

UNIVERSITY OF SOUTHAMPTON

**SCHEMAS IN ADOLESCENTS AND THEIR RELATIONSHIP TO
PSYCHOPATHOLOGY**

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General Abstract

To date, the vast majority of the research on Early Maladaptive Schemas (EMS's) focuses on adulthood. Little consideration has been given to the possibility of the identification and modification of EMS's in adolescence. This dissertation consists of two papers, both of which emphasise the importance of investigating the role that schemas may have in adolescent psychological disorders.

In order to explore the role of schemas in adolescence, a literature review, covering both research findings from adolescent and adult studies, was carried out. Firstly, it looks at traditional models of cognitive therapy and its limitations in effectively treating complex psychological disorders. Conceptualisations of schema were then considered, followed by review of Young's (1990) theory and the evidence that exists to support it. Given that early development is considered central in the formation of schemas, attachment theory is discussed in the context of both child and adult psychological dysfunction. This basis is used to discuss the theoretical, developmental and treatment implications of schemas in adolescence. Finally, suggestions are made as to how these ideas may be taken forward in terms of future research.

The research paper investigated the psychometric properties of a modified version of the Young Schema Questionnaire- Short Form, as well as exploring the relationship between schemas, psychopathology, self-esteem and personality in a non-clinical adolescent sample. The clinical and research implications of these findings were discussed.

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Contents

Title Page.....	i
General Abstract.....	ii
Acknowledgements.....	iii
Contents.....	iv

Literature Review

The Development of Early Maladaptive Schemas and their Role in Adolescent Psychopathology

Title Page.....	1
Abstract.....	2
Introduction.....	3
Theoretical Overview of Standard Cognitive Therapy.....	4
Schema Theory.....	8
Concept of Schema.....	8
Early Maladaptive Schemas (EMS's).....	12
Schema Domains.....	13
Schema Processes.....	16
Schema Maintenance.....	17
Schema Avoidance.....	17
Schema Compensation.....	18
Schema Modes.....	19
Young Schema Questionnaire.....	20
Schema Focused Therapy.....	23

Attachment Theory.....	24
Attachment and Psychopathology.....	26
Integration of Attachment and Cognitive Theory.....	28
Negative Cognitions in Adolescence.....	30
Developmental Considerations.....	30
Dysfunctional Cognitions in Adolescents.....	32
Cognitive Behavioural Therapy with Young People.....	37
Conclusions.....	38
References.....	40

Empirical Paper

Factor Structure of the Young Schema Questionnaire (Short Form) in a Non-Clinical Adolescent Sample

Running Head.....	61
Title Page.....	62
Abstract.....	63
Introduction.....	64
Negative Thoughts, Cognitive Processes and Psychopathology in Adolescents	65
Dysfunctional Cognitions in Adolescents.....	66
Schemas and Personality Disorder in Adolescents.....	67
Schema Theory.....	69
Early Maladaptive Schemas.....	70
Schema Domains.....	71
Young Schema Questionnaire.....	73
The use of Schema Questionnaires with Adolescents.....	74
Aims of the Study.....	76
Method.....	77
Participants	77
Measures.....	77
Procedure.....	80
Data Analysis.....	80
Results.....	82

Factor Structure of the YSQ-S.....	82
Gender Differences.....	83
Age Differences.....	85
Internal Consistency.....	87
YSQ-S, Psychopathology and Self-Esteem.....	87
YSQ-S and Personality.....	88
Discussion.....	90
References.....	98
Tables.....	109
Appendices.....	118

List of Tables

Table 1: Age and Sex of Participants

Table 2: Rotated Factor Analysis of the YSQ-S.

Table 3: Rotated Factor Analysis of the YSQ-S (Males)

Table 4: Rotated Factor Analysis of the YSQ-S (Females)

Table 5: Rotated Factor Analysis of the YSQ-S (Younger Group)

Table 6: Factor Analysis of the YSQ-S (Older Group)

Table 7: Pearson correlation coefficient (one-tailed) between YSQ-S factors and total score, BSI Primary Indices and the RSE.

Table 8: Pearson correlation coefficients (two-tailed) between JEPQR-A, YSQ-S factors and total score and BSI Primary Indices.

Table 9: Regression analysis of the YSQ-S total score and Neuroticism as predictors of psychopathology.

List of Appendices

Appendix A: Manuscript submission information for 'Cognitive Therapy and Research'.

Appendix B: School recruitment letter

Appendix C: Modified form of the YSQ-S and permission for use.

Appendix D: Letter confirming ethical approval

Appendix E: Letter to parents for participant consent.

Appendix F: Information for participants

Appendix G: Feedback report for participants

Appendix H: Tables of rotated factors

SCHEMAS IN ADOLESCENTS AND THEIR RELATIONSHIP TO PSYCHOPATHOLOGY

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**This paper has been prepared for submission to ‘Cognitive Therapy
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Schemas in Adolescents and their Relationship to Psychopathology

Abstract

The aim of this paper is to explore the literature that examines the potential role of Early Maladaptive Schemas (EMS's) in adolescent psychopathology. In order to explore this idea, the review is structured in the following way. Firstly, it looks at traditional models of cognitive therapy, and how their limitations have led to a greater focus on schemas. The various definitions of schemas are discussed next, followed by a more in depth review of Young's ideas about EMS's and the therapy that he has developed as a result (Young, 1990). An important aspect of Young's work is the development of a questionnaire measure of EMS's, and the studies which have explored the questionnaire's psychometric properties and clinical utility are described. Given the proposed importance of early development in the formation of schemas, the second part of the review examines related theories of early dysfunction and later psychopathology. Attachment theory is discussed in the context of both child and adult psychological dysfunction, and links are made to cognitive theory. The review then considers the theoretical, developmental and treatment implications of schemas in adolescence. Conclusions are drawn in order to establish how these ideas may be taken forward in future research.

Key Words: Schemas, adolescence, psychopathology, attachment, development

Introduction

Schemas have become prominent within our theoretical understanding of adult psychopathology. This, in turn, has led to developments in clinical interventions for the treatment of intractable psychological difficulties, such as personality disorders. Schema theories propose that these deeper level cognitive structures originate in early childhood, but there is limited empirical support for this idea. In addition, there is almost no research that has attempted to look at whether schemas are identifiable in adolescence. There are a number of reasons why it is important to consider how schemas develop during adolescence. Firstly, exploring schemas in adolescence could impact on our understanding of the development of psychopathology; secondly, knowledge about schemas could facilitate our conceptualisation of adolescent psychopathology; and finally, such investigation could provide evidence which can either strengthen or challenge current theoretical models of dysfunctional cognition.

In order to explore these ideas, this review is structured in the following way. Firstly, it looks at traditional models of cognitive therapy, and how their limitations have led to a greater focus on schemas. The various definitions of schema are discussed next, followed by a more in depth review of Young's ideas about early maladaptive schemas and the therapy that he has developed as a result (Young, 1990). An important aspect of Young's work is the development of a questionnaire measure of these hypothesised early maladaptive schemas and the studies, which have explored the questionnaire's psychometric properties and clinical utility, are described. Given the proposed importance of early development in the formation of schemas, the second part of the review examines related theories of early dysfunction and later psychopathology. Attachment theory is discussed in the context of both

child and adult psychological dysfunction, and links are made to cognitive theory. This conceptual framework is used to discuss the theoretical, developmental and treatment implications of schemas in adolescence. Conclusions are drawn in order to establish how these ideas may be taken forward in future research.

Theoretical Overview of Standard Cognitive Therapy

Cognitive therapy is the field of applied psychology that is unified by a belief in the central role played by mediating knowledge structures in explaining and changing human behaviour. Within its many diverse orientations, cognition is seen as having a contributory role in influencing emotion. Cognitive-behavioural accounts of psychopathology came to the fore in the late 1960s, as a reaction to the theoretical excesses and practical limitations of classical psychoanalysis and to the rigid, restrictive nature of radical behaviourism. Beck (1967) developed a comprehensive model based on the tenet that people form certain beliefs about themselves and the world as a result of early experience, and use these beliefs to process later experiences. If these beliefs are extreme, rigid and resistant to change, they may be 'dysfunctional'. According to the theory, these core beliefs represent a vulnerability factor that interacts with negative life events to contribute to the development of psychological disorders (Abramson, Alloy, & Metalsky, 1988; Alloy, Hartlage, & Abramson, 1988).

Beck's theory has a causal mediation component, in that the interaction between dysfunctional attitudes and negative life stress should contribute to the operation of faulty cognitions, such as negative automatic thoughts about the self, world and future. In depression, for example, the self is often seen as worthless, the world may be seen as full of obstacles and the future can seem hopeless (Beck, Rush,

Shaw, & Emery, 1979). Thus, this 'stream of consciousness' is activated by negative life stress among cognitively vulnerable people (Eaves & Rush, 1984; Rush & Beck, 1978). Recent research has found evidence for the causal mediation component of Beck's theory of depression. Joiner, Metalsky, Lew and Klocek, (1999) looked at dysfunctional attitudes and symptoms of anxiety and depression in students before and after their mid term examinations. Their findings indicated that dysfunctional attitudes and exam outcome contributed to depression, but not through the operation of anxious cognitions. The considerable debate over whether cognition temporally precedes and therefore causes affective responses, or vice versa (Lazarus, 1982; Zajonc, 1980, 1984) has yet to reach firm conclusions. What is clear is that cognitions, emotion and behaviour are viewed by cognitive theorists as reciprocally determining and interactive constructs (Beck, 1991). Given that different types of psychological disorder have different outcomes in terms of behaviour, cognitive theory also postulates that the content of cognition is disorder-specific. According to this content-specific hypothesis, the contents of depressive cognitions are loss and failure (Beck et al, 1979). Such persons are over-sensitised to misinterpret most events in their life in these terms. The contents of anxiety cognitions are fear of physical or psychological harm or danger (Beck & Emery, 1985). Finally, the contents of aggression cognitions are unfairness and hostility, with an emphasis on immediate gratification rather than on future consequences (Beck, Freeman, & Pretzer, 1990). The content specific hypothesis has been criticised because disorders are not mutually exclusive, and individuals with the same disorder do not necessarily share a common cognitive content (Maser & Cloninger, 1990).

Another important feature of Beck's model is the distinction made between different levels of cognition. Beck's theoretical framework distinguishes between

automatic thoughts (content), faulty information processing due to dysfunctional assumptions (process) and core beliefs (structures, schema). The latter are thought to represent complex templates of cognition that determine how experiences are perceived and conceptualised. Incoming data is transformed to fit and reinforce these structures. This is achieved through the operation of characteristic information-processing mechanisms: arbitrary inference, selective abstraction, over-generalisation, magnification and minimisation, personalisation, labelling/mislabelling and dichotomous thinking (Beck et al., 1979). Once activated, dysfunctional assumptions give rise to negative automatic thoughts (NAT's). NAT's are so called because they are ideas or thoughts that seem to come into the mind automatically. They are consciously available and often have a self-evaluative element. NAT's are usually associated with unpleasant emotions. They become more frequent and intense as psychological distress develops and maintain other symptoms of the particular disorder. Some theorists, (e.g. Beck 1987; Layden, Newman, Freeman, & Morse, 1993; Wells & Hackman, 1993) see cognitions as incorporating images as well as verbal content.

This theoretical standpoint has led to a therapeutic approach, which is known as standard cognitive therapy. A definition of this is offered by Beck and Shaw (1977) as:

A standard, time-limited, problem orientated psychotherapy aimed at modifying the faulty information processing activities evident in psychological disorders like depression. Since cognitive therapy considers a hypervalent set of maladaptive concepts as a central characteristic of psychological disturbances, then the correction and damping down of these concepts should alleviate symptomatology. The therapist and patient

collaborate to identify distorted cognitions, which are derived from maladaptive beliefs or assumptions. These cognitions and beliefs are subjected to *logical analysis* and *empirical hypothesis-testing* which leads individuals to realign their thinking with reality. (p. 18)

There have been many advantages to using a cognitive-behavioural approach for understanding and treating psychological disorders. Such frameworks provide a working understanding of the immediate cognitive phenomenology influencing affect and behaviour in a way that is easily accessible to the patient. However, Beck's version of cognitive therapy has come under criticism (Guidano & Liotti, 1983; Mahoney, 1991; Safran & Seagal, 1991). It has been noted that a subgroup of patients do not show an adequate therapeutic response to cognitive therapy (Hollon & Najavits, 1988; Robins & Hayes, 1993). Standard cognitive therapy has also been criticised for its inadequacies in dealing with the full range and complexity of clinical issues that arise (Clark, 1995). The main criticisms are: standard cognitive therapy has a limited view of emotion, an inadequate view of interpersonal factors, too little emphasis on the therapeutic alliance, and an overemphasis on conscious, controlled processing. The recognition of these limitations by cognitive therapists has led to a shift in the last decade towards an ever increasing focus on 'deeper' level cognitions or schemas as a focus for change, particularly with complex psychological problems such as personality disorder (Beck, Freeman & Pretzer, 1990; Padesky & Greenberger, 1995; Young, 1990). Schema-focused therapy (Young, 1990) is just one of the emerging cognitive therapies that has developed in an attempt to address the limitations of standard cognitive therapy.

Schema Theory

Young (1990) originally developed his integrative model of Schema Focused Therapy (SFT) in part to specifically address the needs of patients with long-standing characterological and other chronic disorders. Patients with personality disorders and other chronic difficulties frequently fail to respond to more traditional short-term cognitive therapy. Young (1990) cites several reasons for this. Firstly, short-term cognitive therapy assumes a degree of flexibility on the part of the patient. One of the hallmarks of personality disorder is the presence of pervasive inflexible patterns that are enduring (DSM-IV; APA, 1994). Secondly, short-term cognitive therapy assumes that patients have access to their thoughts and feelings, at least to some extent. Personality disordered individuals tend to actively avoid looking at their deepest cognitions and emotions. Lastly, personality disordered patients tend to have dysfunctional interpersonal relationships whereas the therapy relationship is not usually a major problem focus in short-term cognitive therapy. To facilitate the conceptualisation and treatment of such individuals, Young developed a set of theoretical constructs, which he called early maladaptive schemas that expanded the short-term cognitive model (Beck et al., 1979). Young (1990) views this expansion as a “convenient clinical heuristic” rather than an all-encompassing theory of psychopathology. Before focussing on Young's conceptualisation of schema specifically, it is useful to consider a more generic concept of the schema as a cognitive construct.

Concept of Schema

Cognitive theorists (Beck, Freeman, & Pretzer, 1990; Stein & Young, 1993; Young, 1990) view schemas as an important vulnerability factor in the development of psychopathology. Definitions of the term ‘schema’ vary considerably within the

literature. To further add to the confusion on definitions, the terms schema and core belief seem to be used interchangeably within the literature. Whilst no clarity has been confidently established, the term schema tends to be used more commonly to describe a cognitive structure which processes information according to the pre-existing beliefs contained within it, whereas core belief tends to refer to an unyielding belief held by the individual which may be contained within a schema. Beck, Freeman and Pretzer (1990) provide one definition of schemas:

In the field of psychopathology, the term schema has been applied to structures with a highly personalised idiosyncratic content that are activated during disorders such as depression, anxiety, panic attacks and obsessions and become prepotent. Thus in clinical depression, for example, the negative schemas are in ascendancy, resulting in a schematic negative bias in interpretation and recall of experiences as well as in short term and long term predictors, whereas positive schemas become less accessible. (p. 32)

Young (1990) has taken a more specific approach, proposing that schemas are unique to each person. He has developed a model in which Early Maladaptive Schemas (EMS's) are seen as 'templates for the processing of later experience' (p. 9). He describes schemas as extremely stable and enduring themes that develop during childhood and are elaborated on throughout an individual's life. Biological factors are thought to play a role in the development of schemas. Freeman (1993) maintains that schemas begin at birth, and possibly even in utero. The child's ability to negotiate various developmental tasks may be in part determined by his or her innate temperament, in combination with parenting styles and social influences. Young (1990) sees his conceptualisation of schema as being structurally similar to Lakatos's 'metaphysical hard core' (Guidano & Liotti, 1983):

A deep, relatively indisputable metaphysical hardcore...identified essentially in the tacit self-knowledge that has been progressively elaborated during the course of development and that...is for individuals a kind of implicit general view of themselves'. (p. 66)

The development of an individual's knowledge is an active process in response to the environment (Popper, 1972). At birth, the individual is provided with a biological identity, but not as yet a personal psychological one. The neonate has the capacity to sense and interpret what arrives through the sensory organs, and to actively process tacit knowledge. Tacit knowledge is described as the primary form of knowledge in early development that is not dependent on verbalisation, reflection and awareness (Guidano & Liotti, 1983). The development of language allows for the progressive construction of a more explicit knowledge, based on this tacit knowledge and the continuing incoming flow of information. It is this process which is thought to permit the gradual establishment of stable and ordered knowledge or reality. How this knowledge is developed is thought to be the active work of an idiosyncratic agent, that is, the individual. Thus, an infant learns to know through exploring and actively interacting with his or her own environment, in which other people are the most important objects. The child is not passive in selecting the content of this knowledge; he or she actively selects and constructs rules and concepts about the self and others. Thus the organisation of emotional experience, and cognitive growth are the main theoretical strands in an integrative approach to maturational processes, environmental influences, and knowledge organisation.

In recent years, the role of tacit knowledge in the development of emotional disorders has been given more consideration (Lundh, 1988). The possibility of two

cognitive systems has been raised; one being conscious, controlled, highly adaptive, but of limited attentional capacity, and the other being automatic, non-conscious, effortless and of unlimited capacity due to it being outside awareness. Schemas are seen as being part of this second system. Experimental cognitive psychologists have demonstrated the existence of information processing outside of conscious awareness (Brewin, 1988; Williams, Watts, MacLeod, & Matthews, 1988). In addition, clinical information processing studies have found evidence of preconscious automatic selective attentional processing of threat stimuli in anxiety disorders (MacLeod & Rutherford, 1992; Mogg, Mathews, & Eysenck, 1992). Together these findings provide strong support for the existence of non-conscious, automatic cognitive activity in emotional disorders, although not necessarily of schemas specifically.

This focus on tacit knowledge has received a mixed reaction. Ellis (1990) sees it as embracing some of the less desirable (non-empirical) features of psychodynamic approaches. Perris (2000) gives two main reasons for accepting the idea of tacit knowledge and its implications. Firstly, the acceptance of unconscious automatic cognitive/emotional processes in the organisation of knowledge are, as Bowers (1984) stipulates, "logically necessary and do not depend on, or derive from, the warrant or validity of psychoanalysis" (p.227). Such structures could be viewed in terms of Kelly's concept of core constructs (Kelly, 1955). Secondly, there is a danger of making a similar error as the behaviourist movement did, in denying the influence of cognitions on behaviour, due to them not being observable or easily measurable. Thus, the fact that the tools to reliably measure schemas are in their infancy is not a reason for dismissing the concept altogether. James (2001) outlines some of the positive aspects of the increased attention to deeper level cognitions. As the models are more comprehensive, they may lead to a greater understanding about



the development and maintenance of psychological problems. The “testability” of schemas is open to question, given that they are outside of conscious awareness. However, Young (1990) has made an attempt to move towards this possibility, with his categorisation of early maladaptive schemas, which are organised in terms of deficits in early development. The following section will firstly define EMS's, describe the eighteen EMS's proposed by Young, and then briefly explain the processes through which EMS's are thought to operate.

Early Maladaptive Schemas (EMS's)

Early Maladaptive Schemas have several defining characteristics. Firstly, they are a priori truths that are implicit. In contrast with underlying assumptions, schemas are seen as unconditional. Once the schema is activated, the belief about the outcome is inevitable. Secondly, EMS's are self-perpetuating and so are resistant to change. Schemas are comfortable and familiar, and so incoming information is distorted in order to maintain their validity. Thirdly, EMS's, by definition, must be dysfunctional, leading directly or indirectly to psychological distress. Fourthly, EMS's are activated by relevant environmental factors. For example, if a person with an Abandonment schema is separated from a significant individual for a period of time, the schema would be activated, usually accompanied by a higher level of affective arousal than would be expected with the activation of an underlying assumption. Lastly, EMS's are thought to be the result of both the child's innate temperament and his or her early experiences. Young (1990) suggests that rather than resulting from isolated traumatic events, schemas are formed through the ongoing patterns of everyday negative experiences with others, which cumulatively strengthen the schema.

Young and Klosko (1993) suggest that EMS's are present in normal populations, but become exaggerated and extreme in symptomatic individuals. If this were the case, then it would follow that schemas could also have a role in the maintenance of all types of psychopathology. Padesky (1994) suggests that patients with a personality disorder (Axis II) may differ from patients with a symptom disorder (Axis I) in terms of the degree of dysfunction, the number of dysfunctional schemas, or the absence of a more adaptive set of beliefs which counter-balance the dysfunctional beliefs incorporated into the schema. Young (1990) identified a classification system of 16 common schemata that are proposed to underlie an individual's psychopathology, based on clinical experiences with "chronic psychotherapy patients". This list was expanded to 18 (Young, 1998) and has been grouped into five broad schema domains, corresponding to the child's primary tasks of normal development. The schema domains comprise Disconnection and Rejection, Impaired Autonomy and Performance, Impaired Limits, Other Directedness and Overvigilance and Inhibition. These are described below together with the EMS's in each domain. When parenting and the social environment are optimal, children develop appropriately in all five areas. However, when either the parental or social environment is not optimal, children are vulnerable to developing EMS in one or more of these schema domains.

Schema Domains

Disconnection and Rejection: This domain is based on the expectation that one's need for safety, nurturance and acceptance will not be met in a predictable manner. The typical family origin is described as rejecting, unpredictable or abusive. Connection involves having intimate emotional ties to others or a sense of belonging and fitting into a group. In order to develop this sense of social desirability, children

need unconditional love and dependable parenting. This domain comprises the following EMS's.

1. Abandonment/Instability: The sense that significant others will not be able to continue providing emotional support or practical protection because they are emotionally unstable or unpredictable; because they will die imminently; or because they will abandon the person in favour of someone better. 2. Mistrust/Abuse: The expectation that others will abuse, humiliate, or manipulate the person, either through intentionally or through extreme negligence. 3. Emotional Deprivation: The expectation that one's desire for emotional support will not be adequately met. Such deprivation can take the form of a lack of nurturance, empathic understanding or protection. 4. Defectiveness/Shame: The feeling that one is invalid in important aspects or would be unlovable to significant others if exposed. This may also involve a sense of shame about one's perceived flaws. 5. Social Isolation/Alienation: The feeling that one is isolated or different from other people.

Impaired Autonomy & Performance: This domain relates to expectations about oneself and the environment that interfere with the ability to function independently, or perform successfully. The typical family origin is enmeshed, undermining of the child's confidence. Four schemas come within this domain.

6. Dependence/Incompetence: The belief that one is unable to handle everyday responsibilities without considerable help from others. 7. Vulnerability to Harm or Illness: An exaggerated fear that disaster (medical, emotional, external events) will strike at any time and that one is unable to prevent it. 8. Enmeshment/Undeveloped Self: An excessive emotional involvement with significant other(s), and the belief that one cannot survive without the constant support of that person(s). 9. Failure: The belief that one is fundamentally inadequate to one's peers in areas of

achievement. Often involves beliefs that one is stupid, lower in status, and less successful than others are.

Impaired Limits: This domain refers to a deficiency in internal limits, responsibility to others or long term orientation. This can lead to difficulties in respecting the rights of others, making commitments, or setting and meeting realistic personal goals. The typical family origin is characterised by permissiveness, a lack of direction or a sense of superiority. In some cases the child may not have been pushed to tolerate normal levels of discomfort or may not have been given adequate supervision and guidance. Two schemas make up this domain.

10. Entitlement/Grandiosity: The belief that one is superior to others, entitled to privileges, or not bound by the normal rules of social interaction. Can include excessive competitiveness toward or domination of others. 11. Insufficient self-control/self-discipline: A difficulty or refusal to exercise sufficient self-control to achieve goals, or to restrain the excessive expression of one's own emotions or impulses.

Other directness: This domain relates to an excessive focus on the desires and responses of others, at the expense of one's own needs, in order to gain love and approval or avoid retaliation. This usually involves suppression and lack of awareness regarding one's own anger. The typical family origin is based on conditional acceptance. In such families, the parent's emotional needs and desires are valued more than the unique feelings of the child. The schemas in this domain are as follows.

12. Subjugation: Involves the surrendering of control to others because one feels coerced, usually to avoid anger or abandonment. Usually involves the perception

that one's own desires, opinions and feelings are not important to others. 13. Self-sacrifice: Excessive focus on meeting the needs of others, at the expense of one's own gratification. 14. Approval-seeking/Recognition-seeking: Excessive emphasis on gaining approval, recognition, or attention from others at the expense of developing a secure and true sense of self.

Overvigilance and Inhibition: The four schemas in this final domain put an excessive emphasis on suppressing one's spontaneous feelings and impulses, or on meeting rigid internalised rules about performance and ethical behaviour, often at the expense of positive outcomes. The typical family origin is demanding and sometimes punitive and there is usually an undercurrent of pessimism.

15. Negativity/Pessimism: Involves a persistent focus on the negative aspects of life and an exaggerated expectation that things will eventually go seriously wrong. 16. Emotional Inhibition: The excessive inhibition of spontaneous action, feelings or communication to avoid disapproval by others or feelings of shame. 17. Unrelenting Standards/Hypercriticalness: The belief that one must reach very high internalised standards of behaviour and performance, usually to avoid criticism. 18. Punitiveness: The belief that people should be harshly punished for making mistakes, involving the tendency to be intolerant, punitive and impatient with self and others when they don't meet one's expectations and standards.

Schema Processes

As EMS's are identified and challenged in an individual, the person engages in a variety of cognitive, affective and behavioural manoeuvres, called schema processes. These processes explain how schemas are maintained over time, how they are avoided, and how individuals sometimes adapt to their schemas by

overcompensation. They serve to maintain the validity of the schema and to avoid experiencing the painful affect resulting from schema activation. These processes share a certain degree of similarity with psychoanalytic concepts of resistance and defence mechanisms (Young & Behary, 1998).

Schema Maintenance

Schema Maintenance refers to the processes by which EMS's are reinforced, and accounts for the rigidity that is characteristic of complex psychological problems. At the cognitive level, this involves an excessive focus on confirmatory information, and negating contradictory information. This process is not a new concept in cognitive theory, and is commonly known as a cognitive distortion (Beck, 1967). At the behavioural level, the schema is maintained through self-defeating behaviour patterns. These behavioural patterns are hypothesised to develop early in life and may have been adaptive in helping the child to cope with adverse early experiences. However, once the person has left the adverse situation, these behaviours become self-defeating and function to reinforce the person's schemas. For example, someone who failed to develop a sense of competence as a result of being overprotected as a child may cope with adolescence by allowing others to make decisions for him or her. It is often the case that individuals remain hopeless about changing these patterns, even after they have been pointed out to them, as the schema is seen as central to their sense of self, rather than a more transitory way of being.

Schema Avoidance

When EMS's are triggered, the individual experiences a high degree of negative affect, which is usually unpleasant. Therefore, the individual develops both

volitional and automatic processes to avoid either triggering the schema in the first place, or experiencing the affect connected to the schema. Three types of avoidance may occur. Cognitive avoidance refers to blocking the thoughts and images that might trigger the schema. Depersonalisation, whereby the person removes him or herself psychologically from a situation can occur. People who have experienced particularly painful events, such as sexual abuse, can forget the memory completely. Affective avoidance refers to the ways in which an individual blocks feelings. Self-harm and drug misuse are methods commonly used to numb an overwhelming emotional experience. Another form of affective avoidance is a learned automatic process for dulling one's emotional experience, which can take place even when there is no cognitive avoidance. Young (1990) suggests that this leads to the experience of "more chronic, diffuse emotions and psychosomatic symptoms, in comparison with non avoidant patients who experience more intense acute emotions that pass quickly" (p.23). Behavioural avoidance refers to the evasion of potentially challenging real-life situations that may act as triggers. This can manifest in the extreme in the inability to function at all in a work setting or in a relationship.

Schema Compensation

This process refers to behaviours that overcompensate for a schema; they present as the opposite of what one would expect based on the knowledge of the person's EMS's. Such processes can be functional to an extent, as they can lead to the person putting all their energy into getting their needs met, which were not met in early life. However, schema compensation involves a failure to recognise the underlying vulnerability, leaving the person unable to deal with the effect of failures in the compensatory strategy and the emergence of the underlying schema. For example, someone with a Dependence schema may go to great lengths to build in

excessive routine and structure to their life in order to prevent them being in a situation where they would have to depend on someone else.

Schema Modes

A more recent addition to Young's theory of schema processes is schema modes. A schema mode represents a group of schemata or processes that are currently active for an individual. These manifest as a strong emotional response or a rigid coping style that dominates an individual's functioning. Individuals can shift from one mode to another; as that shift occurs, a different group of schemas, that were previously dormant, become active. These modes are thought to represent facets of the self that have not become fully integrated with other facets, similar to a dissociative state. Young has proposed four general categories of mode; the child modes, the maladaptive coping modes, the maladaptive parent modes, and the healthy adult modes (see Young & Behary, 1998 for a more comprehensive description of schema modes).

Empirical support for Young's theory is in its infancy, although it is already partially validated though its allegiance with existing models of cognitive therapy which have been reviewed already, and early attachment processes, which are discussed later in this review. However, the development of the Young Schema Questionnaire (Young, 1990, 1991) has allowed the cognitive component of EMS to be empirically tested.

