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"I felt like anorexia was pushing my friends away"

An Exploration of Friendship Experiences in Adolescent Eating Disorders

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Overview of Thesis

This 'portfolio' thesis comprises four chapters: A systematic review, two journal articles and an extended methods chapter. The systematic review was written up in the format of a journal article suitable for submission to Clinical Psychology Review. Both journal articles were written up in the style of a journal suitable for submission to Qualitative Health Research.

The two journal articles emerged from the same qualitative research project. The decision to write the research up as two journal articles was taken only after all of the data had been collected and analysed, and it became apparent that this would be appropriate. The first journal article has been labelled a 'bridging article' as it provides an introduction and sets the scene for the second journal article. The second journal article is considered the 'main journal article' as it presents the grounded theory that emerged from the research.

The extended method is provided to orient the reader to the philosophical approach the researcher adopted in her qualitative work. It also provides a reflection on how the quality of the research was evaluated throughout the process, a contentious issue in qualitative research. The full methodology is not reported in this chapter in order to avoid repetition of what has already been presented in the journal articles, rather, pertinent issues that the researcher felt deserved more detailed discussion are presented.

Word count

Systematic Review: 9, 380
Bridging Article: 7,994
Main Article: 11, 204
Extended Method: 2,548

Total: 31, 126 words

Contents

List of tables

List of figures

Thesis Abstract

Aims: Friendship plays an important and central role in adolescent life. This thesis was conducted in two parts to address two broad aims relating to friendship in adolescence. The first aim was to establish what is currently known about the impact of perfectionism on adolescent interpersonal relationships. Specifically, it was of interest to determine whether perfectionism exerts a negative influence on adolescent friendships. The second aim was to explore the friendship experiences of adolescents diagnosed with an eating disorder (ED) in order to address a significant gap in the current literature.

Method: A systematic review of the literature relating to perfectionism and interpersonal functioning in adolescence was carried out with a view to addressing the first aim. With regards to the second aim a grounded theory study was conducted with adolescents currently in treatment for an eating disorder. The young people were asked about their experiences of friendship and emerging concepts were followed up in a concurrent process of data collection and analysis.

Results: The systematic review highlighted an absence of research on interpersonal functioning and perfectionism in adolescence, with only seven studies identified that met inclusion criteria. The results were further complicated by inconsistencies in the conceptualisation of perfectionism in the identified studies. The empirical study uncovered the efforts that adolescents go to to achieve acceptance in their friendships. It also revealed that the development of an ED is experienced as creating distance in adolescent friendships. This affects both the actual amount of time that young people spend with their friends as well as the emotional connection that they are able to feel in their friendships.

Conclusions: There is a need to reconsider the conceptualisation of perfectionism in future research with a consistent acknowledgement of the interpersonal dimensions of the concept. It is important to acknowledge the significant impact that ED development can have on adolescent relationships. Young people may require support to address these difficulties and preserve their friendships to avoid long term negative consequences.

Chapter 1: Systematic Review

Prepared in accordance with the author guidelines for Clinical Psychology Review (relevant extracts from the guidelines can be found in appendix 1)

Formatting and referencing are therefore in accordance with APA, 6th edition.

1. A Systematic Review of the Relationship Between Perfectionism and Interpersonal Functioning in Adolescent Peer Relationships

Abstract

Purpose: Perfectionism has been suggested as a potential risk factor for the development of impaired interpersonal relationships. Limited research supports this link in adulthood, however, it is unclear whether the same relationship exists in adolescence. This systematic review therefore examined the available literature on perfectionism and interpersonal functioning in adolescent populations with the aim of establishing what is currently known about the association between these two concepts.

Method: Three electronic databases were searched for published research reporting on tests of an association between perfectionism and an interpersonal variable. Seven papers were identified as eligible for inclusion in the review and the quality of these papers was assessed using a quality rating scale.

Results: The findings that were reported across the seven papers were inconsistent and limited by the use of different perfectionism and interpersonal measures, making cross study comparisons difficult. An association between 'adaptive' perfectionism and positive peer relationships was suggested as was a link between interpersonal perfectionism and social disconnection.

Conclusions: The infancy of this field of research was highlighted. The need to establish a more robust conceptualisation of perfectionism in adolescence was apparent. It was suggested that future research needs to address limitations in the field including an inconsistent selection of interpersonal measures, the failure to use other-report measures and an absence of research out with westernised cultures.

Highlights

- Studies of perfectionism and interpersonal functioning in adolescence are lacking
- The conceptualisation of perfectionism in adolescence is problematic, namely due to a neglect of interpersonal components
- There is inconsistency in the interpersonal variables that are selected for study by different research groups
- Further research is needed to clarify the impact of perfectionism on adolescents' relationships

Keywords: Adolescence; peer relationships; perfectionism; systematic review

Introduction

Background

The development of friendships and peer relationships are central aspects of child and adolescent development. It is recognised that adolescence is a time during which relationships with peers become increasingly important, with the transition from childhood to adolescence marked by an increase in the frequency, intensity and intimacy of peer interaction (Berndt, 1982). Adolescence is a life period in which friends begin to take on the role of attachment figures, and adolescents gradually separate from their parents (Allen & Land, 1999). Relationships with peers are thought to impact considerably on the development of personality, social skills and self identity (Flett *et al.,* 1997b; Harter, 1990; Robinson, 1995; Sullivan, 1953).

Negative social interactions and peer rejection have been associated with problematic emotions and cognitions (Klima & Repetti, 2008) and it is well established that difficulties in social relationships can contribute to the development of psychological maladjustment (Bagwell *et al.,* 1998; Deater-Deckard, 2001; Masten, 2005). In contrast, supportive friendships have been shown to play a protective role. Friendship can increase the ability of the individual to cope with psychological stressors (Gauze *et al.,* 1996; Hartup & Stevens, 1999) and enhance feelings of confidence and self worth (Berndt, 2002).

Given the importance of peer relationships in healthy development and adjustment, it is of interest to understand factors which might limit or inhibit the development of satisfying social relationships during adolescence. It is suggested that individual differences in personality will influence the ease with which adolescents form and maintain friendships. Perfectionism is one personality trait that has been highlighted as conferring a potential risk for experiencing interpersonal difficulties (Flett *et al.,* 1997b; Habke & Flynn, 2002; Hewitt *et al.,* 2003). Justification for this hypothesis stems from research linking socially-prescribed perfectionism with

fearful and preoccupied insecure attachment patterns (Boone, 2013; Flett *et al.,* 2002). It is suggested that individuals will experience a desire for approval and close relationships yet will feel inhibited through fear of negative social evaluation. These conflicting emotions may lead to difficulties in forming or sustaining relationships (Flett *et al.,* 2002).

The perfectionism construct

The study of perfectionism has been considered relevant to the field of psychology for several decades (Hamachek, 1978; Horney 1950). Conceptions of the construct have evolved over the years. Historically perfectionism was viewed as the setting of excessively high standards for oneself and a subsequent experience of distress, presumably as a result of the pressure this placed on oneself (e.g. Burns, 1980; Hamachek, 1978). Contemporary theorists maintain that perfectionism is multidimensional comprised of both interpersonal and intrapersonal components (e.g. Hewitt & Flett, 1991) or both adaptive and maladaptive dimensions (e.g. Slaney *et al.,* 2001).

Controversy remains as to whether perfectionism is best understood as a dimensional or a categorical trait. That is, whether individuals vary in the degree to which they possess one or more continuous dimensions of perfectionism or whether individuals can be grouped into perfectionism categories (adaptive, maladaptive and non-perfectionists) (Flett & Hewitt, 2002). Although this issue has yet to be resolved, research in other areas of psychology consistently support taking a dimensional approach (Fraley & Waller, 1998; Ruscio & Ruscio, 2000). A preliminary taxometric analysis provided support for the dimensional approach to perfectionism, however, the study was biased by the use of perfectionism measures that were not intended to be used for category classification (Broman-Fulks *et al.,* 2008). In practice, the conceptualisation of perfectionism that is used in research is often defined by the measure that is employed (Parker, 1997) and this has implications for interpreting research findings in this area.

One of the most widely cited models of perfectionism (Hewitt and Flett, 1991) defines the trait as a three dimensional construct encompassing self-oriented perfectionism, other-oriented perfectionism and socially-prescribed perfectionism. The latter two dimensions reflect interpersonal components of perfectionism. Other-oriented perfectionism involves holding heightened expectations for others and the tendency to evaluate others critically. Socially-prescribed perfectionism describes the belief that others expect perfection and will be rejecting if this expectation is not met (Hewitt & Flett, 1991). It may be particularly relevant to explore the impact of these interpersonal dimensions on social functioning. It is the dimension of socially-prescribed perfectionism that has been linked to insecure attachment patterns (Flett *et al.,* 2002)

More recently, Hewitt & Flett have described a further facet of perfectionism, Perfectionistic Self Presentation (PSP) (Hewitt *et al.,* 2003). It is described as an interpersonal expression of perfectionism, independent of the existing interpersonal dimensions. It captures the need to *appear* to be perfect as opposed to the need to actually *be* perfect and the use of perfectionistic interpersonal behaviours to achieve this. PSP is considered to be a pervasive interpersonal style that will contribute to problematic interpersonal relationships (Hewitt *et al.,* 2003).

Numerous other conceptualisations of multidimensional perfectionism have been put forward including Frost's (Frost *et al.,* 1990) multidimensional model and Slaney *et al*'s (2001) model of adaptive and maladaptive perfectionism. In Slaney and colleagues model, maladaptive perfectionism is differentiated from adaptive perfectionism by the level of distress that is experienced when it has not been possible for an individual to meet their established standards. The model previously included an interpersonal component (Slaney & Johnson, 1992), however, this has been removed in subsequent revisions following the observation that individuals did not differ reliably on this subscale.

The assessment of perfectionism in adolescent populations has been a late addition to the field. It is only in the last decade that research has turned to the adaptation of perfectionism measures for use with children and adolescents (e.g. CAPS Flett *et al.,* 1997a; PSPS-Jr Hewit *et al.,* 2011). This development has lead to increased interest in whether perfectionism might present differently or be associated with different outcomes in younger populations. It is suggested that since adolescence is a time in which social acceptance and integration is incredibly important, the interpersonal components of perfectionism are likely to be particularly pertinent (Hewitt *et al.,* 2011). This assertion makes evident an emerging premise that perfectionism may not be as stable a trait as it has traditionally been considered to be, and rather might fluctuate with changing circumstances, particularly during adolescent development (Herman *et al.,* 2011).

The impact of perfectionism on interpersonal relationships

There is a relative paucity of research into the interpersonal world of perfectionists. Research linking perfectionism to alternative negative outcomes such as depression and other psychopathologies has been more prevalent (e.g. Goldner *et al.,* 2002; Hewitt & Flett, 1991). However, more recently research has begun to emerge in support of the contention that perfectionism confers a risk of impaired interpersonal functioning (see Habke & Flynn, 2002 for a review). It is generally theorised that difficulties could arise indirectly, through the association of perfectionism with various clinical disorders, or more directly, as a result of perfectionist behaviours and cognitions.

Depression and social anxiety have both been linked to heightened perfectionism and associated with impairment in relationships (Davila & Beck, 2002; Flett *et al.,* 1997b; Juster *et al.,* 1996; Petty *et al.,* 2004). It has been proposed that mood disorders might cause individuals to act in such a way that generates negative reactions from others (Habke & Flynn, 2002). Other theorists have suggested that psychological presentations are detectable by peers and trigger the perception that

those individuals are weaker and more readily targetable for bullying or teasing (Roxborough *et al.,* 2012).

In relation to direct routes to interpersonal problems, theories of perfectionism suggest that individuals displaying heightened levels of interpersonal perfectionism are more likely to perceive themselves as not belonging, view others as having excessively high expectations for them and hold the innate belief that one can avoid the threat of rejection by appearing to be perfect (Flett *et al.,* 2001; Hewitt *et al.,* 2003). These beliefs might lead to interpersonal difficulties by encouraging social withdrawal in order to avoid social situations that are perceived as threatening. Other perfectionists may attempt to engage with others but find that the tendency towards non self-disclosure inhibits the formation of close relationships and causes them to appear evasive and unengaged to others (Hewitt *et al.,* 2003). Self-disclosure has been identified as a key element in establishing and maintaining interpersonal relationships (Runge & Archer, 1981) that PSP is likely to inhibit. Other behaviours associated with perfectionism might also provoke negative reactions in others. Attempts at perfectionistic self-promotion associated with PSP might come across as being boastful, arrogant or false which others find aversive and respond to by withdrawing or deriding these traits (Hewitt *et al,.* 2003; Chen *et al.,* 2012).

Empirical support from the adult literature

Individuals scoring highly on socially-prescribed perfectionism report making efforts to please others, feelings of inferiority in their relationships, experiencing high levels of interpersonal distress, approval seeking, submissiveness, low social confidence and high levels of dependency (Hewitt & Flett, 1991; Hewitt *et al.,* 2003; Hill *et al,.* 1997; Wyatt and Gilbert, 1998). These findings demonstrate the interpersonal expression of perfectionism proposed above. Socially-prescribed perfectionists are also more likely to report feeling lonely (Flett *et al,.* 1996), report a heightened frequency of negative social interactions (Flett *et al.,* 1997b) and

report increased difficulties establishing and maintaining satisfying interpersonal relationships (Shahar *et al.,* 2004). These studies attest to the negative impact of perfectionism on social relationships. The association has also been found in intimate relationships with perfectionists describing relationship difficulties and low satisfaction in their romantic relationships (Flett *et al.,* 2001; Habke *et al.,* 1999).

In a study of individuals currently undergoing therapy, PSP was associated with elevated ratings of therapy as threatening and distressing and of the therapist as judgemental and disliking the individual (Hewitt *et al.,* 2008). Interestingly, individuals with high PSP were also ranked less positively by the interviewers, and therapists reported feeling less willing to work with them therapeutically. This supports the contention that PSP is not just experienced internally but is detected and experienced negatively by interaction partners.

The Perfectionism Social Disconnection Model

Emerging from the theories and research evidence discussed above, Hewitt *et al* (2006) have proposed the perfectionism social disconnection model (PSDM) which posits that individuals high in perfectionism are at an increased risk of experiencing social disconnection. It is the perfectionistic behaviours that arise as a result of interpersonal perfectionism that are believed to inadvertently lead to disconnection through fostering problematic or distant interpersonal relationships (Sherry *et al.,* 2013). Disconnection can be experienced both subjectively (a felt sense of detachment from others) and objectively (impoverished relationships; Chen *et al.,* 2012). Initial tests of the model have supported its tenets (Rice *et al.,* 2006; Sherry *et al.,* 2008).

Aims of review

It has been noted that we currently know very little about the nature of perfectionism in young people and even less about how perfectionism might affect

the interpersonal functioning of adolescents (Flett & Hewitt, 2012). This has, in part, been due to the absence of measures suitable for the assessment of perfectionism in youth. However, the development of such scales more recently has increased the potential for research in this field. The aim of this review was therefore to establish what is currently known about perfectionism and social relationships in adolescence, both to determine what conclusions can currently be drawn and to focus future research efforts on issues of relevance.

