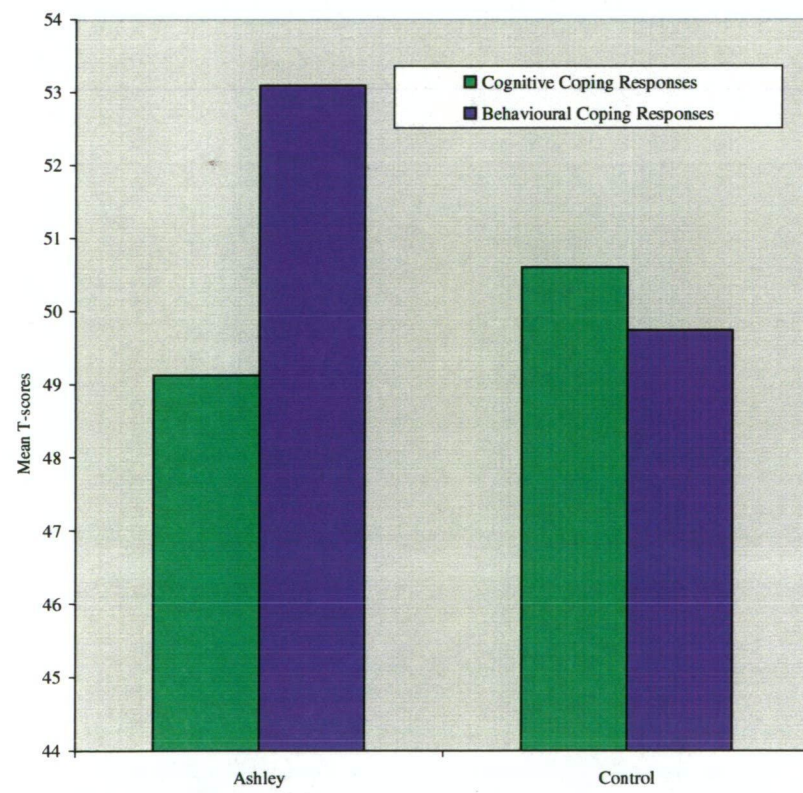


Figure 3. Mean T scores of coping responses classified by method for Ashley and control groups.

To investigate differences in coping between Ashley residents depending on the mental illnesses they were experiencing, several oneway analyses of variance were carried out. Ashley residents were classified as suffering from emotional problems if they scored positive for one or more of the disorders listed under the APS internalising disorders in Table 2. The independent variable was mental health classification, with three levels: no mental illness, conduct disorder only, and conduct disorder plus emotional problems. The dependent variables were cognitive approach, behavioural approach, cognitive avoidance, and behavioural avoidance coping. Effects for all dependent variables were significant (see Tables 6 and 7).

Table 6
Means and Standard Deviations for the Use of Coping Responses by Controls and Ashley Residents Distinguished by Diagnosis

		Control Group N=61	Conduct Disorder Only N=21	Conduct Disorder + Emotional Problems N=28
Cognitive Approach	<i>M</i>	49.03	37.81	34.07
	<i>SD</i>	9.56	6.47	3.13
Behavioural Approach	<i>M</i>	48.95	44.43	39.11
	<i>SD</i>	8.41	4.93	5.77
Cognitive Avoidance	<i>M</i>	53.07	65.55	63.36
	<i>SD</i>	9.47	5.36	6.74
Behavioural Avoidance	<i>M</i>	51.06	63.40	66.25
	<i>SD</i>	9.04	5.46	6.48

Table 7
Oneway Analyses of Variance for Coping Responses
by Controls and Ashley Residents Distinguished by
Diagnosis

Source	<u>df</u>	<u>F</u>
Between groups		
Cognitive Approach	2	40.75**
Behavioural Approach	2	18.00**
Cognitive Avoidance	2	25.90**
Behavioural Avoidance	2	43.55**
Within groups		
Cognitive Approach	107	
Behavioural Approach	107	
Cognitive Avoidance	107	
Behavioural Avoidance	107	

Note. * $p < .05$. ** $p < .01$.

These results were explored with Tukey's Post Hoc test, comparing the two Ashley groups and the controls. Both Ashley groups differed from controls on all four measures of coping (see Figures 4 and 5). Behavioural approach was the only coping measure on which Ashley groups differed from each other, the conduct disorder group using significantly more behavioural approach coping than the conduct disorder plus emotional problems group ($p < .05$).

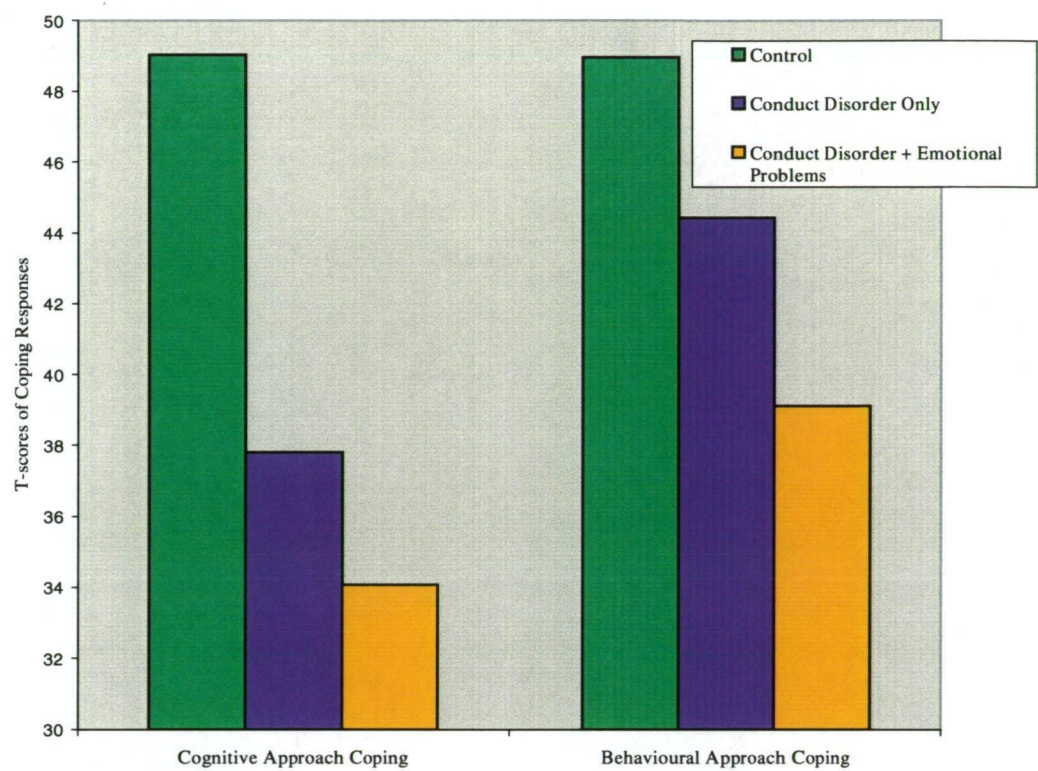


Figure 4. Mean T scores of approach coping responses for controls and Ashley residents distinguished by diagnosis.