Young Schema Questionnaire

The Schema Questionnaire (YSQ; Young 1990, revised 1991) consists of 205 items and was designed to measure 16 EMS, but was again modified in 1994. The questionnaire currently exists in two forms; a long version (205 items) and a short version (75 items). The short form includes those items which loaded most highly onto the 15 factors (of the 16 schemas proposed by Young) when the tool was investigated for its psychometric properties with both clinical and non-clinical samples (Schmidt, Joiner, Young, & Telch, 1995). One schema (Social Undesirability) was dropped because it was unreliable. Similar results were found in a more recent factor analysis on an Australian clinical sample (Lee, Taylor, & Dunn, 1999) where 14 of the 16 factors proposed by Young emerged. Again, Social Undesirability did not emerge, and the Emotional Inhibition items emerged as two separate factors - 'Emotional Constriction' and 'Fear of Loss of Control'. Lee, Taylor & Dunn (1999) also found that the YSQ could discriminate well between Axis I and Axis II patients, with Axis II patients scoring higher on all of the subscales of the questionnaire. Similar findings have been found by researchers using the YSQ translated into French (Mihaescu et al., 1997). They found that YSQ scores were highest in patients with personality disorder, reflecting the sensitivity of the scale to Axis II pathology. Shah and Waller (2000) demonstrated that the YSQ correlated with measures of depression such as the BDI, and argued that it could be used to explore schemas that underpin a number of clinical disorders, as well as personality disorder. They found that depressed individuals differed from healthy controls both in terms of scores on the YSQ, particularly the Defectiveness/Shame, Self-Sacrifice and Insufficient Self-Control schemas, and also in terms of parenting, as measured by the Parental Bonding Inventory (PBI; Parker, Tupling, & Brown, 1979), which was perceived as being poorer than in healthy controls.

Stopa, Thorne, Waters and Preston (2001) found similar psychometric properties for both the long and short forms of the YSQ. Their clinical group included both Axis I and II disorders, which is encouraging evidence for the questionnaire's wider clinical utility with both groups. Interestingly, a sex difference was found in the Entitlement schema (with men scoring more highly than women), which may reflect a cultural difference in expectations. Defectiveness was the best predictor of the depth or seriousness of the disorder, whereas Defectiveness, Abandonment and Unrelenting Standards were all predictive of the degree of client distress. This suggests that some schemas may have a critical role in the development of psychological disorders. Waller, Meyer and Ohanian (2001) found the short form had a similar level of internal consistency, reliability, discriminant and concurrent validity as the long form, when used with a clinical group of bulimics and a non clinical comparison group.

Simmons (2000) used a case control design to compare depressed adolescent girls (n=12) and their mothers, with a control group of non-depressed adolescent girls (n=15) and their mothers on a variety of measures, including a modified version of the short form of the YSQ. Analysis of the individual factors/schemata on the YSQ indicates that Defectiveness is the best predictor of difference between the two groups of adolescents. This is consistent with research conducted with adults (Schmidt et al., 1995) which indicated that Defectiveness, along with Dependency, were the best predictors of high scores on measures of depression. The reason that Dependency was not a good predictor in adolescent samples could be because adolescents are generally still living at home with their parents and so it is not easily identified as a difficulty. Research by Shah and Waller (2000) using the YSQ, gives

slightly different results from Schmidt et al. (1995), and indicates that depressed adults are differentiated by three unhealthy core beliefs on the YSQ: Defectiveness/Shame, Self-Sacrifice and Insufficient Self-Control. Again, Defectiveness is implicated, although the results of Simmons (2000) study should be interpreted with caution, given the small sample size.

Stopa and Waters (in preparation) raise the question of whether the YSQ is measuring stable underlying constructs, or whether it simply measures negative thoughts that are produced by dysphoric affect. They found in a non-clinical sample that certain schemas (Emotional Deprivation, Defectiveness and Entitlement) were influenced by a musical mood induction, whereas the other 12 schemas were not. Scores on Emotional Deprivation and Defectiveness were increased in the depressed mood condition, whereas Entitlement scores increased in the happiness mood condition. What is interesting is that the schemas activated by the depressed mood condition belong to Disconnection and Rejection, the earliest domain. They conclude that some schemas are stable constructs, but that others appear to be influenced by positive and negative mood states. It is not clear whether this is due to schema activation, or whether mood simply increases the incidence of automatic thoughts. The use of self-report measures in the assessment of schemas is practical (Dohr, Rush, & Bernstein, 1989; Hammen, Marks, Mayol, & DeMayo, 1985) but it has its limitations. Segal (1988) rightly states that such measures can define a schema in descriptive terms, but cannot provide evidence regarding its structural relationship. However, Schmidt et al. (1995) report some early findings of information processing tasks which found that participants scoring highly on the YSQ show significantly greater Stroop interference for schema specific words than participants with low scores on the YSQ.

Schema Focused Therapy

Schema Focused Therapy (SFT) is an integrative therapy that assimilates and adapts strategies that are utilised in standard cognitive therapy, but goes beyond the short-term approach by combining interpersonal and experiential techniques within a cognitive-behavioural framework. SFT includes greater use of the therapeutic relationship as a mechanism for change, and more attention is paid to affective experiences through the use of imagery and role-playing, in order to elicit greater levels of affect in sessions. There has been an increased focus on the changing emphasis of the therapist-patient relationship within certain strands of cognitive therapy (Safran, 1990; Safran & Greenberg, 1988; Safran & Segal, 1991). Theorists drawing upon psychodynamic, interpersonal, and experiential traditions argue that standard cognitive therapy has failed to take advantage of the pivotal role that the therapeutic relationship can play in the change process (Mahoney, 1991; Safran, 1990). Such interpersonally based frameworks view the therapeutic relationship as the central vehicle for revealing core dysfunctional schemas. The interpersonal perspective is similar to cognitive therapy's extension into the field of personality disorders, where the therapeutic focus concerns an attempt to conceptualise the core interpersonal problems involved (Beck, Freeman, & Pretzer, 1990; Young, 1991). Guidano and Liotti (1983) view the relationship as providing the context in which the patient's developmental history is uncovered as it relates to the dysfunctional attachment patterns that have prevented integration of self-knowledge.

Young (1990) contends that specific parenting patterns lead to the formation of EMS's within particular domains. Once in place, these EMS's selectively filter for corroborating evidence and so the schemas are extended and elaborated throughout the individual's lifetime. This suggestion makes meaningful links between cognitive

and developmental theories of psychopathology. Perris (2000) noted that cognitive theorists refer to at least three different developmental conceptions. These include; a Piagetian approach (Bizzini, 1998; Ivey, 1986; Rosen, 1989); Erikson's stage model (Freeman, 1993) and Bowlby's attachment theory (Guidano & Liotti, 1983; Perris, 1998). Emotion is thought to play a powerful role in how we learn to function cognitively in the world, by influencing schemas. The family environment is thought to play a primary role in the child's construction of schema, with emotional expressiveness being a critical component (Halberstadt, 1991). Several theorists have proposed models linking family emotional expressiveness to the development of personality and psychopathology (Bowlby, 1969; Dix, 1991; Sullivan, 1953). The attempts to integrate cognitive and interpersonal perspectives of psychological disorder have frequently used attachment theory as a focal point, as it provides a model for understanding the possible aetiology of psychopathology (Reinecke & Rogers, 2001). The next section summarises the key tenets of attachment theory and how it relates to psychopathology.

Attachment Theory

Bowlby's (1969) theory of infant attachment has proved to be a rich source of insights for understanding the dynamics of human relationships across the lifespan. In his view, attachment behaviours are progressively organised over the first months of life, in order to maintain proximity and contact with the primary caregiver. The formation of a bond with a responsive caregiver allows the developing child to explore his or her physical and social environment with confidence, and to find comfort and security in this relationship when faced with stress, uncertainty or danger. Consequently, the willingness and ability of parents to provide a secure base is an important determinant of the nature of the affectional bonds that emerge

between parents and children. Bowlby's ideas have been empirically supported in a variety of situations. Ainsworth, Blehar, Waters and Wall (1978) studied attachment behaviours in one year old infants through exposure to an unfamiliar figure (strange situation) and found that the mother-child interaction observed at three months of age reliably predicted the patterns of attachment behaviours. Attachment has been extensively studied in social mammals and has yielded significant insights regarding the configuration of attachment physiology (for a review of the findings, see Amini et al., 1996). Attachment in children has been widely researched. Securely attached children do far better during pre-school and early school age than their insecurely attached peers who are more likely to develop behaviour problems (Erikson, Egeland, & Sroufe, 1985; Lewis, Feiring, McGoffog, & Jaskir, 1984; Renken, Egeland, Marvinney, Mangelsdorf, & Sroufe, 1989). However, at least two studies have failed to find such associations (Bates & Bayles, 1988; Goldberg, Lojkasek, Minde, & Corter, 1990); and the ones which have found associations, often find their hypotheses only partly supported, for example, finding that the association only holds for males (Renken et al., 1989).

Bowlby stated that within the relational context with its primary caregiver, the child develops representational models of the self (I am loveable) and of one's relational experience (Others are trustworthy). These internal working models, which are conceptually similar to EMS's, are enduring and stable mental representations of attachment relationships that are carried forward into new relationships as the child develops. Hence these mental models are assumed to exhibit considerable developmental continuity, and to serve as the basis for recapitulating certain patterns of interactions which become, over time, habitual, automatic, and hard to change (Bowlby, 1980). Erikson (1950) calls this a sense of

"me-ness", which is subjectively experienced by school age, if not before. It is this me-ness which is thought not to develop in individuals with personality disorder, who typically experience a pervasive sense of a lack of genuineness, continuity or coherence, the consequence being a "false self" (Winnecott, 1965). This idea of false self is comparable to the concept of the individual who has not developed a full range of schema and so has a negatively distorted view of self and others (Padesky, 1994).

Attachment and Psychopathology

Ainsworth's classifications of attachment style or status have been more closely followed than Bowlby's original ideas. This has lead to the tendency to treat both adolescent and adult attachment in terms of infant attachment classifications, and to direct therapeutic intervention towards the problem of insecure attachment (Kenny & Rice, 1995). Much of the research has presumed that such systematic relationships exist between measures of adult attachment style and the quality of early relationships (Shaver, Belsky, & Brennan, 2000). A number of measures have been developed that measure attachment styles that are directly analogous to the attachment classifications identified in infancy (Bartholomew & Horowitz, 1991; Griffen & Bartholomew, 1994). For example, Allen, Moore, Kuperminc and Bell (1998) used the Adult Attachment Interview alongside multiple measures of functioning obtained from parents, adolescents and their peers. A secure attachment style was related to competence with peers (as reported by peers), lower levels of internalising behaviours (as reported by adolescents), and lower levels of deviant behaviour (as reported by peers and by mothers). Other research utilising such measures show that late adolescents who report insecure attachment styles also show difficulty with affect regulation, intimacy, interpersonal problem-solving, social competence, and other markers of dysfunctional adjustment, in contrast to those with

secure attachment styles (Cooper, Shaver, & Collins, 1998; Lopez, 1995; Shaver & Hazen, 1993).

Bowlby (1978) takes a slightly different view of adult attachment difficulties and has identified three deviant, clinically significant patterns of adult attachment, which share some of the features of the higher-order factor structures described by Young (1990). Individuals with a pattern of anxious attachment were typically exposed to parents who were unresponsive to the child's signals, or who actively rejected the child. Love withdrawal or threatened abandonment as a discipline technique could also be present. The child is thought to be constantly anxious that they will lose access to the attachment figure. As an adult, the person is likely to be hyper-vigilant to signs of loss and abandonment, and will therefore demonstrate a lower threshold for exhibiting proximity-maintaining attachment behaviour than securely attached individuals. This has similarities to the domains of Disconnection and Rejection and Impaired Autonomy and Performance. The second pattern is called compulsive self-reliance, in which the person will deny the need for close interpersonal relationships. The person will distrust relationships, mock their necessity, and avoid situations where he or she might be rejected, or relied upon by others. Again, this is similar to the schemas in the Overvigilance and Inhibition domain. The third pattern is one of compulsive care giving, where the person is always the giver of care, never the receiver. This develops in response to having parents who were unable to provide care for the child, but were happy to receive or demand it from the child. The domain of Other Directedness bears some similarity.

Individuals who display such patterns as those described above, are likely to respond badly to separation from an attachment figure, and have difficulties in their

adult relationships and their relationships with their own children. Theoretical links have been made with psychopathology including depression, anxiety and personality disorders; as such difficulties are thought to lead to biased ways of processing relational information (Beck, 1967). It is thought that the quality of early attachment relationships affects the development of cognitive structures, which renders the individual vulnerable to future psychological problems. The next section describes the evidence that exists to support this idea.

Integration of Attachment and Cognitive Theory

There is a growing body of research that has started to examine the cognitive aspects of early attachment. Ingram, Miranda and Seagal (1998) report that insecurely attached adults are more likely to attend to negative stimuli than securely attached individuals following a negative mood induction, indicating that performance on information processing tasks can be predicted by attachment style. Negative parental characteristics such as criticism and perfectionism have been found to predict the development of dysfunctional attitudes in children (Whisman & Kwon, 1992). Randolph and Dykman, (1998) compared perceptions of parenting in college students across four parenting dimensions (low care, overprotection, perfectionistic expectations, and criticalness), with measures of dysfunctional attitudes, general depression-proneness, and current depression. Each parenting dimension correlated significantly with dysfunctional attitudes and depression tendencies in the offspring, with perfectionistic and critical parenting playing a particularly prominent role. Whisman and McGarvey (1995) found a significant relationship between reported childhood attachment and dysphoria in college students, which was partially mediated by dysfunctional attitudes regarding performance evaluation and approval by others. Similar associations have been

found in samples of clinically depressed individuals (Reinecke & Rogers, 2001) suggesting there is a strong possibility that adverse early experiences may contribute to the vulnerability to develop psychopathology in adulthood through the establishment of dysfunctional cognitions. Although research indicates that difficult early relationships render individuals vulnerable to later psychopathology (Blatt & Holman, 1992; Burbach & Borduin, 1986; Rapee, 1997), there have been no longitudinal studies examining the role of early attachment.

Attachment processes are seen as playing a major role in the development of self-knowledge. These "working models", which underlie attachment patterns and include both conscious and unconscious schematic elements, serve not only to anticipate reality, but also to cope with the expectations generalised from the aggregate of multiple interactions with a caregiver (Bowlby, 1969). Further exploration of the types of early experiences described in both attachment theory and schema theory may produce the much-needed empirical evidence for the developmental basis of SFT and the role of emotion in psychopathology. Kazdin (2002) states that treatment approaches should be connected to what is known about onset, maintenance, termination and recurrence of psychological disorders. Current treatment approaches have originated from general models (e.g., psychoanalytic, family and cognitive behavioural) that emphasise processes (e.g., thwarted impulses, family processes, distorted cognitions) that have a wide applicability across disorders. There is a lack of emphasis in the current literature on establishing how these processes may interact. For example, do certain types of early experience lead to specific beliefs about the self and others, and what are the various risk and protective factors that determine the onset or degree of specific clinical problems?

Young's hypothesised links between parenting patterns and EMS formation provides a potentially useful theoretical structure for research, as it contains specific predictions that can be tested, retrospectively, cross-sectionally, and prospectively (Simons & Free, 2000). Therefore, it would seem logical to use a measure such as the YSQ in exploring the development of schemas in a younger population. The increasing awareness of psychological problems in children and adolescents has led to advances in the developmental aspects of cognitive theory. The last section of this review will look at how cognitive theory applies to psychopathology in adolescents.

Negative Cognitions in Adolescence

Developmental Considerations

It is estimated that approximately twenty per cent of children and adolescents experience some form of psychological disorder (Target & Fonagy, 1995). Achenbach (1992) takes a dimensional approach to conceptualising psychological problems in children. The two major dimensions are internalising problems, which include emotional behaviours such as crying, worrying and withdrawal; and externalising problems that include aggressive and delinquent conduct problems. When children's behavioural or emotional responses to an event are maladaptive, in that they are inappropriate given the nature of the event or significantly impair the child's social or academic adjustment, it is the presumption of the cognitive-behavioural model that they may lack more appropriate behavioural skills, or that their beliefs (cognitive contents) or problem-solving capacities (cognitive processes) are in some way disturbed (Reinecke, Dattilio, & Freeman, 1996).

In the past, psychopathology in childhood and adolescence was often dismissed as a transient phase in development. More recently, some psychological

problems found in adolescence are now viewed as being on a continuum with adult psychological problems and responsive to many of the same treatments. Strong relationships have been found between childhood depression and psychological problems in adulthood (Harrington, Rutter, & Frombonne, 1996), and between depression and a variety of other psychological problems (Egeland, Pianta, & Ogawa, 1996; Grilo, Walker, Becker, Edell, & McGlaskan, 1997). Depressive symptoms that appear in childhood and adolescence often develop into clinical disorders later in life and also predict poor interpersonal functioning and psychological adjustment (Kovacs, Feinberg, Crouse-Novak, Paulauskas, & Finkelstein, 1984; Kovacs, Feinberg, Crouse-Novak, Paulauskas, Pollock et al, 1984). However, research evidence is lacking, and anecdotally, adolescents have been described as "difficult to treat" or "less likely to respond to medication" but evidence for these statements is scant (Wilkes, Belsher, Rush, & Frank, 1994).

In recent years there has been a growing interest in the cognitions of children and adolescents. Garber, Weiss and Shanley (1993) observe two possible reasons for this. Firstly, adolescents differ from adults in terms of cognitive, social and emotional development. Thus testing cognitive theories with this population can give us important information about the generalisability of cognitive theories about psychological disorder to a population who are at a different developmental level. Secondly, studying cognitions that relate to adult psychopathology in adolescents helps to add validity to models of adolescent psychopathology. There is evidence from the literature on normal development that children's sense of self (Harter, 1983; Ruble, Parsons, & Ross, 1976), attributions about the causes of events (Nicholls, 1978; Rholes, Blackwell, Jordan, & Walters, 1980), experience of guilt (Zahn-Waxler & Kochanska, 1988), and sense of time and future (Coleman, 1974;

Coleman, Herzberg, & Morris, 1977) develop with age. Thus it is possible that children and adolescents do not yet have the capacity to experience the kind of negative cognitions that are known to be associated with psychological distress in adults. However, if a particular cognitive style is hypothesised to be associated with a particular type of psychological problem such as depression, then this should be present by adolescence (Garber, 1992). Evidence of such generalisability would serve to strengthen the validity of cognitive theories, whereas failure to replicate would highlight the limitation of theories and provide a potential focus for their modification (Garber, Weiss, & Shanley, 1993). Therefore it is important to establish whether dysfunctional thoughts, processes and schemas can be identified in children and adolescents, and whether the content is specific to different types of psychological difficulties.

Dysfunctional cognitions in adolescents

In the area of dysfunctional cognitions, depression has probably received the most attention. A review of the literature by Harrington (1993) indicates that depressed adolescents show a similar pattern of automatic thoughts and dysfunctional assumptions to depressed adults. Leitenberg, Yost and Carroll-Wilson (1986) found that depressed adolescents had higher rates of cognitive errors, such as catastrophising, personalising and selective abstraction. Other studies have found that depressed children have significantly lower self-esteem, greater hopelessness, a more external locus of control, and a more negative attributional style than non-depressed children (McCauley, Mitchell, Burke, & Moss, 1988). Depressed children have less self-confidence (Marton, Conolley, Kutcher, & Korenblum, 1993), and a higher frequency of negative automatic thoughts than non-depressed children (Laurent & Stark, 1993). Specific patterns of cognition have also been linked with

childhood anxiety. Leitenberg, Yost and Carroll-Wilson (1986) also found high rates of cognitive errors such as catastrophising, overgeneralising, personalising and selective abstraction in children who experienced test anxiety. Similarly Prins (1985) found that higher rates of negative thoughts typified anxious children, rather than the number of positive or coping thoughts.

Ambrose and Rholes (1993) measured depressive and anxious cognitions in children as young as ten and found no substantial changes in the number or function of these cognitions across the age range included (10-16 years). According to Piaget (1970), children begin to develop 'concrete operational thinking' between the ages of 7-11 years and can therefore begin to make logical decisions when encountering a discrepancy between thought and perception. Piaget's ideas fit well into the central aim and philosophy of a cognitive therapy approach to psychopathology. Cicchetti and Schneider-Rosen (1986) state that, at the concrete operational stage, children start to become more aware of their psychological selves and start to understand concepts such as guilt and shame more fully. Thus, by the age of 8-11 years, some children become able to experience cognitions in the same way as adults (Kovacs, 1986).

However, what was interesting in the Ambrose and Rholes study was that in contrast to adult samples, (Clark, Beck, & Stuart, 1990; Reno & Halaris, 1989) there was relatively little differentiation in the types of negative cognitions reported. Garber, Weiss and Shanley (1993) similarly found that cognitive measures such as Beck's Cognitions Checklist (CCL; Beck, Brown, Steer, Eidelson, & Riskind, 1987) and The Automatic Thoughts Questionnaire (ATQ; Hollon & Kendall, 1980) did not show discriminant validity with regard to anxiety and depression. These studies may

indicate that dysfunctional thinking is less differentiated during adolescence and that distinctions in cognitive content only emerge with increasing cognitive maturity. However, the absence of specificity does not necessarily mean that negative cognitions are not important in the causal process of psychopathology (Garber & Hollon, 1991). Watson and Tellegen (1985) have proposed that disorders such as anxiety and depression, particularly when measured by self-report measures, represent facets of a broader construct of negative affectivity and therefore would not necessarily be expected to differ with regards to associated cognitions.

To date, the weight of evidence regarding the cognitive components of psychological disorders suggests considerable similarity across age groups, particularly among older children, adolescents and younger adults. However, there is also evidence that cognitive symptoms such as negative self-evaluation, guilt, and hopelessness are reported significantly less among depressed adolescents compared with depressed adults (Friedman, Hurt, Clarkin, Corn, & Aronoff, 1983). Thus, although depressed children may report more negative cognitions than non-depressed children, the strength of the association between these cognitions and other depressive symptoms may be weaker than that found in adults. Asarnow and Bates (1988) reported that only 55 per cent of depressed adolescent patients in a psychiatric ward showed depressed cognitive patterns. Thus, it may be only a subgroup of adolescents with depression who are characterised by negative cognitions, and other factors, such as family circumstance and negative life events may have a more significant role to play.

No research has systematically looked at deeper level cognitive structures in children and adolescents. Schemas are central to the cognitive conceptualisation of

personality disorder in adults but there is limited empirical evidence for the existence of personality disorder in adolescents. The research looking at this question is mixed. One argument for the existence of specific personality disorders, is based on the demonstration that some adolescents meet the diagnostic criteria for borderline, narcissistic and anti-social personality disorders in particular (Becker, Grilo, Edell, & McGlashan, 2000; Kernberg, Hajal, & Normandin, 1998; Myers, Stewart, & Brown, 1998). However, the majority of studies that have looked at the predictive validity of a personality disorder diagnosis, have found it to be a relatively unstable construct. Levy et al. (1999) looked at baseline and two-year follow-up assessments of 101 hospitalised adolescents. Those who met the criteria for personality disorder at baseline were not significantly different in terms of psychopathology and global assessments of functioning from the non-personality-disordered group at follow-up. Similarly, Meijer, Goedhart and Treffers (1998) found that out of fourteen hospitalised adolescents who met the diagnosis for borderline personality disorder, only two still met the criteria at a three-year follow-up.

It may be that a diagnosis has greater validity when the type of personality disorder is not specified (Haslam, 1978). Becker et al. (2000) found that 68 adolescents (aged 12-18 years) who met the criteria for Borderline Personality Disorder displayed a broader pattern of co-morbidity, encompassing aspects of clusters A and C, in comparison to an adult sample who also met the criteria for Borderline Personality Disorder. Kasen, Cohen, Skodol, Johnson and Brook (1999) examined associations between child psychopathology and young adult personality disorder in 551 youths who were 9-16 years old at first assessment and were followed up over ten years. They looked at the predictive effects of prior Axis I and Axis II disorders on young adult personality disorder using logistical regression.

They found that the co-morbidity of Axis I and Axis II disorders increased the likelihood of personality disorder in young adults, relative to the odds of a disorder on a single axis. Such findings indicate that the assessment of personality pathology in adolescence may well facilitate the identification of more persistent psychopathology.

The findings that adolescent psychopathology is not as diagnostically distinct as in adults may well be mirrored in the content of their cognitions. However, the potential identification of schemas warrants consideration, given the evidence, albeit limited, for dysfunctional thoughts and processes. Simons & Free (2000) have attempted to develop a tool that could measure schemas in children aged eight to twelve years. The aims of developing this tool were threefold: one, to study the relationship between children's cognitions and their immediate environment; two, to see if EMS can be detected; and three, to look at the association between adult's and children's EMS in order to further validate the theory of early schema development. The Children's Schema Questionnaire (CSQ) was developed using the YSQ as a basis. 44 items were selected and presented as cartoon vignettes of events that might occur in a child's life, with the cognitive script presented in thought bubbles. The same six point scoring criteria were used as in the adult version. The sample consisted of 166 primary students with no known psychiatric history. A factor analysis of the measure elicited 14 factors, including ten from the YSQ. The CSQ is a potentially useful tool for identifying children at risk of developing negative schemas and could even track changes in schemas over time. It is not yet known whether schemas can be modified at this developmental stage, in order to reduce vulnerability to emotional disorder in later life. Unfortunately, this tool is not as age appropriate for adolescents. The development of valid assessment measures for use

with adolescents could facilitate our understanding of the cognitive structures underlying adolescent psychopathology and personality disorder. If such tools were found to be sensitive to schema change, they would give clinicians a way of measuring the efficacy of cognitive therapy with this age group. The following section reviews what evidence there is to support the use of cognitive behavioural techniques with this client group.

Cognitive Behavioural Therapy with Young People

Stark (1990) has modified Beck's approach to cognitive restructuring for use with younger populations. He stresses the importance of eliciting change in the child's core cognitive structures, not just specific thoughts, in order to alter the way in which the child derives meaning from the world. Wood, Harrington and Moore (1995) found that both CBT and relaxation were more effective than a waiting list control condition in adolescents with high levels of depression. Wilkes et al. (1994) suggest that one of the reasons for using CBT with adolescents is because of the high level of engagement difficulties, as the approach adopts the process of establishing mutual goals in a collaborative manner. Since adolescents are at a transitional period in their development, CBT needs to be flexible to fit in with the adolescents' developmental level. Meta-analyses of studies with adolescents concur that CBT is effective for reducing depression both in the short and long term (Marcotte, 1997; Reinecke, Ryan, & DuBouis, 1998). Carr (1999) favours a family based approach to CBT when treating depression in adolescents because "adolescents belief systems are inextricably bound up with their parents belief systems" (p. 660), and he suggests involving both adolescents and parents in identifying and challenging cognitions. Dysfunctional communications between parents and child have been implicated in the development of dysfunctional cognitive processes (Jaenicke et al., 1987).

Involving parents in the treatment process can enhance CBT's effectiveness (Lewinsohn, Clarke, Hops, Andrews, & Williams, 1990).

There are markedly different developmental processes occurring at the beginning of adolescence compared to the end. Treatment success is likely to be dependent on the therapist's awareness of these changing biological, social and psychological developments. However, whatever challenges this may present, the advantage of conducting therapy with more fluid cognitive structures far outweighs the disadvantages. Wilkes et al. (1994) suggest that adolescence is, theoretically, the most powerful time for the application of cognitive techniques. One possible reason for this may be that the psychological processes involved in self-assessment, self-exploration and the development of a self-concept are extremely fluid, particularly with the younger adolescent. Difficulties with emotional self-expression and inconsistencies in self-image are more likely to arise, reflecting this underlying process. Cognitive techniques are thought to facilitate this developmental process, by helping the young person to become aware of his or her own thoughts and feelings.

Conclusions

Interventions such as cognitive restructuring, which are central to Beck's model of cognitive therapy, are derived from rationalist models of human functioning. The use of such models with children and adolescents has been criticised for not attending to the self-organising, constructive processes of child development (Mahoney & Nezworski, 1985). Cognitive techniques used in an unmodified form may fail to be of benefit to children and adolescents. Some children are likely to be less able to readily identify their current thoughts or to be

able to discriminate between specific emotions. The development of tacit beliefs regarding the reliability of relationships, personal safety and family stability are critical to children, but are rarely incorporated in standard cognitive-behavioural conceptualisations of childhood emotional disorders. Similar criticisms have been made about the neglect of early attachment, given what is known about its importance in later psychopathology.

The inclusion of these factors in Young's theory of schema development incorporates a developmental perspective into cognitive dysfunction, facilitating the application of the theory to a younger population. This in turn could be used to develop more appropriate therapeutic techniques that have a greater focus on early experiences and familial factors. This may seem presumptuous, given the limited evidence for standard cognitive therapy techniques with children and adolescents. However, if schema-focussed therapy could be adapted for use with adolescents, it is possible that individuals at risk of developing complex psychological difficulties such as personality disorders could be identified and treated whilst their schemas were potentially less entrenched. However, such developments in treatment strategies are a long way off. An initial step would be to develop appropriate tools for identifying schemas in adolescents, or exploring whether existing measures are appropriate. Establishing the existence of dysfunctional schemas in adolescents would provide some support for the use of a schema-focused approach in treating complex psychological problems in this client group.

References

Abramson, L.Y., Alloy, L.B., & Metalsky, G.I. (1988). The cognitive diathesis-stress theories of depression: Toward an adequate evaluation of the theories' validities. In L.B. Alloy (Ed.). Cognitive Processes in Depression. New York: Guildford Press.

Achenbach, T. (1992). Manual for the Child Behaviour Checklist. Burlington, VT: University of Vermont Department of Psychiatry.

Ainsworth, M.D.S., Blehar, M.C., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the strange situation. Hillsdale, NJ: Erlbaum.

Allen, J., Moore, C., Kuperminc, G., & Bell, K. (1998). Attachment and adolescent psychosocial functioning. Child Development, 69, 1406-1419.

Alloy, L.B., Hartlage, S., & Abramson, L.Y. (1988). Testing the cognitive diathesis-stress theories of depression: Issues of research design, conceptualisation and assessment. In L.B. Alloy (Ed.). Cognitive Processes in Depression. New York: Guildford Press.

Ambrose, B., & Rholes, W.S. (1993). Automatic cognitions and the symptoms of depression and anxiety: An examination of the content specificity hypothesis. Cognitive Therapy and Research, 17(3), 289-308.