In order to achieve this, a search strategy was designed that aimed to identify all published research papers assessing perfectionism and social functioning in adolescence. The identified literature was then critically evaluated in order to answer the question: What are the interpersonal correlates of perfectionism in adolescence? Of particular interest was whether the commonly held belief that perfectionism will impair interpersonal relationships would be upheld by the adolescent literature. In the instance that this relationship was supported, a secondary aim was to explore the potential mechanisms that have been suggested to underlie this association.

Method

Search strategy

A literature search was conducted in June 2013 using three electronic databases: PsycInfo (1987 to June 2013), Pubmed (1946 to June 2013) and Web of Knowledge (1864 to June 2013). The databases were chosen to cover both psychological and social science research. The start date of the search was selected by the earliest year available on each database in order to be as inclusive as possible. The published literature was searched to verify that a similar review had not been conducted with no similar reviews identified. Search terms relating to the population of interest (adolescence), perfectionism and peer relationships (see table 1.1) were combined using 'AND' to search each of the databases. Hand

searches of the reference list of all articles that met eligibility for inclusion in the review were undertaken as well as citation searching each of these articles.

Table 1.1: Systematic review search terms

Perfectionism terms		Interpersonal terms		Population terms
Perfect* Imperfect* (not imperfecta) OR Imperfection Evaluative concerns Personal Standards Personal Values	**AND**	Peer* Social* Friend* Interpersonal*	**AND**	Adolescen* Young adult Child* Teen* Youth

Eligibility Criteria

In order to be included in the review, articles had to be original primary research articles, published in a peer reviewed journal, use any quantitative methodology and be published in English. Articles published in a language other than English were excluded due to the lack of feasibility for translation. There were no restrictions set on publication date since this was the first review in this area. Studies meeting these criteria were then screened for inclusion in the review using the following criteria: i) sample comprised of children and/or adolescents ii) included a measure of perfectionism iii) included a measure assessing interpersonal

functioning or peer relationships and iv) reported one or more test of an association between i) and ii). Given the limited research in this area, studies were included in which the primary aim of the research was not to investigate an association between perfectionism and interpersonal functioning, provided that this was stated as a secondary aim and that the relationship was addressed and clearly reported within the wider research context.

Exclusion criteria

Studies where interpersonal functioning was assessed in relation to family or other non-peer relationships were excluded from this review. Studies were also excluded where perfectionism was not measured using a specific perfectionism measure (e.g. using the perfectionism subscale of the EDI or selecting participants 'likely' to be highly perfectionistic, such as high academic achievers). Studies where social impairments were expected to be present for alternative reasons (e.g. an autistic spectrum disorder) were excluded to avoid confounding the results. Qualitative research was not included since qualitative research is not considered appropriate for exploring the relationship between specific variables. Finally, conference proceedings were not included on the basis of containing insufficient details of the research.

Data collection and management process

The initial search strategy yielded a total of 2623 publications (1036 from Web of Knowledge, 892 from Psycinfo and 695 from Pubmed). All of these articles were uploaded to Refworks reference management software and any duplicates were removed, leaving 1855 articles to consider for inclusion. Screening the titles of these articles eliminated a further 1514 papers. These papers were rejected on the basis that they were conducted on a topic disparate to the question of interest or where it was clear that the research had been conducted with an adult population. The abstracts of the remaining 341 studies were then reviewed using the criteria

outlined above. A further 283 papers were excluded and the reason for exclusion recorded.

In the remaining 58 articles it was unclear from the abstract whether the article met the eligibility criteria and the full paper was obtained in order to determine this. In practice this was most often because it had not been possible to determine whether criteria iv) was met. This process resulted in the identification of six papers meeting eligibility criteria. One additional paper was identified through hand searching the reference and citation lists of these articles. The flow of the systematic literature selection process is illustrated in figure 1.1 using the format recommended by the PRISMA group (Moher *et al.,* 2009).

During the search a number of papers were identified as 'near misses'. These were papers in which i) an investigation of the relationship between perfectionism and interpersonal functioning was not listed as an aim of the study and ii) a specific measure of interpersonal functioning was not included but in which i) interpersonal functioning was assessed via a subscale of a global measure used in the research and ii) the association between perfectionism and this subscale was reported. These studies were excluded on the basis that other similar studies may have been missed. An unlimited number of global measures might include an interpersonally relevant subscale but would not necessarily have been identified using the search terms specified in this review. However, because these studies could provide additional insights into this area they are referenced in appendix 3 for the interested reader.

Information was collated on each of the studies included in the review using a standardised data extraction form (see appendix 4). This included relevant information about the author, type of study, aims, participant characteristics, outcome measures, analyses, key findings and limitations of the study. A summary of this information is presented in table 1.2.

Figure 1.1: Flowchart of study selection process

Table 1.2: Characteristics of included studies

		Chen et al (2012)	Flett et al (2012)	Gilman et al (2011)	Herman et al (2011)
Study aim		To examine the associations between attachment, PSP and soc disconnection in an adolescent population. Secondary aim: tested whether any PSP facets serve as mediators of the association between insecure attachment and social disconnection.	To examine associations (correlations) between perfectionism and each of the other 3 dimensions. To evaluate the roles of coping and social support in depression	To investigate the relationships between perfectionism, interpersonal relationships and peer reported behaviours in adolescents. To assess the degree to which the perceptions held by adolescent perfectionists of their social functioning converge with peer perceptions.	To determine whether any social, academic or intrapersonal precursors in early childhood would differentiate (predict) the types of perfectionism in 6th grade children
Study details	**Country**	North America	North America	US	North America
	Design	Cross-sectional	Cross-sectional	Cross-sectional	Longitudinal Cohort study
	Consent rate	95%	87%.	Ave 68% across schools	97% (69% participated at T2)
	Sample size	N = 178	N = 58	N = 984	N = 456
Participant details	**Participants**	High school students	Clinical population with 'emotional problems' related to family abuse	9th grade school students from 4 different schools (n = 213, 107, 372, 292)	First grade (sixth grade at T2) school students from 9 public schools
	Age, gender	16-19 (m=16.20, SD = 1.80) 89 f, 89 m	15.3 years (16 in elementary school, 42 in secondary) 33 m, 25 f	M=14.66, SD = .68 491 f, 470 m (23 not reported)	M=6.22, SD=0.34 (11.22 at T2) 239 m, 217 f
	Ethnicity, SES	71% Asian 21% Caucasian, 5% Hispanic 2% African 1% other	No details	76% Caucasian 10.7% African 2.5% Hispanic 2% Asian 8.8% Other 'Wide range of SES'	Ist grade sample: 89% African American, >60% low SES T2 71/7% low SES
Measures used	**Perfectionism**	PSPS-Jr	CAPS	Almost Perfect Scale – Revised (APS-R)	CAPS
	Interpersonal	SCS-R	SOCSS (Perceived peer support & classmate support subscales)	BASC-2 Interpersonal relations scale 'Peer reported behaviours'	TOCA-R PNI (social preference subscale)

Analysis	**Correlation**	All 3 facets of PSP sig correlated with social disconnection. Fearful attachment correlated with social disconnection	No significant association between perfectionism and peer or classmate support.	High standards associated with low self reported interpersonal problems, discrepancy with more interpersonal problems. High standards associated with peer reported likeability, helping others and admiration by others. Opposite findings were noted for the discrepancy scale but these were non sig.	N/a
	Other	**Mediation:** PSP leads to social disconnection. Nondisclosure of imperfections sig mediated the relationship between fearful attachment and social disconnection.	N/a	**ANOVAs:** Adaptive perfectionists sig more positive interpersonal relationships than the other two classes. Adaptive perfectionists sig more admired than maladaptive perfectionists. Maladaptive and adaptive perfectionists sig more admired than non perfectionists. Adaptive and maladaptive perfectionists help others sig more than non-perfectionists. Adaptive perfectionists sig higher likeability scores than non perfectionists.	**Latent class regressions:** Maladaptive class higher teacher rated peer rejection scores than adaptive class and non-perfectionistic class in 6th grade. Teachers rated the maladaptive class higher on the peer rejection subscale than the non-perfectionists in 1st grade. i.e. risk factor No differences between the classes on teacher rated shyness in 1st or 6th grade. 'Non-striving' class liked more than other 3 classes in 1st Other 3 classes did not differ from each other.
Limitations		Cross-sectional Self-report Sample predominantly adolescents of Asian heritage Low internal consistency of non-disclosure of imperfection subscale	No comparison group without a history of maltreatment. Self-report only. Cross-sectional	Cross-sectional design Limited interpersonal variables studied, likely to be other relevant variables. Limited external validity due to sampling schools in one state.	Did not correct for multiple comparisons in analysis. Perfectionism self-report only. Findings may be limited to cultural context Analyses based on archival data set so limited by measures used in original study. Peer liking not repeated at T2.

		Roxborough et al (2012)	Wang et al (2009)	Ye et al (2008)
Study aim		To better understand the association between facets of perfectionism and suicide by assessing the PSDM and determining whether those relationships are mediated by social disconnection (being bullied or teased/social hopelessness). Secondary goal: To determine whether the interpersonal components of perfectionism are related to social disconnection.	4 goals 3: to examine whether the perfectionism classes differ on measures of psychological functioning (including loneliness)	Test extent to which perfection ism was associated with OCD. Examine associations between perfectionism, depression, and peer relationship impairment in children with OCD. Also tested the existence of a unique contribution of perfectionism to the prediction of depressive symptoms and interpersonal difficulty over and above what OCD symptoms would predict.
Study details	**Country**	Canada	China	US
	Design	Cross-sectional	Cross-sectional	Cross-sectional
	Consent rate	Not reported	100%	Not reported
	Sample size	N = 152	N = 509	N = 31
Participant details	**Participants**	Psychiatric outpatients with anxiety and/or depression	High school students from 16 different classes across 4 schools.	Outpatients OCD diagnosis (55% also tic disorders & 32% ADHD)
	Age, gender	8-20 (mean 12.87, SD 2.97) 83 m, 69f	14-21 (M=16.6, SD=1.37) 309 (61%) m, 199 (39%) f (1 ppt did not disclose gender).	7-18 (mean 11.77, SD = 2.59) 58% m, 42% f
	Ethnicity, SES	71.5% Caucasian Canadian 9.2% European 6.6% Asian .....doesn't add up to 100% (87.3%)	Highest education level of father: 32% primary 33% middle school 26% high school 9% some college. The culture in the schools was virtually monethnic.	All white/European American
Measures used	**Perfectionism**	CAPS PSPS-Jr	APS-R	Adaptive-Maladaptive perfectionism scale (AMPS)
	Interpersonal	'ratings' of social disconnection	UCLA Loneliness Scale – version 3	Asher Loneliness Scale (ALS) McCloskey's Peer relationship scale (MPRS) Schwartz peer victimisation scale (SPVS)
Analysis	**Correlation**	SPP and 3 facets of PSP associated with social hopelessness. 3 facets of PSP but not SPP associated with being bullied (not SOP).	Discrepancy subscale correlated with loneliness. No correlation with high standards.	Sensitivity to mistakes related loneliness and peer victimisation (and poorer quality of peer relationships sig at adjusted type 1 error rate). Contingent self esteem sig correlated with

				less loneliness and higher quality peer relationships.
	Other	**Mediation:** PSP leads to being bullied or teased (social disconnection) (which in turn leads to suicide risk) i.e. interpersonal components of perfectionism may lead to social disconnection in the form of being bullied. All interpersonal components (PSP & SPP) of perfectionism lead to social hopelessness (and mediated relationship with suicide measures) (Relationship between SPP and PSP and suicide risk or future likelihood of attempting suicide was mediated by experiences of being bullied or social hopelessness).	**Anova:** Loneliness scores did not differ between classes for females. Male adaptive perfectionists reported less loneliness than the other two groups, no diff between maladaptive and non-perfectionists.	**Multiple Regression:** Controlling for age and gender, sensitivity to mistakes accounted for sig and substantial variation in loneliness and peer victimisation. Contingent self-esteem predicted quality of relationships. After controlling for OCD, perfectionism was still found to account for significant variation in loneliness and quality of peer relationships (peer victimisation not quite sig).
Limitations		Single item for both interpersonal measures. Self-report only. Cross-sectional. Social-disconnection muli-faceted, could be measured in many other ways.	Used a translated version of the APS-R, one item was mistranslated. Used cluster analysis to classify perfectionists – involves researcher judgements that may lead to a lack of precision. Measures used were developed from concepts and theories based in western cultures, reliability and validity may be influenced by translation as precise meaning of constructs may differ. Restricted to high school students limiting generalisability.	Small sample size Less rigid adherence to typical type 1 error criteria Little racial/cultural diversity AMPS not widely used – raises concern about psychometric quality No comparison group Cross-sectional

Quality rating system

Published research can vary significantly in terms of methodological quality which can bias the results the research obtains. In conducting a review it is therefore important to assess the quality of the included studies. This allows a judgement of how much weight should be given to the findings of individual studies rather than approaching all research findings as equally valid. The method of assessing the quality of studies in a systematic review can, in itself, introduce bias. Various professional groups and independent research teams have focused on the development of guidelines for critical appraisal and several well established quality rating systems for the evaluation of RCTs and intervention studies are now in existence (e.g. Cochrane guidelines, Higgins *et al.,* 2008). However, all of the studies that were identified for inclusion in the current review were cross-sectional in design. There has been relatively less guidance published on the quality assessment of observational research. York University's Centre for Reviews and Dissemination (CRD, 2009) suggest that the quality assessment of observational studies should focus on evaluating aspects of the methodology and analysis (e.g. participant allocation, choice of outcome measures and statistical issues) and the extent to which these factors may have introduced bias to the result. They recommend the use of checklists in evaluating study quality to impose a standardised approach on the assessment. For the purposes of the current review a quality rating checklist was developed based on two recent documents: The NICE '*quality appraisal checklist for quantitative studies reporting correlations and associations'* (appendix G, NICE, 2012) and the STROBE Statement '*checklist of items that should be included in reports of cross-sectional studies'* (von Elm *et al.,* 2008). These checklists were adapted to ensure that all items were appropriate for assessing the quality of cross-sectional studies. This resulted in a checklist of 10 quality criteria to be used in this review (see appendix 5).

The quality ratings were completed in accordance with the outcome ratings used by SIGN (2008) for assessing the methodological quality of research articles. Studies could achieve one of six possible outcomes for each quality criterion. The outcomes

were each associated with a quality rating score. The outcomes ratings were: well covered (3), partially covered (2), poorly covered (1) and not covered, not reported or not applicable (all 0). A total summary score for each paper was not reported because it was considered that some criteria would necessarily hold more weight than others. A combined score would therefore not accurately portray the overall quality of the study (Higgins & Green, 2011). It is regarded as preferable to consider aspects of quality individually and in isolation of each other (Juni *et al.,* 1999). The assessment of quality inevitably involves a degree of subjective judgement and the quality evaluation was therefore undertaken independently by a second researcher to ensure consistency in the ratings. Initial agreement was 85%. Discrepancies were resolved by returning to the papers and discussing the most appropriate rating.