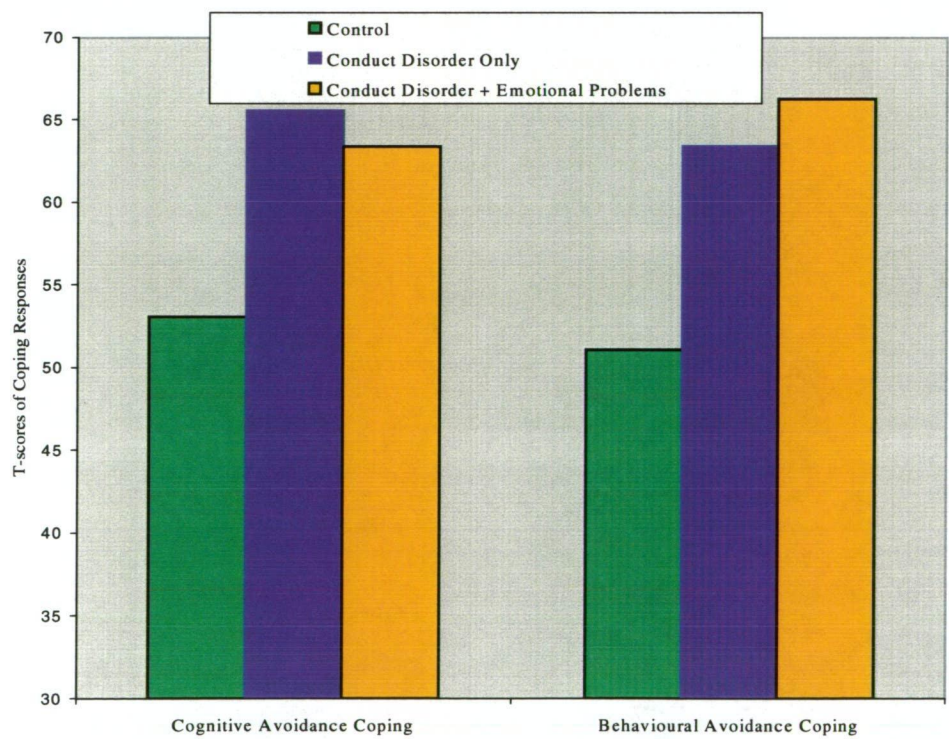


Figure 5. Mean T scores of avoidance coping responses for controls and Ashley residents distinguished by diagnosis.

Because of the fact that Ashley residents consisted mostly of males, as well as the fact that a gender effect was found for the control group, the same one way anovas were carried out again, using only the males of all three groups. The independent variable was again mental health classification, with three levels: no mental illness, conduct disorder only, and conduct disorder plus emotional problems. The dependent variables were again cognitive approach, behavioural approach, cognitive avoidance, and behavioural avoidance coping. Effects for all dependent variables were again significant (see Tables 8 and 9).

Table 8
Means and Standard Deviations for the Use of Coping Responses by Ashley Residents
Distinguished by Diagnosis and Controls, Males Only

		Control Group N=26	Conduct Disorder Only N=20	Conduct Disorder + Emotional Problems N=22
Cognitive Approach	<i>M</i>	44.63	37.90	34.11
	<i>SD</i>	8.84	6.62	3.46
Behavioural Approach	<i>M</i>	46.00	44.37	39.52
	<i>SD</i>	8.97	5.05	6.44
Cognitive Avoidance	<i>M</i>	50.42	65.52	63.88
	<i>SD</i>	10.23	5.50	6.35
Behavioural Avoidance	<i>M</i>	49.87	63.15	66.22
	<i>SD</i>	11.13	5.47	6.44

Table 9
Oneway Analyses of Variance for Coping Responses
by Ashley Residents Distinguished by Diagnosis and
Controls, Males Only

Source	<u>df</u>	<u>F</u>
Between groups		
Cognitive Approach	2	14.65**
Behavioural Approach	2	5.07**
Cognitive Avoidance	2	26.47**
Behavioural Avoidance	2	26.24**
Within groups		
Cognitive Approach	65	
Behavioural Approach	65	
Cognitive Avoidance	65	
Behavioural Avoidance	65	

Note. * $p < .05$. ** $p < .01$.

These results were explored with Tukey's Post Hoc test, comparing the two Ashley groups and the controls. Both Ashley groups differed from controls on all measures of coping except for behavioural approach, where the control group did not differ from the conduct disorder only group, only from the conduct disorder plus emotional problems group (see Figures 6 and 7) Behavioural approach was again the only coping measure on which Ashley groups differed from each other, the conduct disorder group using significantly more behavioural approach coping than the conduct disorder plus emotional problems group ($p < .05$).

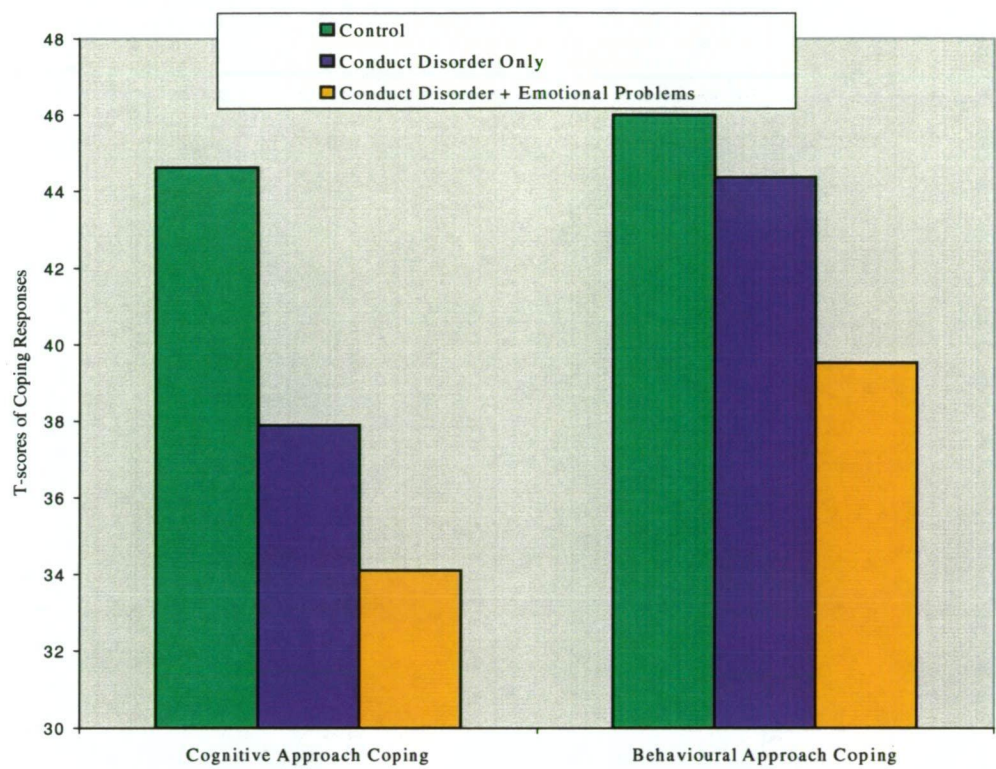


Figure 6. Mean T scores of approach coping responses for controls and Ashley residents distinguished by diagnosis, males only.