American Psychiatric Association. (1994). Diagnostic and Statistical Manual of Mental Disorders (4th ed.). Washington, DC: Author.

Amini, F., Lewis, T., Lannon, R., Louie, A., Baumbacher, G., McGuinness, T., & Schiff, E.Z. (1996). Affect, attachment, memory: Contributions toward psychobiologic integration. Psychiatry, 59, 213-239.

Asarnow, J.R., & Bates, S. (1988). Depression in child psychiatric inpatients: Cognitive and attributional patterns. Journal of Abnormal Child Psychology, 16, 601-615.

Bartholomew, K., & Horowitz, L. (1991). Attachment styles among young adults: a test of the four category model. Journal of Personality and Social Psychology, 61, 226-245.

Bates, J.E., & Bayles, K. (1988). Attachment and the development of behaviour problems. In J. Belsky & T. Nezworski (Eds.). Clinical Implications of Attachment. Hillsdale, NJ: Erlbaum.

Beck, A.T. (1967). Depression: Causes and Treatment. Philadelphia: University of Pennsylvania Press.

Beck, A.T. (1987). Cognitive models of depression. Journal of Cognitive Psychotherapy: An International Quarterly, 1, 2-27.

Beck, A.T. (1991). Cognitive therapy as *the* integrative therapy. Journal of Psychotherapy Integration, 1, 191-198.

Beck, A.T., Brown, G., Steer, R., Eidelson, J.I., & Riskind, I. (1987). Differentiating anxiety and depression: A test of the content specificity hypothesis. Journal of Abnormal Psychology, 96, 179-183.

Beck, A.T., & Emery, G. (1985). Anxiety Disorders and Phobias. Cambridge, MA: Basic Books.

Beck, A.T., Freeman, A., & Pretzer, J. (1990). Cognitive Therapy of Personality Disorders. Guildford Press, New York.

Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G. (1979). Cognitive Therapy of Depression. New York: J Wiley & Sons.

Beck, A.T. & Shaw, B.F. (1977). Cognitive approaches to depression. In A. Ellis & R. Grieger (Eds.). Handbook of rational emotive theory and practice. New York: Springer.

Becker, D.F., Grilo, C.M., Edell, W.S., & McGlashan, T.H. (2000). Applicability of personality disorder criteria in late adolescence: Internal consistency and criterion overlap 2 years after psychiatric hospitalisation. Journal of Personality Disorders, 15 (3), 255-262.

Bizzini, L. (1998). Cognitive psychotherapy in the treatment of personality disorders in the elderly. In C. Perris & P. McGorry (Eds.). Cognitive Psychotherapy of Psychotic and Personality Disorders: Handbook of Theory and Practice. Chichester: Wiley & Sons.

Blatt, S., & Holman, E. (1992). Parent-child interaction in the aetiology of depression. Clinical Psychology Review, 12, 47-91.

Bowers, K.S. (1984). On being unconsciously influenced and informed. In K.S. Bowers & D. Meichenbaum (Eds.). The Unconscious Reconsidered. Chichester: Wiley & Sons.

Bowlby, J. (1969). Attachment and Loss, Vol. 1. New York: Basic Books.

Bowlby, J. (1978). Attachment theory and its therapeutic implications. In S.C. Feinstein and P. Giovacchini (Eds.). Adolescent Psychiatry: Developmental and Clinical Studies. Vol. VI. Chicago: University of Chicago Press.

Bowlby, J. (1980). Attachment and Loss: Vol 3: Loss, Sadness and Depression. New York: Basic Books.

Brewin, C.R. (1988). Cognitive Foundations of Clinical Psychology. London: Lawrence Erlbaum Associates.

Burbach, D., & Borduin, C. (1986). Parent-child relations and the etiology of depression: A review of methods and findings. Clinical Psychology Review, 6, 133-153.

Carr, A. (1999). The Handbook of Child and Adolescent Clinical Psychology: A Contextual Approach. London: Routledge.

Cicchetti, D., & Schneider-Rosen, K. (1986). An organisational approach to childhood depression. In M. Rutter, C. Izard., & P.B. Read (Eds.). Depression in young people: developmental and clinical perspectives. New York: Guilford Press.

Clark, D.A. (1995). Perceived limitations of standard cognitive therapy: A consideration of efforts to revise Beck's theory and therapy. Journal of Cognitive Psychotherapy: An International Quarterly, 9 (3), 153-172.

Clark, D.A., Beck, A.T., & Stuart, B. (1990). Cognitive specificity and positive-negative affectivity: Complementary or contradictory views on anxiety and depression. Journal of Abnormal Psychology, 99, 148-155.

Coleman, J.C. (1974). Relationships in Adolescence. London: Routledge.

Coleman, J.C., Herzberg, J., & Morris, M. (1977). Identity in adolescence: Present and future concepts. Journal of Youth and Adolescence, 6, 63-75.

Cooper, M.L., Shaver, P.R., & Collins, N.L. (1998). Attachment styles, emotional regulation and adjustment in adolescence. Journal of Personality and Social Psychology, 74 (5), 1380-1397.

Dix, T. (1991). The affective organisation of parenting: Adaptive and maladaptive processes. Psychological Bulletin, 110 (1), 3-25.

Dohr, K.V., Rush, A.J., & Bernstein, I.H. (1989). Cognitive biases and depression. Journal of Abnormal Psychology, 98, 31-40.

Eaves, G., & Rush, A.J. (1984). Cognitive patterns in symptomatic and remitted unipolar major depression. Journal of Abnormal Psychology, 93, 31-40.

Egeland, B., Pianta, R., & Ogawa, J. (1996). Early behaviour problems: Pathways to mental disorders in adolescent development and psychopathology. Development and Psychopathology, 8(4), 735-749.

Ellis, A. (1990). The revised ABCs of rational emotive therapy. Cited in J.C. Muran & Z.V. Segal (1992). The development of an idiographic measure of self-schemas: An illustration of the construction and use of self-scenarios. Psychotherapy, 29 (4), 524-535.

Erikson, E.H. (1950). Childhood and Society. New York: Norton.

Erikson, M.F., Egeland, B., & Sroufe, L.A. (1985). Predicting peer competence and peer relationships in childhood from early parent-child relationships. In R.D. Parke & G.Ladd (Eds.). Family-peer relationships: Modes of linkage. Hillsdale, N.J: Erlbaum.

Freeman, A. (1993). A psychosocial approach for conceptualising schematic development for cognitive therapy. In K.T. Kuehlwein & H. Rosen (Eds.). Cognitive Therapies in Action: Evolving Innovative Practice. San Francisco: Jossey-Bass.

Friedman, R.C., Hurt, S.W., Clarkin, J.F., Corn, R., & Aronoff, M.S. (1983). Symptoms of depression among adolescents and young adults. Journal of Affective Disorders, 5, 37-43.

Garber, J. (1992). Cognitive models of depression: A developmental perspective. Psychological Inquiry, 3, 235-240.

Garber, J., & Hollon, S.D. (1991). What can specificity designs say about causality in psychopathy research? Psychological Bulletin, 110, 129-136.

Garber, J., Weiss, B., & Shanley, N. (1993). Cognitions, depressive symptoms, and development in adolescents. Journal of Abnormal Psychology, 102 (1), 47-57.

Goldberg, S., Lojkasek, M., Minde, K., & Corter, C. (1990). Predictions of behaviour problems in four-year-olds born prematurely. Development and Psychopathology, 2, 15-30.

Griffen, D., & Bartholomew, K. (1994). The metaphysics of measurement: the case of adult attachment. In K. Bartholomew, & D. Perlman. Attachment Processes in Childhood. London: Jessica Kingsley Publishers.

Grilo, C.M., Walker, M.L., Becker, D.F., Edell, W.S., & McGlaskan, T.H. (1997). Personality disorders in adolescents with major depression, substance use disorders, and coexisting major depression and substance use disorders. Journal of Consulting and Clinical Psychology, 65(2), 328-332.

Guidano, V.F., & Liotti, G. (1983). Cognitive Processes and Emotional Disorders. New York: Guildford Press.

Halberstadt, A.G. (1991). Toward an ecology of expressiveness: Family socialisation in particular and a model in general. In R.S. Feldman & B. Rim (Eds.). Fundamentals of Non-Verbal Behaviour. New York: Cambridge University Press.

Hammen, C., Marks, T., Mayol, A., & DeMayo, R. (1985). Depressive self-schemas, life stress, and vulnerability to depression. Journal of Abnormal Psychology, 94, 308-319.

Harrington, R.C. (1993). Depressive disorder in childhood and adolescence. Wiley, Chichester.

Harrington, R.C, Rutter, M., & Frombonne, E. (1996). Developmental pathways in depression: Multiple meanings, antecedents, and endpoints. Development and Psychopathology, 8(4), 601-606.

Harter, S. (1983). Developmental perspectives on the self-system. In E.M. Hetherington (Ed.). Handbook of Child Psychology: Vol. 4. New York: Wiley.

Haslam, M.T. (1978). A study of psychiatric illness in adolescence, psychiatric breakdown in adolescence: Diagnosis and prognosis. International Journal of Social Psychiatry, 24 (4), 287-294.

Hollon, S.D., & Kendall, P.C. (1980). Cognitive self-statements in depression: Development of an Automatic Thoughts Questionnaire. Cognitive Therapy and Research, 4, 383-397.

Hollon, S.D., & Najavits, L. (1988). Review of empirical studies on cognitive therapy. In A.J. Frances & R.E. Hales (Eds.). American Psychiatric Press Review of Psychiatry. Washington, DC: American Psychiatric Press.

Ingram, R., Miranda, J., & Seagal, Z. (1998). Cognitive Vulnerability to Depression. New York: Guilford Press.

Ivey, A.E. (1986). Developmental Theory. San Francisco: Jossey-Bass.

Jaenicke, C., Hammen, C., Zupen, B., Hiroto, Gordon, G., Adrian, C., & Burge, J. (1987). Cognitive vulnerability in children at risk for depression. Journal of Abnormal Child Psychology, 15, 559-572.

James, I.A. (2001). Schema therapy: The next generation, but should it carry a health warning? Behavioural and Cognitive Psychotherapy, 29 (4), 401-407.

Joiner, T.E., Metalsky, G.I., Lew, A., & Klocek, J. (1999). Testing the causal mediation component of Beck's theory of depression: Evidence for specific mediation. Cognitive Therapy and Research, 23 (4), 401-412.

Kasen, S., Cohen, P., Skodol, A.E., Johnson, J.G., & Brook, J.S. (1999). Influence of child and adolescent psychiatric disorders on young adult personality disorder. American Journal of Psychiatry, 156 (10), 1529-1535.

Kazdin, A.E. (2002). The state of child and adolescent psychotherapy research. Child and Adolescent Mental Health, 7 (2), 53-59.

Kelly, G. (1955). The Psychology of Personal Constructs. New York: Norton.

Kenny, M.E., & Rice, K.G. (1995). Attachment to parents and adjustment in late adolescent college students: Current status, applications and future considerations. The Counselling Psychologist, 23, 433-456.

Kernberg, P.F., Hajal, F., & Normandin, L. (1998). Narcissistic personality disorder in adolescent inpatients: A retrospective record review study of descriptive characteristics. In E.F. Ronningstam. Disorders of Narcissism: Diagnostic, Clinical, and Empirical Implications. Washington DC: American Psychiatric Press.

Kovacs, M. (1986). A developmental perspective on methods and measures in the assessment of depressive disorders: the clinical interview. In M. Rutter, C. Izard., & P.B. Read (Eds.). Depression in young people: developmental and clinical perspectives. New York: Guilford Press.

Kovacs, M., Feinberg, T.L., Crouse-Novak, M.A., Paulauskas, S.L., Pollock, M., & Finkelstein, R. (1984). Depressive disorders in childhood: II. A longitudinal study of the risk for a subsequent major depression. Archives of General Psychiatry, 41, 643-649.

Kovacs, M., Feinberg, T.L., Crouse-Novak, M.A., Paulauskas, S.L., & Finkelstein, R. (1984). Depressive disorders in childhood: I. A longitudinal prospective study of characteristics and recovery. Archives of General Psychiatry, 41, 229-237.

Laurent, J., & Stark, K. (1993). Testing the cognitive content-specificity hypothesis with anxious and depressed youngsters. Journal of Abnormal Psychology, 102, 226-37.

Layden, M., Newman, C., Freeman, A., & Morse, S. (1993). Cognitive Therapy of Borderline Personality Disorder. Allyn and Bacon, USA.

Lazarus, R.S. (1982). Thoughts on the relations between emotion and cognition. American Psychologist, 37, 1019-1024.

Lee, C.W., Taylor, G., & Dunn, J. (1999). Factor structure of the Schema Questionnaire in a large clinical sample. Cognitive Therapy and Research, 23 (4), 441-451.

Leitenberg, H., Yost, L.W., & Carroll-Wilson, M. (1986). Negative cognitive errors in children: Questionnaire development, normative data and comparisons between children with and without self-reported symptoms of depression, low self-esteem, and evaluation anxiety. Journal of Consulting and Clinical Psychology, 54 (4), 528-536.

Levy, K.N., Becker, D.F., Grilo, C.M., Mattanah, J. F., Garnet, , K.E., Quinlan, D.M., Edell, W. S., & McGlashan, T.H. (1999). Concurrent and predictive validity of the personality disorder diagnosis in adolescent patients. American Journal of Psychiatry, 156 (10), 1522-1528.

Lewinsohn, P.M., Clarke, G.N., Hops, H., Andrews, J., & Williams, B. (1990). Cognitive-behavioural treatment for depressed adolescents. Behaviour Therapy, 21, 385-401.

Lewis, M., Feiring, C., McGoffog, C., & Jaskir, J. (1984). Predicting psychopathology in six-year-olds from early social relations. Child Development, 55, 123-136.

Lopez, F.G. (1995). Contemporary attachment theory: an introduction with implications for counselling psychology. The Counselling Psychologist, 23, 395-415.

Lundh, L.G. (1988). Cognitive therapy and the analysis of meaning structures. IN C. Perris, I.M. Blackburn & H. Perris (Eds.). Cognitive Psychotherapy: Theory and Practice. Berlin: Springer-Verlag.

MacLeod, C., & Rutherford, E.M. (1992). Anxiety and the selective processing of emotional information: Mediating roles of awareness, trait and state variables, and personal relevance of stimulus materials. Behaviour Research & Therapy, 30, 479-491.

Mahoney, M. J. (1991). Human Change Processes: The Scientific Foundations of Psychotherapy. New York: Basic Books.

Mahoney, M., & Nezworski, M. (1985). Cognitive-behavioural approaches to children's problems. Journal of Abnormal Child Psychology, 13(3), 467-476.

Marcotte, D. (1997). Treating depression in adolescence: A review of the effectiveness of cognitive-behavioural treatments. Journal of Youth and Adolescence, 26, 273-283.

Marton, P., Conolley, J., Kutcher, S., & Korenblum, M. (1993). Cognitive social skills and self-appraisal in depressed adolescents. Journal of the American Academy of Child and Adolescent Psychiatry, 32, 739-44.

Maser, J., & Cloninger, C.R. (1990). Comorbidity in anxiety and mood disorders. Washington, DC: American Psychiatric Press.

McCauley, E., Mitchell, J.R., Burke, P., & Moss, S. (1988). Cognitive attributes of depression in children and adolescents. Journal of Consulting and Clinical Psychology, 56, 903-8.

Meijer, M., Goedhart, A.W., & Treffers, P.D. (1998). The persistence of borderline personality disorder in adolescence. Journal of Personality Disorders, 12 (1), 13-22.

Mihaescu, G., Sechaud, M., Cottraux, J., Velardi, A., Heinze, X., Finot, S.C., & Baettig, D. (1997). Le questionnaire de schemas cognitifs de Young: Traduction et validation preliminaire. L'Encephale, XXIII, 200-208.

Mogg, K., Mathews, A., & Eysenck, M. (1992). Attentional bias in clinical anxiety states. Cognition and Emotion, 6, 149-159.

Myers, M.G., Stewart, D.G., & Brown, S.A. (1998). Progression from conduct disorder to antisocial personality disorder following treatment for adolescent substance misuse. American Journal of Psychiatry, 155 (4), 479-485.

Nicholls, J.G. (1978). The development of the concepts of effort and ability, perception of academic attainment, and the understanding that difficult tasks require more ability. Child Development, 49, 800-814.

Padesky, C.A. (1994). Schema change processes in cognitive therapy. Clinical Psychology and Psychotherapy, 1 (5), 267-278.

Padesky, C.A., & Greenberger, D. (1995). Clinician's Guide to Mind Over Mood. New York: Guildford Press.

Parker, G., Tupling, H., & Brown, L.B. (1979). A Parental Bonding Instrument. British Journal of Medical Psychology, 52, 1-10.

Perris, C. (1998). Defining the concept of individual vulnerability as a base of psychotherapeutic interventions. In C. Perris & P. McGorry (Eds.). Cognitive Psychotherapy of Psychotic and Personality Disorders: Handbook of Theory and Practice. Chichester: Wiley & Sons.

Perris, C. (2000). Personality-related disorders of interpersonal behaviour: A developmental-constructivist cognitive psychotherapy approach to treatment based on attachment theory. Clinical Psychology and Psychotherapy, 7, 97-117.

Piaget, J. (1970). Science of education and the psychology of the child. New York: Orion.

Popper, K.R. (1972). Objective Knowledge: An Evolutionary Approach. Oxford: Clarendon Press.

Prins, P.J.M. (1985) Self-speech and self-regulation of high and low-anxious children in the dental situation: An interview study. Behaviour Research and Therapy, 23, 181-191.

Randolph, J.J., & Dykman, B.M. (1998). Perceptions of parenting and depression-proneness in the offspring: Dysfunctional attitudes as a mediating mechanism. Cognitive Therapy and Research, 22, 377-400.

Rapee, R. (1997). Potential role of childrearing practices in the development of anxiety and depression. Clinical Psychology Review, 17, 47-67.

Reinecke, M.A, Dattilio, F., & Freeman, A. (1996). Cognitive Therapy with Children and Adolescents. New York: Guilford Press.

Reinecke, M.A. & Rogers, G.M. (2001). Dysfunctional attitudes and attachment style among clinically depressed adults. Behavioural and Cognitive Psychotherapy, 29 (2), 129-141.

Reinecke, M.A., Ryan, N.E., & DuBouis, D.L. (1998). Cognitive-behavioural therapy of depression and depressive symptoms during adolescence: A review and

meta-analysis. Journal of the American Academy of Child and Adolescent Psychiatry, 37, 26-34.

Renken, B., Egeland, B., Marvinney, D., Mangelsdorf, S., & Sroufe, A. (1989). Early childhood antecedents of aggression and passive-withdrawal in early elementary school. Journal of Personality, 57, 257-282.

Reno, R.M., & Halaris, A.E. (1989). Dimensions of depression: A comparative longitudinal study. Cognitive Therapy and Research, 13, 549-565.

Rholes, W.S., Blackwell, J., Jordan, C., & Walters, C. (1980). A developmental study of learned helplessness. Developmental Psychology, 16, 616-624.

Robins, C.J., & Hayes, A.M. (1993). An appraisal of cognitive therapy. Journal of Consulting and Clinical Psychology, 61, 205-214.

Rosen, H. (1989). Piagetian theory and cognitive therapy. In A. Freeman, K.M. Simon, L. Beutler & H. Arkowitz (Eds.). Comprehensive Handbook of Cognitive Therapy. New York: Plenum.

Ruble, D.N. Parsons, J.E., & Ross, J. (1976). Self-evaluative responses of children in an achievement setting. Child Development, 47, 990-997.

Rush, A.J., & Beck, A.T. (1978). Adults with affective disorders. In M. Hersen & A.S. Bellack (Eds.). Behaviour Therapy in Psychiatric Settings. Baltimore: Williams & Wilkins.

Safran, J.D. (1990). Towards a refinement of cognitive therapy in light of interpersonal theory: I. Theory. Clinical Psychology Review, 10, 107-121.

Safran, J.D., & Greenberg, L.S. (1988). Affect and consciousness: A cognitive perspective. In R. Stern (Ed.), Theories of the Unconscious. Hillsdale, NJ: Analytic Press.

Safran, J.D., & Seagal, Z.V. (1991). Interpersonal Processes in Cognitive Therapy. New York: Basic Books.

Schmidt, N.B., Joiner, T.E., Young, J.E., & Telch, M.J. (1995). The Schema Questionnaire: Investigation of psychometric properties and the hierarchical structure of a measure of maladaptive schemas. Cognitive Therapy and Research, 19, 295-321.

Segal, Z. (1988). Appraisal of self-schema: Construct in cognitive models of depression. Psychological Bulletin, 103, 147-162.

Shah, R., & Waller, G. (2000). Parental style and vulnerability to depression: the role of core beliefs. The Journal of Nervous and Mental Disease, 188(1), 19-25.

Shaver, P., Belsky, J., & Brennan, K. (2000). The adult attachment interview and self-reports of romantic attachment: Association across domains and methods. Journal of Personal Relationships, 7, 25-43.

Shaver, P.R., & Hazen, C. (1993). Adult romantic attachment: theory and evidence. In D. Perlman & W. Jones (Eds.). Advances in Personal Relationships. London: Jessica Kingsley Publishers.

Simmons, J. (2000). Depressed adolescent girls and their mothers. Unpublished doctoral dissertation. Oxford Clinical Psychology Course, Oxford, United Kingdom.

Simons, J., & Free, M. (2000). Development of a children's schema questionnaire. Unpublished doctoral dissertation. Griffith University, Brisbane, Australia.

Stark, K.D. (1990). Childhood Depression: School-Based Intervention. New York: Guilford Press.

Stein, D.J., & Young, J.E. (1993). Cognitive Science and Clinical Disorders. San Diego: Academic Press.

Stopa, L., Thorne, P., Waters, A., & Preston, J. (2001). Are the short and long forms of the Young Schema Questionnaire comparable and how well does each version predict psychopathology scores? Journal of Cognitive Psychotherapy: An International Quarterly, 15 (3), 253-272.

Stopa, L., & Waters, A. (in preparation). The effect of mood on responses to the Young Schema Questionnaire (short form). Manuscript in preparation, University of Southampton.

Sullivan, H.S. (1953). The Interpersonal Theory of Psychiatry. New York: Norton.

Target, M., & Fonagy, P. (1995). The psychological treatment of child and adolescent psychiatric disorders. In A. Roth & P. Fonagy (Eds.). What Works for Whom? A Critical Review of Psychotherapy Research. London: Guilford Press.

Waller, G., Meyer, C., & Ohanian, V. (2001). Psychometric properties of the long and short versions of the Young Schema Questionnaire: Core beliefs among bulimic and comparison women. Cognitive Therapy and Research, 25, 137-147.

Watson, D., & Tellegen, A. (1985). Towards a consensual structure of mood. Psychological Bulletin, 98, 219-235.

Wells, A., & Hackman, A. (1993). Images and Core beliefs in health anxiety: content and origins. Behavioural Psychotherapy, 21, 3, 265-274.

Whisman, M.A., & Kwon, P. (1992). Parental representations, cognitive distortions, and mild depression. Cognitive Therapy and Research, 16, 557-568.

Whisman, M.A., & McGarvey, A.L. (1995). Attachment, depressotypic cognitions, and dysphoria. Cognitive Therapy and Research, 19, 633-650.

Wilkes, T.C.R., Belsher, G., Rush, A.J., & Frank, E. (1994). Cognitive Therapy for Depressed Adolescents. New York: Guilford Press.

Williams, J.M.G., Watts, F.N., MacLeod, C., & Matthews, A. (1988). Cognitive Psychology and Emotional Disorders. Chichester: John Wiley & Sons.

Winnecott, D.W. (1965). The Maturational Processes and the Facilitating Environment. New York: International Universities Press.

Wood, A., Harrington, R., & Moore, A. (1995). Controlled trial of a brief cognitive-behavioural intervention in adolescent patients with depressive disorders. Journal of Child and Psychology and Psychiatry and Allied Disciplines, 37(6), 737-746.

Young, J.E. (1990). Cognitive Therapy for Personality Disorders: A Schema-Focused Approach. Professional Resource Exchange.

Young (1991). Early Maladaptive Schemas. Unpublished manuscript. Cited in Schmidt, N.B., Joiner, T.E., Young, J.E., & Telch, M.J. (1995). The Schema Questionnaire: Investigation of psychometric properties and the hierarchical structure of a measure of maladaptive schemas. Cognitive Therapy and Research, 19, 295-321.

Young, J.E., & Klosko, J. (1993). Reinventing your life. New York: Dutton Books.

Young (1998). The Young Schema Questionnaire - Shortened Inventory. [Http://www.schematherapy.com](http://www.schematherapy.com). Copyright Jeffrey Young and Gary Brown.

Young, J.E., & Behary, W.T. (1998). Schema-focused therapy for personality disorders. In N. Tarrier, A. Wells & Haddock, G. (Eds.). Treating Complex Cases: The Cognitive Behavioural Therapy Approach. Chichester: John Wiley & Sons.

Zahn-Waxler, C., & Kochanska, G. (1988). The origins of guilt. Nebraska Symposium on Motivation, 36, 183-528.

Zajonc, R.B. (1980). Feeling and thinking: Preferences need no inferences. American Psychologist, 35, 151-175.

Zajonc, R.B. (1984). On the primacy of affect. American Psychologist, 37, 117-123.

Running Head:

Schemas and Adolescent Psychopathology

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**FACTOR STRUCTURE OF THE YOUNG SCHEMA
QUESTIONNAIRE (SHORT FORM) IN A NON-CLINICAL
ADOLESCENT SAMPLE**

**This paper has been prepared for submission to
'Cognitive Therapy and Research' (see Appendix A).**

Kerry Beckley

Factor Structure of the Young Schema Questionnaire (Short Form) in a Non-Clinical Adolescent Sample

Abstract

This study investigated the factor structure of a modified form of Young Schema Questionnaire-Short Form (YSQ-S; Young, 1998) with a large non-clinical adolescent sample (N=705). The YSQ-S was found to have good internal consistency and a fifteen-factor solution. The age and gender differences were also explored, and results of these analyses are discussed. The YSQ-S total score was moderately correlated with global indices of psychopathology and self-esteem, although the factors representing the individual schemas did not demonstrate significant associations. In addition, the YSQ-S was not found to have discriminatory ability between specific types of psychological disorder. The YSQ-S was as good as, if not better than Neuroticism, in predicting levels of psychopathology. The clinical and research implications of these findings are outlined.

Key Words: schema; adolescence; questionnaire validation; cognitive vulnerability; psychopathology.

Introduction

The aim of this study is to establish whether the Young Schema Questionnaire-Short Form (YSQ-S; Young, 1998) is a suitable tool for identifying schemas in adolescents. To date, the YSQ is the only assessment tool with good psychometric properties that can identify Early Maladaptive Schemas (EMS's) in adults. Given that schemas are thought to develop in early childhood, it would be useful to establish whether they can be identified in adolescents for two main reasons. Firstly, evidence of EMS's in adolescence would provide support for the proposal that schemas are established in early childhood. Garber, Weiss, & Shanley, (1993) make the point that evidence of negative cognitions in adolescents would strengthen the validity of cognitive theories, whereas failure to replicate would highlight the limitation of theories and provide a potential focus for their modification. The same argument may be true of underlying cognitive structures that are thought to develop during childhood. Whether schemas are found to be conceptually similar to the EMS's proposed by Young (1990), or not, the findings may provide information about how they develop over time.

Secondly, there are potential clinical gains from being able to identify EMS's in adolescents. Beck's (1967) cognitive model of psychological disorders is based on the tenet that dysfunctional cognitive structures and processes are the result of early experience, resulting in a vulnerability factor that interacts with negative life events to contribute to the development of psychological disorders. Wilkes, Belsher, Rush and Frank (1994) suggest that the application of cognitive techniques during adolescence is optimal, as the psychological processes involved in developing a sense of self and other are potentially more fluid. EMS's are thought to be directly

related to the development of psychopathology, thus identifying them in adolescence may lead to the application of existing interventions, or the development of new therapeutic techniques, to modify schemas at this optimal time in development. This type of treatment approach may be of particular relevance to adolescents who have more complex difficulties, and who are thought to be at risk of developing a personality disorder.

In order to explore whether using the YSQ with adolescents is viable, it is useful to first establish what is already known about the applicability of cognitive models to adolescents with psychological disorders. Given that maladaptive schemas are thought to be particularly important in the development of personality problems, the evidence for the diagnosis, or the emergent diagnosis, of personality disorder in adolescents will then be discussed. Finally the evidence that exists for EMS's in adults will be reviewed, and the aims of the current study clarified.

Negative Thoughts, Cognitive Processes and Psychopathology in Adolescents

It is estimated that up to one in five children and adolescents experience some form of psychological disorder (Target & Fonagy, 1995). Cognitive-behavioural theories postulate that these young people lack the appropriate behavioural skills, or that their beliefs (cognitive contents) or problem-solving capacities (cognitive processes) are in some way disturbed (Reinecke, Dattilio, & Freeman, 1996). There has been a move to view psychological problems in adolescence as a continuum with adult problems, rather than as a transient phase in development. For example, strong relationships have been found between childhood depression and psychological problems in adulthood (Harrington, Rutter, & Frombonne, 1996). If this were the

case, then it would seem plausible that treatment approaches developed for adults may also be effective. Young people differ from adults in terms of their cognitive, social and emotional development, and so assumptions cannot be made about the generalisability of cognitive theories of psychological disorder from adults to adolescents. This raises the possibility that children and adolescents may not experience negative cognitions in the same way as adults, and that adult cognitive models may either be inapplicable, or may need to be adapted to incorporate developmental processes.