Results

Overview of included studies

Seven studies were identified for inclusion in the review (see table 1.2). With one exception all studies were cross-sectional in design, the seventh was a longitudinal cohort study with data collected at two time points (Herman *et al.,* 2011). All of the studies were published between the years 2008 and 2012. Three studies recruited a clinical sample and the others recruited their participants from school settings. The majority of the studies were conducted with westernised populations with just one recruiting from outside this population (Wang *et al.,* 2009). The mean age of the participants included ranged from 7 to 21 years and the sample sizes ranged from n=31 to n=984. All studies included both male and female participants. Only one study mentioned any exclusion criteria (Ye *et al.,* 2008) stating that they excluded individuals with learning disabilities, psychotic disorders and those unable to read the questionnaire packs.

Perfectionism measures

Four different measures of perfectionism were used in the papers included in the review: the Child and Adolescent Perfectionism Scale (CAPS; Flett *et al.,* 1997a), the Perfectionistic Self Presentation Scale - Junior (PSPS-Jr; Hewitt *et al.,* 2011), the Adaptive-Maladaptive Perfectionism Scale (AMPS, Rice & Preusser, 2002) and the Almost Perfect Scale – revised (APS-R, Slaney *et al.,* 2001). The properties of these assessment measures are detailed in table 1.3a.

Interpersonal measures

The interpersonal measures that were used in the studies were diverse and included both self-report and other-report measures. The assessment tools used were: the social connectedness scale (SCS-R, Lee *et al.,* 2001), the Survey of Children's Social Support (SOCSS, Dubow & Ullman, 1989), the BASC-2 interpersonal relations scale (Behaviour assessment system for children 2nd edition self report-adolescent, Reynolds & Kamphaus, 2004), the UCLA loneliness scale-version 3 (Chinese version, Robinson *et al.,* 1997), the Asher Loneliness Scale (ALS, Asher & Wheeler, 1985), McCloskey's Peer Relationship Scale (MPRS, McCloskey & Stuewig, 2001) and the Schwartz Peer Victimisation Scale (SPVS, Schwartz *et al.,* 2002). One study used 'ratings of social disconnection' questions that they designed for the research (Roxborough *et al.,* 2012). Two studies included peer report measures (Based on Social relations questionnaire (Blyth *et al.,* 1982); 'peer behavioural assessment' (Parkhurst & Asher, 1992); Pupil nomination inventory (PNI), social preference scale (Ialongo *et al.,* 1999)) and one included a teacher rated measure, the Teachers observation of classroom adaptation (TOCA-R, Werthamer-Larsson *et al.,* 1991). These measures and their properties are summarised in table 1.3b.

Table 1.3a: Perfectionism Measures

Measure (perfectionism)	**Factors/subscales**	**Description**	**Reliability**	**Validity**	**Population developed for**	**Studies using this measure**
Adaptive-Maladaptive Perfectionism Scale (AMPS, Rice & Preusser, 2002)	Subscales: 1. Sensitivity to mistakes 2. contingent self esteem 3. compulsiveness 4. need for admiration. (27 items)	Measures adaptive and maladaptive aspects of perfectionism. Sensitivity to mistakes is considered to be maladaptive and the other 3 dimensions more adaptive.	Cronbach's alpha from 0.73 to 0.91	Limited external validity	Developed for use with children/adolescents (9-12 year olds)	Ye et al (2008)
Almost Perfect Scale-revised (APS-R, Slaney et al, 2001)	Subscales: 1. Standards (7 items) 2. discrepancy (12 items) 3. orderliness (4 items)	Measures adaptive and maladaptive aspects of perfectionism. Standards assesses high personal standards and performance expectations. Discrepancy measures perceived inadequacy in meeting personal standards. Order assesses preferences for order and organisation.	Cronbach's alpha from 0.82 to 0.92	Evidence for convergent and discriminant validity	Adult scale. Limited evidence for use with adolescents.	Gilman et al (2009) Wang et al (2009)
Child-Adolescent perfectionism Scale (CAPS, Flett et al,1997)	Subscales: 1. self oriented perfectionism (12 items) 2. socially prescribed perfectionism (10 items).	Multidimensional perfectionism scale used to assess trait perfectionism (self-directed and interpersonal).	Cronbach's alpha from 0.85 to 0.90 Adequate test-retest reliability	Construct validity reported	Developed for use with children/adolescents	Flett et al (2012) Roxborough et al (2012) Herman et al (2011)
Perfectionistic self-presentation scale – junior form (PSPS-Jr, Hewitt et al, 2011)	Subscales: 1. Perfectionistic self-promotion 2. nondisplay of imperfection 3. non-disclosure of imperfection. (18 items)	Tendency to present oneself as perfect – the need to appear perfect to others, to avoid demonstrating any imperfections and to avoid admission or disclosure of imperfection.	Internal consistencies from .62 to .88	Convergent validity and concurrent validity demonstrated.	Developed for use with children/adolescents	Roxborough et al (2012) Chen et al (2012)

Table 1.3b: Interpersonal Measures

Measure (interpersonal)	**Factors/subscales**	**Description**	**Reliability**	**Validity**	**Population developed for**	Studies using this measure
Asher Loneliness Scale (ALS, Asher & Wheeler, 1985)	16 items (and 8 distractor items, hobbies) One factor – loneliness and social dissatisfaction.	Measures feelings of loneliness and social dissatisfaction, social inadequacy, perceived status.	Cronbach's alphas >0.90	Concurrent validity evidenced	Developed for use with children/adolescents	Ye et al (2008)
Behaviour assessment system for children 2nd edition self report-adolescent (BASC-2: SRP-A) (Reynolds & Kamphaus, 2004)	16 separate subscales (12 clinical and 4 adaptive) Interpersonal relations (adaptive) subscale used.	Multidimensional measure, emotional and behavioural domains. Interpersonal relations measures success relating to others and enjoyment in relationships.	'Acceptable internal consistency and test-retest reliability' (scores not reported)	Convergent and discriminant validity well established	Developed for use with children/adolescents	Gilman et al (2011)
McCloskey's peer relationship scale (MPRS, McCloskey & Stuewig, 2001)	12 items (8 support, 4 conflict)	Quality of a child's primary friendship. Higher scores indicate higher levels of mutual warmth and support and lower levels of conflict in the relationship.	Cronbach's alphas in the mid 0.70 range	Has not been reported	Developed for use with children/adolescents	Ye et al (2008)
'Peer reported behaviours' **Based on Social Relations Questionnaire, (Blyth, 1982) and Peer Behavioural Assessment (Parkhurst & Asher, 1992)**	"How much do you like to be in school/social activities with this person?" (1-5 likert scale) "Who do you admire or look up to?" "Who likes to help others?"	Participants received a random selection of their classmate names to rate.	n/a	Some evidence for convergent validity	Developed for use with children/adolescents	Gilman et al (2011)
Pupil Nomination Inventory (PNI, Lalongo et al, 1999)	3 constructs: 1. authority acceptance/aggressive behaviour	Children nominate classmates who fit each description.	Test-retest reliability from 0.19 to 0.66 (0.52 – 0.55 for social preference ratings)	Concurrent validity reported	Developed for use with children/adolescents	Herman et al (2011)

	2. social participation/shy behaviour 3. likeability/rejection (only these ratings used) (10 items)					
'Ratings of social disconnection'	2 questions rated on a scale of 0 to 3. "Have you ever been bullied or teased by other kids?" "How often do you feel hopeless about your relationships?"	Bullying/teasing and social hopelessness	n/a	n/a	Developed for this study. Similar questions have been used in other studies with adolescents.	Roxborough et al (2012)
Relationship Questionnaire (RQ, Bartholomew & Horowitz, 1991)	4 short paragraphs describing secure, preoccupied, dismissing and fearful attachment, rated on a scale of 1-7.	Attachment style in relationships	n/a	Good convergent, discriminant and concurrent validity.	Adult measure but concurrent validity has been demonstrated in adolescents.	Chen et al (2012)
Schwartz peer victimisation scale (SPVS, Schwartz et al, 2002)	5 item scale	Overt and relational forms of peer victimisation, such as teasing and bullying.	Cronbach's alpha 0.75	Convergent validity	Developed for use with children/adolescents	Ye et al (2008)
Social connectedness scale – revised (SCS-R, Lee et al, 2001)	20 items, one factor.	Degree of interpersonal connection that an individual experiences with peers.	Cronbach's alpha 0.92 in adults (0.70 in this adolescent sample)	Discriminant validity demonstrated	Adult measure	Chen et al (2012)
Survey of Children's social support (SOCSS, Dubow & Ullman, 1989)	Subscales: Friends Peers Family (31 items)	Perceived levels of support received.	Cronbach's alphas from 0.74 to 0.88	Evidence for convergent validity	Developed for use with children/adolescents	Flett et al (2012)
Teachers observation of classroom adaptation (TOCA-R, Werthamer-Larsson et al, 1991)	Shyness and peer rejection subscales used	Teachers view on child's adaptation in classroom. Shyness measures social avoidance or low social participation. Peer rejection measures rejection by	Cronbach's alphas from 0.80 to 0.94 Test-retest reliability >0.60 over a 4 month interval.	Convergent validity reported	Developed for use with teachers rating children/adolescents	Herman et al (2011)

		classmates, number of friends and being approached by others to play.				
UCLA Loneliness Scale – Version 3 (Russell & Cutrona, 1988) (Chinese translation, version 3, Robinson et al, 1990/97)	20 items	Measures loneliness on a 4 point likert scale. Higher scores reflect greater loneliness.	Cronbach's alphas from .89 to .94 (.85 for Chinese scale) Test-retest correlation of .73 over 12 month.	Construct validity (sig relationships with other measures on loneliness, health and well-being. Chinese version correlates pos with another measure of social loneliness).	Adult measure but has been validated with adolescents	Wang et al (2009)

Quality Ratings of Included studies

A summary of each paper's quality ratings is presented in table 1.4.

- Participant Characteristics

All bar one study (Flett *et al.,* 2012) met the well covered or adequately addressed rating for reporting of participant characteristics. Flett *et al* (2012) failed to provide an age range, SES, ethnicity or any inclusion/exclusion criteria and this study therefore achieved only a 'poorly addressed' rating.

- Consent Rate

Five of the studies reported the percentage of those individuals approached that agreed to take part in the research (Chen *et al.,* 2012; Flett *et al.,* 2012; Gilman *et al.,* 2011; Herman *et al.,* 2011; Wang *et al.,* 2009). The consent rates reported ranged from 65% to 100%.

- Sample size

None of the papers that were included reported basing their sample size on a power calculation. Two papers (Gilman *et al.,* 2011; Wang *et al.,* 2009) recruited large sample sizes that were considered very likely to be sufficient to detect a medium effect size and thus met the criteria for the 'adequately addressed' rating.

- Measures used

Reliability and validity: All of the papers reported the reliabilities of the measures used and these were in the acceptable-excellent range. With the exception of one study (Ye *et al.,* 2008) all of the papers reported evidence for the validity of the measures they used. Two studies included measures designed for the purposes of their study and reliability and validity were therefore unclear (Gilman *et al.,* 2011; Roxborough *et al.,* 2012).

Suitability for use with adolescents: Three studies (Chen *et al.,* 2012; Gilman *et al.,* 2011; Wang *et al.,* 2009) used one or more measure that was designed for use with an adult population. The problems with this are that the psychometric properties of

the measure will therefore be based on an adult population and since the constructs of perfectionism and friendship may be qualitatively different in adolescent populations the reliability and validity might differ too. Two studies employed the APS-R, one study used adult cut off scores from an unpublished study to classify their sample by perfectionism type (Gilman *et al.,* 2011) whereas the other used cluster analysis (Wang *et al.,* 2009) which was considered to be more appropriate. In studies using an adult interpersonal measure, one study used a measure that had previously been validated with adolescents (Wang *et al.,* 2009) whereas the other did not (Chen *et al.,* 2012).

Informants: Five of the seven studies received a 'not addressed' rating in this criterion for failing to include any measures other than those rated by the participants. Self-report measures are subject to biases such as social desirability responding that may be particularly relevant in the population under study in this review. Adolescents in general display high levels of concern over social acceptability and find it highly revealing and undesirable to admit personal shortcomings to others (Berndt, 1979). These concerns might be more prominent in perfectionistic populations who are characterised by an increased tendency towards nondisclosure and presenting a socially desirable image of themselves (Gilman *et al.,* 2011). It has also been suggested that there is a risk of perfectionists over-reporting interpersonal difficulties due to their increased tendency to perceive social situations as threatening (Roxborough *et al.,* 2012). The failure to collect additional measures from a relevant other e.g. teacher or peer reports, left the majority of the studies open to bias. Two studies (Gilman *et al.,* 2011; Herman *et al.,* 2011) benefitted from using teacher and/or peer measures as well as self-report measures. However they received an 'adequately addressed' rating than 'well covered' because the variables that peers/teachers reported on were not the same variables covered by the self-report measures. This meant that a direct comparison of the scores could not be carried out.

Table 1.4: Quality assessment ratings

	Quality Criteria									
Study	**(i)**	**(ii)**	**(iii)**	**(iv)**	**(v)**	**(vi)**	**(vii)**	**(viii)**	**(ix)**	**(x)**
Chen et al (2012)	2	3	0	3	2	0	3	2	3	1
Flett et al (2012)	1	2	0	3	3	0	1	1	2	1
Gilman et al (2011)	3	2	2	2	2	2	2	3	2	2
Herman et al (2011)	2	3	0	3	3	2	2	2	3	0
Roxburgh et al (2012)	2	0	0	2	3	0	3	0	3	2
Wang et al (2009)	3	3	2	3	2	0	2	2	3	1
Ye et al (2008)	3	0	0	2	3	1	3	3	3	2

Quality Criteria: (i) The participant characteristics are reported sufficiently (ii) Consent rate is reported (iii) Sample size is adequate, based on an appropriate power analysis (iv) The measures used are reliable and valid (v)The measures used are appropriate for use with an adolescent population (vi) Multiple informants rate the interpersonal variables(s) (vii) Statistical tests were clearly stated and appropriate (viii) Relevant confounding variables were considered in the analysis (ix) Results clearly reported, sufficient to permit independent judgement (x) Effect sizes were reported and are large
Quality Rating: 3 Well covered; 2 Adequately addressed; 1 Poorly addressed; 0 Not addressed/not reported/not applicable

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- Results

Clarity of reporting: In general, ratings for this criterion were very high with only two studies (Flett *et al.,* 2012; Gilman *et al.,* 2011) achieving less than 'well-covered'. The transparency of reporting allowed independent judgement of the results.

Consideration of confounding variables: Most studies were strengthened by the use of analyses that allowed the researchers to control for one or more confounding variables. Two studies did not control for this source of bias in their analyses (Flett *et al.,* 2012; Roxborough *et al.,* 2012).

Appropriateness of analysis: All of the studies used correlational analyses followed by ANOVAs (Gilman *et al.,* 2011; Wang *et al.,* 2009), regression analyses (Herman *et al.,* 2011; Ye *et al.,* 2008) or mediation analyses (Chen *et al.,* 2012; Roxborough *et al.,* 2012). One study (Flett *et al.,* 2012) employed correlational analyses only due to their limited sample size and therefore received the poorest rating.