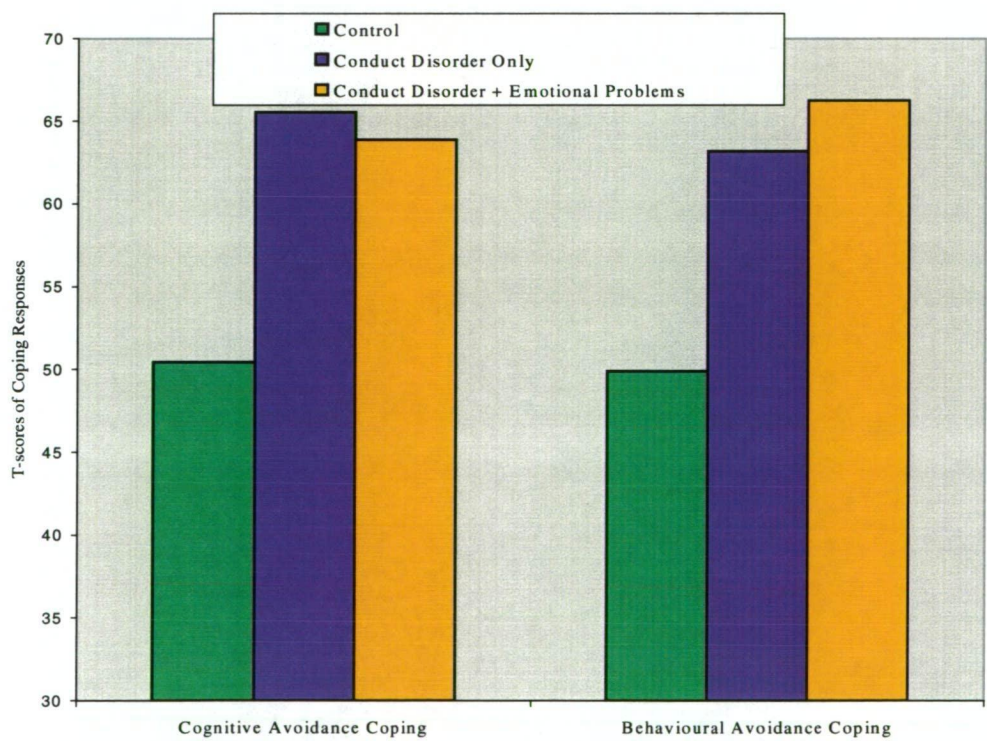


Figure 7. Mean T scores of avoidance coping responses for controls and Ashley residents distinguished by diagnosis, males only.

Further tests were carried out to examine whether a diagnosis of ADHD was partly responsible for the differences in coping responses among Ashley residents. A Pearson Chi-Square analysis showed that there was a significant relationship between ADHD and a diagnosis of emotional problems ($\chi^2 (1, N=50) = 4.98, p < .05$). An independent samples t-test found that, although there was a strong tendency for Ashley residents without ADHD to use more cognitive approach coping responses than those with ADHD, this difference was not significant ($t(48) = 1.80; p = .078$). No differences based on ADHD were found for the other groups of coping responses.

Another question asked was whether level of IQ was related to differences in coping responses among Ashley residents. Ashley residents were grouped by IQ in three categories: IQ < 80; IQ 80 – 100; and IQ > 100. A Pearson Chi-Square analysis showed that there was no significant relationship between IQ level and a diagnosis of emotional problems ($\chi^2 (2, N=50) = 3.36, p = .186$). However, a one way analysis of variance found significant differences between groups for cognitive approach and cognitive avoidance responses (see Table 8). Tukey's HSD post hoc tests revealed that Ashley residents with an IQ level of borderline or below used significantly less cognitive approach responses than those with an IQ level of 80 - 100, but significantly more cognitive avoidance responses than those with an IQ level greater than 100 (see Table 9).

Table 8

One way Analysis of Variance for Coping Responses
by Ashley Residents Distinguished by IQ Level

Source	df	F
Cognitive approach	2, 47	3.49*
Behavioural approach	2, 47	1.57
Cognitive avoidance	2, 47	4.65*
Behavioural avoidance	2, 47	0.69

Note. * $p < .05$.

Table 9

Means and Standard Deviations for the Use of Coping Responses by Ashley Residents
Distinguished by IQ Level

		IQ Level		
		<80 n=23	80 – 100 n=13	> 100 n=14
Cognitive Approach	<i>M</i>	34.35 ^a	38.69 ^a	35.07
	<i>SD</i>	2.82	7.66	4.16
Behavioural Approach	<i>M</i>	40.04	43.81	43.28
	<i>SD</i>	4.35	7.27	9.77
Cognitive Avoidance	<i>M</i>	66.15 ^b	64.58	59.93 ^b
	<i>SD</i>	5.50	6.89	6.18
Behavioural Avoidance	<i>M</i>	65.89	64.50	63.43
	<i>SD</i>	6.32	4.86	7.31

Note. Means labelled sharing common superscripts are significantly different from each other (Tukey's HSD post hoc test with $p < .05$).

Discussion

The results confirmed the hypotheses that adolescents in custody would use more avoidant, and less approach coping responses and more behavioural coping strategies than controls. Even though only half of studies with depressed adolescents and none with conduct disordered adolescents have found lower approach coping, this study has provided such a finding. The hypothesis that this is due to Ashley residents suffering from a higher degree of emotional mental health problems was supported. As many as 57% of Ashley participants scored positive for at least one emotional disorder and they used significantly less behavioural approach coping strategies than those suffering from conduct disorder only and controls. The hypothesis that comorbid residents would use more avoidance coping responses than conduct disorder only residents was not confirmed. This was probably due to a ceiling effect, because these young people suffered from a more severe form of conduct disorder and their use of avoidance coping strategies was already in the high range close to the upper limit. A further increase of scores was thus difficult to achieve.

Other analyses eliminated a significant influence of the variables gender and ADHD on the obtained differences in coping responses. However, the use of coping responses did vary significantly depending on IQ level. Ashley residents with an IQ level of below borderline used more cognitive avoidance coping responses and less cognitive approach coping strategies, but this did not generalise to avoidance/approach overall. They did not have a higher likelihood of having an emotional disorder, but it is probable that they find stressors more distressing than residents with a higher mental ability, as they have greater difficulty understanding their environment and developing appropriate coping responses. This may be reflected in their lower use of cognitive approach coping and they may deal with the distress resulting from a lack of cognitive ability with increased cognitive avoidance coping responses

such as cognitive avoidance and acceptance or resignation. These have been shown to be less adaptive in a chronic severe stress situation, than behavioural avoidance coping responses and therefore probably reinforce their distress. The influence of IQ on coping responses deserves further investigation.

Demographic data of the Ashley population noted in the method section demonstrate that, as expected, these young people are the victims of a history and current environment characterised by chronic severe stress. Two thirds came from separated families, nearly half had a family member with a drug or alcohol problem, and three-quarters had at least one family member who had been in trouble with the law. 21% were subject to a child protection order and 20% lived away from home at an average age of 15. Nearly a third had committed an offence at or before 10 years of age, suggesting a lack of supervision by parents. Three quarters had been suspended from school at least once and they had an average reading age of 10 at an average age of 15, suggesting that they had been rejected by society and were not living up to society's expectations. The stressors reported by Ashley residents on the CRI-Y included having been arrested and detained at Ashley, being present when friends or family members were seriously injured or killed, car accidents, and sexual abuse of their girlfriends and themselves. As many as 98% reported such a chronic severe stressor.

It is therefore not surprising that they choose to cope using avoidance, particularly behavioural avoidance coping responses (Compas, 1987b; 1995). Seeking alternative rewards (or distraction) consists for them of taking drugs, drinking alcohol, seeking out social situations and turning to crime. Emotional discharge consists for them of verbally and physically assaulting people, smashing things and property, and crying. Seeking alternative rewards is useful in avoiding rumination and unwanted intrusions related to the stressors they have experienced, such as sexual and physical abuse, neglect, and witnessing domestic

violence. Emotional discharge is useful in dealing with their emotions arising from the stressors over which they have little control, and which they would have difficulty addressing with problem solving coping strategies.