Dysfunctional cognitions in adolescents

The evidence for both the presence of underlying dysfunctional cognitions, and their content specificity, is mixed. Harrington (1993) indicates that adolescents show a similar pattern of automatic thoughts and dysfunctional assumptions to adults. Leitenberg, Yost, and Carroll-Wilson (1986) found that both depressed and anxious adolescents had higher rates of cognitive errors, such as catastrophising, personalising and selective abstraction. Depressed children have also been found to have a greater number of negative automatic thoughts than non-depressed children do (Laurent & Stark, 1993).

Ambrose and Rholes (1993) measured depressive and anxious cognitions in children as young as ten and found no substantial changes in the number or function of these cognitions across the age range included (10-16 years). In contrast to adult samples (Clark, Beck, & Stuart, 1990; Reno & Halaris, 1989), there was relatively little differentiation in the types of negative cognitions that were reported. Similarly, Garber, Weiss and Shanley (1993) found that cognitive measures such as Beck's

Cognitions Checklist (CCL; Beck, Brown, Steer, Eidelson, & Riskind, 1987) and The Automatic Thoughts Questionnaire (ATQ; Hollon & Kendall, 1980) did not show discriminant validity with regard to anxiety and depression. In general, findings from studies of dysfunctional thoughts and cognitive processes in children and adolescents suggests that dysfunctional thinking may be less differentiated during adolescence, and that distinctions in cognitive content only emerge with increasing cognitive maturity. This is in contrast to adults, where content specificity is a feature of a number of cognitive models of psychopathology (Beck & Emery, 1985; Beck, Freeman, & Pretzer, 1990; Beck, Rush, Shaw, & Emery, 1979). Watson and Tellegen (1985) have proposed that in children, disorders such as anxiety and depression represent facets of a broader construct of negative affectivity and therefore would not necessarily be expected to differ with regards to associated cognitions.

Schemas and Personality Disorder in Adolescents

Few studies have systematically looked at schemas in children and adolescents. Definitions of the term 'schema' vary considerably within the literature. To further add to the confusion on definitions, the terms schema and core belief seem to be used interchangeably within the literature. The term schema tends to be used more commonly to describe a cognitive structure which processes information according to the pre-existing beliefs contained within it, whereas core belief tends to refer to an unyielding belief held by the individual which may be contained within a schema. Schemas are central to the cognitive conceptualisation of personality disorder in adults, but there is limited empirical evidence for the existence of personality disorder in adolescents. Research studies that have addressed this

question indicate that the evidence is mixed. One argument for the existence of specific personality disorders, is based on the demonstration that some adolescents meet the diagnostic criteria for certain personality disorders (borderline, narcissistic and anti-social: Becker, Grilo, Edell, & McGlashan, 2000; Kernberg, Hajal, & Normandin, 1998; Myers, Stewart, & Brown, 1998). However, the majority of studies, which have looked at the predictive validity of a personality disorder diagnosis, have found it to be a relatively unstable construct. Levy et al. (1999) looked at baseline and two-year follow-up assessments of 101 hospitalised adolescents. Those who met the criteria for personality disorder at baseline were not significantly different, in terms of psychopathology and global assessments of functioning, from the non-personality-disordered group at follow-up.

A diagnosis of personality disorder may have greater validity when the type of personality disorder is not specified (Haslam, 1978). Becker et al. (2000) found that 68 adolescents (aged 12-18 years) who met the criteria for Borderline Personality Disorder displayed a broader pattern of co-morbidity, encompassing aspects of personality clusters A and C, in comparison to an adult sample who also met the criteria for Borderline Personality Disorder. Kasen, Cohen, Skodol, Johnson and Brook (1999) examined associations between child psychopathology and young adult personality disorder in 551 youths who were 9-16 years old at first assessment and were followed up over ten years. They looked at the predictive effects of prior Axis I and Axis II disorders on young adult personality disorder using logistical regression. They found that the co-morbidity of Axis I and Axis II disorders increased the likelihood of personality disorder in young adults, relative to the odds of a disorder on a single axis. Such findings indicate that the assessment of

personality pathology in adolescence may well be useful in facilitating the identification of more persistent psychopathology.

The findings that adolescent psychopathology is not as diagnostically definable as in adults may well be mirrored in the content of their cognitions. This has implications for the suitability of using cognitive behavioural interventions that have been developed for adults. The use of cognitive interventions with children and adolescents has been criticised, as they do not always attend to the self-organising, constructive processes of child development (Mahoney & Nezworski, 1985). Caution has been rightly used in applying cognitive techniques in an unmodified form, as they may fail to be of benefit for children and adolescents. The impact of early attachments and the wider family system, are crucial to working with adolescents, but are rarely incorporated in standard cognitive-behavioural conceptualisations of childhood emotional disorders. Young's (1990) theory of schema development provides a developmental perspective of cognitive dysfunction, and therefore could provide a framework for understanding more complex psychological problems in adolescence, if schemas were found to play a role in adolescent psychopathology.

Schema Theory

Young's (1990) schema theory was developed in an attempt to enhance the understanding and treatment of individuals who present with complex personality difficulties. The theory's primary emphasis is on Early Maladaptive Schemas (EMS's), which are thought to be present in normal populations, but become exaggerated and extreme in symptomatic individuals (Young & Klosko, 1993).

Padesky (1994) outlines the possible differences between personality and symptom disorders as being the degree of dysfunction, the number of dysfunctional schemas, or the absence of a more adaptive set of beliefs which counter-balance the dysfunctional beliefs incorporated into the schemas. Therefore, it should be possible to identify schema in both non-clinical and symptom disordered populations, albeit to a lesser extent than would be found in personality disordered individuals.

Early Maladaptive Schemas

Young (1990) proposes that schemas are unique to each person. He has developed a theoretical model in which EMS's are seen as the deepest level of cognition, that serve as "templates for the processing of later experience" (p. 9). He describes schemas as extremely stable and enduring themes that develop during childhood and are elaborated on throughout an individual's life. This is of particular relevance to the role of schemas in adolescence, as it may be that some schemas are less well developed than others at this developmental stage. EMS's are self-perpetuating and so are resistant to change and by definition, must be dysfunctional, leading to psychological distress. EMS's are thought to result from both the child's innate temperament and through the ongoing patterns of everyday negative experiences with others, which cumulatively strengthen the schemas. Young (1990) identified a classification system of 16 common schemas that are proposed to underlie an individual's psychopathology, based on his clinical experiences with personality disordered patients. This list was expanded to 18 (Young, 1998) and has been grouped into five broad schema domains, corresponding to the child's primary tasks of normal development.

Schema Domains

The Disconnection and Rejection domain is seen as the expectation that one's needs for safety, acceptance and respect, will not be met in a predictable manner. The typical family origin is described as detached, cold, rejecting, unpredictable or abusive. There are five schemas relating to this domain. Abandonment/Instability describes the sense that significant others will not consistently provide reliable emotional support or practical protection. Mistrust/Abuse involves the expectation that others will abuse, humiliate, or manipulate the person either intentionally or unintentionally. Emotional Deprivation is the belief that one's desire for an appropriate degree of emotional support will not be adequately met. Defectiveness/Shame refers to the feeling that one is unlovable or has perceived flaws of which one is ashamed. Social Isolation/Alienation is the feeling that one is isolated or different from other people.

The second domain is Impaired Autonomy and Performance that relates to the four schemas that interfere with one's perceived ability to function independently. The typical family origin is undermining of the child's confidence. Dependence/Incompetence describes the belief that one is unable to handle responsibility alone. Vulnerability to Harm or Illness is an exaggerated fear that disaster will strike at any time. Enmeshment/Undeveloped Self describes excessive emotional involvement with others. Failure is the belief that one is stupid, lower in status, or less successful than others, in fundamental ways.

Impaired Limits is the third schema domain, incorporating the two schemas which lead to difficulties in respecting the rights of others, making commitments, or setting and meeting realistic personal goals. The typical family origin is characterised by permissiveness, overindulgence, lack of direction or a sense of superiority. Entitlement/Grandiosity is the belief that one is superior to others, and not bound by the normal rules of social interaction. Insufficient self-control/Self-discipline refers to difficulties in exercising sufficient self-control to achieve goals, or to restrain the excessive expression of one's own emotions or impulses.

The fourth domain is Other Directness which includes three schemas relating to an excessive focus on the needs of others, at the expense of one's own needs, in order to gain approval, maintain one's sense of connection, or avoid retaliation. In such families, the parent's emotional needs and desires are valued more than the unique feelings of the child. Subjugation is the surrendering of control to others, usually to avoid retaliation or abandonment. Self-Sacrifice refers to the excessive focus on meeting the needs of others, at the expense of one's own gratification. Approval-seeking/Recognition-Seeking describes the excessive emphasis on gaining approval at the expense of developing a secure sense of self.

Overvigilance and Inhibition is the fifth domain. The four schemas put an excessive emphasis on suppressing one's spontaneous feelings, or on sticking to rigid internal rules at the expense of psychological well being. The typical family origin is grim, demanding and sometimes punitive and there is usually an undercurrent of pessimism and worry. Negativity/Pessimism is the persistent focus on the negative aspects of life, while minimising the optimistic aspects. Emotional Inhibition refers

to the inhibition of spontaneous action, feelings or communication to avoid disapproval by others or feelings of shame. Unrelenting Standards/Hypercriticalness describes the need to reach very high internalised standards of behaviour and performance, usually to avoid criticism. Punitiveness involves the tendency to be intolerant, punitive and impatient with self and others when they don't meet one's expectations and standards.

Young Schema Questionnaire

The Young Schema Questionnaire (YSQ: Young, 1990, revised 1991) was designed to measure the original 16 EMS's (Approval Seeking/Recognition Seeking and Punitiveness have been added since the questionnaire was devised). The questionnaire currently exists in two forms; a long version (205 items) and a short version (75 items). The short form includes those items which loaded most heavily onto 15 factors (of the 16 proposed by Young) when the tool was investigated for its psychometric properties with both clinical and non-clinical samples (Schmidt, Joiner, Young, & Telch, 1995). One schema (Social Undesirability) was dropped because it was found to be unreliable.

Similar results to this initial study were found in an Australian clinical sample (Lee, Taylor, & Dunn, 1999) where 14 of the 16 factors proposed by Young emerged. They found that the YSQ could discriminate well between patients suffering with Axis I and Axis II disorders, with the latter scoring higher on all of the subscales of the questionnaire. Similar discriminatory findings have been found by researchers using the YSQ translated into French (Mihaescu et al., 1997). Shah and Waller (2000) demonstrated that the YSQ found that Defectiveness/Shame, Self-

Sacrifice and Insufficient Self-control schemas differentiated between depressed and non-depressed groups.

Waller, Meyer and Ohanian (2001) found both forms of the YSQ had similar levels of internal consistency, reliability, discriminant and concurrent validity, when used with a clinical group of bulimics and a non-clinical comparison group. Stopa, Thorne, Waters and Preston (2001) found similar psychometric properties for both versions of the YSQ using a mixed clinical sample. Defectiveness was found to be the best predictor of the depth or seriousness of the disorder, whereas Defectiveness, Abandonment and Unrelenting Standards were all predictive of degree of client distress. This study, in conjunction with the findings from previous studies, suggests that some schemas may have a more critical role than others in the development of psychological disorders.

The use of Schema Questionnaires with Adolescents

Young's hypothesised links between parenting patterns and EMS formation provides a potentially useful tool for research in as much as the theory contains specific predictions which can be tested, retrospectively, cross-sectionally, and prospectively (Simons & Free, 2000). Therefore, the YSQ could be used to examine the development of schema in younger populations. To date, two studies have explored this possibility.

Simons & Free (2000) have developed a tool to measure schemas in children aged eight to twelve years to see if EMS's could be identified, and to examine the association between adults' and children's EMS's. The Children's Schema

Questionnaire (CSQ), based on the YSQ, included 44 cartoon vignettes of scenario's thought to depict Young's EMS. The same six point scoring criteria was used as in the adult version. The sample consisted of 166 primary school students with no known psychiatric history. A factor analysis of the measure elicited 14 factors, including 10 from the YSQ. The ten first-order factors which emerged were; Mistrust/Abuse, Vulnerability to Harm, Insufficient Self-control, Failure, Social Isolation, Enmeshment, Self-Sacrifice, Emotional Deprivation, Defectiveness and Unrelenting Standards. Most of the items from the five other hypothesised EMS's merged on factors that were conceptually similar. The CSQ is a potentially useful tool for identifying young children at risk of developing negative schemas. Unfortunately, the CSQ is not necessarily an appropriate tool for use with adolescents.

One study has used a modified version of the short form of the YSQ in a study investigating the differences between cognitions in depressed and non-depressed adolescents (Simmons, 2000). Depressed adolescents were found to have higher YSQ-S total scores and a greater number of clinically significant EMS's than the non-depressed adolescents. Defectiveness was found to be the best predictor of high scores on the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). In contrast with adult studies (Schmidt et al., 1995), Dependency was not found to discriminate between clinical and non-clinical samples. Simmons (2000) suggests that a possible reason for this could be that adolescents are still appropriately dependent on their parents, therefore it is not an indication of dysfunction in this population. However, the results of this study should be interpreted with caution, given the small sample size.

Aims of the Study

Schemas are important in adult models of psychopathology and a number of theories stress their developmental origins. In order to investigate and test these theories, it is important to have an instrument that can measure these hypothetical constructs. Neither the long nor the short form of the YSQ has been validated on an adolescent population, although both have been found to have comparable psychometric properties with adults. A modified version of the short form has already been used in an adolescent study; therefore it is logical to see if this version has similar utility for adolescents as it does with adults. The YSQ-S's psychometric properties need to be examined using a large adolescent sample. The current study has three aims. The first aim of the study is to investigate the factor structure of the modified form of the YSQ-S (Simmons, 2000). The second aim is to examine the relationship of the YSQ-S to measures of psychopathology and self-esteem. It is hypothesised that the YSQ-S will show a significant association with both psychopathology and low self-esteem. The final aim of this study is to explore whether schemas, as measured by the YSQ-S, are a better predictor of psychopathology than personality dimensions that have previously been found to be associated with specific psychological disorders.

Method

Participants

The sample consisted of 705 adolescents (315 boys and 390 girls); aged from 11 to 17 years (Table 1 shows the distribution of the sample by age). Participants were recruited from three state secondary schools and one sixth-form college in the Wiltshire and Gloucestershire region (Appendix B.). The majority of the sample (95%) was white British.

Insert Table 1 here

Measures

Young Schema Questionnaire - Short Version (Young 1998)

The Young Schema Questionnaire (YSQ-S; Young, 1998) is a 75 item self-report measure created to identify 16 Early Maladaptive Schemas. Each item is rated on a 6-point scale from 1 (completely untrue of me) to 6 (describes me perfectly). Numerical scores can be obtained by adding all the scores on the YSQ-S together to give a total YSQ-S score. Each schema comprises five items that are added to give a mean score for that schema. There are two methods of scoring the YSQ-S. The first is recommended for clinical use (Young, 1990) where only fives and sixes are counted. The second method uses total or mean scores for each schema and is the preferred method in research studies (Lee, Taylor, & Dunn, 1999; Schmidt et al., 1995; Stopa et al., 2001).

Research conducted by Schmidt et al. (1995) indicated that the YSQ has adequate test re-test reliability (average $r = .76$) and internal validity (average $\alpha =$

.90) and that it possesses good convergent and discriminant validity with regard to measures of psychological distress. The Pearson's correlation with the Beck Depression Inventory (BDI; Beck et al, 1961) was .59, the Symptom Checklist-90 Revised (SCL-90-R; Derogatis, 1977) depression subscale was .63; and anxiety subscale was .47; the Rosenberg Self-Esteem Scale, (RSE; Rosenberg, 1965) was -.26, the Dysfunctional Attitudes Scale (DAS; Weissman, 1979) was .60 and with the Personality Diagnostic Questionnaire - Revised (PDQ-R; Hyler & Rieder, 1987) was .71. Lee, Taylor and Dunn (1999) found similar internal consistency of the YSQ (16 factors emerged, including 15 of the original scales proposed by Young, 1991) and they also showed that its primary factor structure was stable across clinical samples from different countries and for varying degrees of client psychopathology.

The current study uses the short form of the YSQ-S (Young, 1998) that has been adapted for adolescents (Simmons, 2000) by changing a few words and phrases to reflect British usage. The YSQ-S's readability was checked to ensure it was suitable for use with the age range of the participants (Flesch-Kincaid Grade Level 6.1). Permission to use this modified form of the YSQ-S was obtained from Jeffrey Young (Appendix C). Waller, Meyer and Ohanian (2001) and Stopa et al., (2001) suggest that the YSQ and the YSQ-S have similar levels of internal consistency, parallel forms reliability and their levels of concurrent validity are largely similar to the long form.

Brief Symptom Inventory (BSI; Derogatis, 1993).

The BSI was used to provide a general measure of psychopathology. It contains 53 items, each of which is rated on a five-point scale of distress. The BSI

provides scores for nine primary symptom dimensions, and three global indices. The Global Severity Index (GSI) indicates the depth of the disorder, by combining information about the number of symptoms reported with the intensity of the perceived distress. The Positive Symptom Distress Index (PSDI) reflects the average level of distress reported for the symptoms that were endorsed. The Positive Symptom Total (PST) reflects the number of symptoms present, with higher scores indicating greater numbers. Although originally designed for use with adults, the BSI has been widely used in research with adolescents (McCaskill, Toro, & Wolfe, 1998), and separate norms have been developed for adolescents (Derogatis, 1993).

Revised Junior Eysenck Personality Questionnaire (JEPQR-A; Francis, 1996).

The JEPQR-A is a 24 item questionnaire which measures Extraversion, Neuroticism, Psychoticism and Lie scores when the use of the 48-item version of the Eysenck Personality measures (the short form of the Revised Junior Eysenck Personality Questionnaire; Corulla, 1990) is inappropriate. The factor analysis of the JEPQR-A scale indicates that the personality dimensions are independent of each other, which is consistent with findings from studies which have used longer versions of the scale (Eysenck & Eysenck, 1975; Francis, 1992, 1993).

Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965).

The RSE includes ten general statements assessing the degree to which respondents are satisfied with their lives and feel good about themselves. The RSE provides an established measure of global self-worth. Statements are rated on a four-point scale ranging from strongly agree to strongly disagree. The RSE has good

construct validity as a measure of global self-esteem in adolescents (Hagborg, 1993) and young adults (Fleming & Courtney, 1984), and has been recommended as a psychometrically sound measure for use with school age children (Chiu, 1988; Gurney, 1986).

Procedure

Ethical approval was obtained through the University of Southampton's ethical committee (See appendix D). As this study did not use a clinical sample, medical ethical consent was not required. Following ethical approval, information about the study was sent to the parents of the school and college pupils (Appendix E). Parents were asked to reply if they did not give consent to their child taking part. All participants received both verbal and written information about the study, emphasising that they did not have to take part in the research (Appendix F). Participants completed the measures in the classroom over a 50 minute to one-hour lesson, and were not allowed to confer with classmates about their answers. The participants were asked to place their questionnaires in the sealable envelope provided, and it was made clear that all responses were confidential. Each of the participating schools and colleges were sent a summary of the research findings (Appendix G).

Data Analysis

Prior to analysis, the data was checked for the accuracy of data entry, missing values and fit between their distributions and the assumptions of multivariate analysis. Missing values were excluded listwise for the purposes of factor analysis and replaced by the mean in all other analyses. The JEPQ Neuroticism and Lie

scales, and the BSI Positive Symptom Index were normally distributed. However, the majority of the data was positively skewed as would be expected with a non-clinical sample on clinical measures and so these variables were logarithmically transformed (Tabachnik & Fidell, 1996). Two exceptions to this were the BSI Global Symptom Inventory, which was transformed for moderate positive skewness and JEPQR-A Extraversion, which was transformed for substantial negative skewness. Although the data was still skewed, this procedure significantly reduced the amount of skewness. The RSE was not transformed, as its skewness was not improved by this procedure. Analysis of the data was conducted using SPSS Version 10.

Results

All 75 items of the YSQ-S were factor analysed using the principal components analysis (PCA) option of SPSS's (Version 10) FACTOR procedure. This is in line with previous studies which have factor analysed different versions of the YSQ. The study was viewed as exploratory, as no previous studies have examined the factor structure of the YSQ-S with an adolescent sample. To enhance the interpretability of the factor solution, an orthogonal rotation procedure (varimax) was used. Kaiser's (1961) criterion was used to retain factors with unrotated eigenvalues with a value greater than one. Pearson correlation was used to establish the relationship between the YSQ-S and measures of psychopathology, personality and global self-esteem.

Factor Structure of the YSQ-S

The expectation, based on Young's theory of the development of schema, is that the primary factor structure of the YSQ-S will be similar to the factor structures found in adult samples. 15 factors emerged that were readily interpretable, and accounted for 65.54% of the total variance. Items which loaded $\geq .40$ on a given factor were assigned to that factor. Where an item loaded onto two factors, it was included as part of the factor on which the item had the highest loading.

Insert Table 2 here

Table 2 shows the percentage of variance for each of the derived factors that were accounted for by the factor analysis. Two Entitlement items (I have a lot of trouble accepting "no" for an answer when I want something from other people & I hate to be limited or kept from doing what I want.) just failed to meet the criteria for

loading onto the Entitlement factor (.356 & .373), and loaded instead onto the Insufficient Self-Control factor (.517 & .472). However, both items had lower loadings onto this factor than items from the YSQ-S that were intended to measure insufficient self-control. Two Enmeshment items (I often feel as if my parent(s) are living through me - I don't have a life of my own & I often feel that I do not have a separate identity from my parents or partner) loaded onto both the Enmeshment (.434 & .402) and the Emotional Deprivation (.411 & .462) factors, with the second item loading slightly higher on the latter and, therefore included as part of this factor. Again, these items loaded to a lesser extent onto Emotional Deprivation than all of the Emotional Deprivation items. One Subjugation item (46. I think if I do what I want, I'm only asking for trouble) failed to load onto any factor.

Gender Differences

Separate factor analyses were completed on male and female participants. These separate analyses used the same method as the analysis used for the whole sample.

Male Group

16 factors emerged that were readily interpretable for the male group ($n = 315$), and accounted for 68.22% of the total variance. Again, items which loaded $\geq .40$ on a given factor were assigned to the factor on which they loaded most highly.

Insert Table 3 here

Table 3 outlines the factors derived from the male sample. Five of the factors (Emotional Deprivation, Vulnerability to Harm, Unrelenting Standards, Self-Sacrifice & Insufficient Self-Control including the additional Entitlement items) produced the same pattern as the factor analysis of the whole sample. However, in the male sample, there were different loadings for the remaining factors. Social Isolation and three of the Defectiveness items loaded onto the same factor; the remaining two Defectiveness items failed to load onto any factor. The items for both Mistrust/Abuse split into two separate factors, representing an Abuse factor (MA 1) and a Mistrust factor (MA 2). Similarly, there were two separate factors for the Enmeshment Items. EM1 appears to reflect over involvement with parents, whereas EM2 is more representative of an underdeveloped self-concept. Six items failed to load onto any factor (Defectiveness, 21, 22; Dependence/Incompetence, 34; Emotional Inhibition, 56; Subjugation, 46, 50).

Female Group

17 factors emerged that were readily interpretable in the female group ($n = 390$), and accounted for 68.09% of the total variance. However, one of these factors had no items that loaded $\geq .40$ so only 16 of them are reported.

Insert Table 4 here

Table 4 shows the derived factors for the female sample. The factor analysis of the female participants was more directly comparable to the analysis of the whole group than the analysis of the male sample. Eight of the factors (Failure, Social

Isolation, Emotional Deprivation, Defectiveness, Emotional Inhibition, Vulnerability to Harm, Self-Sacrifice and Unrelenting Standards) emerged in an identical pattern to both the whole sample and to adult samples. The remaining factors, for the most part, had slightly different configurations, mostly through an additional variable loading onto the factor. The exception to this was the Dependence/Incompetence factor, where the items split into two separate factors, the first reflecting dependence, and the second reflecting incompetence. Four items failed to load onto any factor (Mistrust/Abuse, 11, 12, 13; Subjugation, 46). Interestingly, the three Mistrust/Abuse items were the same as those that made up the Abuse factor in the male sample.

Age Differences

In order to examine the effect of age on the factor structure of the YSQ, the sample was split into two groups. Participants aged ≤ 13 years comprised the Younger group, and participants aged ≥ 14 years comprised the Older group. This age split was decided in an attempt to make the two groups as equal in size as possible.

Younger Group

17 factors emerged that were readily interpretable for the younger group ($n = 325$), and accounted for 70.9% of the total variance. Items which loaded $\geq .40$ on a given factor were assigned to the factor on which they loaded most highly.

Insert Table 5 here

Table Five outlines the factors derived from the younger sample. Eight of the factors (Failure, Defectiveness, Insufficient Self-Control, Emotional Deprivation, Social Isolation, Vulnerability to Harm, Emotional Inhibition & Abandonment) were the same as the factors that were derived in the whole sample. Six of these factors (with the exception of Insufficient Self-control, which had two additional Entitlement items loading) were also found in the analysis of the whole sample. However, there were different loadings for the remaining factors. Self-Sacrifice items loaded onto two separate factors, with one item (Other people see me as doing too much for others and not enough for myself) loading by itself, and the remaining four items making up the other factor. Again the Mistrust factor emerged as separate, with the Abuse items not forming a cohesive factor. Unrelenting Standards emerged as two factors with subtle differences. US1 represents a need to achieve goals, while US2 reflects hypercriticalness. Similarly, Enmeshment emerged as two separate factors, although two items did not load onto any factor. The split reflects the Enmeshment factors found in the male sample. Ten items did not load onto any factor (11, 13, 35, 43, 45, 46, 47, 50, 66, & 68). The remaining items loaded onto factors in meaningful ways, but reflected more variance than was found in the whole sample.

Older Group

17 factors emerged that were readily interpretable for the older group ($n = 380$), and accounted for 70.29% of the total variance.

Insert Table 6 here

Table 6 shows the derived factors for the Older group. In general, the results were directly comparable to the findings from the whole sample. Ten of the factors (Failure, Social Isolation, Emotional Inhibition, Abandonment, Emotional Deprivation, Defectiveness, Vulnerability to Harm, Unrelenting Standards, Self-Sacrifice and Mistrust/Abuse) emerged in the same pattern. Insufficient Self-Control items and two Entitlement items loaded onto the same factor, in common with the analysis of the whole sample.

The remaining factors had slight differences in their configuration. Similar to the female sample, Dependence/Incompetence items split into two separate factors. Similarly, Enmeshment emerged as two factors, as in the male sample. Only item 46 failed to load onto any factor.

Internal Consistency

To determine the internal consistency of the derived factors in all of the analyses, Cronbach's Alpha was calculated for each derived factor. The tables corresponding to each of the factor analyses show that all of the derived factors had alpha values above or equal to 0.7, which demonstrates the psychometric robustness of the scale (Tabachnick & Fidell, 1996).

YSQ-S, Psychopathology and Self Esteem

The relationship between YSQ-S, psychopathology (BSI), and global self-esteem (RSE) was examined. It was expected that both the primary factors and the total score of the YSQ-S would be positively associated with the three indices of

global distress, and negatively associated with self-esteem. One-tailed Pearson's correlations were used as the direction of the relationships between the YSQ-S, BSI and RSE had been predicted. Correlations of $\geq .3$ were considered to be of clinical relevance (Tabachnik & Fidell, 1996). Table 7 shows the correlations between the three measures.

Insert Table 7 here

The correlation co-efficients reported in Table 7 indicate that the YSQ-S total score was significantly correlated with all three indices of psychological distress and global self-esteem. While these associations were all in the expected direction, they were moderate rather than strong relationships. Although many of the derived YSQ-S factors showed a statistically significant relationship with global measures of psychopathology and self-esteem, none of them showed a correlation above 0.3. The same was true of the correlation's between symptom scales of the BSI and both the YSQ-S total score and the derived primary factors.

YSQ-S and Personality

This study also aimed to compare the YSQ-S and the JEPQR-A to explore whether schemas, as measured by the YSQ-S, are a better predictor of psychopathology than personality dimensions that have previously been found to be associated with specific psychological disorders.

Insert Table 8 here

A two tailed Pearson correlation was used as the direction of the relationship between the YSQ-S and the JEPQR-A scales were not predicted. Correlation coefficients shown in Table 8 indicated that only Neuroticism had a significant positive correlation with all three measures of psychopathology and the YSQ-S-S total. While these associations were in the expected direction, again they represent moderate rather than strong associations. Based on these findings, simple regressions (method = enter) were used to explore the predictive relationship of both Neuroticism and the YSQ-S total score to each of the measures of psychopathology. The assumptions for using this technique were met as the number of cases to independent variable ratio was satisfactory ($N \geq 104 + M$, where M is the number of IV's), no outliers, and the data was transformed prior to analysis (Tabachnik & Fidell, 1996).

Initially, both the YSQ-S total score and Neuroticism were entered into a regression analysis to establish their combined predictive value for each of the three primary indices of psychopathology. To see whether the YSQ-S or Neuroticism had better predictive value for each of the three indices, separate regression analyses were then conducted.

Insert Table 9 here

Together, Neuroticism and the YSQ-S total score accounted for between 20 to 30% of the variance in all three indices of psychopathology. Overall, the model accounted for a moderate proportion of the variance. The results from the separate regressions indicate that the two variables are not significantly different in predicting

overall levels of psychopathology in this sample group, although the YSQ-S is marginally better. The higher r value's gained when both variables are combined in the analysis, indicates that the YSQ-S total score and Neuroticism are predictive of slightly different elements of global psychopathology measures.

Discussion

This study had three aims. The first was to examine the factor structure of the YSQ-S, the second was to explore the relationship of the YSQ-S to measures of psychopathology and self-esteem, and the third was to establish whether EMS's were a better predictor of psychopathology than existing personality measures. These three aims will be discussed separately.

The results from this study demonstrated that the factor structure of the YSQ-S was comparable to its structure when used with both clinical and non-clinical adult samples (Lee, Taylor, & Dunn, 1999; Schmidt et al., 1995). The YSQ-S was also found to have acceptable levels of internal consistency. The items that did not load onto the expected factors loaded instead onto conceptually similar factors. These findings indicate that the YSQ-S is an adequate measure of EMS's in adolescents.