Effect sizes: All but one of the studies (Herman *et al.,* 2011) reported the effect sizes that they obtained and made reference to their magnitude within the body of the report. The effect sizes obtained were generally in the small to medium range. A table of the reported effect sizes can be found in appendix 6. Consideration of effect sizes was useful given the significant variations in the number of participants recruited into the studies included in this review and the impact of this on their likelihood of obtaining significant results. The importance of reporting and considering effect sizes, in addition to the significance level of results, was highlighted in a recent paper by Masicampo and Lalande (2012). They reported that in the published literature there are a disproportionate number of significant findings that achieve significance with p values in the range of .045 to .05 i.e. just achieving criterion for statistical significance. They point out that the .05 criterion is an arbitrary cut off and that undue emphasis is placed on this over and above consideration of the actual size of the effect found.

Narrative synthesis of study findings

The variety of measures used across the studies precluded carrying out direct comparisons of the study findings. However, in order to aid the interpretation of the results, the results section below has been structured by similar interpersonal variable.

Interpersonal correlates of perfectionism

- Perceived 'quality' of interpersonal relations

Two studies reported on the association between perfectionism and the quality of adolescents' social relationships. One study employed the APS-R and the BASC interpersonal relations subscale (Gilman *et al.,* 2011), the other used the AMPS and the MPRS (Ye *et al.,* 2008). The APS-R and the AMPS both assess adaptive and maladaptive aspects of perfectionism, however, the AMPS is used on a dimensional basis only whereas the APS-R has also been used to categorise individuals by perfectionism class. The BASC assesses peer relationships in general, whereas the MPRS focuses on a single nominated 'primary' friendship. Both studies were conducted with the explicit aim of determining how perfectionism might impact on peer relationships.

Gilman *et al* (2011) reported that, in a large sample of high school students, APS high standards was associated with greater perceived success in relating to others and increased enjoyment in these relationships. The opposite relationship was found for the APS discrepancy scale with adolescents who scored higher on this scale reporting more interpersonal problems. When the sample was considered by perfectionism class, adolescents identified as adaptive perfectionists reported significantly more positive interpersonal relationships than the other two subtypes. There were no significant differences observed in the interpersonal relationships of maladaptive and non-perfectionists. The absence of a detectable difference between these two classes could potentially be a result of the authors use of cluster analysis. Cluster analysis has been criticised because of the inability to assess whether the classes found are meaningful groups or groupings that are essentially random (Blashfield & Aldenderfer, 1978). Further, the generalisability of the results of cluster analysis to larger population is limited (Blashfield & Aldenderfer, 1978).

In the Ye *et al* (2008) paper it was observed that in a sample of adolescents with an OCD diagnosis, participants scoring highly on an adaptive dimension of

perfectionism reported high quality peer relationships whereas those adolescents with heightened levels of maladaptive perfectionism reported poorer quality peer relationships. The latter finding was only significant using a less stringent type 1 error rate than would generally be considered acceptable. The findings were mirrored in the correlations reported for the other adaptive and maladaptive dimensions of perfectionism measured but the associations did not reach significance. Examination of the results indicated that this was largely due to the small sample size and that all of the correlations did in fact yield moderate to large effect sizes. Further analyses indicated that adaptive perfectionism was a significant predictor of positive peer relationships and that this effect remained even after controlling for OCD symptoms, gender and age. This was interpreted as evidence that perfectionism made a unique contribution to the quality of the adolescents' peer relationships. The authors suggest that the association might arise because perfectionism motivates children to behave in line with social expectations, leading to greater social acceptance. The findings should be considered in light of a number of limitations. The small sample size was a clear limiting factor both in terms of necessitating the researchers to rely on an adjusted p-value to achieve significant findings and in limiting the generalisability of the results. The high levels of co-morbidity also made the sample particularly specific and may have biased the findings. However, the substantial effect sizes obtained and the demonstration that the associations persisted after controlling for a range of confounds attests to the value of further larger scale research in this area.

- Peer reported likeability

Two studies collected information from participants' classmates relating to how well liked the participants were. Both studies used scales that they had designed or adapted to fit the purposes of their study and their psychometric properties were therefore unclear. However the addition of peer reported measures was a considerable strength over the studies using self-report measures in isolation.

Gilman *et al* (2011) asked young people to nominate the peers who they admired in addition to rating how much they liked their peers. Students were given a random selection of 15 names to rate and could themself receive up to 15 positive ratings. Using this method, high standards on the APS was positively correlated with peer reported likeability. An association in the opposite direction was suggested for the discrepancy scale although this was non-significant. Analysis by perfectionism class revealed that adaptive perfectionists received significantly higher ratings of admiration than maladaptive perfectionists and significantly higher likeability scores than non perfectionists. Non-perfectionists received significantly less endorsements on admiration than either type of perfectionist. Maladaptive perfectionists were not found to differ from the other two groups on how much they were liked by their peers.

Herman *et al* (2011) employed a longitudinal design, however, the peer report measure was completed at time one only with no rationale provided for the failure to repeat this measure at time two. Pupils in 1st grade were asked to select an unlimited number of their classmates in response to the question "Which children do you like best?" Perfectionism was assessed at time two and participants were classified into one of four perfectionism subtypes: the standard adaptive, maladaptive and non-perfectionist classes and a fourth 'non-perfectionistic non-striving' class. The non striving class had a higher probability of having been liked more by their peers at time one. No differences were found between the other three categories of perfectionist. The authors acknowledged that the ethnicity of their sample meant that these results might only generalise to individuals from collectivist cultures or that the 'non-striving' class may only be found in settings where future prospects are limited. The failure to re-test peer liking at the second time point in the study prevented any assessment of the participant's current likeability limiting any conclusions being drawn about the impact of perfectionism on peer relationships.

- *Experiences of 'social disconnection'*

Social disconnection has been defined as a sense of detachment from others and the experience of difficult relations with others (Roxborough *et al.,* 2012). Indicators of social disconnection are considered to include feeling rejected, judged, criticised, excluded, (Sherry *et al.,* 2013), experiencing a sense of not belonging, conflict or an absence of social support (Roxborough *et al.,* 2012) and feeling isolated and lonely (Sherry *et al.,* 2012). Several studies identified in this review tapped into one or more of these concepts.

In a study designed primarily to test the Perfectionism Social Disconnection Model (PSDM), Chen *et al* (2012) reported that all three facets of PSP were significantly correlated with social disconnection. These results are however potentially limited in that the interpersonal measures they employed were designed for use with adults. Mediation analyses confirmed that PSP leads to social disconnection, with the NDI subscale significantly mediating the relationship between a fearful attachment style and the experience of social disconnection. This subscale was unique in that none of the other PSP facets mediated this relationship. The use of mediation analysis strengthened the results of this study.

Roxburgh and colleagues (2012) also evaluated the PSDM, evidencing that in a clinical sample all three facets of PSP were associated with both social hopelessness and with being bullied. In addition, socially-prescribed perfectionism was associated with adolescents feeling hopeless about their relationships although not with being bullied. This was the first known study to evidence a link between bullying and the need to appear perfect however the generalisability of the results are unclear given the use of a clinical population and the failure to control for the impact of anxiety and depression symptoms in their analysis. Social disconnection was not associated with self-oriented perfectionism in this study, supporting the distinction between intra- and interpersonal dimensions of perfectionism in adolescents. Mediation analyses confirmed that interpersonal perfectionism leads

to social disconnection as indicated by being bullied or feeling hopeless about relationships. The strength of these findings were limited by the use of single item measures only to assess social disconnection. The authors acknowledged this limitation but pointed to the significant findings in spite of this, suggesting this highlights the strength of the finding and that a more robust measure might help to clarify this relationship.

Ye *et al* (2008) also considered the link between peer victimisation and perfectionism and between perfectionism and loneliness. Participants scoring highly on a maladaptive perfectionism subscale reported elevated levels of loneliness and peer victimisation. Regression analysis confirmed that maladaptive perfectionism was a significant predictor of both loneliness and victimisation. This relationship remained after controlling for OCD symptoms, age and gender. Although the relationship with peer victimisation was only significant using a more liberal p value (<.10) in this study, the effect sizes reported in this paper were some of the largest across all of the studies included in the review. The authors suggest that isolation from ones social group might arise when individuals avoid social interactions in an attempt to avoid detection of their flaws. It is acknowledged that the absence of longitudinal data prevents ruling out an association in the opposite direction and an alternative interpretation might be that young people first experience social isolation, causing them to adopt the belief that they have be perfect in order to fit in. The use of multiple interpersonal measures was a strength of this study that should be considered in future research however the use of the AMPS, a perfectionism measure that has not been validated for use with clinical populations, was a relative weakness.

Wang *et al* (2009) investigated the association between perfectionism and loneliness with a group of high school students from Hong Kong. The discrepancy subscale of the APS was found to correlate significantly with increased loneliness but no association was found with the standards subscale. However, the authors

reported that in this sample the standards and discrepancy subscales correlated significantly with each other in contrast to the reported negative correlation between the two in US populations. They questioned whether this might have been due to a cultural difference in the perfectionism construct and whether some items meanings might have been lost in the translation process. This paper also considered their population by perfectionism class, reporting that adaptive perfectionism was associated with lower reported loneliness for males but not for females. No differences were observed between the maladaptive and the non-perfectionist classes. Again, it was suggested that a cultural difference in perfectionism might explain the absence of an association between maladaptive perfectionism and negative outcomes. The study also employed cluster analysis, the limits of which have been discussed above, which may have influenced the detection of differences.

In a study of adolescents who had experienced abuse, Flett *et al* (2012) investigated the relationship between perfectionism and perceived social support. This is the only study to date that has looked at perfectionism and social support in adolescence. They failed to find any support for an association between perfectionism and perceived peer or classmate support. In contrast, they found a significant relationship between socially-prescribed perfectionism and low perceived family support which they suggested may indicate that, in this population at least, family support is more relevant than perceived peer support. Although non-significant, the correlations between low peer and classmate support were greater with socially-prescribed perfectionism than with self oriented perfectionism but the effect sizes were small. The small sample size in this study meant that only correlational analyses were carried out with no follow up analyses such as tests of possible mediation. The sample was analysed as a whole, without controlling for confounding variables, potentially obscuring differences due to gender, depression level or abuse subtype. The details of the participant characteristics that were reported were sparse. On the basis of these limitations this study was considered

to be one of the weaker studies in the review and of limited generalisability, however, many of the limitations were acknowledged by the authors who suggested that the study should be considered as a pilot study that indicates further investigation is warranted.

Finally, in the longitudinal study conducted by Herman *et al* (2011), peer rejection was assessed by asking teachers to provide a rating of participants' peer rejection at both time points in the study (age 6 and 11). Those students who were classed as maladaptive perfectionists at time two had been rated by their teachers as more frequently rejected by their peers than non-perfectionists at time one and were rated more rejected than any of the other three perfectionism classes by time two. Methodologically, the use of a longitudinal design is a strength of this study compared to the other studies in the review. The authors suggest that problems with peers at an early age may contribute to the developmental origins of maladaptive perfectionism, and persist into later childhood and adolescence.

Discussion

The aim of this review was to identify what is currently known about the relationship between perfectionism and peer functioning in adolescents and to establish whether perfectionism might have damaging consequences on adolescent relationships. Only seven papers were identified that addressed this issue and each of these were published in the five years preceding the review. This highlights the infancy of this field of research. The papers that were identified displayed variations in the interpersonal variables that they elected to investigate, revealing a lack of clarity concerning which concepts are the most relevant to study. More significantly, the review also highlighted problems with the conceptualisations of perfectionism that have been used in the research. It was judged that this had a considerable impact on the findings of the studies included in this review.

Whilst it is now rarely disputed that perfectionism is multidimensional in nature, there remains a neglect to delineate interpersonal dimensions of perfectionism within some multidimensional conceptualisations. This is not to imply that the intrapersonal and cognitive dimensions are invalid in any way but rather to reassert that the different components of perfectionism exhibit differential relationships with various adaptive and maladaptive outcomes. It is the interpersonal dimensions that we propose should be the most relevant to impairments in interpersonal functioning. This is consistent with Hewitt and Flett's (1991) conceptualisation of perfectionism and their later addition of perfectionistic self presentation (Hewitt *et al.,* 2003). Research employing the measures associated with Hewitt and colleagues conceptualisations of perfectionism has consistently shown that outcomes do vary by the dimension under consideration (Flett *et al.,* 1996; Hewitt & Flett, 1991; Hill *et al.,* 1997). It is the interpersonal facets that have been shown to associate most consistently with interpersonal problems in adult populations. Self-directed perfectionism has occasionally been found have some adverse effects on interpersonal relationships, however, this relationship is considerably more modest (Habke & Flynn, 2002).

Turning to the papers included in the current review, the one study that investigated both PSP and self-oriented perfectionism supported the differential relationship between different perfectionism dimensions and interpersonal outcomes (Roxborough *et al.,* 2012). Roxborough *et al* (2012) found a significant association between social disconnection and dimensions of interpersonal perfectionism but not self-oriented perfectionism. In focusing on the importance of considering interpersonal and self-directed perfectionism dimensions separately, a potential explanation for the inconsistent findings across the studies included in the review was identified. Four of the seven studies employed perfectionism measures that did not treat interpersonal and intrapersonal items separately (Herman *et al.,* 2011; Gilman *et al.,* 2011; Wang *et al.,* 2009; Ye *et al.,* 2008). Neither the APS-R nor the AMPS contain explicit interpersonal subscales. The APS discrepancy subscale

has been found to correlate with both socially-prescribed perfectionism and self-oriented perfectionism (Slaney *et al.,* 2001). The use of measures that combined interpersonal and intrapersonal items could feasibly have obscured the presence of significant associations. On the basis of this observation it is therefore suggested that priority is given to establishing clarity in the conceptualisation of perfectionism in adolescence, further development and validation of measures that include interpersonal dimensions and a consistent use of these measures in research thereafter.

Summary of key findings

The systematic search revealed very little research evidence currently available regarding an association between perfectionism and interpersonal functioning. The studies that were identified showed mixed results and variable effect sizes. As a result, and taking into account the problems described above, only tentative conclusions can be drawn. In general 'adaptive' perfectionism seemed to be associated with more positive social relationships. The mechanisms underlying this were unclear. It could be that this link occurs indirectly as a result of greater levels of adjustment in this population. This finding would be consistent with the suggestion that perfectionism in itself is not harmful but that perfectionism in the social domain is (Hewitt *et al.,* 2003). The review suggested that 'maladaptive' perfectionism might confer an increased risk of interpersonal difficulties, however, maladaptive perfectionists were not always reliably distinguished from non-perfectionists by the interpersonal measures and this relationship therefore remains unclear. As discussed above this is likely to be a result of measures of adaptive/maladaptive perfectionism failing to distinguish between interpersonal and intrapersonal items. Some support was found for the premise that perfectionism leads to social disconnection as described in the PSDM.

Although the seven studies were, in the main, conducted from the perspective that perfectionism variables would impact on social variables, the cross sectional nature

of the research means that all of the associations that were reported could equally support a relationship in the opposite direction. That is, that impaired social relationships are a risk factor for heightened perfectionism. Roxborough *et al* (2012) suggested that their results linking bullying and the need to appear perfect could equally be explained by the social reaction model (Flett *et al.,* 2002). In the social reaction model it is theorised that perfectionism develops in response to harsh or rejecting interpersonal experiences as a coping strategy designed to protect oneself from these experiences and offer a sense of control over the environment. Causal modelling studies in perfectionism are lacking and without these it is impossible to conclude whether perfectionism precedes interpersonal outcomes or vice versa (Herman *et al.,* 2011).