In addition, it is to be expected that their history of chronic severe stress will result in the non-development of approach coping responses. They have neither learnt these from their parents, nor have had many occasions to develop them, as they have experienced more severe than generic stress. But the distress caused by the stress of their childhood also blocks the development of approach coping strategies (Rutter, 1985). This is particularly apparent in the results showing that those Ashley residents scoring positive for conduct and emotional disorders use less behavioural approach coping responses than those suffering from conduct disorder only, or than controls. Thus, those residents who are most distressed also use the least approach coping strategies. They are therefore caught in a vicious circle, where an interaction between internal and external resources (Holahan & Moos, 1986) leads to negative outcomes for them. They have low levels of resilience, in particular a low ability to use approach coping strategies in generic stress situations, which are therefore not resolved and which lead to continuing stress. This results in an increase in their emotional problems, which is followed by a further erosion of their resilience.

An obvious place to intervene in this problem is at its perceived beginning: in attempting to decrease the number and degree of the stressors occurring in these young people's lives. Many efforts are currently underway in building the external protective factors preventing the development of mental health problems (Commonwealth Department of Health and Aged Care, 2000). Improving resources for low socio-economic status families, the schools which these children attend, and the communities they are part of will help prevent situations of chronic severe stress from arising. However, another intervention is to foster the

development of internal, individual protective factors within these adolescents. If Ashley residents had approach coping skills for generic stress situations, as well as the ability, as Weisz (1986) suggests, to distinguish between situations where persistence would be successful, and situations where it would be fruitless, their choices and control over their future would be enhanced. These abilities can be learnt, as demonstrated by outcome studies of programs teaching coping skills (Barrett et al., 1996; Dadds et al., 1999; Dadds et al., 1997; Shochet et al., 2001; Shochet & Osgarby, 1999). However, Compas (1995) suggests that generic programs are not sufficient for adolescents exposed to more extreme forms of chronic stress. He proposes that the skills acquired in these programs could lay the foundation for additional skills that could be developed in more specialised programs for adolescents in high risk circumstances. These adolescents would benefit from a program targeting firstly the identification of stressful situations and paired appropriate coping responses, followed by a focus on the cognitive approach coping strategies which they use least, which are logical analysis and positive reappraisal.

Because of the dual purpose of this study which investigated both mental health status and coping strategies, the amount of information which could be collected in the coping and control area was limited. A questionnaire assessing degree of control over the stressor felt by participants may have supported the claim that the behavioural avoidance coping used by residents was adaptive due to their inability to control the stressor. This could be undertaken by a future researcher, as well as assessing the interaction of perceived control, type of stressor, and mental health problems. This is the first study to find that young people with both conduct and emotional disorders use less behavioural approach coping than those with conduct disorder only and controls. Further research into the coping strategies of conduct disordered adolescents and those with conduct disorder and emotional problems is needed to

shed further light on the coping strategies of these groups. This research should take the type of stressor into account as an important contributing variable to coping.

The present results provide two suggestions: firstly that a consideration of the type of stress a person reacts to is essential in considering the adaptiveness of his or her response. Approach coping responses are not always beneficial, and avoidance coping responses are not always detrimental to well-being. Before criticising young people from high risk backgrounds for their use of avoidance coping responses it is important to consider whether they are reacting to chronic severe stress, in which case behavioural avoidance coping would be an adaptive response. Secondly, it is likely that detained adolescents' resilience is weak and they would benefit from being involved initially in a generic coping program, and later in a specialised program dealing with identification of stressors and appropriate responses, and cognitive approach coping strategies. Young people with conduct and emotional disorders would benefit from a program targeting cognitive and behavioural approach coping strategies. Such programs would play an important role in the disruption of the vicious cycle of interaction between internal and external resources and result in improved outcomes for this disadvantaged group.

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Examiner _____
ID# _____

Adolescent Mental Health Questionnaire

by William M. Reynolds, PhD

Name _____	Today's Date _____ / _____ / _____ Mo. Day Yr.		
Gender <input type="radio"/> Male <input type="radio"/> Female	Grade in School _____ Birthdate _____ Mo. Day Yr.		
Height _____ ft _____ in	Weight _____ lbs	Ethnicity/race _____	Age _____
School/Agency _____			

Instructions:

Please complete the information section at the top of this form.

This questionnaire is designed to find out the types of problems that people sometimes have. The following pages contain statements that describe how people feel about themselves, others, and the world around them. Some of the statements ask how you have been feeling over a specific time period, such as the last 6 months or the last 2 weeks. **When answering the statements, please be sure to keep the time period in mind.**

To answer each question, fill in ●, make a check ✓, or make a mark ✗ in the circle that indicates your answer. You may mark your answer directly on this questionnaire booklet. For example, if you have enjoyed watching television nearly all the time in the past 6 months, you would mark your answer in the following way:

"In the past 6 months..." I enjoyed watching television.	Never or almost never	Sometimes	Nearly all the time
	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

There are no right or wrong answers to the statements on this questionnaire. Just answer how you have been feeling. Be as honest as you can in answering each statement.

Some statements may seem strange to you. Do not worry about this. This form is for people who might be having some problems as well as those who do not have any problems. Answer each statement as it best describes you and keep in mind the time period listed above each set of statements.

If you are not sure of a statement, just choose the answer that best describes you or how you feel. Please work carefully, answer all questions, and do not skip any questions.

If you need to change your answer, please erase your answer as completely as possible and mark the correct circle. Be sure that your first answer is erased completely. If you cannot erase your first answer, write NO over the incorrect answer and mark the correct answer.

PAR Psychological Assessment Resources, Inc./P.O. Box 998/Odessa, FL 33556
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"In the past 6 months..."

	True	False
1. I picked on other kids.	<input type="radio"/>	<input type="radio"/>
2. I skipped or cut school a couple times a month.	<input type="radio"/>	<input type="radio"/>
3. I started fights with others.	<input type="radio"/>	<input type="radio"/>
4. I broke into a house, car, or building.	<input type="radio"/>	<input type="radio"/>
5. I broke or destroyed things belonging to others.	<input type="radio"/>	<input type="radio"/>
6. I hurt animals.	<input type="radio"/>	<input type="radio"/>
7. I used a weapon in a fight.	<input type="radio"/>	<input type="radio"/>
8. I physically hurt someone.	<input type="radio"/>	<input type="radio"/>
9. I forced (or tried to force) someone to have sex.	<input type="radio"/>	<input type="radio"/>
10. A couple of times or more I stole things from a store.	<input type="radio"/>	<input type="radio"/>
11. I often broke the rules at home or at school.	<input type="radio"/>	<input type="radio"/>
12. On purpose, I damaged a car, or broke windows or things in a building.	<input type="radio"/>	<input type="radio"/>
13. I always admitted it when I made a mistake.	<input type="radio"/>	<input type="radio"/>
14. I felt mad enough to hurt people.	<input type="radio"/>	<input type="radio"/>
15. I didn't care if I hurt people.	<input type="radio"/>	<input type="radio"/>
16. I sometimes got angry.	<input type="radio"/>	<input type="radio"/>
17. I have taken a gun or weapon to school.	<input type="radio"/>	<input type="radio"/>
18. I was sometimes upset with my parents.	<input type="radio"/>	<input type="radio"/>
19. I lied a lot.	<input type="radio"/>	<input type="radio"/>
20. I always did the right thing.	<input type="radio"/>	<input type="radio"/>
21. I have been in trouble with the police.	<input type="radio"/>	<input type="radio"/>
22. I was suspended or expelled from school.	<input type="radio"/>	<input type="radio"/>
23. I have been in a lot of pain and the doctors couldn't find out why.	<input type="radio"/>	<input type="radio"/>
24. I gained more than 10 pounds in the past 6 months.	<input type="radio"/>	<input type="radio"/>
25. I set something on fire that I shouldn't have.	<input type="radio"/>	<input type="radio"/>
26. I stole something that did not belong to me.	<input type="radio"/>	<input type="radio"/>
27. I never got upset with my parents.	<input type="radio"/>	<input type="radio"/>
28. My weight has stayed about the same.	<input type="radio"/>	<input type="radio"/>
29. I lost 15 or more pounds in the past 6 months.	<input type="radio"/>	<input type="radio"/>
30. There have been a few hassles in my life.	<input type="radio"/>	<input type="radio"/>
31. I tried to kill myself.	<input type="radio"/>	<input type="radio"/>
32. The doctor said I was OK, but I knew I was sick.	<input type="radio"/>	<input type="radio"/>
33. I always asked for help when I needed it.	<input type="radio"/>	<input type="radio"/>
34. Someone did something to hurt me.	<input type="radio"/>	<input type="radio"/>
35. I was very afraid of getting fat.	<input type="radio"/>	<input type="radio"/>

“In the past 6 months...”