However, there was some disparity between the findings from this study and previous studies. The two Entitlement items that loaded onto Insufficient Self-Control reflect the belief that one has right to do what they like, rather than a sense of grandiosity. This may reflect a difficulty for adolescents in distinguishing between internal and external controls. The Enmeshment item (I often feel that I do not have a separate identity from my parents or partner), which loaded slightly higher onto Emotional Deprivation, may reflect the difficulties that individuals from emotionally deprived backgrounds have in developing a sense of self (Erikson, 1950). This Enmeshment item reflects a difficulty in establishing a separate self-concept, whereas the other items reflect more physical constraints on separation from one's parents. The only item that failed to load onto any factor in all three analyses was a

subjugation item (I think if I do what I want, I'm only asking for trouble). This item may be less meaningful to adolescents compared to adults as there are higher levels of constraints placed on them, both through parents and school.

Some interesting gender differences were found when males and females were analysed separately. In the male sample, only five of the factors emerged in the same pattern as the analysis of the whole sample, whereas eight factors emerged for the female sample. The different loadings for the remaining factors for both groups again reflected conceptual similarities. In the male group, the split between Mistrust and Abuse may reflect a lack of connection between feeling vulnerable to abuse and being mistrustful of others, which may develop at a later stage. Similarly, the split found in Enmeshment might reflect appropriate levels of involvement with parents in adolescence, which would be considered inappropriate in adults.

In the female group, the two main differences from the male sample were seen in the emergence of the Defectiveness factor, and the split between Dependence and Incompetence. Defectiveness is associated with depression in female adolescents (Simmons, 2000), as well as in adults (Shah & Waller, 2000). Angold and Rutter (1992) found a sharp increase in depression in adolescents compared to younger children, with a more dramatic rise found in girls. The gender differences found in this sample may reflect a greater propensity for certain types of psychopathology, and certain schemas in females. The split between Dependence and Incompetence may relate to the items comprising the former reflecting more appropriate beliefs in adolescents than in adults.

Overall, the factors found for the female sample were more comparable to the factor structure found in adult samples (Lee, Taylor, & Dunn, 1999; Schmidt et al., 1995). Although some caution must be taken in assuming this is a genuine gender difference; given that the females made up a slightly larger proportion of the sample (55%), it may reflect a developmental difference, in dysfunctional cognitive structures, between males and females. Larger single sex samples would need to be examined to establish if this were the case.

The two age groups had similar factor structures, with the older group having a more comparable factor structure to the whole sample and adult samples (Lee, Taylor, & Dunn, 1999; Schmidt et al., 1995) than the younger group. Although the older group sample was slightly larger, it is likely that this reflects a genuine developmental difference. The fact that schemas can be identified in adolescents, using a highly similar measure to that used to identify schemas in adults, provides some tentative support for Youngs' (1990) theory that EMS's are established in early childhood and become more stable over time. Schemas appear to be less well defined, and therefore more fluid during early adolescence. However, by mid-teens, there is little differentiation between adolescent and adult schemas. The basis on which the age groups were defined could be criticised for being somewhat arbitrary. However, it was necessary to ensure that both groups were large enough to be factor analysed, and so no other configuration was possible.

The YSQ-S total score was found to correlate with global indices of psychopathology and low self-esteem, which indicates that the predicted relationship between these measures, as outlined in the second aim of the study, was correct.

These findings provide some support for Young's (1990) claim that underlying schemas will lead to symptoms of psychological distress. However, the YSQ-S total score only explained a small proportion of the variance (17-22%) in the three BSI global indices. The findings suggest that the YSQ-S has less predictive ability of psychopathology in adolescents, than in adults, where the YSQ-S was found to account for a larger proportion of the variance (37-46%), when global measures of psychopathology were used (Stopa et al., 2001). It is not clear what other factors may account for the variance, given the small proportion explained by the YSQ-S. Age and gender may have a role to play, but could not be entered into a regression analysis as they constitute categorical data. It has been suggested that not all adolescents with psychological problems show dysfunctional cognitions and that other factors such as family circumstance and negative life events may have a greater influence (Asarnow & Bates, 1988). Including cognitive, familial, developmental and environmental factors in future research may help to clarify exactly what effect each has on adolescent psychopathology. In addition, given the potentially important role of the family, parental schemas could also be examined to establish whether these have a significant impact of the psychological well-being of the young person.

Although the YSQ-S correlated with global measures of psychological distress, it was not able to differentiate between types of psychopathology in this sample. However, although there has been some exploration of this possibility, the YSQ-S was not developed for this purpose. It is still not clear whether the YSQ has a role in predicting specific psychological disorders in adulthood, where they are more easily identifiable than in adolescence. Some studies have found that particular schemas discriminate between different types of psychological disorders (Schmidt et

al., 1995; Waller, Meyer & Ohanian, 2001; Waller, Shah, Ohanian & Elliott, 2001), whereas other studies have found less convincing results (Stopa et al., 2001).

In addition, previous research has indicated that there is relatively little differentiation in the types of dysfunctional cognitions experienced by adolescents (Garber, Weiss & Shanley, 1993). The absence of specificity does not mean that negative cognitions are not important in the causal process of psychopathology in adolescents (Garber and Hollon, 1991). It may well be that distinctions in cognitive content, process and structure only become more pronounced with increasing cognitive maturity. Further research using clinical samples is needed to clarify whether the issue is cognitive development, or whether it is the use of a non-clinical sample, which can account for the lack of discriminatory ability of the YSQ-S in adolescents.

The YSQ-S's moderate negative association with the Rosenberg Self-Esteem Questionnaire is similar to previous studies using adult samples (Schmidt et al., 1995). The relationship between low- self-esteem and depression in adolescents is well-researched (Smart & Walsh, 1993; Maxwell, 1992; Marton, Connolly, Kutcher, & Korenblum, 1993). Self-esteem is especially relevant in adolescence due to it being a period of considerable self-criticism and turmoil related to self-concept (Rosenberg, 1985). Deficits in self-esteem are more common among depressed adolescents than the biological symptoms of depression (Inamdar, Siomopoulos, Osborn, & Bianchi, 1979). Overholser, Adams, Lehnert and Brinkman (1995) suggest that this is because the cognitive features of depression are of particular relevance during adolescence.

The YSQ-S also proved to be marginally better than Neuroticism in predicting psychopathology across all three indices. Neuroticism is a measure of emotional instability, and known to be a reliable predictor of psychopathology (McCrae & Costa, 1990). Those individuals who score highly on Neuroticism are likely to show evidence of maladjustment at all ages (McCrae & Costa, 1990). Regardless of age, individuals high in Neuroticism are more likely to use ineffective coping mechanisms such as hostile reactions, passivity, unrealistic ideas about the future and self-blame (McCrae & Costa, 1986). The limitation of using a measure of Neuroticism as a clinical tool is that it does not specify the type of underlying psychological disorder. Studies have found that neuroticism could differentiate between clinical and non-clinical samples, but was not able to differentiate between types of psychological disorder (Corah, 1964; Kassebaum, Couch, & Slater (1959). The same criticism can be made of the YSQ-S. One benefit of using the YSQ-S over measures of Neuroticism is that it provides more clinically useful information in terms of the kinds of dysfunctional cognitive structures that may underlie the presenting problem.

The lack of a clinical sample is the main limitation of the present study, both in terms of the conclusions that can be drawn, and the generalisability of the findings to clinical populations. The number of participants needed to factor analyse a measure of such considerable length meant that the use of a non-clinical sample was the most practical way of conducting the study. Schmidt et al. (1995) found a high level of convergence between adult, student and patient samples, which support the idea that EMS's exist on a continuum, with non-symptomatic individuals presenting

with similar, but less extreme cognitive biases as compared to patient samples. There would have been obvious benefits in including a clinical comparison group to test whether this was the case for adolescents.

The findings from both the present and previous studies does raise the question of what the YSQ-S is measuring, and how it is best used clinically? Both forms of the YSQ are reliable in discriminating between Axis I and Axis II pathology (Lee, Taylor, & Dunn, 1999). The YSQ-S may be best suited to this function, rather than discriminating between different types of Axis I pathology. The research to date has found that diagnostic criteria of personality disorders are not a useful or reliable way of assessing complex characterological difficulties in adolescents (Levy et al., 1999; Meijer, Goedhart, & Treffers, 1998). The identification of underlying cognitive structures could be a way of identifying emergent personality problems. A longitudinal design could explore the utility of the YSQ-S in identifying adolescents thought to be vulnerable to developing a personality disorder, in order to test the questionnaire's predictive ability. If this were possible, it has obvious benefits in terms of determining which individuals are a higher priority for intervention, from those for whom the diagnostic symptomatology is a transient phase.

If EMS's can reliably differentiate between clinical and non-clinical groups, the YSQ-S may prove to be a useful and informative measure of the kinds of underlying cognitions that are targets for therapeutic change. However, given that there is a lack of clarity about the YSQ-S's ability to discriminate between specific types of psychopathology, it cannot be assumed that the identified EMS's are at the root of the presenting clinical problem. It is also important to remember that

individuals' belief systems are influenced by many elements. Research to date indicates that there is a lack of emphasis on establishing how familial and cognitive processes interact (Kazdin, 2002). For example, do certain types of early experience lead to specific beliefs about the self and others, and what are the various risk and protective factors that determine the onset or degree of specific clinical problems? Young's hypothesised links between parenting patterns and EMS formation provides a framework for exploring such interactions in more depth than has been achieved to date.

Finally, given that schemas do exist in adolescent, how suitable are schema-focused interventions for use with adolescents? To date, there has been little research that has looked at the effectiveness of schema-focused therapy in either adults or adolescents. Standard cognitive behavioural therapy has been found to be effective with some adolescent psychological disorders, but it may prove to be less effective with higher levels of more complex types of psychopathology (Harrington, Whittaker, Shoebridge, & Campbell, 1998). Kazdin (2002) outlines the steps that are necessary for developing treatment approaches. The potential use of a schema-focused approach is still at the initial stages. This necessitates further development of both theory and research into the nature of clinical dysfunction in adolescents; and on the processes and mechanisms that are critical to instil change. When this knowledge base is more firmly established, it should confidently lead to further specification of treatment procedures, which can be tested using a diverse range of research designs which account for familial and contextual factors with which treatment interacts. Only then can it be established how effective and appropriate schema-focused therapy is in treating complex psychological disorders that emerge in adolescence.

References

- Ambrose, B., & Rholes, W.S. (1993). Automatic cognitions and the symptoms of depression and anxiety: An examination of the content specificity hypothesis. Cognitive Therapy and Research, 17(3), 289-308.
- Angold, A., & Rutter, M. (1992). Effects of age and pubertal status on depression in a large clinical sample. Development and Psychopathology, 4 (1), 5-28.
- Asarnow, J.R., & Bates, S. (1988). Depression in child psychiatric inpatients: Cognitive and attributional patterns. Journal of Abnormal Child Psychology, 16, 601-615.
- Beck, A.T. (1967). Depression: Causes and Treatment. Philadelphia: University of Pennsylvania Press.
- Beck, A.T., Brown, G., Steer, R., Eidelson, J.I., & Riskind, I. (1987). Differentiating anxiety and depression: A test of the content specificity hypothesis. Journal of Abnormal Psychology, 96, 179-183.
- Beck, A.T., & Emery, G. (1985). Anxiety Disorders and Phobias. Cambridge, MA: Basic Books.
- Beck, A.T., Freeman, A., & Pretzer, J. (1990). Cognitive Therapy of Personality Disorders. Guildford Press, New York.

Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G. (1979). Cognitive Therapy of Depression. New York: J Wiley & Sons.

Beck, A.T., Ward, C.H., Mendelson, M., Mock, J., & Erbaugh, J., (1961). An inventory for measuring depression. Archives of General Psychiatry, 4, 561-571.

Becker, D.F., Grilo, C.M., Edell, W.S., & McGlashan, T.H. (2000). Applicability of personality disorder criteria in late adolescence: Internal consistency and criterion overlap 2 years after psychiatric hospitalisation. Journal of Personality Disorders, 15 (3), 255-262.

Chiu, L. (1988). Measures of self-esteem in school age children. Journal of Counselling and Development, 66, 472-484.

Clark, D.A., Beck, A.T., & Stuart, B. (1990). Cognitive specificity and positive-negative affectivity: Complementary or contradictory views on anxiety and depression. Journal of Abnormal Psychology, 99, 148-155.

Corah, N.L. (1964). Neuroticism and Extraversion in the MMPI: Empirical validation and exploration. British Journal of Social and Clinical Psychology, 3, 168-174.

Corulla, W.J. (1990) A revised version of the psychoticism scale for children. Personality and Individual Differences, 11, 65-76.

Derogatis, L.R. (1977). SCL-90-R Administration, Scoring and Procedures Manual-II (Rev.). Towson, MD: Clinical Psychometric Research.

Derogatis, L. R. (1993): Brief Symptom Inventory: Administration, Scoring and Procedures Manual. Baltimore: Clinical Psychometrics Research.

Erikson, E.H. (1950). Childhood and Society. New York: Norton.

Eysenck, H.J., & Eysenck, S.B.J. (1975). Manual of the Eysenck Personality Questionnaire. London: Hodder & Stoughton.

Fleming, J., & Courtney, B. (1984). The dimensionality of self-esteem: II. Hierarchical facet model for revised measurement scales. Journal of Personality and Social Psychology, 46, 404-421.

Francis, L.J. (1992). Is psychoticism really a dimension of personality fundamental to religiosity? Personality and Individual Differences, 13, 645-652.

Francis, L.J. (1993). The dual nature of the Eysenckian neuroticism scales: A question of sex differences. Personality and Individual Differences, 15, 43-59.

Francis, L.J. (1996). The development of an abbreviated form of the revised Junior Eysenck Personality Questionnaire (JEPQR-A) among 13-15 year olds. Personality and Individual Differences, 21, 835-844.

Garber, J., & Hollon, S.D. (1991). What can specificity designs say about causality in psychopathy research? Psychological Bulletin, 110, 129-136.

Garber, J., Weiss, B., & Shanley, N. (1993). Cognitions, depressive symptoms, and development in adolescents. Journal of Abnormal Psychology, 102 (1), 47-57.

Gurney, P. (1986). Self-esteem in the classroom. International Journal of School Psychology, 7, 199-209.

Hagborg, W. (1993). The Rosenberg self-esteem scale and Harter's self-perception profile for adolescents: A concurrent validity study. Psychology in the Schools, 30, 132-136.

Harrington, R.C. (1993). Depressive disorder in childhood and adolescence. Wiley, Chichester.

Harrington, R.C, Rutter, M., & Frombonne, E. (1996). Developmental pathways in depression: Multiple meanings, antecedents, and endpoints. Development and Psychopathology, 8(4), 601-606.

Harrington, R.C., Whittaker, J., Shoebridge, P., & Campbell, F. (1998). Systematic review of efficacy of cognitive behaviour therapies in childhood and adolescent depressive disorder. British Medical Journal, 316, 1559-1563.

Haslam, M.T. (1978). A study of psychiatric illness in adolescence, psychiatric breakdown in adolescence: Diagnosis and prognosis. International Journal of Social Psychiatry, 24 (4), 287-294.

Hollon, S.D., & Kendall, P.C. (1980). Cognitive self-statements in depression: Development of an Automatic Thoughts Questionnaire. Cognitive Therapy and Research, 4, 383-397.

Hyer, S.E., & Rieder, R.O. (1987). PDQ-R: Personality Diagnostic Questionnaire - Revised. New York: New York State Psychiatric Institute.

Inamdar, S., Siomopoulos, G., Osborn, M., & Bianchi, E. (1979). Phenomenology associated with depressed moods in adolescents. American Journal of Psychiatry, 136, 156-159.

Kaiser, H. (1961). A note on Guttman's lower bound for the number of common factors. Multivariate Behavioural Research, 1, 249-276.

Kasen, S., Cohen, P., Skodol, A.E., Johnson, J.G., & Brook, J.S. (1999). Influence of child and adolescent psychiatric disorders on young adult personality disorder. American Journal of Psychiatry, 156 (10), 1529-1535.

Kassebaum, G. G., Couch, A.S., & Slater, P.E. (1959). The factorial dimensions of the MMPI. Journal of Consulting Psychology, 23, 226-236.

Kazdin, A.E. (2002). The state of child and adolescent psychotherapy research. Child and Adolescent Mental Health, 7 (2), 53-59.

Kernberg, P.F., Hajal, F., & Normandin, L. (1998). Narcissistic personality disorder in adolescent inpatients: A retrospective record review study of descriptive characteristics. In E.F. Ronningstam. Disorders of Narcissism: Diagnostic, Clinical, and Empirical Implications. Washington DC: American Psychiatric Press.

Laurent, J., & Stark, K. (1993). Testing the cognitive content-specificity hypothesis with anxious and depressed youngsters. Journal of Abnormal Psychology, 102, 226-37.

Lee, C.W., Taylor, G., & Dunn, J. (1999). Factor structure of the Schema Questionnaire in a large clinical sample. Cognitive Therapy and Research, 23(4), 441-451.

Leitenberg, H., Yost, L.W., & Carroll-Wilson, M. (1986). Negative cognitive errors in children: Questionnaire development, normative data and comparisons between children with and without self-reported symptoms of depression, low self-esteem, and evaluation anxiety. Journal of Consulting and Clinical Psychology, 54 (4), 528-536.

Levy, K.N., Becker, D.F., Grilo, C.M., Mattanah, J. F., Garnet, K.E., Quinlan, D.M., Edell, W. S., & McGlashan, T.H. (1999). Concurrent and predictive validity of the

personality disorder diagnosis in adolescent patients. American Journal of Psychiatry, 156 (10), 1522-1528.

Mahoney, M., & Nezworski, M. (1985). Cognitive-behavioural approaches to children's problems. Journal of Abnormal Child Psychology, 13(3), 467-476.

Marton, P., Conolley, J., Kutcher, S. & Korenblum, M. (1993). Cognitive social skills and self-appraisal in depressed adolescents. Journal of the American Academy of Child and Adolescent Psychiatry, 32, 739-44.

Maxwell, B.E. (1992). Hostility, depression and self-esteem among troubled and homeless adolescents in crisis. Journal of Youth and Adolescence, 21, 139-150.

McCaskill, P.A., Toro, P.A., & Wolfe, S.M. (1998). Homeless and matched housed adolescents: A comparative study of psychopathology. Journal of Clinical Child Psychology, 27(3), 306-319.

McCrae, R.R., & Costa, P.T. (1986). Personality, coping and coping effectiveness in an adult sample. Journal of Personality, 54, 385-405.

McCrae, R.R., & Costa, P.T. (1990). Personality in Adulthood. New York: Guilford Press.

Meijer, M., Goedhart, A.W., & Treffers, P.D. (1998). The persistence of borderline personality disorder in adolescence. Journal of Personality Disorders, 12 (1), 13-22.

Mihaescu, G., Sechaud, M., Cottraux, J., Velardi, A., Heinze, X., Finot, S.C., & Baettig, D. (1997). Le questionnaire de schemas cognitifs de Young: Traduction et validation preliminaire. L'Encephale, XXIII, 200-208.

Myers, M.G., Stewart, D.G., & Brown, S.A. (1998). Progression from conduct disorder to antisocial personality disorder following treatment for adolescent substance misuse. American Journal of Psychiatry, 155 (4), 479-485.

Overholser, J.C., Adams, D.M., Lehnert, K.L., & Brinkman, D.C. (1995). Self-esteem deficits and suicidal tendencies among adolescents. Journal of the American Academy of Child and Adolescent Psychiatry, 34 (7), 919-928.

Padesky, C.A. (1994). Schema change processes in cognitive therapy. Clinical Psychology and Psychotherapy, 1 (5), 267-278.

Reinecke, M.A, Dattilio, F., & Freeman, A. (1996). Cognitive Therapy with Children and Adolescents. New York: Guilford Press.

Reno, R.M., & Halaris, A.E. (1989). Dimensions of depression: A comparative longitudinal study. Cognitive Therapy and Research, 13, 549-565.

Rosenberg, M. (1965). The Rosenberg Self Esteem Scale. In M. Rosenberg & A. Morris. Society and the adolescent self-image. Princeton N: Princeton University Press.

Rosenberg, M. (1985). Self-concept and psychological well-being in adolescence. In R. Leahy (Ed.). The Development of the Self. New York: Academic Press.

Schmidt, N.B., Joiner, T.E., Young, J.E., & Telch, M.J. (1995). The Schema Questionnaire: Investigation of psychometric properties and the hierarchical structure of a measure of maladaptive schemas. Cognitive Therapy and Research, 19, 295-321.

Shah, R., & Waller, G. (2000). Parental style and vulnerability to depression: the role of core beliefs. The Journal of Nervous and Mental Disease, 188(1), 19-25.

Simmons, J. (2000). Depressed adolescent girls and their mothers. Unpublished doctoral dissertation, Oxford Clinical Psychology Course, Oxford, United Kingdom.

Simons, J., & Free, M. (2000). Development of a children's schema questionnaire. Unpublished doctoral dissertation, Griffith University, Brisbane, Australia.

Smart, R.G., & Walsh, G.W. (1993). Predictors of depression in street youth. Adolescence, 28, 41-53.

Stopa, L., Thorne, P., Waters, A., & Preston, J. (2001). Are the short and long forms of the Young Schema Questionnaire comparable and how well does each version predict psychopathology scores? Journal of Cognitive Psychotherapy: An International Quarterly, 15 (3), 253-272.

Tabachnik, B.G., & Fidell, L.S. (1996). Using Multivariate Statistics (3rd. ed.). New York: Harper Collins.

Target, M., & Fonagy, P. (1995). The psychological treatment of child and adolescent psychiatric disorders. In A. Roth & P. Fonagy (Eds.). What Works for Whom? A Critical Review of Psychotherapy Research. London: Guilford Press.

Waller, G., Meyer, C., & Ohanian, V. (2001). Psychometric properties of the long and short versions of the Young Schema Questionnaire: Core beliefs among bulimic and comparison women. Cognitive Therapy and Research, 25, 137-147.

Waller, G., Shah, R., Ohanian, V., & Elliott, P. (2001). Core beliefs in bulimia nervosa and depression: The discriminant validity of Young's Schema Questionnaire. Behaviour Therapy, 32, 139-153.

Watson, D., & Tellegen, A. (1985). Towards a consensual structure of mood. Psychological Bulletin, 98, 219-235.

Weissman, A.N. (1979). The Dysfunctional Attitude Scale: A validation study. Unpublished dissertation, University of Pennsylvania. Dissertation Abstracts International, 40, 1389-1390.

Wilkes, T.C.R., Belsher, G., Rush, A.J., & Frank, E. (1994). Cognitive Therapy for Depressed Adolescents. New York: Guilford Press.

Young, J.E. (1990). Cognitive Therapy for Personality Disorders: A Schema-Focused Approach. Professional Resource Exchange.

Young (1991). Early Maladaptive Schemas. Unpublished manuscript. Cited in Schmidt, N.B., Joiner, T.E., Young, J.E., & Telch, M.J. (1995). The Schema Questionnaire: Investigation of psychometric properties and the hierarchical structure of a measure of maladaptive schemas. Cognitive Therapy and Research, 19, 295-321.

Young, J.E., & Klosko, J. (1993). Reinventing your life. New York: Dutton Books.

Young (1998). The Young Schema Questionnaire - Shortened Inventory. [Http://www.schematherapy.com](http://www.schematherapy.com). Copyright Jeffrey Young and Gary Brown.

Table 1

Age and Sex of Participants

Age	Male	Female	Total	Percent
11	41	40	81	11.5
12	71	58	129	18.3
13	65	50	115	16.3
14	54	67	121	17.2
15	53	57	110	15.6
16	21	58	79	11.2
17	10	60	70	9.9
Total	315	390	705	100.0

Table 2

Rotated Factor Analysis of the YSQ-S.

Factors	Percentage of variance	Mean loading of items. (No. of items associated in brackets)	Alpha value
Insufficient Self Control	5.86	.65 (7)	.86
Failure	5.72	.78 (5)	.91
Emotional Deprivation	5.24	.65 (6)	.82
Abandonment	5.21	.69 (5)	.86
Social Isolation	5.20	.71 (5)	.89
Emotional Inhibition	4.70	.65 (5)	.83
Defectiveness	4.50	.65 (5)	.88
Vulnerability to Harm	4.47	.64 (5)	.84
Self-Sacrifice	4.12	.69 (5)	.81
Unrelenting Standards	4.03	.68 (5)	.82
Mistrust/Abuse	3.77	.59 (5)	.82
Dependence/ Incompetence	3.76	.57 (5)	.86
Enmeshment	3.46	.48 (4)	.72
Entitlement	3.18	.69 (3)	.75
Subjugation	2.29	.46 (4)	.82

Table 3

Rotated Factor Analysis of the YSQ-S (Males)

Factors	Percentage of variance	Mean loading of items. (No. of items associated in brackets)	Alpha value
Insufficient Self Control plus Entitlement items (66, 68)	5.78	.62 (7)	.86
Failure (plus Dependence/Incompetence item, 35)	6.65	.67 (6)	.90
Emotional Deprivation	5.20	.67 (5)	.82
Abandonment (plus Subjugation item 47)	6.14	.76 (6)	.86
Social Isolation plus Defectiveness items (23, 24, 25)	6.82	.62 (8)	.90
Emotional Inhibition (items 59, 60)	2.60	.64 (2)	.70
Defectiveness	No items loaded onto separate factor		na
Vulnerability to Harm	4.89	.59 (5)	.84
Self-Sacrifice	4.22	.69 (5)	.81
Unrelenting Standards	4.60	.68 (5)	.82
Mistrust/Abuse 1 (items 11, 12, 13)	3.40	.61 (3)	.76
Mistrust/Abuse 2 (items 14, 15)	2.10	.63 (2)	.82
Dependence/Incompetence (items, 31, 32, 33)	3.68	.59 (3)	.73
Enmeshment 1 (items 41, 42, 43)	2.65	.57 (3)	.74
Enmeshment 2 (items 44, 45)	2.71	.57 (2)	.75
Entitlement (items 67, 69, 70)	3.43	.68 (3)	.74
Subjugation items (48, 49) plus Emotional Inhibition items (57, 58)	3.37	.54 (4)	.74

Table 4

Rotated Factor Analysis of the YSQ-S (Females)

Factors	Percentage of variance	Mean loading of items. (No. of items associated in brackets)	Alpha value
Insufficient Self Control (plus Entitlement item 66)	5.31	.66 (6)	.86
Failure	5.89	.80 (5)	.91
Emotional Deprivation (plus Enmeshment item 45)	5.10	.70 (6)	.82
Abandonment	4.76	.69 (5)	.86
Social Isolation	5.78	.73 (5)	.89
Emotional Inhibition	4.68	.70 (5)	.83
Defectiveness	4.68	.69 (5)	.88
Vulnerability to Harm	4.60	.66 (5)	.84
Self-Sacrifice	4.25	.68 (5)	.81
Unrelenting Standards	4.09	.67 (5)	.82
Mistrust/Abuse (items 14, 15)	2.86	.77 (2)	.82
Dependence/Incompetence 1 (items, 31, 32)	1.95	.58 (2)	.77
Dependence/Incompetence 2 (items, 33, 34, 35)	2.67	.61 (3)	.77
Enmeshment (except item 45) plus Subjugation (item 47)	3.70	.57 (5)	.75
Entitlement (except item 66)	3.62	.65 (4)	.76
Subjugation (items 48, 49, 50)	2.57	.55 (3)	.77

Table 5

Rotated Factor Analysis of the YSQ-S (Younger Group)

Factors	Percentage of variance	Mean loading of items. (No. of items associated in brackets)	Alpha value
Failure	6.64	.77 (5)	.90
Defectiveness	5.98	.68 (5)	.88
Insufficient Self-Control	5.64	.65 (5)	.82
Emotional Deprivation	5.42	.65 (5)	.82
Social Isolation	5.41	.66 (5)	.89
Vulnerability to Harm	5.07	.64 (5)	.84
Abandonment	4.73	.57 (5)	.85
Self-Sacrifice (except item 55)	4.40	.67 (4)	.80
Dependence/Incompetence (except item 35, plus Subjugation items 48, 49)	4.17	.58 (6)	.84
Emotional Inhibition	4.14	.61 (5)	.79
Entitlement (items, 67, 69, 70) plus Mistrust/Abuse (item 12)	3.86	.59(4)	.73
Mistrust/Abuse (items 14, 15)	3.27	.74 (2)	.81
Unrelenting Standards 1 (items 63, 64, 65)	3.16	.56 (3)	.75
Enmeshment 1 (items 41, 42)	2.81	.58 (2)	.71
Unrelenting Standards 2 (items, 61, 62)	2.57	.70 (2)	.70
Enmeshment 2 (item 44)	1.93	.44 (1)	na
Self Sacrifice (item 55)	1.70	.63 (1)	na

Table 6

Factor Analysis of the YSQ-S (Older Group)

Factors	Percentage of variance	Mean loading of items. (No. of items associated in brackets)	Alpha value
Failure	6.13	.80 (5)	.91
Insufficient Self-control (plus Entitlement items 66, 68)	5.83	.75 (5)	.87
Social Isolation	5.47	.74 (5)	.98
Emotional Inhibition	5.16	.69 (5)	.85
Abandonment	5.10	.71 (5)	.86
Emotional Deprivation	4.49	.67 (5)	.83
Defectiveness	4.48	.64 (5)	.88
Vulnerability to Harm	4.34	.61 (5)	.83
Unrelenting Standards	4.27	.70 (5)	.83
Self-Sacrifice	4.20	.72 (5)	.82
Mistrust/Abuse	3.85	.58 (5)	.82
Subjugation (except item 46)	3.66	.65 (4)	.84
Entitlement (items, 67, 69, 70)	3.35	.70 (3)	.75
Enmeshment 1 (items 44, 45)	2.72	.61 (2)	.73
Dependence/Incompetence 1 (items 31, 32)	2.68	.59 (2)	.78
Dependence/Incompetence 2 (items, 33, 34, 35)	2.39	.56 (3)	.77
Enmeshment (items 41, 42, 43)	2.20	.51 (3)	.74

Table 7

Pearson correlation coefficient (one-tailed) between YSQ-S factors and total score.