Potential Mechanisms

Some of the studies identified in the review reported the results of analyses intended to explore potential mechanisms underlying the relationship between perfectionism and impaired social relationships. In the Flett *et al* (2012) paper, an assessment of coping style was also included as an outcome measure. Socially-prescribed perfectionism correlated significantly with distancing, an avoidant form of coping. The authors suggest that this coping style might cause adolescents who fear negative social evaluation to present behaviourally as avoidant of social situations and interpersonally as detached. In this way, perfectionism might be indirectly associated with interpersonal difficulties as a result of the coping styles that perfectionists use. The sample size in the study was not sufficient to perform mediation analyses to test this hypothesis.

Chen *et al* (2012) considered the role of attachment style in their test of the PSDM, reporting that attachment associated significantly with both interpersonal perfectionism and social disconnection. They suggested that early attachment might be at the route of both perfectionism and difficulties in later relationships. On the basis of a mediation analysis they reported that fearful attachment had a

significant indirect effect on social disconnection through the non-disclosure of perfectionism.

These findings suggest the relevance of considering additional factors such as attachment style and coping styles in future research on interpersonal functioning in adolescent perfectionists.

Limitations of the included studies

A number of limitations were identified during the quality ratings that were common to the majority of the studies. All but one of the included papers were from westernised populations introducing a significant bias to the review. This is particularly relevant in the field of perfectionism where it is noted that cultural differences in the construct do occur (Wang *et al.,* 2009). It is therefore unlikely to be appropriate to generalise the results of this review to more diverse countries or cultures. In addition, age and gender were not consistently controlled for in the analyses reported. Friendships have been shown to vary with age (Rubin *et al.,* 1998) and across gender (Azmitia *et al.,* 2005) and both of these variables have displayed differential associations with perfectionism (Gilman *et al.,* 2005). The failure to consistently control for these variables may have introduced a bias to the results.

There was a tendency towards the use of self-report data in the included studies. The limits of self-report data are well documented (e.g. van de Mortel, 2008) and it is suggested that concerns over socially desirable responding might be more prominent in adolescent and perfectionistic populations. The use of self-report measures might therefore have constrained the potential to detect interpersonal difficulties. Gilman *et al* (2011) reported that, in their study, the self-reports and peer reports of social functioning were broadly similar, however, as noted in the quality rating of this study, the constructs assessed by the two measures were not altogether analogous. A further difficulty with the measures used was that they

were often not well standardised for in adolescent populations. For example, although the APS-R has been widely used in studies with adolescents, it was developed as an adult measure. It is suggested that the use of adult measures is unlikely to be appropriate due to queries about item relevance and developmental differences in personality in adolescence (Hewitt *et al.,* 2011). The wide range of interpersonal measures that were used across the studies inhibited making any direct comparisons across the studies. This issue of tool selection is perhaps unsurprising given the plethora of interpersonal measures that are available. A recent review identified 86 different measures that can be used to assess social function in children and adolescents (Crowe *et al.,* 2011). The choice of interpersonal measure was rarely theoretically driven and this might provide a starting point for future research.

The issues around the conceptualisation of perfectionism have been discussed in detail above. A further issue relates to the debate over whether perfectionism should be considered as a dimensional or a categorical trait. Both conceptualisations were observed in the papers included in this review. This is problematic because if perfectionism is dimensional then any measure that seeks to classify perfectionists into discrete groups is essentially using an arbitrary cut point and runs the risk of obscuring potentially relevant information (Broman-Fulks *et al.,* 2008). None of the studies included in the review provided a rationale for their use of one perfectionism measure over another.

Strengths and weaknesses of review method

The use of broad search terms increased confidence that all possible papers were identified, however, a number of factors meant that this was not guaranteed. A limited number of databases were searched due to time constraints and only published research was included in the review. The decision to only include published research introduced two problems. Firstly, any new research in the area that had not yet been published would potentially have been missed. The fact that

all of the studies identified for inclusion had been published in the last five years raises concerns that this might have been the case. Secondly, there is a tendency towards the publication of studies that achieve significant findings over those that fail to identify significant associations. The preponderance of published studies that just achieve significant findings is testament to this (Masicampo and Lalande, 2012). Publication bias is a recognised problem when completing a systematic review (Chalmers *et al.,* 1990; Dickersin & Min, 1993). Although papers that were published in languages other than English were excluded, this did not, in fact, result in the exclusion of any studies on this basis alone and this was therefore not considered to be a limitation for this review.

Studies were excluded from the review that did not assess interpersonal functioning using a measure designed solely for this purpose. This meant that although the search strategy identified some studies that used a global measure containing an interpersonal subscale, these studies were not included in the review. This was necessary because other similar studies might not have been identified, however, it did prevent the potential to gain additional insights from these papers. These papers are included in appendix 3 to allow independent judgement of the contribution of these papers to our current understanding of interpersonal functioning and perfectionism.

Implications for practice and future research

The clearest implication of the review is that more research is needed to confirm the potential links between perfectionism and interpersonal functioning in adolescence. Further high quality cross sectional studies are likely to be the most appropriate design given the infancy of knowledge in this area. However, we propose that a necessary first step would be to establish a precise understanding of perfectionism in adolescence. Current conceptualisations have been developed in a top-down manner from adult research. A more robust conceptualisation could be obtained through taking a developmentally informed approach to understanding

perfectionism. In general, perfectionism has been viewed as a stable personality characteristic. However, research has not investigated the possibility that perfectionism might fluctuate in line with life circumstances (Herman *et al.,* 2011). Interpersonal dimensions of perfectionism might be particularly context dependent, displaying temporary elevations in the face of distressing interpersonal events.

In time, additional studies of variables that might mediate the relationship between perfectionism and social difficulties would add to and strengthen the evidence base, as would a consideration of how perfectionism presents in countries and cultures out with the western world. The consistent use of a small subset of interpersonal measures would aid comparisons across studies and obtaining information from a variety of sources (e.g. parents, self, clinicians and peers) would increase the strength of the evidence.

Research in this field is important for a number of reasons. Peer support and positive relationships have been found to provide a buffer against negative outcomes (e.g. Hodges *et al.,* 1999; Nangle *et al.,* 2003). Overcoming problems in peer relationships could therefore have a positive impact on adolescent adjustment. One of the studies identified in this review reported that perfectionism accounted for relationship problems over and above the contribution of mental health variables (Ye *et al.,* 2008). If this result was found to be robust across other clinical presentations, this would suggest that perfectionism might be a legitimate target for treatment cross-diagnostically in order to bring about improvements in interpersonal functioning.

Conclusions

Research in the field of perfectionism in adolescence is sparse and very little is known about its impact on interpersonal relationships. There has been an increase in research over recent years, however, the conclusions that can be drawn are limited by a lack of consensus regarding how the perfectionism construct should be

conceptualised and which interpersonal variables might be the most relevant to explore. Significant findings in adults and the potential link with social disconnection in adolescence suggest this is an area that warrants further research. It is suggested that future research should focus on exploring the interpersonal dimensions of perfectionism, both in terms of further explicating this construct in adolescence and determining how it is expressed in social relationships.

References

Allen, J. P., & Land, D. (1999). Attachment in adolescence. In J. Cassidy & P.R. Shaver (Eds.) *Handbook of Attachment: Theory, Research, and Clinical Applications (*pp 319-335) New York, NY, US: Guilford Press.

Asher, S. R., & Wheeler, V. A. (1985). Children's loneliness: A comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology, 53*(4), 500.

Azmitia, M., Ittel, A., & Radmacher, K. (2005). Narratives of friendship and self in adolescence. *New Directions for Child and Adolescent Development, 2005*(107), 23-39.

Bagwell, C. L., Newcomb, A. F., & Bukowski, W. M. (1998). Preadolescent friendship and peer rejection as predictors of adult adjustment. *Child Development, 69*(1), 140-153.

Berndt, T. J. (1979). Developmental changes in conformity to peers and parents. *Developmental Psychology, 15*(6), 608.

Berndt, T. J. (1982). The features and effects of friendship in early adolescence. *Child Development,* 53, 1447-1460.

Berndt, T. J. (2002). Friendship quality and social development. *Current Directions in Psychological Science, 11*(1), 7-10.

Blashfield, R. K., & Aldenderfer, M. S. (1978). The literature on cluster analysis. *Multivariate Behavioral Research, 13*(3), 271-295.

Blyth, D. A., Hill, J. P., & Thiel, K. S. (1982). Early adolescents' significant others: Grade and gender differences in perceived relationships with familial and nonfamilial adults and young people. *Journal of Youth and Adolescence, 11*(6), 425-450.

Boone, L. (2013). Are attachment styles differentially related to interpersonal perfectionism and binge eating symptoms? *Personality and Individual Differences,* 54, 931-935.

Broman-Fulks, J. J., Hill, R. W., & Green, B. A. (2008). Is perfectionism categorical or dimensional? A taxometric analysis. *Journal of Personality Assessment, 90*(5), 481-490.

Burns, D. D. (1980). The perfectionist's script for self-defeat. *Psychology Today, 14*(6), 34-52.

Centre for Reviews and Dissemination (CRD) (2009). *Systematic reviews: CRD's guidance for undertaking reviews in heathcare* York, CRD: University of York.

Chalmers, T. C., Frank, C. S., & Reitman, D. (1990). Minimizing the three stages of publication bias. *JAMA: The Journal of the American Medical Association, 263*(10), 1392-1395.

Chen, C., Hewitt, P. L., Flett, G. L., Cassels, T. G., Birch, S., & Blasberg, J. S. (2012). Insecure attachment, perfectionistic self-presentation, and social disconnection in adolescents. *Personality and Individual Differences, 52*(8), 936-941.

Crowe, L., Beauchamp, M., Catroppa, C., & Anderson, V. (2011). Social function assessment tools for children and adolescents: A systematic review from 1988 to 2010. *Clinical Psychology Review, 31*(5), 767-785.

Davila, J., & Beck, J. G. (2002). Is social anxiety associated with impairment in close relationships? A preliminary investigation. *Behavior Therapy, 33*(3), 427-446.

Deater-Deckard, K. (2001). Annotation: Recent research examining the role of peer relationships in the development of psychopathology. *Journal of Child Psychology and Psychiatry, 42*(05), 565-579.

Dickersin, K., & MIN, Y. (1993). Publication bias: The problem that won't go away. *Annals of the New York Academy of Sciences, 703*(1), 135-148.

Dubow, E. F., & Ullman, D. G. (1989). Assessing social support in elementary school children: The survey of children's social support. *Journal of Clinical Child Psychology, 18*(1), 52-64.

Flett, G. L., Hewitt, P. L., Oliver, J. M., & Macdonald, S. (2002). Perfectionism in children and their parents: A developmental analysis. In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 89-132) American Psychological Association.

Flett, G., Hewitt, P., Boucher, D., Davidson, L., & Munro, Y. (1997a). The child-adolescent perfectionism scale: Development, validation, and association with adjustment. *Unpublished Manuscript.*

Flett, G. L., Druckman, T., Hewitt, P. L., & Wekerle, C. (2012). Perfectionism, coping, social support, and depression in maltreated adolescents. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 30*(2), 118-131.

Flett, G. L., & Hewitt, P. L. (2002). *Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues.* In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 5-31) American Psychological Association.

Flett, G. L., & Hewitt, P. L. (2012). Perfectionism and cognitive factors in distress and dysfunction in children and adolescents: Introduction to the special issue. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 30*(2), 53-61.

Flett, G. L., Hewitt, P. L., & De Rosa, T. (1996). Dimensions of perfectionism, psychosocial adjustment, and social skills. *Personality and Individual Differences, 20*(2), 143-150.

Flett, G. L., Hewitt, P. L., Garshowitz, M., & Martin, T. R. (1997). Personality, negative social interactions, and depressive symptoms. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement, 29*(1), 28.

Flett, G. L., Hewitt, P. L., Shapiro, B., & Rayman, J. (2001). Perfectionism, beliefs, and adjustment in dating relationships. *Current Psychology, 20*(4), 289-311.

Fraley, R. C., & Waller, N. G. (1998). Adult attachment patterns. In J.A. Simpson & W.S. Rholes *Attachment Theory and Close Relationships* (pp 77-114) Guildford Press.

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14*(5), 449-468.

Gauze, C., Bukowski, W. M., Aquan - Assee, J., & Sippola, L. K. (1996). Interactions between family environment and friendship and associations with self - perceived well - being during early adolescence. *Child Development, 67*(5), 2201-2216.

Gilman, R., Adams, R., & Nounopoulos, A. (2011). The interpersonal relationships and social perceptions of adolescent perfectionists. *Journal of Research on Adolescence, 21*(2), 505-511.

Gilman, R., Ashby, J. S., Sverko, D., Florell, D., & Varjas, K. (2005). The relationship between perfectionism and multidimensional life satisfaction among Croatian and American youth. *Personality and Individual Differences, 39*(1), 155-166.

Goldner, E. M., Cockell, S. J., & Srikameswaran, S. (2002). Perfectionism and eating disorders. In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 319-340) American Psychological Association.

Habke, A. M., & Flynn, C. A. (2002). Interpersonal aspects of trait perfectionism. In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 151-180) American Psychological Association.

Habke, A. M., Hewitt, P. L., & Flett, G. L. (1999). Perfectionism and sexual satisfaction in intimate relationships. *Journal of Psychopathology and Behavioral Assessment, 21*(4), 307-322.

Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior,* 15(1), 27-33.

Harter, S. (1990). Processes underlying adolescent self-concept formation. In R. Montemayor, G.R. Adams & T.P. Gullotta (Eds.), From childhood to adolescence: A Transitional period? Advances in adolescent development: An annual book series, Vol 2 (pp. 205-239). Thousand Oaks, CA, US: Sage Publications.

Hartup, W. W., & Stevens, N. (1999). Friendships and adaptation across the life span. *Current Directions in Psychological Science, 8*(3), 76-79.

Herman, K. C., Trotter, R., Reinke, W. M., & Ialongo, N. (2011). Developmental origins of perfectionism among African American youth. *Journal of Counseling Psychology, 58*(3), 321.

Hewitt, P. L., Blasberg, J. S., Flett, G. L., Besser, A., Sherry, S. B., Caelian, C., . . . Birch, S. (2011). Perfectionistic self-presentation in children and adolescents: Development and validation of the perfectionistic self-presentation Scale—Junior form. *Psychological Assessment, 23*(1), 125.

Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology, 60*(3), 456.

Hewitt, P. L., Flett, G. L., & Ediger, E. (1995). Perfectionism traits and perfectionistic self-presentation in eating disorder attitudes, characteristics, and symptoms. *International Journal of Eating Disorders, 18*(4), 317-326.

Hewitt, P. L., Flett, G. L., Sherry, S. B., & Caelian, C. (2006). Trait perfectionism dimensions and suicidal behavior. In T.E. Ellis (Ed.) Cognition and Suicide: Theory, research, and therapy (pp. 215-235) Washington, DC, US: American Psychological Association.

Hewitt, P. L., Flett, G. L., Sherry, S. B., Habke, M., Parkin, M., Lam, R. W., . . . Stein, M. B. (2003). The interpersonal expression of perfection: Perfectionistic self-presentation and psychological distress. *Journal of Personality and Social Psychology, 84*(6), 1303.