	True	False
36. Something very bad happened to me or my family.	<input type="radio"/>	<input type="radio"/>
37. Someone did something to me that hurt me very much.	<input type="radio"/>	<input type="radio"/>
38. I did something bad to someone who got me mad.	<input type="radio"/>	<input type="radio"/>
39. I got into trouble because of my sexual behavior.	<input type="radio"/>	<input type="radio"/>

“In the past month...”

	True	False
40. I have <u>lost</u> 5 to 10 pounds or more in the past month.	<input type="radio"/>	<input type="radio"/>
41. I have <u>gained</u> 5 to 10 pounds or more in the past month.	<input type="radio"/>	<input type="radio"/>
42. I felt more depressed in the mornings.	<input type="radio"/>	<input type="radio"/>
43. I usually woke up about 2 hours earlier than usual.	<input type="radio"/>	<input type="radio"/>
44. I took some medicine for depression.	<input type="radio"/>	<input type="radio"/>
45. I talked on the telephone.	<input type="radio"/>	<input type="radio"/>

“In the past year, I have had these problems but a doctor didn’t find what was wrong with me...”

	Never or almost never	Sometimes	Nearly all the time
46. Throwing-up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. Stomachaches.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. Pains in my arms or legs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. Other body pains.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. Headaches.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51. Trouble breathing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. My heart going too fast.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53. Feeling dizzy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
54. Things seemed blurry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
55. Fainting or passing out.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
56. Trouble walking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
57. Feeling really sick almost all the time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“In the past year...”

	Never or almost never	Sometimes	Nearly all the time
58. I felt like I was outside my body.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
59. I did things but it seems like I was in a dream.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
60. I got upset because it seems that things around me were not real.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
61. I felt that I was not in control of what I said or did.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
62. I had a hard time concentrating on what was going on around me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“In the past 6 months...”

	Never or almost never	Sometimes	Nearly all the time
63. I felt that everything was OK in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
64. I argued with my teachers or parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
65. I used drugs or alcohol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
66. I enjoyed getting together with my friends or family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
67. I did things without first thinking about them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
68. I was distracted a lot in school or work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
69. I had trouble paying attention in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
70. I interrupted others without meaning to do so.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
71. I had a hard time finishing assignments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
72. I worried about gaining weight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
73. I often felt fat even though people told me I was not fat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
74. It was hard for me to wait for things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
75. When someone asked a question I answered before they were finished.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
76. It was hard for me to sit still in class or at home.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
77. I lost my temper.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
78. I felt good about myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
79. I argued with adults.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
80. I did what adults asked me to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
81. I did things to bother people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
82. If someone told me to do something I did the opposite.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
83. If I did something wrong I blamed others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
84. Other people bothered me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
85. I felt very angry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
86. I worried that if I started eating I wouldn't be able to stop.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
87. I felt like getting back at others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
88. I swore at people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
89. I broke the rules at school or at home.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
90. I felt like (or was) dating someone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
91. At night, I stayed out later than I was allowed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
92. It was easy for me to relax when I met new people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
93. I got so mad that I threw things at home or at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
94. I felt comfortable meeting new people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
95. I did things that were against the law.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
96. I worried that people thought that I had acted strange.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
97. I was very lonely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

"In the past 6 months..."

		Never or almost never	Sometimes	Nearly all the time
98.	It was hard for me to be with people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
99.	I was worried that I had said or done something dumb or weird.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
100.	I was worried that I would not do well in school or sports.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
101.	I had fun with friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
102.	I felt very tense.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
103.	I worried that I had done something wrong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
104.	I got into trouble at school or at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
105.	I did not want to be with my friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
106.	I felt like crying.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
107.	I kept thinking about the bad thing(s) that happened.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
108.	I felt nervous.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
109.	I felt depressed or sad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
110.	I felt mad or angry with nearly everyone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
111.	I got into trouble with the police.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
112.	I stayed away from home without telling my parents where I was.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
113.	I did not study or turn in my homework.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
114.	I felt like doing things after school with my friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
115.	My parents got upset with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
116.	I was afraid of getting fat.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
117.	I worried about a lot of things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
118.	I worried what other kids or adults think about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
119.	I felt that something bad would happen to me or people I know.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
120.	I worried a lot about the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
121.	I felt shaky.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
122.	I had pains or aches in my body.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
123.	I felt restless.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
124.	I got tired easily.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
125.	I felt like my heart was going too fast.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
126.	I felt sweaty.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
127.	I felt dizzy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
128.	I felt sick to my stomach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
129.	I had chills or hot flashes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
130.	I felt that other people knew what I was thinking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
131.	I could not understand what was going on in school or at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
132.	Someone was speaking through my mouth but it wasn't me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“In the past 6 months...”		Never or almost never	Sometimes	Nearly all the time
133.	I heard voices in my head.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
134.	People said I was doing strange things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
135.	People seemed very strange to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
136.	I had trouble falling asleep.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
137.	I felt real jumpy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
138.	I felt upset.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
139.	I had trouble concentrating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
140.	I felt that I could read people's minds.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
141.	I felt that everything was going wrong in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
142.	I felt like crying for no reason.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
143.	I felt like someone or something was controlling me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
144.	I had trouble speaking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
145.	Strange thoughts came into my head.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
146.	I could see, hear, or taste things that other people did not think were there.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
147.	I felt that people were out to get me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
148.	People did not seem to understand what I was saying.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
149.	I felt that my thoughts were being spoken out loud.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
150.	My mind has been playing tricks on me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
151.	It was hard for me to take care of myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
152.	My body felt strange.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
153.	People who I could not see were telling me to do things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
154.	People were talking about me all the time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
155.	I felt that people could hear my thoughts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
156.	I kept seeing things that later I felt were not real.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
157.	People said I talked too fast.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
158.	I could not feel parts of my body.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
159.	I thought about my parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
160.	I could not think very well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
161.	I kept hearing the same thing over and over.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
162.	Thoughts got in my mind that I could not get rid of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
163.	I took diet pills to get my weight down.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
164.	I found myself in a place but could not remember how I got there.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
165.	I felt fat no matter how much weight I lost.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
166.	I did something I knew was bad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
167.	I needed to do things (like wash my hands, or count things) over and over.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“In the past 6 months...”