BSI Primary Indices and the RSE.

	Global Severity Index	Positive Symptom Total	Positive Symptom Distress Index	Rosenberg Self Esteem Scale
	r	r	r	r
YSQ-S Total	.47***	.42***	.43***	-.43***
Insufficient Self Control	.17***	.14***	.17***	-.10**
Failure	.09*	.07*	.13**	-.27***
Emotional Deprivation	.12**	.11**	.11**	-.13***
Abandonment	.10**	.11**	.07	-.11**
Social Isolation	.12***	.16***	.20***	-.22***
Emotional Inhibition	.09*	.07*	.08*	-.14***
Defectiveness	.17***	.12**	.23***	-.19***
Vulnerability to Harm	.25***	.21***	.19***	-.14***
Self-Sacrifice	.12**	.16***	.08*	-.06
Unrelenting Standards	.03	.05	.01	-.05
Mistrust/Abuse	.15***	.19***	.05	-.10*
Dependence/ Incompetence	.06	.06	.02	-.06
Enmeshment	.09*	.11**	.05	-.05
Entitlement	.06	.05	.08*	-.04
Subjugation	.06	.08*	-.00	-.09*

* $p < .05$; ** $p < .01$ *** $p > .001$

Table 8

Pearson correlation coefficients (two-tailed) between JEPQR-A, YSQ-S factors and total score and BSI Primary Indices.

	Extroversion	Neuroticism	Psychoticism
	r	r	r
YSQ-S Total	.21***	.32***	.05
Insufficient Self Control	-.03	.09*	-.01
Failure	-.01	.08	.00
Emotional Deprivation	.09*	.01	.14*
Abandonment	-.01	.17***	-.06
Social Isolation	.26***	.15***	-.01
Emotional Inhibition	.19***	.06	-.06
Defectiveness	.11**	.12**	.07
Vulnerability to Harm	.03	.17***	.08
Self-Sacrifice	.03	.10**	-.16*
Unrelenting Standards	.12**	.13**	-.01
Mistrust/Abuse	-.00	.14***	.09
Dependence/Incompetence	-.05	-.06	-.02
Enmeshment	.03	.07	.02
Entitlement	.00	-.09*	.18**
Subjugation	.01	.12**	-.04
Global Severity Index	.16***	.41***	.13*
Positive Symptom Total	.13***	.40***	.05
Positive Symptom Distress Index	.15***	.31***	.28***

* p < .05 ** p < .01 *** p < .001

Table 9

Regression analysis of the YSQ-S total score and Neuroticism as predictors of psychopathology.

Where both variables are included in the regression analysis			
	Global Severity Index	Positive Symptom Total	Positive Symptom Distress Index
YSQ-S /Neuroticism	Adjusted $r = .30^{***}$	Adjusted $r = .25^{***}$	Adjusted $r = .22^{***}$
Neuroticism	$t = 8.14^{***}$	$t = 7.79^{***}$	$t = 5.34^{***}$
YSQ-S Total	$t = 9.56^{***}$	$t = 8.01^{***}$	$t = 8.83^{***}$
Where the variables are analysed separately			
YSQ-S Total Score	Adjusted $r = .22^{***}$	Adjusted $r = .17^{***}$	Adjusted $r = .18^{***}$
	$t = 12.42^{***}$	$t = 10.82^{***}$	$t = 10.97^{***}$
Neuroticism	Adjusted $r = .17^{***}$	Adjusted $r = .16^{***}$	Adjusted $r = .09^{***}$
	$t = 11.74^{***}$	$t = 11.16^{***}$	$t = 8.25^{***}$

* $p < .0$

** $p < .01$

*** $p > .001$

◦ **Appendix A**

**Manuscript Submission Information for
'Cognitive Therapy and Research'.**

Cognitive Therapy and Research

MANUSCRIPT SUBMISSION INFORMATION

Instructions to Contributors

Manuscript Submissions: Notice of Change in Manuscript Processing

Rick E. Ingram,
Editor

Cognitive Therapy and Research

A minor change has occurred in the processing of manuscripts that are submitted to Cognitive Therapy and Research. This new process represents only a change in how paperwork is handled at the Journal, and does not affect the actual editorial processing of manuscripts.

As readers of the journal will note, the Instructions for Contributors on the back page now states that manuscripts should be submitted to Mrs. Melissa Anderson at Kluwer Academic Publishers rather than directly to the Editor of the Journal. When a manuscript is received in the Kluwer office, an acknowledgement letter is sent from this office to the author along with a copyright transfer form to sign and return. The signed copyright transfer form is kept on file if the manuscript is accepted, and destroyed if the manuscript is not accepted.

Once manuscripts are received by Kluwer, consultation takes place with the Editor to determine which Editor (the Journal Editor or an Associate Editor) will co-ordinate the editorial process. As before, the Co-ordinating Editor will decide to which reviewers the manuscript will be sent. The Kluwer office then sends the manuscript out for review, contacts tardy reviewers when necessary, and when complete forwards the reviews to the Co-ordinating Editor for editorial action and decisions.

This new procedure represents a positive change for the Journal that we anticipate will expedite manuscript processing. More importantly, however, this process will not affect the actual editorial process, nor will it effect the quality of the publications

appearing in Cognitive Therapy and Research.

1. Manuscripts, in quintuplicate and in English, should be submitted to:

Dr. Rick E. Ingram
Editor, Cognitive Therapy and Research
Care of Melissa Andersen
Kluwer Academic Publishers
101 Philip Drive, Assinippi Park
Norwell, MA 02061

Questions regarding the journal should be directed to: Dr. Rick E. Ingram, Editor, Cognitive Therapy and Research, Department of Psychology, Southern Methodist University, Dallas, TX 75275

2. Submission is a representation that the manuscript has not been published previously and is not currently under consideration for publication elsewhere. A statement transferring copyright from the authors (or their employers, if they hold the copyright) to Plenum Publishing Corporation will be required before the manuscript

can be accepted for publication. The Editor will supply the necessary forms for this transfer. Such a written transfer of copyright, which previously was assumed to be implicit in the act of submitting a manuscript, is necessary under the U.S. Copyright Law in order for the publisher to carry through the dissemination of research results and reviews as widely and effectively as possible.

3. Type double-spaced on one side of 8 1/2 x 11 inch white paper using generous margins on all sides, and submit the original and three copies (including, where possible, copies of all illustrations and tables).

4. A title page is to be provided and should include the title of the article; author's name (no degrees), author's affiliation, and suggested running head. The affiliation should comprise the department, institution (usually university or company), city, and state (or nation) and should be typed as a footnote to the author's name. The suggested running head should be less than 80 characters (including spaces) and should comprise the article title or an abbreviated version thereof. For office purposes, the title page should include the complete mailing address and telephone number of the one author designated to review proofs.

5. An abstract following APA guidelines is to be provided, preferably no longer than 75-150 words.

6. A list of 4-5 key words is to be provided directly below the abstract. Key words should express the precise content of the manuscript, as they are used for indexing purposes.

7. Illustrations (photographs, drawings, diagrams, and charts) are to be numbered in one consecutive series of Arabic numerals. The captions for illustrations should be typed on a separate sheet of paper. Photographs should be large, glossy prints, showing high contrast. Drawings should be prepared with india ink. Either the original drawings or good-quality photographic prints are acceptable. Identify figures on the back (lightly in pencil) with author's name and number of the illustration.

8. Tables should be numbered (preferably with Roman numerals) and referred to by number in the text. Each table should be typed on a separate sheet of paper.

9. List references alphabetically at the end of the paper and refer to them in the text by name and year in parentheses.

10. Use of footnotes should be minimal. When their use is absolutely necessary, footnotes should be numbered consecutively using Arabic numerals and should be typed on a separate sheet at the end of the paper. Use the appropriate superscript numeral for citation in the text.

11. In general, the journal follows the recommendations of the 1994 Publication Manual/ of the American Psychological Association (Fourth Edition), and it is suggested that contributors refer to this publication.

12. Authors are encouraged to condense reports as much as possible and to be ready to provide more extensive details upon request. To assist in the standardization of assessment and treatment replications, authors of clinical outcome studies are required to submit a copy of their treatment manual and specific scoring procedures with the manuscripts. Topical relevance, methodological accuracy, and clarity of reporting (for both procedures and outcome) are of critical importance in experimental studies. Particular attention should be given to such considerations as the maximization of internal and external validity, the optimal use of multimethod assessment, and a comprehensive reporting of results. Authors will be responsible

for providing readers with copies of raw data, treatment and scoring manuals, and relevant experimental materials upon request (with incurred expenses accruing to the requestor). Case studies and brief reports should communicate important and heuristic observations, such as replication attempts, innovative techniques, and successful examples of how scientific research can be effectively integrated with clinical responsibilities.

13. Authors requesting blind review should submit the manuscript in a form appropriate to this process (see the APA Publication Manual). Every effort will be made to expedite feedback to the author and to effect rapid publication of accepted manuscripts.

14. After a manuscript has been accepted for publication and after all revisions have been incorporated, manuscripts may be submitted to the Editor's Office on personal-computer disks. Label the disk with identifying information, kind of computer used, kind of software and version number, disk format and file name of article, as well as abbreviated journal name, authors' last names, and (if room) paper title. Package the disk in a disk mailer or protective cardboard. The disk must be the one from which the accompanying manuscript (finalized version) was printed out. The Editor's Office cannot accept a disk without its accompanying, matching hard-copy manuscript. Disks will be used on a case-by-case basis where efficient and feasible.

15. The journal makes no page charges. Reprints are available to authors, and order forms with the current price schedule are sent with proofs.

Appendix B

School recruitment letter

6th June 2001

Dear

I am a trainee clinical psychologist at the University of Southampton, and I am currently completing my clinical placements in the Swindon area. As part of my training, I am undertaking a research project, which aims to develop our understanding of the development of psychological problems such as anxiety and depression, in young people. The theory, which I am basing the study on, suggests that the dysfunctional thinking patterns which are thought to make adults vulnerable to developing psychological problems, are laid down in early childhood. I hope to establish whether these thinking patterns can be detected in adolescents, and so provide some evidence to suggest that this theory is correct. The outcome of this may lead to new and improved ways for clinicians to meet the needs of young people in distress.

I am hoping to recruit 750 participants, aged 11-17, from local schools and colleges. Taking part involves filling in four questionnaires and should be able to be completed within 1 hour. I am hoping that these could be completed in school time, but I would assist in any way necessary to ensure this was as least disruptive as possible to both staff and pupils. A short report, detailing the main findings of the study, would be written for the school and made available to parents/participants by request.

If you think that your school may be able to help me with my research, I would be grateful if you could contact me so that we could discuss the subject further. Thank-you for your assistance in this matter.

Yours sincerely

Kerry Beckley
Trainee Clinical Psychologist

Appendix C

Modified form of the YSQ-S and permission for use.

YSQ-SI

Developed by Jeffrey Young, Ph.D.

Developed by
Jeffrey Young, PhD. COPYRIGHT 1994 Cognitive Therapy Center.
20 East 56th St. Suite SA New York, NY 10022.
Unauthorized reproduction without written consent of the authors is
prohibited.

ID Number

Date

INSTRUCTIONS: Listed below are statements that a person might use to describe himself or herself. Please read each statement and decide how well it describes you. When you are not sure, base your answer on what you emotionally feel not on what you **think** to be true. Choose the **highest rating from 1 to 6** that describes you and write the number in the space before the statement.

RATING SCALE

- 1 Completely untrue of me
- 2 Mostly untrue of me
- 3 Slightly more true than untrue
- 4 Moderately true of me
- 5 Mostly true of me
- 6 Describes me perfectly

1____ Most of the time, I haven't had someone to look after me or care deeply about everything that happens to me.

2.____ In general, people have not been there to give me warmth, holding, and affection

3.____ For much of my life, I haven't felt that I am special to someone.

4.____ For the most part, I have not had someone who really listens to me, understands me, or is tuned into my true needs and feelings.

5. ___ I have rarely had a strong person to give me good advice or direction when I'm not sure what to do.

*ed

6. ___ I find myself clinging to people I'm close to because I'm afraid they'll leave me,

7. ___ I need other people so much that I worry about losing them.

8. ___ I worry that people I feel close to will leave me or abandon me.

9. ___ When I feel someone I care for pulling away from me, I get desperate.

10. ___ Sometimes I am so worried about people leaving me that I drive them away.

*ab

11. ___ I feel that people will take advantage of me.

12. ___ I feel that I cannot let my guard down when I'm with other people, or else they will hurt me on purpose.

13. ___ It is only a matter of time before someone lets me down

14. ___ I am quite suspicious of other people's reasons for doing things.

15. ___ I'm usually on the lookout for people's reasons for doing things.

*ma

16. ___ I don't fit in.

17. ___ I'm basically different from other people.

18. ___ I don't belong; I'm a loner.

19. ___ I feel alienated from other people

20. ___ I always feel on the outside of group

*si

21. ___ No person I am attracted to could love me once he/she saw my faults.

22. ___ No one I am attracted to would want to stay close to me if he/she knew the real me.

23. ___ I'm unworthy of the love, attention, and respect of others.

24. ___ I feel that I'm not loveable.

25. ___ I am too unacceptable in very basic ways to show the real me to other people,

*ds

26. ___ Almost nothing I do at work (or school) is as good as other people can do.

27. ___ I'm not particularly good when it comes to achievement.

28. ___ Most other people are better than I am in areas of work and achievement.

29. ___ I'm not as talented as most people are at their work,

30. ___ I'm not as intelligent as most people when it comes to work (or school).

*fa

31. ___ I do not feel able to get by on my own in everyday life.

32. ___ I think of myself as a person who depends on others, when it comes to everyday functioning.

33. ___ I lack common sense.

34. ___ My judgement cannot be relied upon in everyday situations

35. ___ I don't feel confident about my ability to solve everyday problems that come up.

*di

36. ___ I can't seem to escape the feeling that something bad is about to happen.

37. ___ I feel that a disaster (natural, criminal, financial or medical) could strike at any moment.

38. ___ I worry about being attacked.

39. ___ I worry that I'll lose all my money and become homeless/a 'down-and-out'

40. ___ I worry that I'm developing a serious illness, even though nothing serious has been diagnosed by a doctor

*vh

41. ___ I have not been able to separate myself from my parent(s), the way other people my age seem to.

42. ___ My parent(s) and I tend to be over involved in each other's lives and problems.

43. ___ It is very difficult for my parent(s) and me to keep private details from each other, without feeling let down or guilty.

44. ___ I often feel as if my parent(s) are living through me - I don't have a life of my own

45. ___ I often feel that I do not have a separate identity from my parents or partner.

*em

46. ___ I think if I do what I want, I'm only asking for trouble.

47. ___ I feel that I have no choice but to give in to other peoples' wishes, or else they will be unpleasant to me or reject me in some way.

48. ___ In relationships, I let the other person have the upper hand.

49. ___ I've always let others make choices for me, so I really don't know what I want for myself

50. ___ I have a lot of trouble demanding that my rights be respected and that my feelings be taken into account.

*sb

51. ___ I'm the one who usually ends up taking care of the people I'm close to.

52. ___ I am a good person because I think of others more than of myself.

53. ___ I'm so busy doing things for the people that I care about that I have little time for myself.

54. ___ I've always been the one who listens to everyone else's problems.

55. ___ Other people see me as doing too much for others and not enough for myself

*ss

56. ___ I am too self-conscious to show positive feelings to others (e.g., affection, showing I care).

57. ___ I find it embarrassing to show my feelings to others,

58. ___ I find it hard to be warm and natural.

59. ___ I control myself so much that people think I have no feelings

60. ___ People see me as a tense person

*ei

61. ___ I must be the best at most of what I do; I can't accept second best.

62. ___ I try to do my best, I can't settle for "good enough."

63. ___ I must meet all my responsibilities.

64. ___ I feel there is constant pressure for me to achieve and get things done.

65. ___ I can't let myself off the hook easily or make excuses for my mistakes.

*us

66. ___ I have a lot of trouble accepting "no" for an answer when I want something from other people.

67. ___ I'm special and shouldn't have to accept many of the restrictions placed on other people.

68. ___ I hate to be limited or kept from doing what I want.

69. ___ I feel that I shouldn't have to follow the normal rules and conventions other people do,

70. ___ I feel that what I have to offer is of greater value than what others have to offer

*et

71. ___ I can't seem to discipline myself to complete routine or boring tasks.

72. ___ If I can't reach a goal, I become easily frustrated and give up.

73. ___ I have a very difficult time giving up short-term pleasures in order to reach long-term goals

74. ___ I can't force myself to do things I don't enjoy even when I know it's for my own good

75. ___ I have rarely been able to stick to my resolutions.

Kerry

From: Jeffrey Young <private@schematherapy.com>
To: Kerry Beckley <kerry@kbeckley.freemove.co.uk>
Sent: 05 May 2001 19:25
Subject: Permission to use a modified form of the YSQ with adolescents

Dear Kerry:

Yes, you have my permission to use the modified version of the YSQ, provided you agree to send me a summary of your findings and/or any journal articles that you publish based on it.

However, I do feel you should get the permission of the researchers who made the modifications as well, if you haven't already.

Good luck with your research, and I look forward to hearing from you again soon.

Best wishes,

Jeff Young
private@schematherapy.com

-----Original Message-----

From: Kerry Beckley [mailto:kerry@kbeckley.freemove.co.uk]
Sent: Saturday, May 05, 2001 12:17 PM
To: institute@schematherapy.com
Subject: Permission to use a modified form of the YSQ with adolescents

My name is Kerry Beckley and I am a clinical psychologist in training at the University of Southampton. I am writing to ask for permission to use a modified form of the YSQ for research purpose with adolescents (see attached file). The minor modifications were originally made by Dr. Jonquil Drinkwater and Jane Simmons at Oxford University, UK, with your permission. I am hoping to use it with a large non-clinical sample (500) of 11-18 year olds in order to validate it's use with adolescents. The University of Southampton has paid the fee to use Schema Questionnaires.

I would be grateful if you could let me know whether I have permission to use the modified YSQ.

Regards

Kerry Beckley

Appendix D

Letter confirming ethical approval



University
of Southampton

Department of
Psychology

University of Southampton
Highfield
Southampton
SO17 1BJ
United Kingdom

Telephone +44 (0)23 8059 5000

Fax +44 (0)23 8059 1707

Email

4 July 2001

Kerry Beckley
9 Park Place
Ashton Keynes
Nr. Swindon
Wiltshire SN6 6NT

Dear Kerry,

Re: Schemas in adolescents and their relationship to psychopathology

The above titled application - which was recently submitted to the departmental ethics committee, has now been given approval.

Should you require any further information, please do not hesitate in contacting me on 023 8059 3995.

Yours sincerely,

Kathryn Smith
Ethical Secretary

cc. Janet Turner

Appendix E

Letter to parents for participant consent.

Format for parent letter

(Name of School) has been asked to take part in a research study looking at the views that young people have of themselves. The person who is conducting the study is Kerry Beckley, who is a trainee clinical psychologist affiliated to the University of Southampton.

Taking part in the study will involve you child filling out a number of questionnaires within class time. All of the questionnaires will be anonymous and the researcher will be the only person who has access to the completed questionnaires. The overall finding of the study will be submitted as a research paper to the University of Southampton, and also may be published in an academic journal. A short report will be made available to you after the study has been completed. It will not be possible to tell who has taken part in the study from any of these reports.

If we do not hear from you we will take it that you are happy for your child to take part in the study. If you do not wish your child to take part, please fill in the slip provided and return it to.....

Appendix F

Information for participants

VERBAL SCRIPT FOR TEACHERS - TO BE READ OUT BEFORE FILLING IN THE QUESTIONNAIRES

In this study, you will be asked to fill in a number of questionnaires about yourself. We are interested in how young people see themselves. Taking part involves filling in four questionnaires. Please read the instructions for each questionnaire carefully, as each one is different. There are no right or wrong answers, try to answer them as honestly as possible. There is no need to write your name on the questionnaires as they are numbered.

Please fill out the front sheet first. When you have finished filling in the questionnaires, take a moment to check that you have answered all the questions and not left any out. Then put the questionnaires back into the envelope and seal it.

Your answers are confidential. The researcher will be the only one who will have access to the questionnaires. You do not have to take part in this study. If you do not wish to take part, please feel free to use the paper provided for your own purpose.

THANK-YOU FOR TAKING PART IN THIS RESEARCH.

**University of Southampton
Doctoral Programme in Clinical Psychology**

Participant De-briefing Statement

Project Title: Schemas in Adolescence

What is the purpose of this study?

This research aims to investigate how thoughts and feelings are related in adolescents. This relationship has been well studied in adults and has resulted in psychologists being able to help people with emotional problems more effectively. It is hoped that knowing more about the views that adolescents have of themselves will lead to an improvement in the way that psychologists can help young people with emotional problems.

Why have I been chosen?

You have been chosen to take part in this study because you are a pupil of, who have kindly agreed to take part. Other schools in this area are also being asked to take part.

Will anyone know how I answered the questionnaires?

No. All the questionnaires will be anonymous so I will not be able to tell who filled them in. If you found any of the questions distressing or wish to talk to someone about this, please talk to someone (parents, teacher, school counsellor) about this.

Can I see the results of the study?

Individual feedback is not available, as I will have no record of the names of people who took part in the study. A report, summarising the results of the study will be available to you and your family. Your form tutor will inform you when this report is available (September 2002).

What will happen to the results of this research study?

The overall results of this study will be written up as a thesis submitted as part of my Doctorate in Clinical Psychology at Southampton University. It may be written up for publication in an academic journal. No one will be able to tell that you took part from reading the report.

THANK-YOU FOR YOUR PARTICIPATION IN THIS RESEARCH.

Contact Details: Kerry Beckley
 Doctoral Programme in Clinical Psychology
 Building 44 (Shackleton)
 University of Southampton
 Highfield
 Southampton
 SO17 1BJ
Tel: (02380) 595321

Appendix G

Feedback report for participants

University of Southampton
Doctoral Programme in Clinical Psychology

Schemas in Adolescence: Feedback from study

You may remember taking part in a study last year that involved filling in several questionnaires about yourself. In total, 705 young people took part in the study. The study has now been completed and the main findings are stated below.

What was the purpose of the study?

The research aimed to investigate how thoughts and feelings are related in adolescents. This relationship has been well studied in adults and has resulted in psychologists being able to help people with emotional problems more effectively. It was hoped that knowing more about the beliefs that adolescents have of themselves would help psychologists to improve the ways in which they could help young people with emotional problems. The main aim of the study was to establish if a questionnaire called the Young Schema Questionnaire (YSQ-S) was useful in identifying the kinds of beliefs in adolescents, which are thought to contribute to the development of psychological problems in adults.

What did the study find out?

The study found that the YSQ-S was able to identify dysfunctional beliefs about themselves in adolescents, indicating that adolescents do think in similar ways to adults. However, there were some differences that suggested that these beliefs are not as strongly held in adolescence. This is useful for psychologists to know as it suggests that adolescence is potentially a time when unhelpful ways of thinking can be more easily modified, enabling the young person to develop a more positive view of themselves. This may be very important in reducing the amount of psychological distress they experience, both in adolescence and in adulthood. It is hoped that the YSQ-S will be particularly useful in identifying young people with complex psychological problems, although further research will be needed to see if this is true.

Who will see the results of this study?

This study will be submitted as part of my Doctorate in Clinical Psychology at Southampton University. It will also be submitted for publication in an academic journal. All of the data contained within the study is anonymous so no one will be able to tell that you took part from reading the report.

I would like to thank you once again for taking part in the study. I am not able to give any feedback on individual scores, as I did not record the names of participants. If you have any further questions, please feel free to contact me.

Contact Details: Kerry Beckley
 Doctoral Programme in Clinical Psychology
 Building 44 (Shackleton)
 University of Southampton
 Highfield
 Southampton
 SO17 1BJ
Tel: (02380) 595321

Appendix H

Tables of Rotated Factors

Factor Loadings for YSQ-S items - Whole Participant Sample.

YSQ-S Items	Factors														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. (ed). Most of the time, I haven't had someone look after me or care deeply about everything that happens to me.	.009	.190	.683	-.008	.125	-.003	.174	.006	-.003	.123	.119	.004	.001	.009	.165
2. (ed) In general, people have not been there to give me warmth, holding, and affection.	.102	.005	.765	.002	.144	.007	.115	.009	.004	.003	.145	.120	.002	.005	.137
3. (ed) For much of my life, I haven't felt that I am special to someone.	.008	.138	.690	.007	.005	.134	.181	.146	.008	.110	.004	.005	.005	.001	.005
4. (ed) For the most part, I have not had someone who really listens to me, understands me, or is tuned into my true needs and feelings.	.164	.001	.703	.129	.128	.207	.110	.009	.002	.002	.147	.004	.002	.002	-.114
5. (ed) I have rarely had a strong person to give me good advice or direction when I'm not sure what to do.	.001	.203	.619	.132	.118	.001	.008	.003	.139	.005	.118	.006	.002	.190	.007
6. (ab) I find myself clinging to people I'm close to because I'm afraid they'll leave me.	.127	.135	.003	.723	.120	-.004	.237	.008	.004	.109	.119	.009	.102	.002	.179
7. (ab) I need other people so much that I worry about losing them.	.124	.175	.007	.733	.009	-.003	.165	.008	.118	.007	.141	.007	.104	.003	.105
8. (ab) I worry that people I feel close to will leave me or abandon me.	.150	.141	.180	.698	.130	.005	.138	.245	.007	.115	.138	.009	.003	.001	.108
9. (ab) When I feel someone I care for pulling away from me, I get desperate.	.204	.007	.007	.706	.009	.010	.005	.211	.114	.004	.173	.204	.005	.009	.000
10.(ab) Sometimes I am so worried about people leaving me that I drive them away.	.004	.107	.161	.601	.248	.175	.006	.207	.006	.003	.196	.128	.126	.009	-.120
11. (ma) I feel that people will take advantage of me	.160	.113	.006	.287	.130	.172	.194	.174	.180	.118	.469	.002	.199	.002	.119
12. (ma) I feel that I cannot let my guard down when I'm with other people, or	.010	.113	.210	.143	.168	.107	.153	.165	.010	.110	.600	.000	.128	.122	.006

else they will hurt me on purpose.															
13.(ma) It is only a matter of time before someone lets me down.	.194	.245	.188	.220	.129	.002	.211	.177	.102	.139	.521	.005	.108	.005	.135
14.(ma) I am quite suspicious of other people's reasons for doing things.	.206	.004	.158	.196	.009	.166	.008	.004	.009	.109	.683	.179	.002	.008	.005
15 (ma) I'm usually on the lookout for people's reasons for doing things.	.178	.107	.108	.183	.152	.158	.006	.007	.005	.150	.668	.188	.001	.004	.003
16 (si) I don't fit in.	.126	.139	.123	.117	.717	.136	.194	.009	.010	.002	.241	.009	.008	.003	.004
17. (si) I'm basically different from other people.	.173	.109	.226	.147	.628	.110	.280	.138	.128	.006	.142	.005	.009	.002	.001
18. (si) I don't belong: I'm a loner.	.007	.158	.165	.122	.773	.104	.214	.155	.002	.108	.003	.132	.003	.009	.009
19. (si) I feel alienated from other people.	.009	.172	.128	.127	.740	.170	.166	.182	.003	.108	.008	.125	.001	.010	.010
20. (si) I always feel on the outside of a group.	.103	.131	.010	.152	.682	.262	.156	.001	.009	.007	.008	.100	.106	.006	.004
21. (ds) No person I am attracted to could love me once he/she saw my faults.	.138	.005	.178	.153	.192	.194	.693	.005	.005	.007	.153	.129	.116	.004	.002
22. (ds) No one I am attracted to would want to stay close to me if he/she knew the real me.	.102	.113	.247	.147	.231	.145	.698	.008	.001	.000	.165	.125	.008	.000	.001
23. (ds) I'm unworthy of the love, attention, and respect of others.	.006	.160	.185	.214	.180	.117	.685	.123	.001	.006	.001	.141	.009	.138	.006
24. (ds) I feel that I am not loveable.	.007	.203	.158	.005	.276	.179	.660	.196	.004	.004	.005	.150	.003	.007	.006
25. (ds) I am too unacceptable in very basic ways to show the real me to other people.	.006	.234	.174	.007	.336	.149	.528	.207	.004	.007	.240	.154	.102	.004	.008
26. (fa) Almost nothing I do at work (or school) is as good as other people can do.	.197	.712	.144	.003	.179	.005	.203	.141	.000	.007	.009	.007	.005	.001	.008
27. (fa) I'm not particularly good when it comes to achievement.	.008	.759	.157	.164	.005	.010	.100	.144	.100	.006	.001	.148	.214	.001	.000
28. (fa) Most other people are better	.136	.822	.006	.123	.115	.113	.119	.007	.009	.001	.009	.129	.009	.007	.003