Hewitt, P. L., Habke, A. M., Lee-Baggley, D. L., Sherry, S. B., & Flett, G. L. (2008). The impact of perfectionistic self-presentation on the cognitive, affective, and physiological experience of a clinical interview. *Psychiatry: Interpersonal and Biological Processes, 71*(2), 93-122.

Higgins, J. P., & Green, S. (2011). Cochrane handbook for systematic reviews of interventions. Retrieved 06/15, 2013, from www.handbook.cochrane.org

Higgins, J. P., Green, S., & Collaboration, C. (2008). *Cochrane handbook for systematic reviews of interventions.* Wiley Online Library.

Hill, R. W., Zrull, M. C., & Turlington, S. (1997). Perfectionism and interpersonal problems. *Journal of Personality Assessment, 69*(1), 81-103.

Hodges, E. V., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology, 35*(1), 94.

Horney, K. (1950). Neurosis and human growth: The struggle towards self-realization. *New York: Norcross.*

Ialongo, N. S., Kellam, S. G., & Poduska, J. (Eds.). (1999). *Manual for the peer nomination inventory* (Tech.Rep.No.4 ed.). Baltimore, MD: Johns Hopkins University.

Jüni, P., Witschi, A., Bloch, R., & Egger, M. (1999). The hazards of scoring the quality of clinical trials for meta-analysis. *JAMA: The Journal of the American Medical Association, 282*(11), 1054-1060.

Juster, H. R., Heimberg, R. G., Frost, R. O., Holt, C. S., Mattia, J. I., & Faccenda, K. (1996). Social phobia and perfectionism. *Personality and Individual Differences, 21*(3), 403-410.

Klima, T., & Repetti, R. L. (2008). Children's peer relations and their psychological adjustment: Differences between close friendships and the larger peer group. *Merrill-Palmer Quarterly, 54*(2), 151-178.

Lee, R. M., Draper, M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal of Counseling Psychology, 48*(3), 310.

Masicampo, E., & Lalande, D. R. (2012). A peculiar prevalence of p values just below. 05. *The Quarterly Journal of Experimental Psychology, 65*(11), 2271-2279.

Masten, A. S. (2005). Peer relationships and psychopathology in developmental perspective: Reflections on progress and promise. *Journal of Clinical Child and Adolescent Psychology, 34*(1), 87-92.

McCloskey, L. A., & Stuewig, J. (2001). The quality of peer relationships among children exposed to family violence. *Development and Psychopathology, 13*(1), 83-96.

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Annals of Internal Medicine, 151*(4), 264-269.

Nangle, D. W., Erdley, C. A., Newman, J. E., Mason, C. A., & Carpenter, E. M. (2003). Popularity, friendship quantity, and friendship quality: Interactive influences on children's loneliness and depression. *Journal of Clinical Child and Adolescent Psychology, 32*(4), 546-555.

National Institute for Health and Clinical Excellence (NICE) (2012). *Methods for the development of NICE public health guidance (3rd ed) appendix G: Quality appraisal checklist - quantitative studies reporting correlations and associations*. London.

Parker, W. D. (1997). An empirical typology of perfectionism in academically talented children. *American Educational Research Journal, 34*(3), 545-562.

Parkhurst, J. T., & Asher, S. R. (1992). Peer rejection in middle school: Subgroup differences in behavior, loneliness, and interpersonal concerns. *Developmental Psychology, 28*(2), 231.

Petty, S. C., Sachs-Ericsson, N., & Joiner Jr, T. E. (2004). Interpersonal functioning deficits: Temporary or stable characteristics of depressed individuals? *Journal of Affective Disorders, 81*(2), 115-122.

Reynolds, C. R., & Kamphaus, R. W. (Eds.). (2004). *Manual for behavioural assessment system for children* (2nd ed.) Circle Pines, MN: American Guidance Service.

Rice, K. G., Ashby, J. S., & Gilman, R. (2011). Classifying adolescent perfectionists. *Psychological Assessment, 23*(3), 563.

Rice, K. G., Leever, B. A., Christopher, J., & Porter, J. D. (2006). Perfectionism, stress, and social (dis) connection: A short-term study of hopelessness, depression, and academic adjustment among honors students. *Journal of Counseling Psychology, 53*(4), 524.

Rice, K. G., & Preusser, K. J. (2002). The Adaptive/Maladaptive perfectionism scale. *Measurement and Evaluation in Counseling and Development,* 34(4), 210-222.

Robinson, J., Shaver, P., & Wrightsman, L. (1997). Measures of personality and social psychological attitudes (ZF yang, YY yang & ZX zhang, trans.).

Robinson, N. S. (1995). Evaluating the nature of perceived support and its relation to perceived self-worth in adolescents. *Journal of Research on Adolescence, 5*(2), 253-280.

Roxborough, H. M., Hewitt, P. L., Kaldas, J., Flett, G. L., Caelian, C. M., Sherry, S., & Sherry, D. L. (2012). Perfectionistic Self‐Presentation, socially prescribed perfectionism, and suicide in youth: A test of the perfectionism social disconnection model. *Suicide and Life-Threatening Behavior, 42*(2), 217-233.

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (1998). Peer interactions, relationships, and groups. *Handbook of Child Psychology,*

Runge, T. E., & Archer, R. L. (1981). Reactions to the disclosure of public and private self-information. *Social Psychology Quarterly,* 44(4), 357-362.

Ruscio, J., & Ruscio, A. M. (2000). Informing the continuity controversy: A taxometric analysis of depression. *Journal of Abnormal Psychology, 109*(3), 473.

Sassaroli, S. & Ruggiero, G.M. (2005). The role of stress in the association between low self-esteem, perfectionism, and worry, and eating disorders. *International Journal of Eating Disorders, 37 (2), 135-141.*

Schwartz, D., Farver, J. M., Chang, L., & Lee-Shin, Y. (2002). Victimization in south korean children's peer groups. *Journal of Abnormal Child Psychology, 30*(2), 113-125.

Scottish Intercollegiate Guidelines Network (SIGN) (2008). *SIGN 50: A guideline developer's handbook*. Edinburgh.

Shahar, G., Blatt, S. J., Zuroff, D. C., Krupnick, J. L., & Sotsky, S. M. (2004). Perfectionism impedes social relations and response to brief treatment for depression. *Journal of Social and Clinical Psychology, 23*(2), 140-154.

Sherry, S. B., MacKinnon, A. L., Fossum, K., Antony, M. M., Stewart, S. H., Sherry, D. L., . . . Mushquash, A. R. (2013). Perfectionism, discrepancies, and depression: Testing the perfectionism social disconnection model in a short-term, four-wave longitudinal study. *Personality and Individual Differences 54, 54*, 692-697.

Sherry, S. B., Hewitt, P. L., Stewart, S. H., Mackinnon, A. L., Mushquash, A. R., Flett, G. L., & Sherry, D. L. (2012). Social disconnection and hazardous drinking mediate the link between perfectionistic attitudes and depressive symptoms. *Journal of Psychopathology and Behavioral Assessment, 34*(3), 370-381.

Sherry, S. B., Law, A., Hewitt, P. L., Flett, G. L., & Besser, A. (2008). Social support as a mediator of the relationship between perfectionism and depression: A preliminary test of the social disconnection model. *Personality and Individual Differences, 45*(5), 339-344.

Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The revised almost perfect scale. *Measurement and Evaluation in Counseling and Development,* 34(3) 130-145.

Slaney, R. B., & Johnson, D. G. (1992). *The almost perfect scale.* Unpublished manuscript.

Sullivan, H. S. (1953). The interpersonal theory of psychiatry. New York, NY, US: W W Norton & co.

van de Mortel, Thea F. (2008). Faking it: Social desirability response bias in self-report research. *Australian Journal of Advanced Nursing, 25*(4), 40.

Von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gøtzsche, P. C., & Vandenbroucke, J. P. (2008). The strengthening the reporting of observational studies in epidemiology [STROBE] statement: Guidelines for reporting observational studies. *Gaceta Sanitaria, 22*(2), 144-150.

Wang, K. T., Yuen, M., & Slaney, R. B. (2009). Perfectionism, depression, loneliness, and life satisfaction a study of high school students in hong kong. *The Counseling Psychologist, 37*(2), 249-274.

Werthamer-Larsson, L., Kellam, S., & Wheeler, L. (1991). Effect of first-grade classroom environment on shy behavior, aggressive behavior, and concentration problems. *American Journal of Community Psychology, 19*(4), 585-602.

Wyatt, R., & Gilbert, P. (1998). Dimensions of perfectionism: A study exploring their relationship with perceived social rank and status. *Personality and Individual Differences, 24*(1), 71-79.

Ye, H. J., Rice, K. G., & Storch, E. A. (2008). Perfectionism and peer relations among children with obsessive-compulsive disorder. *Child Psychiatry and Human Development, 39*(4), 415-426.

Chapter 2: Bridging Article

Prepared in accordance with the author guidelines for Qualitative Health Research (relevant exerts from the guidelines can be found in appendix 2)

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All names and potential identifiers have been changed

2. Efforts to Achieve Acceptance: A Grounded Theory Exploration of Friendship in Adolescent Eating Disorders

Abstract

Although it has long been believed that individuals with an Eating Disorder (ED) will experience impaired social relationships, very little empirical research has explored this theory in adolescent EDs. The purpose of the current research was therefore to explore the social relationships of adolescents with an ED using grounded theory interviews and analysis. Eight females aged between 15 and 17 were interviewed about their experiences of friendship. Analysis revealed strong themes of desiring acceptance and fearing negative evaluation in relationships. The adolescents described factors that contributed to their sense of acceptance or rejection in their relationships and a range of strategies that they would employ in an attempt to counteract these concerns. The strategies that the adolescents described entailed presenting the self in a socially acceptable way, putting others first, avoiding conflict and accepting less in their relationships. The potential social consequences of these behaviours are discussed.

Keywords: adolescents / youth; eating disorders; grounded theory; mental health and illness, children / adolescents; relationships

Introduction

Adolescence is a time fraught with a number of transitions and developmental tasks. One of the key tasks during this period is the move away from the primary caregiver and towards the development of attachments in close friendships (Masten, 2005). Adolescent friendships rapidly increase in intensity and complexity (Brown, 2004) and adolescents spend significantly more time with their peers than with anyone else (Rubin *et al,.* 1998 or 2006). Peer attachment has been shown to play a similar, and potentially more significant, role to caregiver attachment in adolescent adjustment (Labile *et al.,* 2000). Supportive friendships provide the opportunity to fulfil basic human needs of companionship, security and emotion regulation (Allen & Manning, 2007; Bukowski & Sippola, 2005), however, friendships also provide an arena for rejection, conflict, teasing and negative social comparisons.

In parallel with the increasing importance of peer relationships, adolescence is a life stage in which self awareness and self consciousness are heightened, especially among adolescent girls (Kirsch *et al*., 2007; Gustaffson et al., 2008). The importance of peer approval in establishing self-esteem increases significantly during the transition to adolescence (Harter, 2006) and negative evaluations or rejecting peer experiences are therefore particularly detrimental to adolescents' sense of self (Bukowski & Sippola, 2005; Pike et al., 1995). Taken together these understandings indicate that peer relationships are highly influential in adolescent life.

It has been suggested that peer relationships and maladjustment bear a bidirectional relationship. That is, as well as impaired social relationships impacting on psychological health, psychological problems might also serve as a risk factor for further relationship difficulties (Klima & Repetti, 2008). The implication is that there is a high likelihood that adolescents experiencing mental ill health will also be experiencing concurrent difficulties in interpersonal functioning. This has been relatively well explored in some areas (e.g. depression; Deater-Deckard, 2001; Mufson *et al*., 2011) but virtually neglected in others, including the EDs. The belief that ED presentation has an interpersonal component that

impacts on relationships dates back to the work of Bruch (1973) who depicted individuals with an ED as submissive, concerned with rejection and highly focussed on gaining other's approval. However, empirical research to corroborate this claim is sparse.

One of the earliest studies of peer functioning in disordered eating found that an avoidance of conflict in friendships was associated with heightened bulimic symptoms in adolescent high school girls (Pike *et al.,* 1995). This association persisted over and above an association with general psychological distress and was more significant than the impact of familial disconnection. The authors suggested that their findings supported increased research on friendship variables in ED populations and on delineating the specific ways in which these relationships are impaired by ED symptoms. Unfortunately, further research into this has been minimal.

Limited research has revealed that adolescents who place greater importance on social acceptance display higher levels of disordered eating than their classmates (McVey *et al.,* 2002) and that social anxiety, detachment from friends and social insecurity all relate to ED symptoms, although these relationships were found to diminish when depression levels were controlled for (Schutz & Paxton, 2007). Within a large sample of inpatients, lower reported social competence and greater isolation were related to ED variables (Zaitsoff *et al*., 2009), however, the participants in this study had been admitted to an inpatient unit for a range of psychiatric problems and were not exclusively an ED sample. Finally, in an investigation of family and peer attachment, adolescents with an ED scored significantly lower on peer attachment than controls (Cunha *et al*., 2009). They reported trusting their peers less, feeling more detached from them and believing that communication within the relationship was impaired. Peer detachment was the most significant variable differentiating the clinical from the control group, more so than any family variable. Despite this finding, the authors focused on discussing the implications of the family variables in the paper rather than drawing attention to the importance of peer functioning. In summary, little research has been forthcoming on social relationships among adolescents with an ED, especially outside the domain of risk factor research, and rarely with clinical populations.

Relatively more research has taken place with adults (e.g. Grissett & Norvell, 1992; Hartmann *et al,.* 2010; Holt & Espelage, 2002), however, developmentally relevant variables such as peer acceptance are less prevalent in adult populations and attachments are increasingly transferred to intimate partners. The uniqueness of adolescence as a developmental life stage makes it questionable whether the results of adult research can be generalised to this population. Research with adults does however attest to the significance of interpersonal impairments, highlighting that experiencing an ED in adolescence can have interpersonal effects that persist long into adulthood. A six year follow up of a sample with anorexia nervosa revealed significantly fewer and more superficial friendships than a comparison group (Wentz, 2001).

A potential mechanism underlying the proposed incidence of interpersonal difficulties in ED populations is the presence of certain psychological traits common to distress in general. Amongst other variables, social anxiety, low self esteem and perfectionism have previously been implicated in the emergence of social problems (Azmitia *et al.,* 2005; Davila & Beck, 2002; Shahar *et al.,* 2004). These traits are known to precede ED development and persist past the point of recovery from EDs (Kaye *et al*., 2004; Sassaroli & Ruggiero, 2005; Slade, 1986). Similarly, friendship problems are thought to exist prior to eating difficulties (Nevonen & Broburg, 2000; Troop & Bifulco, 2002; Welch *et al*., 1997) and remain heightened post ED recovery (Steinhausen & Vollrath, 1993). It follows that these traits may well play a role in making adolescents with an ED more prone to the development of friendship difficulties.