		Never or almost never	Sometimes	Nearly all the time
168.	I had some thoughts that I couldn't put out of my mind.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
169.	I had some bad thoughts that I tried to ignore.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
170.	I did something over and over so nothing bad would happen to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**“Recently, or in the past 6 months,
there have been times when I felt...”**

		Never or almost never	Sometimes	Nearly all the time
171.	Very distracted.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
172.	That I needed very little sleep.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
173.	Like talking a lot.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
174.	That my thoughts were racing through my head.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
175.	It was hard to focus on one thing at a time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
176.	Very happy, even though I had felt rotten not long ago.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
177.	So good that I could not get things done.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
178.	That my friends and family could not keep up with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
179.	So good that I thought I could get away with doing something I knew was wrong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
180.	Super good one day, and then really bad the next.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
181.	That I had a lot of energy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
182.	That I was talking very fast.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“In the past month, I felt...”

		Never or almost never	Sometimes	Nearly all the time
183.	Sweaty for no reason.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
184.	Shaky all over.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
185.	Dizzy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
186.	Like I had trouble breathing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
187.	Like my heart was going too fast.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
188.	A pain in my stomach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
189.	Like throwing up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
190.	Like I was choking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
191.	Like I wasn't in my body.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
192.	Like I was going to die.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
193.	Like the world was spinning around me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
194.	A pain in my chest.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
195.	That I had lost feelings in my hands or arms.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
196.	That something very bad was going to happen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“In the past month, I felt...”

	Never or almost never	Sometimes	Nearly all the time
197. Like I was in a place with too many people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
198. Like I might pass out.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“In the past 2 weeks...”

	Never or almost never	Sometimes	Nearly all the time
199. I worried that something bad would happen to people I cared about.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
200. I worried that something bad would happen to me, and that I would not see my parents again.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
201. I wanted to stay home with my mother or father rather than go to school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
202. I had a lot of pains or felt very sick and had to stay home.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
203. I felt nervous when I was away from home.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
204. I had bad dreams about being alone or about something bad happening to my family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
205. I had a hard time sleeping when I was away from home or when my parents were away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
206. I was worried that my mother or father would go away and not come back.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“In general...”

	Never or almost never	Sometimes	Nearly all the time
207. I like the way I look.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
208. I know that I can trust my friends and the people I like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
209. People say and do things to hurt me or get me in trouble.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
210. If I tell someone a secret, they will tell someone else.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
211. People make me mad real easily.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
212. My boyfriend or girlfriend sees other people behind my back.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
213. I think most people are evil.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
214. I feel like dating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
215. I smile at people when they smile at me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
216. I feel like I don't have any friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
217. I feel uncomfortable around people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
218. I see or feel things that others cannot.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
219. I think that other people are against me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
220. I talk to myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
221. I think that I have some special powers that others do not have.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
222. I feel there is no one that I can talk to.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
223. I feel silly for no reason.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
224. I have trouble talking or making people understand me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“In general...”

	Never or almost never	Sometimes	Nearly all the time
225. I feel that I am different from other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
226. I wish I had never been born.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
227. I feel like things are not real.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
228. It seems that once people get to know me they don't like me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
229. I get so angry that I can't control it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
230. I can't help doing things that I know are bad for me or will get me in trouble.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
231. My moods change quickly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
232. I think that most people like me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
233. I think about killing myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
234. I feel bored with life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
235. I feel out of touch with things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
236. I can't control my behavior.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
237. I have hurt myself on purpose.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
238. I worry that I will be alone in the world.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
239. My feelings are easily hurt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
240. I feel that I don't have any friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
241. People do things to be mean to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
242. I worry that I will say or do something wrong at a party.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
243. People can depend on me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
244. I feel that I am a good person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
245. I like to have people around me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
246. I worry that I will not have any friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
247. I feel that I must do things perfectly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
248. I think my work is not good enough even if people say it is.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
249. I worry that other people will see me cry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
250. I like to do things with friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
251. I panic if I am called on in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
252. I feel that I am too shy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
253. I worry that other people will think that I do not act right.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
254. I like to meet new people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
255. I feel scared about things or other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
256. I feel that I am as good as most people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
257. If my work is not perfect I would rather not turn it in.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
258. I keep things that are worn-out or that I no longer use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
259. It is important for me to follow a schedule.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“In general...”

	Never or almost never	Sometimes	Nearly all the time
260. It is important for me to follow the rules.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
261. I feel that I can trust most people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
262. It is easy for me to relax.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
263. I think that people are trying to cheat me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
264. I feel that I am a worthless person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
265. It is hard for me to throw things away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
266. I want people to do things my way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
267. I feel that I must make lists of things that I need to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
268. I like to keep things to myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“In the past 3 months...”

	Never	Once or twice a week	Three or more times a week
269. I threw-up on purpose after eating a large meal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
270. I took laxatives or exercised a lot so I wouldn't gain weight.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
271. I would force myself to throw up after eating a meal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
272. The sight of food made me feel sick.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
273. I felt depressed after eating a lot of food.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
274. I had to leave the house because I could not stop eating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
275. I ate large amounts of food in private so no one would see.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
276. I got sick after eating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

“During the past month...”

	Never	Once or twice a week	Three or more times a week
277. It was hard for me to get to sleep at night.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
278. Once I got to sleep, I seemed to wake up a lot at night.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
279. I woke up in the middle of the night and couldn't get back to sleep.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
280. I woke up earlier than usual and couldn't get back to sleep.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
281. I could not sleep or got less than an hour of sleep.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
282. I worried about not being able to fall asleep at night.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
283. I woke up at night because of nightmares.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
284. I woke up after a bad dream, and felt very upset.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
285. I dreamt that something bad happened to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
286. I was very frightened after waking up from a dream.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
287. I went to bed worrying that I would have a bad dream.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
288. I had a nightmare.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

"In the past 2 weeks..."

	Almost never	Sometimes	Nearly every day
289. I have felt very depressed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
290. I felt slowed down.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
291. I thought about killing myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
292. I had trouble falling asleep.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
293. I woke up early in the morning and couldn't go back to sleep.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
294. I felt that I was worthless.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
295. I felt that I had done something wrong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
296. I felt like I had no energy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
297. I had trouble keeping still or felt restless.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
298. I felt like or tried to hurt myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
299. I had trouble concentrating or thinking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
300. I felt guilty about things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
301. I did not feel like eating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
302. I felt miserable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
303. I felt very upset about things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
304. I cried or felt like crying.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
305. I felt like the things I used to like to do were no longer fun.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
306. I have been eating more than usual.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
307. I felt sick, or had aches or pains.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
308. I felt good about myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
309. I felt that things were hopeless.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
310. I felt tired most of the time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
311. I felt that life was not worth living.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
312. I was too tired to do my work or go to school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
313. I tried, or seriously thought about killing myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
314. I just wanted to be alone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
315. I felt very sad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
316. I felt like or stayed in bed most of the day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
317. I got mad easily.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
318. I felt that no one cared if I lived or died.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
319. I felt angry with myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate how often you may have used the following substances over the past 6 months.

“In the past 6 months, I have used...”		Never	Couple of times a month	Once a week	Couple of times a week	Nearly every day
320	Marijuana	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
321	Beer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
322	Hard liquor (rum, vodka, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
323	Wine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
324	Cocaine (coke, Crack)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
325	PCP (Angel Dust)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
326	LSD, DMT, or Mescaline	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
327	Speed, amphetamines, bennies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
328	Sniff paint, glue, white-out, spray-cans, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
329	Opium, heroin, or morphine.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
330	Downers, sleeping pills, seconals (reds), Quaaludes (ludes), etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
331	Other drugs or alcohol.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you answered “Never” to all the substances listed above (questions 320 to 331), skip the remaining items and tell the examiner you are finished with the questionnaire.