than I am in areas of work and achievement.															
29. (fa) I'm not as talented as most other people are at their work.	.111	.797	.108	.155	.173	.007	.125	.009	.009	.000	.009	.106	.009	.001	.006
30. (fa) I'm not as intelligent as most other people when it comes to work (or school).	.010	.794	.136	.103	.113	.006	.000	.115	.134	.003	.009	.192	.009	.007	.006
31. (di) I do not feel able to get on by my own in everyday life.	.137	.239	.105	.009	.207	.001	.138	.165	.009	.007	.008	.549	.256	.116	.231
32. (di) I think of myself as a person who depends on others, when it comes to everyday functioning.	.109	.200	.009	.145	.010	-.004	.137	.177	.007	.006	.005	.646	.185	.007	.174
33. (di) I lack common sense.	.176	.198	.009	.004	.146	.164	.141	.182	.007	.003	.118	.620	.002	.165	.010
34. (di) My judgement cannot be relied upon in everyday situations.	.162	.193	.181	.006	.108	.256	.212	.100	.000	.004	.132	.587	.106	.135	.113
35. (di) I don't feel confident about my ability to solve everyday problems that come up.	.145	.263	.157	.177	.140	.215	.233	.261	.002	.005	.103	.464	.189	.001	.139
36. (vh) I can't seem to escape the feeling that something bad is about to happen.	.150	.170	.119	.131	.126	.156	.160	.629	.009	.006	.221	.009	.193	.007	.008
37. (vh) I feel that a disaster (natural, criminal, financial or medical) could strike at any moment.	.007	.143	.137	.178	.146	.112	.164	.682	.002	.123	.125	.143	.117	.007	.192
38. (vh) I worry about being attacked.	.152	.139	.007	.275	.007	.010	.140	.596	.119	.008	.110	.008	.005	.129	.005
39. (vh) I worry that I'll lose all my money and become homeless/a 'down and out'.	.133	.126	.106	.158	.248	.005	.006	.633	.000	.000	.108	.276	.009	.008	.005
40. (vh) I worry that I'm developing a serious illness, even though nothing serious has been diagnosed by a doctor.	.205	.009	.152	.132	.172	.142	.005	.642	.004	.010	.005	.008	.181	.009	.003
41. (em) I have not been able to separate myself from my parent(s), the way other people have.	.112	.137	.006	.005	.004	.009	.145	.174	.007	.175	.006	.006	.607	.113	.169
42. (em) My parent(s) and I tend to be	.004	.221	.007	.009	.132	.181	.007	.206	.004	.104	.100	.008	.702	.159	.003

over involved in each other's lives and problems.															
43. (em) It is very difficult for my parent(s) and me to keep private details from each other, without feeling let down or guilty.	.159	.142	-.100	.149	.004	.169	.005	.123	.007	.007	.170	.215	.643	.133	.006
44. (em) I often feel as if my parent(s) are living through me - I don't have a life of my own.	.008	.005	.411	.241	.009	.101	.183	.003	.149	.004	-.142	.300	.434	.001	.006
45. (em) I often feel that I do not have a separate identity from my parents or partner.	.001	.118	.462	.321	.109	.005	.004	.176	.110	.008	.003	.205	.402	.006	.182
46. (sb) I think if I do what I want, I'm only asking for trouble.	.153	.010	.234	.156	.144	.124	.235	.257	.147	.117	.142	.170	.180	.117	.254
47. (sb) I feel that I have no choice but to give in to other peoples wishes, or else they will be unpleasant to me or reject me in some way.	.188	.106	.010	.326	.234	.258	.149	.120	.144	.007	.245	.132	.248	.004	.401
48. (sb). In relationships, I let the other person have the upper hand.	.213	.112	.106	.224	.006	.334	.111	.006	.142	.004	.180	.175	.006	.134	.483
49. (sb) I've always let others make choices for me, so I don't really know what I want for myself.	.126	.116	.160	.160	.167	.299	.007	.105	.153	.005	.119	.251	.277	.004	.550
50. (sb) I have a lot of trouble demanding that my rights be respected and that my feelings be taken into account.	.240	.115	.223	.284	.197	.234	.110	.166	.110	.101	.006	.204	.175	.003	.422
51. (ss) I'm usually the one who ends up taking care of people I'm close to.	.284	.008	.010	.103	.005	.002	.102	-.007	.624	.131	.165	-.151	.166	.010	.002
52. (ss) I am a good person because I think of others more than of myself.	.009	.010	.006	.116	.004	.006	.005	.001	.724	.243	.003	.000	-.114	.007	.002
53. (ss) I'm so busy doing things for the people that I care about that I have little time for myself.	.006	.002	.123	.003	.118	.147	.003	.003	.736	.001	.003	.151	.164	.135	.007
54. (ss) I've always been the one who	.192	.008	.001	.005	.005	.008	.003	.107	.759	.183	.007	.001	.005	-.152	.008

listens to everyone else's problems.															
55. (ss) Other people see me as doing too much for others and not enough for myself.	-.104	.152	.001	.010	.112	.005	.004	.106	.627	.168	.009	.004	.000	.209	.275
56. (ei) I am too self-conscious to show positive feelings to others (e.g. affection, showing I care).	.114	.006	.104	.005	.146	.692	.132	.003	.009	.163	.000	.005	.006	.005	.191
57. (ei) I find it embarrassing to show my feelings to others.	.107	.008	.003	.001	.129	.676	.167	.001	.008	.170	.010	.004	.114	.004	.238
58. (ei) I find it hard to be warm and natural.	.009	.009	.126	.008	.157	.721	.006	.111	.008	.007	.145	.008	.005	.138	.005
59. (ei) I control myself so much that people think I have no feelings.	.120	.004	.141	.001	.107	.644	.148	.197	.007	.009	.140	.119	.193	.145	-.181
60. (ei) People see me as a tense person.	.002	.126	.008	.003	.215	.532	.177	.268	.010	.176	.131	.005	.119	.144	.001
61. (us) I must be the best at most of what I do; I can't accept second best.	.010	-.172	.008	.005	.191	.162	-.115	.118	.009	.567	.199	.113	.120	.182	.008
62. (us) I try to do my best, I can settle for "good enough".	.009	.010	.001	-.107	.010	.006	.008	.000	.008	.786	.184	.001	.113	.010	.005
63. (us) I must meet all my responsibilities.	.135	.005	.004	.173	.001	.008	.148	.002	.245	.727	.005	.003	.000	.005	.003
64. (us) I feel there is constant pressure to achieve and get things done.	.272	.003	.205	.241	.009	.183	.005	.010	.207	.681	.000	.004	.005	.001	.001
65. (us) I can't let myself off the hook easily or make excuses for my mistakes.	.009	.158	.123	.129	.003	.236	.002	.184	.143	.577	.005	.001	.140	.007	.001
66. (et) I have a lot of trouble accepting "no" for an answer when I want something from other people.	.517	.000	.109	.112	.009	.005	.116	.003	.006	.208	.154	.250	.004	.356	.006
67. (et) I'm special and shouldn't have to accept many of the restrictions placed on other people.	.174	.006	.001	.001	.128	.006	.000	.010	.114	.138	.008	.105	.189	.685	.009
68. (et) I hate to be limited or kept from doing what I want.	.472	.001	.110	.142	.005	.109	.004	.002	.152	.273	.005	.203	.004	.373	-.118
69. (et) I feel that I shouldn't have to follow the normal rules and conventions other people do.	.251	.006	.188	.002	.008	.117	.004	.113	.003	.002	.002	.003	.005	.750	.002

[illegible]

Factor Loadings for YSQ-S items - Male Sample.

YSQ Items	Factors															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. (ed) Most of the time, I haven't had someone look after me or care deeply about everything that happens to me.	.143	.008	.006	.207	.657	.186	.009	.004	.007	.008	.002	.008	.003	.007	.007	.005
2. (ed) In general, people have not been there to give me warmth, holding, and affection.	.199	.006	.007	.010	.756	.009	.008	.005	.002	.008	.001	.128	.149	.002	.001	.009
3. (ed) For much of my life, I haven't felt that I am special to someone.	.258	.156	.008	.007	.693	.003	.006	.105	.102	.004	.007	.123	.004	.105	.009	.010
4. (ed) For the most part, I have not had someone who really listens to me, understands me, or is tuned into my true needs and feelings.	.159	.106	.200	.163	.653	.002	.006	.003	.004	.149	.163	.001	.166	-.152	.249	.003
5. (ed) I have rarely had a strong person to give me good advice or direction when I'm not sure what to do.	.000	.219	.171	.001	.603	.001	.005	.141	.007	.148	.211	.005	.006	-.124	.136	.001
6. (ab) I find myself clinging to people I'm close to because I'm afraid they'll leave me.	.165	.106	.676	.007	.166	.158	.125	.003	.004	.000	.188	.000	.002	.275	.001	.009
7. (ab) I need other people so much that I worry about losing them.	.176	.009	.681	.122	.123	.115	.007	.003	.242	.000	.159	.001	.005	.230	.005	.005
8. (ab) I worry that people I feel close to will leave me or abandon me.	.234	.149	.684	.212	.237	.188	.116	.002	.007	.005	.007	.004	.126	.169	.000	.008
9. (ab) When I feel someone I care for pulling away from me, I get desperate.	.138	.007	.714	.191	.115	.185	.004	.115	.198	.130	.009	.009	.006	.000	.006	.002
10.(ab) Sometimes I am so worried about people leaving me that I drive them away.	.213	.114	.630	.007	.003	.222	.002	.117	.004	.008	.005	.213	.228	-.142	.149	.150
11. (ma) I feel that people will take advantage of me	.241	.108	.379	.113	.008	.182	.005	.155	.109	.120	.510	.131	.007	.153	.002	.006
12. (ma) I feel that I cannot let my	.126	.135	.178	.150	.175	.163	.002	.009	.131	.007	.675	.004	.009	.108	.115	.102

guard down when I'm with other people, or else they will hurt me on purpose.																
13.(ma) It is only a matter of time before someone lets me down.	.171	.198	.173	.196	.121	.108	.209	.005	.003	.007	.651	.004	.162	.006	.005	.200
14.(ma) I am quite suspicious of other people's reasons for doing things.	.140	.171	.212	.232	.192	.169	.010	.144	.005	.139	.361	.105	.002	.007	.008	.584
15 (ma) I'm usually on the lookout for people's reasons for doing things.	.008	.197	.279	.221	.142	.109	.144	.107	.005	.143	.205	.111	.005	.001	.001	.668
16 (si) I don't fit in.	.724	.124	.183	.140	.150	.002	.003	.178	.009	.004	.174	.004	.006	.138	.004	.007
17. (si) I'm basically different from other people.	.646	.105	.255	.227	.222	.002	.009	.126	.008	.001	.008	.003	.001	.106	.131	.004
18. (si) I don't belong: I'm a loner.	.735	.203	.120	.003	.207	.131	.116	.000	.009	.009	.007	.005	.009	.004	.008	.005
19. (si) I feel alienated from other people.	.726	.102	.188	.000	.133	.176	.010	.010	.004	.125	.005	.238	.109	.006	.007	.115
20. (si) I always feel on the outside of a group.	.698	.192	.133	.005	.002	.120	.008	.102	.115	.009	.188	.230	.000	.003	.111	.010
21. (ds) No person I am attracted to could love me once he/she saw my faults.	.299	.003	.160	.217	.290	.191	.110	.111	.326	.004	.241	.003	.306	.262	.07	.148
22. (ds) No one I am attracted to would want to stay close to me if he/she knew the real me.	.349	.008	.006	.260	.338	.180	.000	.005	.293	-.130	.261	.008	.242	.267	.266	.002
23. (ds) I'm unworthy of the love, attention, and respect of others.	.436	.267	.156	.003	.280	.229	.003	.000	.209	.000	.007	.001	.327	.247	.110	.142
24. (ds) I feel that I am not loveable.	.482	.288	.124	.103	.211	.229	.001	.003	.212	.002	.122	.002	.328	.103	.116	.007
25. (ds) I am too unacceptable in very basic ways to show the real me to other people.	.477	.259	.003	.118	.250	.244	.006	.003	.230	.001	.329	.006	.267	.102	.007	.118
26. (fa) Almost nothing I do at work (or school) is as good as other people can do.	.168	.683	.000	.209	.187	.149	.007	.001	.009	.001	.153	.006	.001	.006	.008	.148
27. (fa) I'm not particularly good when * it comes to achievement.	.150	.693	.153	.205	.165	.145	.000	.006	.006	.003	.006	.177	.173	.003	.155	.003

28. (fa) Most other people are better than I am in areas of work and achievement.	.197	.794	.003	.188	.007	.126	.005	.007	.118	.010	.119	.006	.008	.004	.006	.005
29. (fa) I'm not as talented as most other people are at their work.	.189	.740	.156	.130	.127	.116	.006	.005	.137	.008	.008	.001	.003	.153	.008	.000
30. (fa) I'm not as intelligent as most other people when it comes to work (or school).	.008	.745	.140	.189	.007	.151	.006	.126	.179	.009	.002	.007	.002	.003	.005	.003
31. (di) I do not feel able to get on by my own in everyday life.	.137	.360	.185	.004	.005	.133	.005	.007	.652	.153	.008	.108	.101	.110	.003	.006
32. (di) I think of myself as a person who depends on others, when it comes to everyday functioning.	.112	.260	.240	.004	.006	.156	.003	.009	.657	.003	.108	.005	.250	.003	.154	.002
33. (di) I lack common sense.	.218	.338	.002	.190	.005	.006	.007	.002	.477	.228	.006	.289	.003	.003	.007	.009
34. (di) My judgement cannot be relied upon in everyday situations.	.267	.376	.144	.137	.137	.178	.006	.003	.379	.002	.009	.149	.339	.003	.007	.237
35. (di) I don't feel confident about my ability to solve everyday problems that come up.	.237	.403	.213	.133	.185	.377	.004	.007	.302	.006	.103	.154	.264	.106	.003	.135
36. (vh) I can't seem to escape the feeling that something bad is about to happen.	.158	.213	.115	.178	.118	.569	.116	.181	.100	.010	.235	.133	.003	.101	.126	.130
37. (vh) I feel that a disaster (natural, criminal, financial or medical) could strike at any moment.	.132	.223	.263	.006	.116	.621	.126	.004	.184	.160	.137	.120	.007	.002	.007	.004
38. (vh) I worry about being attacked.	.006	.200	.235	.005	.127	.626	.006	.178	.107	.162	.186	.006	.009	.193	.000	.005
39. (vh) I worry that I'll lose all my money and become homeless/a 'down and out'.	.281	.221	.296	.149	.004	.551	.006	.010	.004	.001	.006	.004	.007	.115	.006	.205
40. (vh) I worry that I'm developing a serious illness, even though nothing serious has been diagnosed by a doctor.	.138	.162	.178	.199	.005	.591	.005	.008	.002	.009	.004	.005	.202	.007	.352	.008
41. (em) I have not been able to separate myself from my parent(s), the way other people have.	.227	.005	.182	.165	.003	.272	.124	.002	.116	.003	.006	.009	.004	.639	.002	.006

42. (em) My parent(s) and I tend to be over involved in each other's lives and problems.	.009	.311	.334	.004	.007	.147	.003	.204	.001	.165	.121	.214	.205	.529	.007	.006
43. (em) It is very difficult for my parent(s) and me to keep private details from each other, without feeling let down or guilty.	.004	.270	.263	.003	.005	.007	.009	.152	.010	.253	.203	.115	.183	.540	.141	.002
44. (em) I often feel as if my parent(s) are living through me - I don't have a life of my own.	.134	.135	.247	.108	.268	.142	.004	.010	.264	.000	.009	.123	.626	.002	.004	.009
45. (em) I often feel that I do not have a separate identity from my parents or partner.	.169	.208	.382	.003	.302	.149	.123	.007	.010	.002	.006	.141	.515	.224	.004	.008
46. (sb) I think if I do what I want, I'm only asking for trouble.	.218	.010	.257	.005	.223	.214	.235	.111	.405	.010	.130	.163	-.171	.162	.002	.162
47. (sb) I feel that I have no choice but to give in to other peoples wishes, or else they will be unpleasant to me or reject me in some way.	.257	.168	.419	.006	.134	.261	.147	.120	.178	.166	.267	.350	.153	.002	.001	.112
48. (sb). In relationships, I let the other person have the upper hand.	.114	.008	.301	.289	.009	.245	.005	.138	.268	.120	.172	.482	.001	.003	.009	.005
49. (sb) I've always let others make choices for me, so I don't really know what I want for myself.	.261	.105	.220	.207	.117	.425	.002	.007	.198	.103	.00	.469	.007	.164	.003	.007
50. (sb) I have a lot of trouble demanding that my rights be respected and that my feelings be taken into account.	.283	.124	.238	.195	.223	.371	.008	.008	.274	.005	.201	.398	.007	.004	.003	-.132
51. (ss) I'm usually the one who ends up taking care of people I'm close to.	.142	.010	.175	.232	.124	.001	.166	.633	-.123	.002	.167	.002	.001	.007	.003	.008
52. (ss) I am a good person because I think of others more than of myself.	.005	.005	.009	.116	.000	.001	.377	.682	.008	.005	.007	.001	.006	-.122	.006	.004
53. (§§) I'm so busy doing things for the people that I care about that I have little time for myself.	.203	.003	.002	.127	.008	.156	.001	.727	.104	.010	.008	.178	.175	.007	.010	.006

54. (ss) I've always been the one who listens to everyone else's problems.	.004	.000	.005	.161	.005	.123	.266	.739	.170	.007	.000	.007	-.118	.004	.155	.003
55. (ss) Other people see me as doing too much for others and not enough for myself.	.123	.158	.001	-.155	.003	.101	.169	.648	.003	.155	.003	.137	.176	.115	.009	.146
56. (ei) I am too self-conscious to show positive feelings to others (e.g. affection, showing I care).	.242	.257	.008	.007	.010	.159	.223	.010	.163	.005	.007	.370	.004	.107	.395	.001
57. (ei) I find it embarrassing to show my feelings to others.	.141	.137	.003	.106	.169	.003	.244	.007	.008	.007	.007	.691	.008	.201	.165	.117
58. (ei) I find it hard to be warm and natural.	.230	.146	.009	.005	.245	.009	.120	.009	.000	.159	.002	.515	.125	.000	.354	.118
59. (ei) I control myself so much that people think I have no feelings.	.144	.171	.003	.139	.192	.008	.112	.123	.102	.166	.113	.187	.008	.010	.693	.006
60. (ei) People see me as a tense person.	.275	.201	.100	.002	.004	.291	.101	.008	.010	.008	.005	.224	-.126	.002	.589	.148
61. (us) I must be the best at most of what I do; I can't accept second best.	.001	-.119	.007	.009	.006	.005	.499	.197	.000	.332	.001	.111	.198	.138	.003	.233
62. (us) I try to do my best, I can settle for "good enough".	.002	.009	-.110	.128	.002	.001	.771	.169	.003	.136	.006	.007	.007	.005	.001	.010
63. (us) I must meet all my responsibilities.	.206	.004	.007	.129	.007	.006	.785	.182	.122	.001	.111	.001	.000	.00	.003	.006
64. (us) I feel there is constant pressure to achieve and get things done.	.120	.009	.273	.247	.009	.005	.696	.160	.005	.008	.003	.103	.002	.000	.008	.002
65. (us) I can't let myself off the hook easily or make excuses for my mistakes.	.001	.210	.132	.007	.006	.133	.659	.186	.006	.009	.127	.141	.003	.124	.223	-.215
66. (et) I have a lot of trouble accepting "no" for an answer when I want something from other people.	.004	.005	.143	.478	.121	.008	.147	.005	.239	.376	.005	.004	.001	.226	.230	.171
67. (et) I'm special and shouldn't have to accept many of the restrictions placed on other people.	.117	.006	.007	.168	.001	.010	.134	.145	.100	.696	.009	.004	.005	.008	.008	.119
68. (et) I hate to be limited or kept from doing what I want.	.116	.119	.005	.435	.173	.007	.297	.006	.210	.427	.004	.006	-.123	.006	.253	.137
69. (et) I feel that I shouldn't have to follow the normal rules and conventions	.007	.108	.000	.212	.235	.165	.006	.003	.005	.719	.006	.009	-.103	.007	.004	.002

[illegible]

Factor Loadings for YSQ-S items - Female Sample.

YSQ Items	Factors																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. (ed) Most of the time, I haven't had someone look after me or care deeply about everything that happens to me.	.253	.159	.002	.688	.006	.105	.004	.003	.008	.008	.005	.141	.005	.004	.113	.102	.121
2. (ed) In general, people have not been there to give me warmth, holding, and affection.	.137	.127	.009	.727	.002	.010	.004	.124	-.118	.116	.007	.117	.112	.160	.200	.005	.008
3. (ed) For much of my life, I haven't felt that I am special to someone.	.123	.003	.009	.746	.006	.161	.010	.179	.004	.121	.002	.004	-.000	.004	.006	.005	.009
4. (ed) For the most part, I have not had someone who really listens to me, understands me, or is tuned into my true needs and feelings.	.006	.222	.115	.684	.006	.141	.135	.009	.006	.114	.008	.001	.128	.008	.001	-.161	-.103
5. (ed) I have rarely had a strong person to give me good advice or direction when I'm not sure what to do.	.202	.211	.003	.626	.158	.135	.003	-.004	.126	.002	.006	.191	.008	.007	-.156	.153	.006
6. (ab) I find myself clinging to people I'm close to because I'm afraid they'll leave me.	.129	.111	.185	.003	.777	.159	.002	.003	.003	.008	.003	.001	.000	-.119	.008	.168	.107
7. (ab) I need other people so much that I worry about losing them.	.180	.007	.117	.005	.767	.100	.002	.007	.173	.002	.004	.003	.009	.006	.010	.164	.001
8. (ab) I worry that people I feel close to will leave me or abandon me.	.150	.145	.131	.162	.689	.007	.003	.238	.009	.106	.002	.002	.008	.140	.167	.001	.002
9. (ab) When I feel someone I care for pulling away from me, I get desperate.	.005	.112	.196	.005	.672	.010	.009	.169	.128	.008	.109	.006	.166	.182	.008	.006	-.168
10.(ab) Sometimes I am so worried about people leaving me that I drive them away.	.102	.220	.008	.217	.558	.006	.120	.129	.005	.001	.159	.154	.158	.257	-.164	-.228	.004
11. (ma) I feel that people will take advantage of me	.170	.182	.185	.003	.233	.100	.197	.189	.227	.168	.149	.005	.253	.185	.130	-.233	.144
12. (ma) I feel that I cannot let my guard	.129	.331	.006	.189	.235	.008	.170	.208	.005	.213	.005	.008	.390	.004	.202	-.140	.157

down when I'm with other people, or else they will hurt me on purpose.																	
13.(ma) It is only a matter of time before someone lets me down.	.299	.246	.182	.172	.315	.117	.004	.244	.006	.109	.005	.003	.346	.004	.308	-.105	.150
14.(ma) I am quite suspicious of other people's reasons for doing things.	.002	.008	.137	.115	.153	.123	.171	.008	.115	.010	.003	.005	.770	.006	.115	.102	-.126
15 (ma) I'm usually on the lookout for people's reasons for doing things.	.006	.155	.152	.009	.135	.165	.170	.009	.009	.137	.004	.004	.763	.006	.005	.008	.007
16 (si) I don't fit in.	.152	.742	.108	.131	.127	.192	.217	.115	.003	.002	.002	.001	.116	.007	.006	.004	.121
17. (si) I'm basically different from other people.	.141	.644	.170	.237	.121	.266	.007	.143	.010	.007	.005	.005	.008	.112	.001	.008	.106
18. (si) I don't belong; I'm a loner.	.158	.777	.118	.140	.100	.236	.113	.185	.004	.007	.006	.118	.003	.006	.009	.123	.003
19. (si) I feel alienated from other people.	.224	.761	.140	.127	.008	.222	.009	.178	.003	.009	.006	.007	.009	.007	.010	.155	.006
20. (si) I always feel on the outside of a group.	.010	.717	.009	.130	.149	.141	.212	-.000	.004	.006	.106	.005	.004	.004	.008	.001	-.140
21. (ds) No person I am attracted to could love me once he/she saw my faults.	.006	.200	.132	.133	.009	.750	.185	.005	.003	.009	.010	.008	.106	.006	.002	.005	.005
22. (ds) No one I am attracted to would want to stay close to me if he/she knew the real me.	.126	.261	.004	.193	.134	.756	.124	.007	.001	.001	.005	.001	.164	.131	.002	.001	.006
23. (ds) I'm unworthy of the love, attention, and respect of others.	.103	.106	.000	.109	.188	.745	.006	.010	.004	.006	.001	.171	.000	.007	.128	.006	.008
24. (ds) I feel that I am not loveable.	.182	.251	.107	.131	.003	.693	.170	.265	.001	.002	.000	.005	.000	.005	.007	.005	.007
25. (ds) I am too unacceptable in very basic ways to show the real me to other people.	.167	.385	.005	.128	.010	.531	.186	.190	.004	.005	.006	.004	.183	.006	.006	.005	.007
26. (fa) Almost nothing I do at work (or school) is as good as other people can do.	.719	.197	.161	.107	.005	.182	.004	.147	.004	.005	.008	.004	-.001	.001	.003	.134	.002
27. (fa) I'm not particularly good when it comes to achievement.	.785	.001	.005	.131	.129	.104	.002	.153	.109	.008	.219	.004	.000	.129	.009	.000	.001
28. (fa) Most other people are better than	.829	.009	.006	.001	.145	.010	.004	.006	.009	.001	.009	.004	.003	.010	.105	.003	.001

I am in areas of work and achievement.																	
29. (fa) I'm not as talented as most other people are at their work.	.822	.216	.008	.144	.115	.010	.004	.008	.008	.001	.006	.000	.003	.002	.129	.001	.005
30. (fa) I'm not as intelligent as most other people when it comes to work (or school).	.828	.139	.006	.166	.008	.03	.003	.008	.152	.001	.008	.008	.006	.102	.004	.006	.003
31. (di) I do not feel able to get on by my own in everyday life.	.228	.217	.196	.213	.005	.008	.109	.230	.009	.005	.265	.105	.010	.179	.004	.525	.006
32. (di) I think of myself as a person who depends on others, when it comes to everyday functioning.	.161	.143	.150	.129	.195	.002	.002	.183	.005	.001	.172	.009	.129	.256	.003	.632	.004
33. (di) I lack common sense.	.173	.130	.155	.147	.008	.119	.003	.169	-.150	.002	.009	.156	.009	.626	.007	.010	-.126
34. (di) My judgement cannot be relied upon in everyday situations.	.148	.125	.186	.009	.001	.132	.184	.108	.005	.010	.158	.146	.006	.644	.300	.007	.004
35. (di) I don't feel confident about my ability to solve everyday problems that come up.	.208	.113	.181	.103	.141	.236	.186	.242	.007	.007	.155	.003	-.003	.569	.004	.221	.174
36. (vh) I can't seem to escape the feeling that something bad is about to happen.	.182	.134	1.00 0E- 01	.008	.215	.191	.165	.630	.007	.006	.176	.007	.008	.153	.001	.002	.282
37. (vh) I feel that a disaster (natural, criminal, financial or medical) could strike at any moment.	.136	.188	.005	.121	.164	.157	.122	.734	.000	.114	.006	.003	-.000	.009	.009	.103	.204
38. (vh) I worry about being attacked.	.151	.004	.136	.004	.220	.006	.113	.619	.007	.148	.002	.008	.002	.005	.007	.001	-.378
39. (vh) I worry that I'll lose all my money and become homeless/a 'down and out'.	.134	.269	.008	.008	.004	.009	.000	.665	.003	.003	.110	.172	.181	.201	.001	.108	-.140
40. (vh) I worry that I'm developing a serious illness, even though nothing serious has been diagnosed by a doctor.	.101	.132	.183	.192	.007	.103	.008	.630	.000	.113	.189	.142	.007	.001	.004	.117	.004
41. (em) I have not been able to separate myself from my parent(s), the way other people have.	.198	.004	.007	-.130	.007	.003	.138	.142	.009	.249	.543	.119	.002	.003	.005	.321	.005
42. (em) My parent(s) and I tend to be	.277	.008	.007	.002	.004	.008	.175	.149	.010	.235	.641	.200	.003	.001	.004	.005	.003

over involved in each other's lives and problems.																	
43. (em) It is very difficult for my parent(s) and me to keep private details from each other, without feeling let down or guilty.	.165	.007	.199	-.198	.002	.005	.006	.132	.002	.008	.653	.145	.183	.174	.006	.002	.005
44. (em) I often feel as if my parent(s) are living through me - I don't have a life of my own.	.007	.123	.002	.318	.009	.155	.001	.004	.228	.010	.586	.007	-.182	.178	.106	.006	.007
45. (em) I often feel that I do not have a separate identity from my parents or partner.	.005	.006	.002	.466	.227	.001	.002	.200	.219	.003	.460	.010	-.003	.106	.008	.008	.255
46. (sb) I think if I do what I want, I'm only asking for trouble.	.005	.179	.231	.307	.010	.238	.157	.277	.232	.005	.277	.004	.002	.149	.006	.007	.148
47. (sb) I feel that I have no choice but to give in to other peoples wishes, or else they will be unpleasant to me or reject me in some way.	.005	.281	.222	.005	.209	.213	.230	.009	.184	.002	.411	-.134	.141	.009	.344	.005	-.109
48. (sb). In relationships, I let the other person have the upper hand.	.009	.009	.218	.112	.145	.179	.175	.002	.010	.005	.004	.003	.110	.004	.658	.004	.007
49. (sb) I've always let others make choices for me, so I don't really know what I want for myself,.	.150	.139	.005	.133	.126	.008	.296	.000	.201	.004	.336	.004	.170	.101	.556	.206	.003
50. (sb) I have a lot of trouble demanding that my rights be respected and that my feelings be taken into account.	.009	.252	.187	.173	.252	.006	.113	.128	.171	.142	.259	.010	.004	.163	.430	.008	.006
51. (ss) I'm usually the one who ends up taking care of people I'm close to.	.107	.003	.295	.009	.109	.009	.009	-.106	.548	.180	.135	.010	.221	-.128	.006	.006	.003
52. (ss) I am a good person because I think of others more than of myself.	.118	.004	.004	-.007	.010	.002	.008	.004	.755	.140	.010	.002	-.004	.004	.009	.005	-.140
53. (ss) I'm so busy doing things for the people that I care about that I have little time for myself.	.005	.004	.002	.001	.001	.001	.008	.002	.727	.007	.126	.162	.004	.005	.131	.119	.004
54. (ss) I've always been the one who	.010	.007	.153	.000	.009	.003	.006	.000	.761	.149	.001	-.149	.009	.000	.006	-.119	.001

listens to everyone else's problems.																	
55. (ss) Other people see me as doing too much for others and not enough for myself.	.166	.005	.003	-.001	.198	.007	.009	.010	.590	.157	.001	.178	.004	.004	.356	.007	.276
56. (ei) I am too self-conscious to show positive feelings to others (e.g. affection, showing I care).	.006	.110	.152	.149	.004	.009	.716	-.005	.006	.111	.002	-.006	.005	-.001	.198	.002	.006
57. (ei) I find it embarrassing to show my feelings to others.	.003	.112	.009	-.001	.004	.181	.775	.004	.117	.133	.006	-.004	.003	.001	.007	.188	.003
58. (ei) I find it hard to be warm and natural.	.008	.143	.004	.008	.004	.007	.785	.122	.007	.004	.006	.103	.117	.147	.006	.005	-.009
59. (ei) I control myself so much that people think I have no feelings.	.004	.162	.002	.007	.001	.009	.688	.165	.002	.137	.114	.192	.150	.139	.000	-.127	-.105
60. (ei) People see me as a tense person.	.009	.140	.003	.003	.111	.230	.555	.173	.005	.245	.123	.178	.129	-.004	.003	.004	.155
61. (us) I must be the best at most of what I do; I can't accept second best.	.010	.198	.156	.155	.002	.003	.200	.101	.004	.599	.005	.221	.113	.135	-.106	-.001	.226
62. (us) I try to do my best, I can settle for "good enough".	-.007	.111	.006	.002	.004	.005	.124	.000	.004	.789	.108	.008	.008	.001	.001	.007	.140
63. (us) I must meet all my responsibilities.	.003	.007	.007	.001	.148	.005	.010	.005	.297	.676	.005	.003	.002	.004	.002	.002	-.116
64. (us) I feel there is constant pressure to achieve and get things done.	.001	.004	.176	.237	.156	.009	.138	.145	.272	.665	.009	.002	.006	.000	.007	.003	-.201
65. (us) I can't let myself off the hook easily or make excuses for my mistakes.	.010	.008	.001	.143	.004	.001	.105	.202	.157	.549	.191	.008	.010	.157	.185	.008	.008
66. (et) I have a lot of trouble accepting "no" for an answer when I want something from other people.	.001	.121	.485	.006	.009	.187	.002	-.002	.005	.237	.003	.426	.009	.264	.006	.009	.004
67. (ét) I'm special and shouldn't have to accept many of the restrictions placed on other people.	.006	.153	.157	-.002	.000	.004	.108	.008	.009	.155	.184	.663	-.001	.003	.007	.010	.004
68. (et) I hate to be limited or kept from doing what I want.	.008	.005	.325	.006	.167	.002	.000	-.005	.151	.318	-.003	.465	.008	.136	.009	.006	-.255
69. (et) I feel that I shouldn't have to	.004	.007	.183	.150	.001	.010	.007	.134	.000	.001	.008	.795	-.002	.003	.003	-.003	.006