Individual differences in psychological traits mean that some individuals are more likely than others to base their self worth on success in relationships, fear negative evaluations and adapt their behaviour in relationships to avoid disapproval or rejection (Rudolph *et al.,* 2005). Accordingly, certain traits have been shown to influence how individual's behave in relationships. Azmitia *et al* (2005) found that adolescents with low self esteem had a tendency to put the needs of others before their own and to remain in hostile relationships (Azmitia *et al.,* 2005). Flett *et al* (1996) suggested that perfectionistic individuals might act in such a way as to trigger difficulties in interactions, a pattern that has been confirmed in adult populations (Flett *et al.,* 2001; Hill *et al.,* 1997). However, the relationship of perfectionism to interpersonal problems in adolescence has been more difficult to clarify as

a result of conceptual uncertainty surrounding the measures that are currently used (Galloway, 2013a).

In relation to behaviour in relationships, a recent study of adolescent girls in treatment for an ED picked up on the sociocultural pressures and expectations that young girls feel subject to (Gustafsson *et al.,* 2010) and explored the strategies that they use to manage these pressures (Gustafsson *et al.,* 2011). Although the research did not focus on friendships specifically, this was one of the areas in which the adolescents described experiencing pressures. Their resulting behaviour in social situations was considered to fall into one of three categories: being true to oneself, adapting to the situation and presenting oneself in a positive light. The strategies were described as differing in terms of their success, desirability and the effort required to sustain them. There were parallels between this research and the current study, however, the present research elected to ask about experiences of friendship only, in order to explore these relationships in more depth.

Aims of research

The decision to explore friendship experiences evolved from the recognition of the importance of peer relationships in adolescence and the lack of current understanding of friendship in adolescent EDs. A qualitative approach was utilised in order to explore the subtleties of everyday friendship experience for adolescents with an ED, including their perceptions of their friendships and their behaviour in these relationships. Behaviour in relationships is influenced by social goals. Social goals describe the things that individuals want to achieve in social settings and are believed to derive from one's self representations (Salmivalli *et al*., 2005). Examples of social goals identified for adolescents have included getting one's own way, avoiding conflict, feeling close to others, having many friends, helping others and influencing others (Jarvinen & Nicholls, 1996; Ojanen *et al*., 2005). It was of interest to explore which goals might be most pertinent to the adolescents and how they would go about achieving them in their friendships. The research also aimed to explore how the psychological traits associated with EDs might be expressed and impact on relationships.

2 Method

2.1 Design

The study used a social constructivist version of grounded theory, informed primarily by the work of Charmaz (2006). The researcher aligned herself with an interpretive position philosophically, considering that there are multiple, equally valid realities and that knowledge is co-constructed through the researcher-participant interaction. In line with grounded theory methodology a concurrent process of data collection and analysis was employed, with the researcher continually moving between the two, allowing the emerging analysis to shape subsequent data collection.

2.2 Participants

Inclusion/exclusion criteria

The research sought the opinions of young people between the ages of 12-18, currently receiving treatment for an ED (AN, BN, EDNOS) within CAMHS Lothian. Young people were excluded if they were experiencing any co-morbid disorder that would raise concerns about participation being harmful to the individual or that might be judged to invalidate the findings of the research (e.g. ASD, current acute psychotic episode). Subjects who were not fluent in English were not recruited as use of a translator would interfere with the dynamic conversational process and phrase by phrase analysis. The researcher did not interview her own patients. Prior to contacting the young people, their clinicians were asked to confirm that the individual had the capacity to consent to participation and that participation would be appropriate at this time.

Demographics

Eight young people volunteered to take part in the research. All of the participants were female between the ages of 15 and 17 and were being seen within tier 3 or 4 Child and Adolescent Mental Health Services (CAMHS) at the time of their interview. All but one of the participants reported that the current episode was their first experience of an ED. The remaining young person stated that she had experienced difficulties with eating on and off

for five years, with two previous episodes requiring input from CAMHS. The participant demographic information is summarised in table 2.1.

Table 2.1: Participant demographics

Demographic Information	Details N = 8
Sex	All female
Age	15-17 years (mean 16years)
Ethnicity	All white Scottish
Living situation	4 at home with both parents 3 at home with single parent 1 inpatient
Diagnosis	5 Anorexia 2 bulimia 1 EDNOS
Service currently receiving support from	4 Tier III outpatient team 3 Tier IV intensive treatment service 1 In-patient
Inpatient admissions	2 one admission 6 no admissions
School attendance	4 attending school (missed odd days only) 4 out of school (3-12 months since last in school)
Previous CAMHS input	4 no previous input 4 previous input (CFS, anxiety, mixed anxiety/depression/eating, sleep)

2.3 Procedure

Potential participants were identified and provided with an information sheet by the staff working with them. Any young person who expressed an interest in taking part was then contacted by telephone, given a chance to ask any questions about the research and, if they were still interested, a suitable time was arranged for the interview to take place.

Each interview began with asking the young person “Can you tell me about your experiences of friendship over the last few years?”. All interviews were participant lead although later interviews also used focused questions in order to follow up pertinent issues raised in the earlier interviews. Prompts were used to encourage the young people to describe their experiences in more detail. Interviews lasted between 43 and 70 minutes.

All interviews were recorded, transcribed, anonymised and uploaded to QSR NVIVO10 software package. The first four transcripts were coded on a line by line basis. These codes were compared and similar concepts grouped together into tentative emerging categories. Memos were written throughout the process to clarify the researchers emerging ideas and note areas requiring further exploration. Later analysis sought to evaluate and refine the early conceptual categories through the use of constant comparative techniques, questioning the data and consulting the literature.

2.4 Ethical considerations

Written informed consent was obtained from all participants prior to commencing the interviews. Emphasis was placed on the voluntary nature of participation and the fact that non-participation would have no negative consequences for the individual or their treatment. Participants were assured of confidentiality and the limits of confidentiality were clearly explained. It was highlighted that the interviews were not intended to be therapeutic and that the researcher would not be providing individual feedback to clinicians. Ethical approval for the study was gained from the Scotland A Research Ethics Committee (REC reference 09/MRE00/93).

3. Results

In their descriptions of their friendship experiences, the participants spoke about their friendships both in the period before developing an ED and subsequent to ED development. It was apparent that, in terms of their friendships, these two time periods were experienced quite differently. The results presented in this paper relate mainly to the period before the ED developed. It is acknowledged that there is some overlap between

the two periods, however, many of the processes that are described were disrupted or altered by the development, and subsequent increase in severity, of the ED.[1]

Summary of Framework

Figure 2.1 provides an explanatory framework of the main categories and sub-categories that the analysis yielded. Three main categories emerged describing the process of evaluating and making efforts to achieve acceptance in friendships. The three categories were: *perception of fit with peer group, concern with increasing acceptance* and *strategies used to facilitate acceptance.*

The adolescents appraised their acceptance in their relationships through evaluating the quality of their friendships, relatively stable traits of their friend group and their perceived social worth. On the basis of negative evaluations of their friendships and a sense of being different or inferior to their friends, the young people perceived a risk of rejection. They therefore adopted a range of strategies to increase their potential for acceptance by others.

The framework suggests that the risk of rejection that an individual perceives in their relationships impacts on the strength of their drive to increase acceptance and their level of reliance on protective strategies in their friendships.

The categories and subcategories of the framework are outlined in the results section below. They are illustrated by excerpts from the transcripts to ground the results in the data and are integrated with relevant literature to achieve a more complete understanding.

[1] See main journal article for the impact of ED development on friendship.

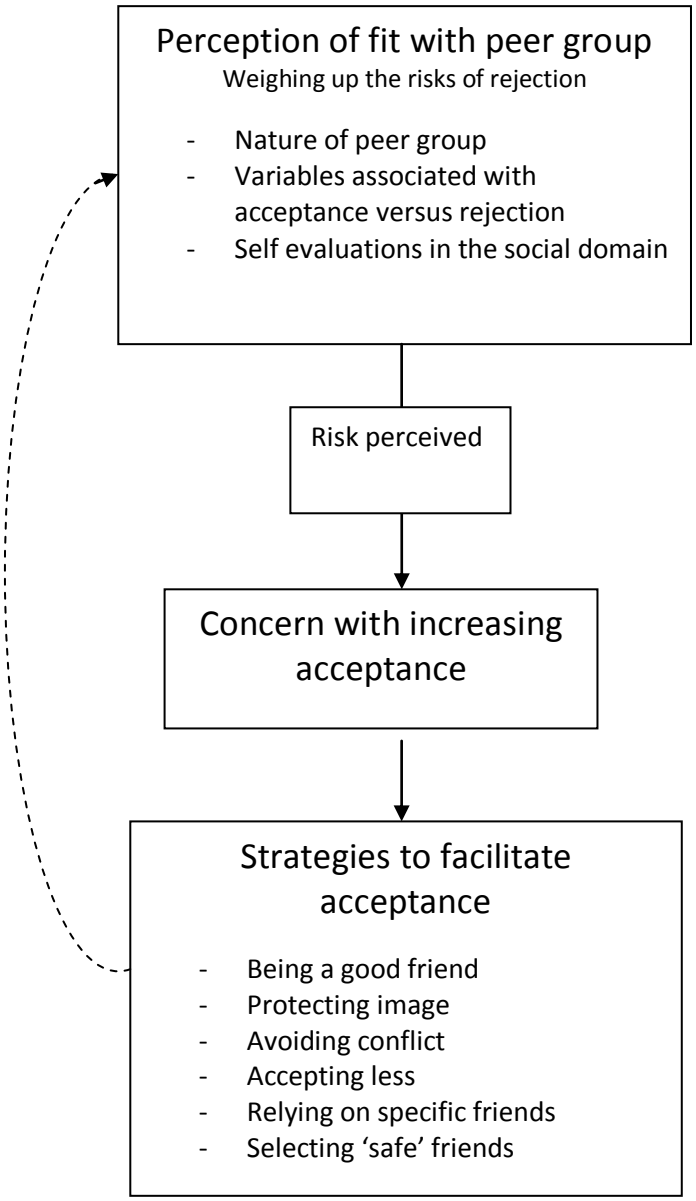

Figure 2.1: Explanatory Framework: Evaluating and making efforts to achieve acceptance in friendships

Explanation of Main Categories

3.1 Perception of fit with peer group

Young people expressed how comfortable, accepted and safe they felt within their group of friends. Their judgement of this was influenced by a number of factors that fell into three broad subcategories: *the nature of the peer group, the balance of variables associated with acceptance versus rejection* and *self evaluations in the social domain.* These categories contributed cumulatively to the adolescents' perceived risk of rejection.

3.1.1 Nature of peer group

The adolescents provided details of their peer group as well as groups that they had been part of previously. They indicated the size of the group, how long they had been friends for, the social status of their group, what their friends were like personality wise and whether or not they had a best friend. The adolescents varied from one another on each of these factors and deficiencies in any of the areas was associated with a feeling of risk.

Some participants had remained friends with the same group since primary school although the majority had either made some new friends or moved groups entirely when they transitioned to secondary school. Making new friends was seen as a daunting task and being a newcomer in an already established group of friends was considered a risky position to be in. Once friendships were established, the length of time since the relationship was established did not appear to impact on how close the young people were able to feel to their friends. Participants reported feeling very close to young people they had known for only a short space of time. However, friends that had been around for longer tended to be viewed as less likely to be judgemental. In general, having more friends was seen as a positive and desirable status as was being popular and having a best friend.

> ***Ashley:*** *Our group is so small, and we do get on really well, most of the time, but when it gets hard, it gets really hard because you think other than this group, I've got no one else that I can rely on.*

However, being popular was also associated with different concerns about rejection due to the more exclusive nature of this group. The young people felt that it was easiest to be

friends with other people with similar interests and personalities. Being part of a volatile group where fall outs were frequent was described as intimidating.

3.1.2 Balance of variables associated with acceptance versus rejection

3.1.2.1 Perceived closeness

The adolescents described good friends as the people that they believed they could rely on, confide in and that understood them. There was a belief that with these friends they could divulge their problems and express themselves freely without fear of judgement, rejection or having their confidence broken. In these close friendships the young people believed they were liked and valued which made them feel safe and accepted.

> ***Nicole:*** *I feel like, you know, like happy because I know that, that I can be myself around her and without her judging me or anything like that and that I don't have to act in a different way so that she doesn't think of me any differently, so.. well I sort of feel at ease when I'm with her.*

The participants believed that ideally this was how friendship should be but most adolescents described only one or two friendships in which they felt like this. The friendship qualities that emerged in this study were very similar to those that were rated as most highly valued by a group of non-clinical adolescents in a study employing a similar design (Azmitia *et al*. 2005). In the 2005 study loyalty, trust and emotional support were rated as the most important ideals in friendship. The similarity in values between this study and our study suggests that the actual friendship values held by adolescents with an ED may not differ from adolescents in general.

3.1.2.2 Perceived rejection

The young people described some of their friendships more negatively and were aware of things that they would like to be different in these friendships. They voiced that with some of their friends it felt like their opinions were not valued, they could not be themself, there was a lack of support and understanding, or the relationships were unequal. The participants' narratives also contained examples of feeling unfairly treated, excluded and as though their relationships lacked depth or common interests.

> ***Tasha:*** *I just felt like a... bit of an outsider, just standing with them so that I had somewhere to stand at break and stuff.*
>
> ***Chrissie:*** *I've had quite, quite a variety of friends, like, all over the place. Em... but I think over that time they kind of all found their own way of, like, walking all over me.*

3.1.2.3 Direct rejection

The participants also provided examples of times where they had experienced more direct episodes of rejection by their peers. This could involve bullying, teasing, being talked about, being excluded from plans and being treated differently to other peers.

> ***Melanie:*** *Steph was really, really nasty to me [sounds surprised, pitch of voice goes up]. Like really, really mean and she'd say things like "oh you can't sit with us today... we can't budge up... you'll have to sit at another table on your own"... Em, she'd organise things with the rest of the group and she deliberately wouldn't invite me.*

Dissatisfaction with relationships has previously been observed in populations with heightened ED symptoms (Grisset & Norvel, 1992; Holt & Espelage; Schutz & Paxton, 2007). Considering the results above, it is suggested that it is not the values held by these adolescents that is problematic but rather the conviction that they are not being met in their friendships. It is unclear whether this population do in fact experience more negative relationships or whether they perceive this to be the case, potentially as a result of having more stringent standards for meeting values or a heightened sensitivity to negative friendship experiences (Flett *et al*. 2001; Schutz & Paxton, 2007). It has been observed, for instance, that adolescents with high self esteem seem more able to dismiss difficulties as a normative part of friendship whereas low self esteem adolescents tended to dwell on difficulties and view them as an indicator of flaws in the friendship (Azmitia *et al*., 2005). A similar process may have been operating for the adolescents in the current study.

3.1.3 Self evaluations in the social domain

The adolescents' accounts suggested that they would continually engage in evaluation of their social worth by considering their performance in social situations, their appearance, their likeable qualities and their weaknesses. They also made frequent predictions about

how they might come across to other people and engaged in social comparisons with their peers.

> ***Jane:*** *If I had a conversation with someone, and it was a.. good conversation but if there was one tiny little bit, where I thought "oh that made me sound a bit stupid" I will focus completely on that bit and disregard the rest... and I will think "now that person must think I'm stupid"*

Overwhelmingly, the young people described that the outcome of the self-evaluations was a sense of being different to their peers in some way. This could be in terms of their personality, their interests, their background, their strengths and weaknesses, their appearance, or their social skills. They tended to report feeling inferior or not good enough as a result.