“If you use any of the substances listed above, do you...”		True	False
332	Find that you need to take or use more to get the same feeling as you used to.	<input type="radio"/>	<input type="radio"/>
333	Feel like you can't control your use of the substance, or have less control than you would like.	<input type="radio"/>	<input type="radio"/>
334	Spend a lot of time trying to get the substance.	<input type="radio"/>	<input type="radio"/>
335	Spend a lot of time using the substance.	<input type="radio"/>	<input type="radio"/>
336	Go to school or work drunk or high.	<input type="radio"/>	<input type="radio"/>
337	Spend more time using the substance than with your family or non-using friends.	<input type="radio"/>	<input type="radio"/>
338	Have some problems in school, with friends, or how you feel because of your use of the substance.	<input type="radio"/>	<input type="radio"/>
339	Feel like the substance no longer affects you as it used to.	<input type="radio"/>	<input type="radio"/>
340	Feel rotten when you stop using the substance.	<input type="radio"/>	<input type="radio"/>
341	Need to take the substance because if you stop you will feel rotten.	<input type="radio"/>	<input type="radio"/>
342	Use the substance even though you know it will cause you a lot of problems.	<input type="radio"/>	<input type="radio"/>
343	Get drunk or high during school or work.	<input type="radio"/>	<input type="radio"/>
344	Feel like you want to quit or stop using it but can't.	<input type="radio"/>	<input type="radio"/>
345	Take the substance because you feel depressed.	<input type="radio"/>	<input type="radio"/>
346	Feel like you can't get through the day without getting high or having a drink.	<input type="radio"/>	<input type="radio"/>

CRI-YOUTH FORM

Item Booklet

Rudolf H. Moos, Ph.D.

Directions:


On the accompanying answer sheet, please fill in your name, today's date, and your sex, age, grade in school, and ethnic group. Please mark all your answers on the answer sheet. **Do not write in this booklet.**

PAR Psychological Assessment Resources, Inc./P.O. Box 998/Odessa, FL 33556/Toll-Free 1-800-331-TEST

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 This form is printed in blue ink on recycled paper. Any other version is unauthorized.

Reorder # RO-2332

Part 1

This booklet contains questions about how you deal with important problems that come up in your life. Please think about the most important problem or stressful situation you have experienced **in the last 12 months** (for example, a problem with your parents, a problem at school, a serious illness or accident, or the death of a family member or a friend). Briefly describe the problem in the space provided in Part 1 of the answer sheet. If you have not experienced a major problem, list a minor problem that you have had to deal with. Then answer each of the 10 questions about the problem or situation (listed below and again on the answer sheet) by circling the appropriate response:

Circle "**DN**" if your response is **DEFINITELY NO**.

Circle "**MN**" if your response is **MAINLY NO**.

Circle "**MY**" if your response is **MAINLY YES**.

Circle "**DY**" if your response is **DEFINITELY YES**.

DN	MN	MY	DY
DN	MN	MY	DY
DN	MN	MY	DY
DN	MN	MY	DY

1. Have you ever faced a problem like this before?
2. Did you know this problem was going to happen to you?
3. Did you have enough time to get ready to deal with the problem?
4. When this problem happened, did you think about how it might harm you?
5. When this problem happened, did you think of it as a challenge?
6. Was this problem caused by something you did?
7. Was this problem caused by something someone else did?
8. Did anything good come out of dealing with this problem?
9. Has this problem or situation been worked out?
10. If the problem has been worked out, did it turn out all right for you?

Part 2

Read each item carefully and indicate how often you took that action to deal with the problem you described in Part 1. Circle the appropriate response on the answer sheet:

Circle "**N**" if your response is NO, Not at all.

Circle "**O**" if your response is YES, Once or Twice.

Circle "**S**" if your response is YES, Sometimes.

Circle "**F**" if your response is YES, Fairly often.

<input checked="" type="radio"/> N	<input type="radio"/> O	<input type="radio"/> S	<input type="radio"/> F
<input type="radio"/> N	<input checked="" type="radio"/> O	<input type="radio"/> S	<input type="radio"/> F
<input type="radio"/> N	<input type="radio"/> O	<input checked="" type="radio"/> S	<input type="radio"/> F
<input type="radio"/> N	<input type="radio"/> O	<input type="radio"/> S	<input checked="" type="radio"/> F

There are 48 items in Part 2. Remember to mark all your answers on the answer sheet. Please answer each question as accurately as you can. All your answers are strictly confidential. If you do not wish to answer a question, please circle the number of that question on the answer sheet to indicate that you have decided to skip it. If an item does not apply to you, please write **NA** (Not Applicable) in the box to the right of the number for that item. If you wish to change an answer, make an **X** through your first answer and circle the new answer. Note that answers are numbered across in rows on Part 2 of the answer sheet.

1. Did you think of different ways to deal with the problem?
2. Did you tell yourself things to make yourself feel better?
3. Did you talk with a parent or other family member about the problem?
4. Did you decide on one way to deal with the problem and do it?
5. Did you try to forget the whole thing?
6. Did you feel that time would make a difference—that the only thing to do was wait?
7. Did you get involved in new activities?
8. Did you take it out on other people when you felt angry or sad?
9. Did you try to step back from the problem and think about it?
10. Did you tell yourself that things could be worse?
11. Did you talk with a friend about the problem?
12. Did you know what had to be done and try hard to make things work?
13. Did you try not to think about the problem?
14. Did you realize that you had no control over the problem?
15. Did you try to make new friends?
16. Did you take a chance and do something risky?
17. Did you go over in your mind what you would say or do?
18. Did you try to see the good side of the situation?
19. Did you talk with an adult like a teacher, coach, counselor, clergyman, or doctor?
20. Did you decide what you wanted and try to get it?

21. Did you daydream or imagine things being better than they were?
22. Did you think that the outcome would be decided by fate?
23. Did you begin to read more often for enjoyment?
24. Did you yell or shout to let off steam?
25. Did you think about how things might turn out?
26. Did you keep thinking about how you were better off than other people with the same problems?
27. Did you look for help from other kids or groups with the same type of problem?
28. Did you try at least two different ways to solve the problem?
29. Did you put off thinking about the situation, even though you knew you would have to at some point?
30. Did you accept the problem because nothing could be done to change it?
31. Did you begin to spend more time in fun activities, like sports, parties, and going shopping?
32. Did you cry to let your feelings out?
33. Did you try to make sense out of why this problem happened to you?
34. Did you try to tell yourself that things would get better?
35. Did you ask a friend to help you solve the problem?
36. Did you try to do more things on your own?
37. Did you wish the problem would go away or somehow be over with?
38. Did you expect the worst possible outcome?
39. Did you try to keep busy with school or other things to help you cope?
40. Did you do something that you didn't think would work, but at least you were doing something?
41. Did you think about the new hardships that would be placed on you?
42. Did you think about how this situation could change your life for the better?
43. Did you ask for sympathy and understanding from someone?
44. Did you take things a day at a time, one step at a time?
45. Did you try to deny how serious the problem really was?
46. Did you lose hope that things would ever be the same?
47. Did you find new ways to enjoy life?
48. Did you listen to music as a way to cope?

Appendix C. Parent Information and Consent Forms.

(For parents of Ashley residents)

Dear (parent's name)

Re: Study: Coping Responses and Mental Health of Adolescents in Custody

I would like to ask your permission to allow (child's name) to complete two questionnaires while at Ashley. The process should take about 1 ½ hours and is being undertaken by the Oakrise Child and Adolescent Mental Health Service and is also part of a university project with the School of Psychology. Participation is voluntary and does not have to continue with the questionnaire once he (she) has started with it. It is completely confidential, with the exception of either your child or another person being in danger. In that case I will have to talk to you and about who I will have to tell this information to. When I write up the results, they will be anonymous and will not have 's name on them.