[illegible]

Factor Loadings for YSQ-S (Younger Group)

YSQ-S Items	Factors																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. (ed) Most of the time, I haven't had someone look after me or care deeply about everything that happens to me.	.194	.306	.144	.576	.164	.002	-.004	-.004	.009	-.005	.182	.163	.101	.003	.007	.195	.002
2. (ed) In general, people have not been there to give me warmth, holding, and affection.	.003	.180	.101	.725	.205	.004	-.009	.003	.161	.003	.143	.205	.002	.006	-.006	.169	.129
3. (ed) For much of my life, I haven't felt that I am special to someone.	.231	.130	.143	.717	.112	.008	.189	.009	.005	.104	-.008	-.003	.008	-.007	.008	-.118	.003
4. (ed) For the most part, I have not had someone who really listens to me, understands me, or is tuned into my true needs and feelings.	-.003	.008	.003	.692	.202	.006	.159	.002	.006	.152	.006	.230	-.002	.109	-.003	-.103	-.190
5. (ed) I have rarely had a strong person to give me good advice or direction when I'm not sure what to do.	.230	.208	-.001	.518	.009	.003	.353	-.001	.009	.126	.227	-.006	.003	-.184	.203	-.004	.008
6. (ab) I find myself clinging to people I'm close to because I'm afraid they'll leave me.	.121	.348	.189	.162	.004	.207	.697	.004	-.005	-.002	-.002	.007	.105	.006	-.001	-.112	.010
7. (ab) I need other people so much that I worry about losing them.	.199	.232	.161	.268	.008	.272	.568	.180	.008	.002	.007	.114	.002	.003	-.004	-.002	-.127
8. (ab) I worry that people I feel close to will leave me or abandon me.	.151	.235	.204	.280	.194	.330	.511	.108	.004	.008	-.005	.223	.007	.169	-.003	-.008	.005
9. (ab) When I feel someone I care for pulling away from me, I get desperate.	.008	.208	.188	.174	.138	.367	.530	.176	.210	.006	.175	.149	.000	.005	-.002	.199	-.009
10.(ab) Sometimes I am so worried about people leaving me that I drive them away.	.006	.006	-.003	.006	.370	.165	.566	.008	.007	.184	.142	.152	-.007	.109	.004	.281	.007
11. (ma) I feel that people will take advantage of me	.122	.198	.267	.003	.227	.007	.356	.195	.006	.131	.192	.303	.282	.173	-.133	-.115	.009
12. (ma) I feel that I cannot let my guard	.007	.194	.006	.102	.162	.150	.271	.006	.010	.009	.425	.399	.244	.009	-.004	-.184	.004

down when I'm with other people, or else they will hurt me on purpose.																	
13.(ma) It is only a matter of time before someone lets me down.	.243	.198	.231	.260	.124	.139	.277	-.010	.000	.002	.300	.368	.235	.108	-.002	-.129	.184
14.(ma) I am quite suspicious of other people's reasons for doing things.	.146	.205	.166	.227	.009	.008	.110	.106	.007	.008	.008	.787	.005	.007	.007	.003	-.002
15 (ma) I'm usually on the lookout for people's reasons for doing things.	.225	.185	.233	.122	.137	.101	.187	.107	.006	.007	.003	.695	.005	-.145	.206	.008	-.003
16 (si) I don't fit in.	.140	.216	.113	.170	.668	.115	.113	.191	.130	.103	.124	.216	.003	.003	.003	-.103	-.003
17. (si) I'm basically different from other people.	.166	.259	.188	.230	.612	.179	.222	.176	.004	.174	.009	-.009	.122	.001	.004	-.145	.004
18. (si) I don't belong; I'm a loner.	.207	.323	.010	.284	.700	.202	.006	-.003	.101	.003	.007	.003	.008	-.005	.146	.008	.005
19. (si) I feel alienated from other people.	.208	.224	.124	.230	.645	.227	.008	.004	.142	.179	.010	.005	.009	-.006	.008	.184	.009
20. (si) I always feel on the outside of a group.	.169	.173	.007	.109	.678	.003	.118	.214	.143	.167	.120	.009	.010	.172	.003	.006	-.008
21. (ds) No person I am attracted to could love me once he/she saw my faults.	.110	.694	.178	.206	.147	.004	.165	.190	.133	.224	-.002	.151	-.003	-.004	.009	.010	-.160
22. (ds) No one I am attracted to would want to stay close to me if he/she knew the real me.	.129	.711	.001	.241	.155	.005	.187	.125	.146	.146	.004	.124	-.005	.125	.001	-.127	-.009
23. (ds) I'm unworthy of the love, attention, and respect of others.	.146	.699	.007	.177	.236	.164	.174	.000	.007	.006	.003	.124	.002	.150	-.003	.006	.007
24. (ds) I feel that I am not loveable.	.161	.663	.006	.120	.200	.179	.112	.006	.139	.184	.009	.005	.007	-.002	-.004	.007	.010
25. (ds) I am too unacceptable in very basic ways to show the real me to other people.	.191	.623	.007	.106	.315	.133	.126	-.008	.172	.139	.168	.143	.009	.009	.007	.003	.142
26. (fa) Almost nothing I do at work (or school) is as good as other people can do.	.725	.303	.215	.132	.135	.138	-.009	-.001	.003	-.002	-.004	.110	.005	.009	-.006	-.003	.007
27. (fa) I'm not particularly good when it comes to achievement.	.764	.124	.003	.005	.007	.179	.125	.121	.120	.169	.005	.005	.001	.009	.002	.204	-.001
28. (fa) Most other people are better	.801	.133	.140	.007	.010	.010	.008	.007	.008	.109	.136	.166	.005	.009	-.007	-.002	-.009

than I am in areas of work and achievement.																	
29. (fa) I'm not as talented as most other people are at their work.	.766	.114	.007	.150	.183	.115	.177	.006	.161	.007	.122	.004	.003	.002	-.004	-.006	.001
30. (fa) I'm not as intelligent as most other people when it comes to work (or school).	.782	.009	.006	.127	.149	.008	.114	.006	.258	.009	.111	.005	.003	.004	-.009	.007	.005
31. (di) I do not feel able to get on by my own in everyday life.	.348	.202	.216	.009	.244	.220	-.002	.009	.588	.003	.182	.010	.007	.143	.002	-.007	-.006
32. (di) I think of myself as a person who depends on others, when it comes to everyday functioning.	.261	.164	.108	.181	.005	.204	.103	.003	.701	.005	.010	.005	.183	-.001	.002	-.005	.001
33. (di) I lack common sense.	.312	.211	.197	.004	.241	.156	.001	-.002	.598	.006	.210	-.003	-.002	.004	.136	.007	-.116
34. (di) My judgement cannot be relied upon in everyday situations.	.286	.348	.140	.180	.155	.008	-.005	.001	.510	.004	.183	.117	.115	.166	.139	.239	.007
35. (di) I don't feel confident about my ability to solve everyday problems that come up.	.352	.331	.197	.122	.007	.302	.141	.104	.379	.118	-.004	.177	.008	.211	.003	.010	.001
36. (vh) I can't seem to escape the feeling that something bad is about to happen.	.200	.134	.143	-.001	.194	.558	.221	.124	.104	.101	.003	.164	.129	.249	.010	-.131	.009
37. (vh) I feel that a disaster (natural, criminal, financial or medical) could strike at any moment.	.121	.203	.169	.111	.115	.665	.209	-.005	.207	.008	.135	.111	.215	.006	-.002	.001	.128
38. (vh) I worry about being attacked.	.151	.007	.112	.108	.005	.704	.148	.144	.001	.002	.168	.146	.124	.005	-.009	.010	-.002
39. (vh) I worry that I'll lose all my money and become homeless/a 'down and out'.	.214	.128	.142	.004	.350	.594	.120	.005	.133	.007	.102	.010	-.109	.004	.006	.264	.007
40. (vh) I worry that I'm developing a serious illness, even though nothing serious has been diagnosed by a doctor.	.145	.009	.160	.006	.128	.689	.009	.006	.163	.180	.104	-.156	-.004	.008	.149	-.009	-.009
41. (em) I have not been able to separate myself from my parent(s), the way other people have.	.237	.226	.199	.001	-.004	.216	.009	-.004	.006	.010	.102	-.004	.010	.664	.131	.002	-.002

42. (em) My parent(s) and I tend to be over involved in each other's lives and problems.	.359	-.006	.005	.008	.127	.156	.338	.002	.114	.109	.172	.007	.175	.495	.246	.146	-.004
43. (em) It is very difficult for my parent(s) and me to keep private details from each other, without feeling let down or guilty.	.323	-.004	-.006	-.009	.008	.004	.365	.000	.224	.149	.230	.005	.209	.296	.215	.136	-.293
44. (em) I often feel as if my parent(s) are living through me - I don't have a life of my own.	.125	.218	.004	.434	.125	.187	.146	.007	.215	.104	.006	-.007	.206	.183	-.005	.436	-.181
45. (em) I often feel that I do not have a separate identity from my parents or partner.	.241	.235	.161	.489	.006	.229	.220	.005	.009	.116	.009	-.009	.007	.198	.134	.396	.009
46. (sb) I think if I do what I want, I'm only asking for trouble.	.179	.234	.282	.197	.300	.137	.224	.216	.185	.009	.006	-.003	.327	.138	-.002	-.002	.006
47. (sb) I feel that I have no choice but to give in to other peoples wishes, or else they will be unpleasant to me or reject me in some way.	.130	.206	.265	.130	.248	.139	.340	.286	.174	.216	.001	.287	.173	.126	.001	.149	.005
48. (sb). In relationships, I let the other person have the upper hand.	.006	.101	.285	.163	.117	-.005	.279	.208	.404	.359	.170	.118	-.001	-.195	.008	.001	.179
49. (sb) I've always let others make choices for me, so I don't really know what I want for myself,.	.009	.006	.218	.212	.245	.202	.117	.142	.428	.281	-.005	.246	-.003	.382	-.002	.010	.210
50. (sb) I have a lot of trouble demanding that my rights be respected and that my feelings be taken into account.	.004	.181	.230	.294	.249	.233	.150	.233	.253	.227	.007	.001	.010	.398	-.008	.122	.178
51. (ss) I'm usually the one who ends up taking care of people I'm close to.	.004	.002	.242	.106	.161	-.169	.288	.575	-.149	.105	.008	.006	.123	.225	.008	-.001	.008
52. (ss) I am a good person because I think of others more than of myself.	.008	.006	.002	-.010	.001	.008	.004	.681	-.002	.152	.159	.009	.384	-.107	-.002	.128	.008
53. (ss) I'm so busy doing things for the people that I care about that I have little time for myself.	.005	.106	.010	.009	.174	.008	.007	.684	.213	.154	.186	.008	-.010	.142	.141	.188	.107

54. (ss) I've always been the one who listens to everyone else's problems.	.009	.003	.009	.003	.009	.157	.006	.758	.006	.119	-.006	.004	.141	-.105	.120	-.179	-.004
55. (ss) Other people see me as doing too much for others and not enough for myself.	.144	.008	.002	.003	.115	.113	.006	.417	.004	.114	.165	.002	.136	.004	.294	-.002	.633
56. (ei) I am too self-conscious to show positive feelings to others (e.g. affection, showing I care).	.149	.124	.206	.246	.115	.001	.006	.168	.148	.644	-.006	-.003	.009	.135	.010	-.009	.008
57. (ei) I find it embarrassing to show my feelings to others.	.009	.241	.278	.003	.005	.003	.007	.155	-.002	.637	.002	.006	.250	.004	.004	.121	.007
58. (ei) I find it hard to be warm and natural.	.148	.172	.006	.007	.181	.150	-.001	.143	-.004	.672	.140	.134	.114	-.006	.006	.288	.006
59. (ei) I control myself so much that people think I have no feelings.	.003	.171	-.002	.008	.105	.215	.009	.157	.152	.546	.321	-.004	.008	.264	.103	-.009	-.225
60. (ei) People see me as a tense person.	.170	.134	-.007	-.003	.279	.191	.004	.004	.108	.537	.172	.155	.009	.008	.214	-.294	.000
61. (us) I must be the best at most of what I do; I can't accept second best.	-.006	.005	.130	.006	.121	.141	-.002	.190	.007	.008	.161	.110	.002	.010	.759	-.001	.102
62. (us) I try to do my best, I can settle for "good enough".	-.103	-.005	.198	.003	.008	-.005	.000	.010	.004	.131	.009	.005	.449	.007	.649	.001	.003
63. (us) I must meet all my responsibilities.	.004	.167	.217	.002	.113	.004	.000	.295	.006	.159	-.005	.003	.678	.004	.179	.004	.005
64. (us) I feel there is constant pressure to achieve and get things done.	.007	.004	.225	.288	.165	.161	.008	.326	.008	.157	.000	.008	.453	.120	.333	.187	-.010
65. (us) I can't let myself off the hook easily or make excuses for my mistakes.	.114	-.123	.003	.206	.009	.223	.121	.118	.199	.289	.008	.008	.546	.142	.107	-.006	.002
66. (et) I have a lot of trouble accepting "no" for an answer when I want something from other people.	.009	.223	.429	.162	.152	.113	.002	.255	.110	-.186	.318	.125	.006	.201	.243	-.120	-.186
67. (et) I'm special and shouldn't have to accept many of the restrictions placed on other people.	.194	.130	.214	.001	.154	.192	-.004	.149	.002	.008	.635	.007	-.004	.229	.154	-.004	.181
68. (et) I hate to be limited or kept from doing what I want.	.008	.004	.358	.142	.156	.009	-.190	.301	.003	.007	.384	.204	.111	.230	.008	-.004	-.295

[illegible]

Factor Loadings for YSQ-S (Older Group)

YSQ-S Items	Factors																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. (ed). Most of the time, I haven't had someone look after me or care deeply about everything that happens to me.	.159	.224	.006	-.003	-.005	.008	.004	.747	.004	-.002	.003	.149	-.002	-.003	.005	-.001	-.002
2. (ed) In general, people have not been there to give me warmth, holding, and affection.	.184	.005	.010	-.006	.005	.173	-.002	.762	.005	-.003	.010	.160	.003	.002	.008	.155	-.120
3. (ed) For much of my life, I haven't felt that I am special to someone.	.007	.006	.001	.153	.296	.176	.007	.691	.262	.005	.004	-.008	-.002	.001	.004	.007	.004
4. (ed) For the most part, I have not had someone who really listens to me, understands me, or is tuned into my true needs and feelings.	.130	.001	.207	.007	.223	.009	.007	.675	.175	-.003	.004	.002	-.003	.005	-.008	.005	.377
5. (ed) I have rarely had a strong person to give me good advice or direction when I'm not sure what to do.	.001	.204	.004	.134	.003	-.120	.001	.642	.007	.009	.007	.005	.002	.129	.130	-.006	.363
6. (ab) I find myself clinging to people I'm close to because I'm afraid they'll leave me.	.175	.153	.133	.806	.001	-.005	.006	-.003	.006	.007	.135	.006	.007	.000	.009	-.009	-.010
7. (ab) I need other people so much that I worry about losing them.	.007	.189	.116	.740	.001	.007	.002	.003	.117	.164	.153	.196	.103	-.004	.156	-.140	-.002
8. (ab) I worry that people I feel close to will leave me or abandon me.	.225	.100	.104	.699	-.006	.331	.125	.130	.004	.008	.153	.006	-.002	.002	.102	.114	.004
9. (ab) When I feel someone I care for pulling away from me, I get desperate.	.010	.104	.213	.693	.004	.166	.009	.002	.005	.122	.104	.215	.003	.003	.008	.210	.009
10.(ab) Sometimes I am so worried about people leaving me that I drive them away.	.195	.136	-.009	.459	.003	.361	.005	.006	-.005	.009	-.008	.180	.005	.008	.001	.281	.406
11, (ma) I feel that people will take advantage of me	.195	.135	.008	.337	.187	.117	.182	.005	.164	.149	.010	.403	.207	-.116	-.005	.266	.156

12. (ma) I feel that I cannot let my guard down when I'm with other people, or else they will hurt me on purpose.	.321	.007	.101	.184	.005	.007	.160	.341	.125	.004	.009	.553	.122	.009	.003	.009	.003
13.(ma) It is only a matter of time before someone lets me down.	.209	.249	.203	.189	-.004	.195	.175	.189	.257	.149	.176	.511	.004	-.007	-.006	.008	-.004
14.(ma) I am quite suspicious of other people's reasons for doing things.	.008	-.004	.207	.218	.256	.157	.009	.151	.003	.248	.169	.599	-.008	.182	.113	.134	-.003
15 (ma) I'm usually on the lookout for people's reasons for doing things.	.169	.008	.146	.204	.253	.108	.165	-.003	.005	.006	.158	.681	-.004	.150	.010	.007	.006
16 (si) I don't fit in.	.759	.134	.114	.184	.170	.009	.008	.008	.139	.008	-.003	.263	.009	-.136	.003	-.005	.004
17. (si) I'm basically different from other people.	.709	.004	.160	.102	.004	.004	.005	.174	.274	.009	.004	.184	.004	-.001	.005	.149	.171
18. (si) I don't belong: I'm a loner.	.805	.109	.114	.004	.182	.186	.004	.007	.134	.004	.143	-.003	.004	.004	.008	-.000	-.004
19. (si) I feel alienated from other people.	.798	.165	.111	.009	.165	.157	.009	.102	.165	.004	.112	.109	-.002	.001	.004	.007	-.004
20. (si) I always feel on the outside of a group.	.666	.171	.006	.193	.275	.001	.111	.125	.147	.007	.186	-.003	.001	.005	-.003	.002	-.002
21. (ds) No person I am attracted to could love me once he/she saw my faults.	.230	.003	.136	.009	.218	.106	.007	.009	.766	.006	.004	.147	.007	-.002	.001	.002	.009
22. (ds) No one I am attracted to would want to stay close to me if he/she knew the real me.	.327	.146	.119	.111	.148	.149	.002	.203	.638	-.002	.010	.148	.006	.001	-.007	.002	.006
23. (ds) I'm unworthy of the love, attention, and respect of others.	.194	.193	.120	.010	-.002	.009	-.002	.125	.675	-.002	.217	-.010	.005	.195	.125	.007	.007
24. (ds) I feel that I am not loveable.	.379	.210	.149	-.007	.151	.226	.002	.146	.615	.004	.130	.004	.116	.005	.204	.141	-.005
25. (ds) I am too unacceptable in very basic ways to show the real me to other people.	.436	.209	.004	.129	.133	.007	.140	.115	.476	.007	.132	.214	.128	.005	.124	.107	.136
26. (fa) Almost nothing I do at work (or school) is as good as other people can do.	.124	.749	.185	.009	.130	.006	.121	.155	.156	.001	.008	.006	.129	-.007	.006	-.003	.007
27. (fa) I'm not particularly good when it comes to achievement.	-.002	.773	.133	.134	-.004	.135	-.140	.181	.006	.106	.010	.004	.159	.004	.010	.005	.008

28. (fa) Most other people are better than I am in areas of work and achievement.	.111	.842	.008	.006	.005	.128	.005	.001	.133	.116	.134	.003	.001	.001	.004	.114	.001
29. (fa) I'm not as talented as most other people are at their work.	.221	.811	.120	.140	.002	.009	.007	.006	.119	.006	.204	-.008	-.004	.002	.003	.001	-.006
30. (fa) I'm not as intelligent as most other people when it comes to work (or school).	.141	.835	.008	.119	.004	.104	-.007	.007	-.003	.167	.007	.008	-.002	.006	.119	.007	-.001
31. (di) I do not feel able to get on by my own in everyday life.	.134	.212	.119	.110	.141	.121	.007	.156	.009	.008	.119	.006	.288	-.007	.712	.006	.002
32. (di) I think of myself as a person who depends on others, when it comes to everyday functioning.	.004	.167	.007	.284	.119	.161	-.005	.006	.008	.005	.004	.006	.146	.005	.768	.106	-.006
33. (di) I lack common sense.	.007	.120	.009	.004	.121	.006	-.005	.109	.006	-.008	.004	.009	.009	.113	.006	.799	-.006
34. (di) My judgement cannot be relied upon in everyday situations.	.181	.003	.171	.005	.269	.255	.004	.006	.164	-.005	.391	.102	.007	.104	.161	.540	.006
35. (di) I don't feel confident about my ability to solve everyday problems that come up.	.210	.268	.142	.157	.258	.304	.006	-.002	.176	-.104	.354	.008	.009	-.007	.227	.341	.205
36. (vh) I can't seem to escape the feeling that something bad is about to happen.	.008	.286	.010	.156	.249	.543	.109	.004	.274	-.006	.005	.245	.007	.007	-.006	.007	.336
37. (vh) I feel that a disaster (natural, criminal, financial or medical) could strike at any moment.	.213	.304	.003	.224	.223	.601	.118	.009	.195	-.123	.009	.007	.134	-.008	.139	.003	.151
38. (vh) I worry about being attacked.	-.161	.112	.185	.420	.172	.464	.008	.122	.214	.154	.009	-.006	.129	.002	-.003	.208	-.241
39. (vh) I worry that I'll lose all my money and become homeless/a 'down and out'.	.132	.153	.113	.132	.003	.694	.004	.130	.008	-.004	-.003	.146	.008	-.005	.218	.229	-.129
40. (vh) I worry that I'm developing a serious illness, even though nothing serious has been diagnosed by a doctor.	.129	.118	.151	.010	.123	.756	.115	.129	.121	.003	.112	.005	.010	.008	.002	-.005	.004
41. (em) I have not been able to separate myself from my parent(s), the way other people have.	-.001	.118	-.002	.142	.157	-.002	.151	-.004	-.003	.001	.006	.003	.753	.008	.154	-.003	-.257

42. (em) My parent(s) and I tend to be over involved in each other's lives and problems.	.008	.108	.005	-.002	.187	.201	.170	.002	.178	.006	.008	-.006	.661	.144	.109	.187	.168
43. (em) It is very difficult for my parent(s) and me to keep private details from each other, without feeling let down or guilty.	.003	-.001	.196	.004	.134	.236	.007	-.219	.189	.132	.196	.202	.547	.127	.132	.173	.130
44. (em) I often feel as if my parent(s) are living through me - I don't have a life of my own.	.136	.003	.007	.006	-.008	.159	.142	.147	.139	.191	.294	-.256	.434	.007	.218	.001	.254
45. (em) I often feel that I do not have a separate identity from my parents or partner.	.145	.103	-.007	.207	-.132	.399	.006	.213	-.006	.133	.273	.008	.284	.232	.285	-.008	.286
46. (sb) I think if I do what I want, I'm only asking for trouble.	.169	.114	.208	.179	.161	.172	.006	.171	.202	.001	.218	.269	.329	.009	.008	.003	.207
47. (sb) I feel that I have no choice but to give in to other peoples wishes, or else they will be unpleasant to me or reject me in some way.	.246	.165	.224	.305	.255	.103	.004	.009	.117	.006	.524	.167	.306	-.003	.128	.002	.190
48. (sb). In relationships, I let the other person have the upper hand.	.006	.178	.198	.180	.242	.005	.006	.005	.215	.008	.710	.010	-.002	-.009	-.006	.139	-.005
49. (sb) I've always let others make choices for me, so I don't really know what I want for myself,.	.145	.168	.004	.113	.266	.002	-.004	.115	.125	.117	.727	.117	.193	.122	.009	-.005	-.009
50. (sb) I have a lot of trouble demanding that my rights be respected and that my feelings be taken into account.	.199	.249	.136	.240	.010	.117	.154	.105	.008	.104	.602	.187	.126	-.009	.007	.170	.002
51. (ss) I'm usually the one who ends up taking care of people I'm close to.	.009	.010	.102	.164	.001	-.120	.212	.006	.227	.637	.005	.242	.006	-.008	.001	-.003	-.160
52. (ss) I am a good person because I think of others more than of myself.	.003	.121	.202	.123	.005	-.005	.198	.005	-.005	.735	-.008	-.003	-.003	-.005	.009	-.008	-.006
53. (ss) I'm so busy doing things for the people that I care about that I have little time for myself.	.003	.007	-.002	-.003	.186	.005	.004	.004	.005	.760	.103	-.005	.159	.170	.007	-.005	.003

54. (ss) I've always been the one who listens to everyone else's problems.	.007	.007	.112	.103	.000	.001	.204	-.003	.005	.789	-.003	.007	-.006	-.123	-.003	.006	.129
55. (ss) Other people see me as doing too much for others and not enough for myself.	.010	.126	-.004	.139	-.005	.005	.135	-.008	-.122	.665	.326	.107	.010	.009	.006	-.109	-.002
56. (ei) I am too self-conscious to show positive feelings to others (e.g. affection, showing I care).	.188	-.003	.008	.004	.659	.006	.182	.003	.190	.009	.217	.114	-.006	.002	.184	-.006	.004
57. (ei) I find it embarrassing to show my feelings to others.	.161	.006	.006	.004	.768	-.001	.134	.003	.008	.006	.121	.149	.209	-.004	.171	.005	.004
58. (ei) I find it hard to be warm and natural.	.222	.004	.111	.007	.720	.142	.005	.174	-.002	-.000	.180	.106	.141	.168	-.006	.205	-.007
59. (ei) I control myself so much that people think I have no feelings.	.176	.123	.145	-.104	.593	.101	.174	.133	.010	-.002	.005	.005	.005	.283	-.004	.263	.003
60. (ei) People see me as a tense person.	.257	.005	-.002	.009	.574	.268	.159	.134	.231	.101	.114	.003	.134	.169	-.001	.002	.002
61. (us) I must be the best at most of what I do; I can't accept second best.	.112	-.124	.009	-.07	.284	.170	.600	.004	.002	.007	.005	.196	.005	.144	.003	.004	.286
62. (us) I try to do my best, I can settle for "good enough".	.110	-.004	.002	-.103	.156	.007	.837	-.006	-.005	.008	.001	.158	.129	-.001	.008	-.100	-.005
63. (us) I must meet all my responsibilities.	-.000	.008	.003	.198	-.002	-.001	.785	-.001	.003	.233	-.002	-.000	.009	.137	.002	.009	-.001
64. (us) I feel there is constant pressure to achieve and get things done.	.003	-.002	.230	.281	.146	.151	.693	.165	.115	.259	.007	-.001	-.006	.003	.110	-.08	-.003
65. (us) I can't let myself off the hook easily or make excuses for my mistakes.	.009	.123	.004	.111	.185	.008	.617	.007	.008	.244	.118	.116	.228	.122	-.135	.005	.002
66. (et) I have a lot of trouble accepting "no" for an answer when I want something from other people.	.109	-.001	.650	.002	.138	-.006	.208	.009	.009	-.004	.123	.003	-.004	.360	.163	.010	.125
67. (et) I'm special and shouldn't have to accept many of the restrictions placed on other people.	.006	.003	.226	.004	.273	-.003	.152	-.004	-.136	.007	-.003	-.004	.189	.669	.004	-.005	.120
68. (et) I hate to be limited or kept from doing what I want.	-.003	-.003	.434	.285	.131	-.000	.278	.109	.135	.009	.005	.002	-.257	.473	.194	.005	-.005

[illegible]