The purpose of this project is to find out if any young people at Ashley need extra help for depression, anxiety, trauma, or another reason. It will also provide information on what Ashley residents do when they are faced with a problem or stressful situation. The first questionnaire which I will help with, will help find out if any young people at Ashley suffer from depression, anxiety, trauma, or another problem. The second questionnaire looks at how deals with things that are difficult, problems or stressful situations, what he (she) does when coming across such things.

If answering these questionnaires reminds of things which were upsetting to him (her) or upsets him (her) in any other way, I will be able to help him (her) at any time he (she) asks during our meeting. When he (she) has completed the questionnaires, I will score the questionnaires and then write a brief report about the results. If he (she) seems to need extra help, I will suggest this to him (her), and also contact you, but it is only an offer, not obligatory.

..... can stop answering questions at any time and this will have no bad effect on how he (she) is treated at Ashley or in court. As part of the university study, I will also use some of the information from the first screening form that was filled in when first came to Ashley, but again this information will not be connected with his (her) name.

If you agree to allow your child to complete these questionnaires, please sign and return the attached consent form by (Date).

Yours sincerely

Rosie Bickel
Psychologist

Coping Responses and Mental Health of Adolescents in Custody

Rosie Bickel

STATEMENT OF INFORMED CONSENT (Parents of Ashley residents)

- 1. I have read and understood the information sheet for this study.
- 2. The nature and possible effects of this study have been explained to me.
- 3. I understand that my child might be reminded of upsetting situations.
- 4. I understand that some questions relate to criminal acts and that my child does not have to answer them.
- 5. I understand that all research data will be treated as confidential.
- 6. Any questions that I have asked have been answered to my satisfaction.
- 7. I agree that research data gathered for the study may be published provided my child cannot be identified as a participant.
- 8. I agree for my child to participate in this investigation and understand that he/she may withdraw at any time and my treatment will not change.

.....
Name of Child

.....
Name of Parent

.....
Signed

.....
Date

Date

Parents of students
of Grade 7 & 9 (11, Psychology Class)
Exeter District High School (Launceston College)

Dear Parents

Re: Study: Coping Responses and Mental Health of Adolescents in Custody

I would like to ask your permission to allow your child to complete a coping resources questionnaire during a class period. It should take about 20 minutes and is part of a university project with the School of Psychology. Participation is voluntary and your child does not have to continue with the questionnaire once he or she has started with it. It is completely confidential. When I write up the results, they will be anonymous and will not have your child's name on them.

The questionnaire I will ask your child to complete looks at how he or she deals with difficult problems or stressful situations, and what ways he or she uses to deal with the distress which results from them. The purpose of the project is to find out how students in Northern Tasmania compare to Ashley residents in the strategies they use when they are faced with a problem or stressful situation. When your child has completed the questionnaire, I will score the questionnaires, summarise the results of all young people tested, and then write a brief report about them. If the school requests this, I am willing to come back, explain the results to the students, and give them a copy of the report.

If you agree to allow your child to complete this questionnaire, please sign and return the attached consent form by (Date).

Yours faithfully

Rosie Bickel
Psychologist

Coping Responses and Mental Health of Adolescents in Custody
Rosie Bickel

STATEMENT OF INFORMED CONSENT (Parents of students)

- 1. I have read and understood the information sheet for this study.
- 2. The nature and possible effects of this study have been explained to me.
- 3. I understand that my child might be reminded of upsetting situations.
- 4. I understand that all research data will be treated as confidential.
- 5. Any questions that I have asked have been answered to my satisfaction.
- 6. I agree that research data gathered for the study may be published provided my child cannot be identified as a participant.
- 7. I agree for my child to participate in this investigation and understand that he/she may withdraw at any time and my treatment will not change.

.....
Name of Child

.....
Name of Parent

.....
Signed

.....
Date

Appendix D. Ashley Residents Information and Consent Forms

Coping Responses and Mental Health of Adolescents in Custody

Rosie Bickel (Psychologist)

INFORMATION SHEET (Ashley)

1. This screening is being done by Oakrise Child and Adolescent Service and as part of a university project. It is completely confidential, with the exception of either you or another person being in danger. In that case I will have to talk to you about who I will have to tell this information to.
2. Its purpose is to find out if any young people at Ashley need extra help for depression, anxiety, trauma, or another reason. It will also provide information on what Ashley residents do when they are faced with a problem or stressful situation.
3. The first questionnaire which I will help you with, will help find out if any young people at Ashley suffer from depression, anxiety, trauma, or another problem.
4. The second questionnaire looks at how you deal with things that are difficult, problems or stressful situations, what you do when you come across such things.
5. If answering these questionnaires reminds you of things which were upsetting to you or upsets you in any other way, I will be able to help you at any time you ask for it during our meeting.
6. When you have completed the questionnaires, I will score the questionnaires and then write a brief report about the results.
7. If you seem to need extra help, I will suggest this to you, but you don't have to accept it, if you don't want it.
8. The results which I will use for the university study will be anonymous and won't have your name on them.
9. You can stop answering questions at any time and this will have no bad effect on how you are treated at Ashley or in court.
10. As part of the university study, I will also use some of the information from the first screening form that was filled in when you first came to Ashley, but again this information will not be connected with your name.

Coping Resources of Adolescents in Tasmania

Rosie Bickel

STATEMENT OF INFORMED CONSENT (Ashley)

1. I have read and understood the information sheet for this study.
2. The nature and possible effects of this study have been explained to me.
3. I understand that the study involves filling in two questionnaires.
4. I understand that I might be reminded of upsetting situations.
5. I understand that some questions relate to criminal acts and that I do not have to answer them.
6. I understand that all research data will be treated as confidential.
7. Any questions that I have asked have been answered to my satisfaction.
8. I agree that research data gathered for the study may be published provided that I cannot be identified as a participant.
9. I agree to participate in this investigation and understand that I may withdraw at any time and my treatment will not change.

.....

Name

.....

Signed

.....

Date

Coping Responses and Mental Health of Adolescents in Custody

Rosie Bickel (Psychologist)

INFORMATION SHEET (Schools)

1. This screening is being done as part of a university project. It is completely confidential. When I write up the results, they will be anonymous and won't have your name on them
2. Its purpose is to find out how students in Northern Tasmania compare to Ashley residents in the sort of strategies they use when they are faced with a problem or stressful situation.
3. The questionnaire I will ask you to complete looks at how you deal with things that are difficult, problems or stressful situations.
4. If this questionnaire reminds you of things which were upsetting to you, I will be able to help you afterwards.
5. When you have completed the questionnaire, I will score the questionnaires, summarise the results of all young people surveyed and then write a brief report about them.
6. If you and your teachers want me to, I will come back and explain the results to you, and give you a copy of the report.
7. You can stop answering questions at any time and this will have no bad effect on your school report or how you are treated at school.

Coping Responses and Mental Health of Adolescents in Custody
Rosie Bickel (Psychologist)

STATEMENT OF INFORMED CONSENT (Schools)

- 1. I have read and understood the information sheet for this study.
- 2. The nature and possible effects of this study have been explained to me.
- 3. I understand that the study involves filling in two questionnaires.
- 4. I understand that I might be reminded of upsetting situations.
- 5. I understand that all research data will be treated as confidential.
- 6. Any questions that I have asked have been answered to my satisfaction.
- 7. I agree that research data gathered for the study may be published provided that I cannot be identified as a participant.
- 8. I agree to participate in this investigation and understand that I may withdraw at any time.

.....
Name

.....
Signed

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Date