> ***Nicole:*** *I felt as if they had all good qualities you know like they would be, em, really pretty or they would be, you know, have a really good figure and I had neither and I had no good qualities, I just felt completely different from them.*

> ***Jane:*** *I was very surprised that someone actually liked me.. because I thought I was too weird.. and um [4 secs] I just... I don't get it [laughs]*

The adolescent accounts accord with existing literature suggesting that adolescents with ED symptoms carry out increased social comparisons (Halliwell & Harvey, 2006) and display more negative self evaluations than either other clinical populations or non-clinical adolescents (Boone *et al*., 2013; Gustaffson *et al*., 2008). According to sociometer theory (Leary & Baumeister, 2000) the process of evaluating one's acceptance is the primary function of the self esteem system. This provides a way of understanding the sense of not being good enough reported by the participants. Self esteem provides an internal measure of how well one is faring in interpersonal situations (Leary *et al.,* 2001). The adolescent's perception that they were lacking in social value fits with research suggesting that EDs are associated with lowered self esteem (Stice, 2002).

3.1.3.1 Experiencing anxiety in social situations

A number of the adolescent's described finding social situations anxiety provoking because of their fears about being judged negatively by others and the potential for them to act in a way that might contribute to them being rejected.

> ***Georgia:*** *I get nervous cause I think I'm the odd one out and stuff... Em I worry people might not like me or they might laugh at me or something...em...or I think I'm going to do something wrong, em, maybe I'll embarrass myself or something*

An association between social anxiety and EDs is well established, with prevalence rates reported at between 20% and 59% (Godart *et al*., 2000; Kaye *et al*., 2004; Obeid *et al*., 2013). Social anxiety has often been understood with reference to the social cognition literature. It is theorised that relational schema form a key part of an individual's sense of self (Anderson & Chen, 2002). Social anxiety arises when an individual becomes aware of a discrepancy between the social self, how individuals believe others see them and the ought self, the self they believe others think they should be (Higgins *et al.,* 1986). It was interpreted that the adolescents in the current study were describing the perception of a significant gap between their social self and their ought self, causing them anxiety around others and a desire to adapt their social self. Sense of self is influenced by attachment experiences (Baldwin, 1992), suggesting one potential mechanism underlying the difficulties the young people described.

3.2 Concern with increasing acceptance

The young people appeared to weigh up the factors described above in order to judge how well they fitted in with their friends and how accepted they were within their friend group and the wider peer group. All of the participants described feeling that they or their relationships were lacking in some way and that this made them vulnerable to rejection. There was an expressed desire for things to be different. This could be to feel closer to friends, to be more popular or to see themself as a better friend. The adolescents described looking for ways in which they could adapt in order to increase their acceptance.

> ***Ashley:*** *It makes you think 'what have I done wrong? Why am I not worthy to go to this just like everyone else? Like what have I done?' em, and then it's kind of the weird one is 'what can I do to get in?'*

Striving for acceptance is a normative developmental process consistent with the growing importance of peer relationships in adolescence (Kirsch *et al*., 2007). However, it is also consistent with conceptualisations of low self-esteem and high interpersonal perfectionism common to ED presentations (Fairburn 1997; 1999; Geller *et al*., 2000). This constellation

of characteristics may cause the drive to be felt more keenly, seem more important or feel less achievable, prompting more concerted efforts to achieve acceptance in this population.

The researcher observed that the adolescents' reports of unsatisfactory relationships, their impaired self identity, heightened fear of rejection and drive to secure acceptance all bore strong similarities to conceptualisations of attachment insecurity (Allen & Land, 1999). In support of this observation, higher levels of insecure anxious attachment have been identified in adults with an ED compared to controls (Troisi *et al*., 2005) and adolescents with AN show poorer quality peer attachments than controls do (Cunha et al., 2009). It was considered that attachment might provide a useful framework for understanding the adolescents' friendship experiences.

3.3 Strategies used to facilitate acceptance

The young people described a range of strategies that could be employed to increase interpersonal acceptance and make friendships 'work'. They also suggested the relative merits and detriments of using these strategies. There is some overlap amongst the categories because some of the behaviours they described could be considered to encompass two or more strategies simultaneously.

3.3.1 Being a good friend

The first strategy that emerged entailed always trying to be the best friend possible. This involved putting other people first, doing nice things for friends, deferring to friends views, helping friends through their problems and avoiding being nasty or unkind. The participants described feeling guilty and worrying they had let people down when they encountered barriers to being a good friend or acted in a way that was inconsistent with this goal.

> ***Melanie:*** *I would always you know try to remember their birthdays. Get them all a nice present, em yeah just always be friendly and chatty (...). always be there for them and like it's..... I should always reply to texts and I'm bad if I don't, that sort of thing*

3.3.2 Protecting image

Young people described engaging in efforts to present themselves in a way that would be acceptable to their peers. This involved appearing to like the same things as their friends and avoiding disclosing anything negative about themself. They noted that the traits they would wish to present or hide might be different depending on the friends that they were with. The adolescents described trying to avoid situations where they might be judged or do something wrong. There was a belief that it was important to appear happy and carefree and that being overly sensitive or having 'problems' was undesirable and should be hidden.

> ***Nicole:*** *Em well, I suppose, I mean we're quite different me and Caitlin, like, you know, she'll like a different style of music and, well, not so much the same sense of humour, well, yeah, like... sometimes I feel as if I've got to pretend so I can maintain a close friendship with her*

This strategy was reported to be exhausting and effortful to maintain. It also left the young person feeling that they were not being true to themself or their friends but fearful of what the consequences might be if they did express their wishes and opinions. There seemed to be an underlying rule that thoughts and emotions should be shared but only if they would not damage the individual's reputation. The adolescents also noted that the strategy of protecting one's image could cause them to appear uptight, prevent them from doing things or lead to them withdrawing from interactions when they were unsure how they could act to fit in. The researcher considered this strategy to be broadly analogous to the strategy labelled '*presenting oneself in a positive light*' in a similar study conducted with adolescents in Sweden (Gustafsson et al., 2011). In the Swedish study the strategy was similarly described as having disadvantages but social benefits were also noted such as feeling in control or avoiding difficult questions from others.

3.3.2.1 Avoiding help-seeking

An additional outcome of efforts to present a desirable image was that sharing difficulties was incompatible with this goal. The young people reported finding it difficult to share their problems with others or ask for help. This became particularly apparent in the context of the developing ED. However, not sharing their difficulties was viewed as at odds with

their goal to be a good friend. It was considered a negative to hide things from friends and avoiding sharing problems could therefore cause feelings of guilt.

> ***Nicole:*** *I probably shut away from quite a lot of friends, I mean because I would never tell them anything, like, about what was going on with me, like I wouldn't tell (...) Yeah I just.... never really spoke, like I would let them do all the talking but I would never really speak about myself*

3.3.3 Avoiding conflict

The young people viewed conflict as threatening and engaged in efforts to avoid coming into conflict with any of their friends. They worried that engaging in conflict would offend their friends and could lead to rejection. The behaviours that emerged from the analysis included avoiding expressing opinions that differed from friends, staying out of arguments or debates, deferring to friends views, not holding a grudge and avoiding saying anything that might offend friends.

> ***Ashley:*** *I would censor what I say and I would think very hard about what I was going to say before I said it to make sure that it wouldn't offend anyone (...) I just wanted to keep things the way they were and not cause any drastic changes by a view I said that everyone disagreed with or if I said an opinion about something, about someone, that they got very offended by. So it was very very controlled.*

It was clear that this strategy often meant that the adolescents were unable to stand up for themselves or would go along with things they did not really agree with. One participant described an incident where her group of friends had failed to turn up to meet her and she felt unable to express how this made her feel.

> ***Tasha:*** *So I was just kind of saying that I was a little bit, em..[3 secs].. I kind of played it down though, I didn't say actually how upset I had been, I just said that I was a little bit.. miffed.*

3.3.4 Accepting less

The adolescents' narratives contained examples of accepting less from their friendships than was ideal. This could take the form of tolerating and making light of behaviour they disagreed with or that was hurtful, remaining friends with people they did not particularly like or going along with the things that their friends wanted to do.

> ***Tasha:*** *I'm kind of friends with them just because I know I've got like another year of school and I don't want to be completely alone (Mmhmm) Em ..[3 secs]..so even when I do.. get like picked on or whatever in the group..[2 secs].. it's just better to tolerate it than.. than make a fuss and then have no friends for next year.*

There was an acknowledgement that using this strategy was not ideal but a sense of resignation to the fact that it was necessary. Participants described not seeing any viable alternatives. Young people tended to describe themselves as being petty or over-reacting if they let this bother them too much. This strategy bore similarities to the strategy labelled by Gustafsson et al (2011) as '*adapting to situations'.*

3.3.4.1Relationships lacking depth

A common correlate of accepting less was that individuals described having friendships lacking depth. This appeared to arise from the belief that it was better to have friends of some description than none at all. It was also perceived that the adolescents' lacked the confidence or esteem to believe they could expect more than this. When young people spoke about friends that fell into this category they often spoke about them as an undifferentiated group "the rest of my school friends" indicating their lack of individual connection to them. This was viewed as a temporary strategy and the adolescents recognised that these friendships would not persist into the future.

> ***Ashley:*** *Most of the friendships I think I've made have been like out of convenience out of a need for someone to be there and just to have that friend.*
>
> ***Chrissie:*** *I had this thing about like "oh it's good to have loads of friends even if sometimes they talk about you behind your back or whatever they're still your friends".*

Despite these relationships not being close this strategy did have a number of benefits. It allowed young people to view themselves, and others to view them, as somebody who had friends and increased their opportunities to socialise.

3.3.5 Relying on specific friends

Many of the participants described having one friend, a 'best friend', whom they felt they could rely on and concentrated their efforts on maintaining this friendship. There was a

sense that as long as this relationship was preserved they could cope with their other friendships lacking in quality. This friend often made up for the participant's perceived shortcomings by being more confident, being able to stand up for them or functioning as a link to a wider peer group.

> ***Tasha:*** *Pamela is em a friend I've had since I was three. And she's.. been in my class.. ever since then [laughs] So... she's kind of.. the person that's kept me tied to the friendship group I have at school, em, and I think that..[3 secs].. if she was ever doing anything I know that I would be invited.. and.. so yeah that keeps me in the loop kind of.*

The downside to this strategy was observed to be that it made them very vulnerable if they fell out with this friend or the friend was absent in a situation that they were finding difficult. The adolescents also seemed to find it necessary to turn a blind eye and let their best friends away with undesirable behaviour *because* they were their best friend. This became apparent through inconsistencies in their accounts where best friends were initially presented as virtually flawless then later narratives revealed times where they had felt let down or treated badly by them.

> ***Iris:*** *But I do have to tell her things... after meetings [with psychologist] she'll be like "what happened?" and I'll just be like "yeah I've been talking about this". But she gets angry if I, like, don't tell her, so I do need to tell her stuff.*

It seemed that it was either too risky to chance confronting the behaviour or too difficult to acknowledge that their best friend's behaviour was unacceptable. The young people consistently stated "I don't mind" when they were asked more about these episodes in the interviews. This was interpreted as consistent with using denial to defend against difficult feelings (Vaillant, 1994).

3.3.6 Understanding strategies through consultation with the literature

The strategies described by the young people were better understood through consulting the literature on social goals (Crick & Dodge, 1994; Dykman, 1998) and self-presentational behaviour (e.g. Higgins, 1998). Self-presentation has been defined as 'the processes by which individuals attempt to monitor and control the impressions others form of them' (Mack *et al.,* 2007). Social goals are the underlying desired outcomes that drive self-presentation and other social behaviours and are believed to originate from earlier social

experiences and latent social needs (Dykman, 1998). Social goals are suggested to operate along two major dimensions, agency and communality (Ojanen *et al*., 2005). Agency describes the continuum from authority and self confidence to submission and compliance. Communality comprises the continuum from achieving closeness to others to hiding one's thoughts and emotions from others (Ojanen *et al*., 2005). In terms of the behaviours described by the young people in the current study there was a clear orientation towards submissive and emotionally constrained goals. The communality dimension pointed to an inner conflict that the adolescents appeared to be describing as a result of wanting to be close to friends on the one hand but striving to hide their inner self from them on the other.

Two specific interpersonal styles have been proposed to encompass a collection of related social behaviours: 'Silencing the self' (Jack & Dill, 1992) and 'perfectionistic self presentation' (PSP; Hewitt *et al.,* 2003). Silencing the self involves suppressing ones feelings, putting the needs of others before the self and maintaining compliance with others. PSP involves concealing shortcomings and demonstrating ones supposed perfection. The adolescents' behaviours in the current study were elaborated with reference to these interpersonal styles. It was interpreted that they young people were attempting to function as the 'perfect friend' through being thoughtful, compliant and never putting other people out. This would make them easy to g*et al*ong with and less likely to be rejected thereby facilitating their drive for acceptance.

The final strategy of relying on specific friends was considered as a safety behaviour that allowed the adolescents to avoid expressing their true self to all but those who they were most certain would not reject them. An over-reliance on existing relationships has previously been reported as a strategy utilised by individuals with social anxiety (Alden & Taylor, 2004; Halmi *et al.,* 1991),

4. Discussion

The friendship experiences and behaviours of adolescents with an ED were explored through qualitative analysis and consultation with relevant literature. Attachment theory (Bowlby, 1979; 2008) was considered to provide a common framework through which the

range of theories and concepts that were identified as relevant could be understood. Adolescence is a critical time for healthy separation from parents and formation of close attachments to friends (Masten, 2005). Attachment theory describes how internal representations of the self and others can influence the development and maintenance of difficulties during this period. Early insecure attachment patterns and/or hostile peer environments might preclude opportunities for nurturance, validation of worth and a sense of connectedness in friendships. This then triggers emotional distress and efforts to secure attachments. This process has been proposed to play a role in the development of perfectionism (Wei *et al*., 2006), social anxiety (McClintock & Evans 2001) and low self-esteem (Laible *et al*., 2004) and to confer a tendency to form social goals oriented towards appeasing others (Dykman, 1998). These traits underlie self presentational social behaviours and submissiveness in relationships, behaviours that were apparent throughout the adolescent's friendship narratives (Alden & Taylor, 2004; Flett *et al.,* 1996; Geller *et al*., 2000; Halmi *et al.,* 1991).

The behaviours that the adolescents described in their friendships were consistent with the concepts of PSP (Hewitt *et al.,* 2003) and silencing the self (Jack & Dill, 1992). PSP has been differentiated from other forms of interpersonal perfectionism by explicitly describing the need to appear perfect to others even when one may not personally believe this to be the case. This dimension of perfectionism has not appeared in other theorists conceptualisations of perfectionism. Given the prevalence of self-presentational behaviours apparent in the adolescents' social relationships, the current study would suggest that this is a highly relevant dimension to attend to. Silencing the self and PSP have previously been associated with EDs and with related presentations of depression and low self-esteem (Castro *et al*., 2004; Cockell *et al*. 2002; McGee *et al*. 2005; Geller *et al*., 2000; Zaitsoff *et al*., 2002), however, the current study adds to this by providing insights into how the traits might be expressed behaviourally.

The strategies that the adolescents described in their relationships are likely to play a functional role in some situations. It is also likely, however, that some individuals could become overly reliant on the strategies to the neglect of quality relationships. Girls with EDs have been found to place greater emphasis on securing relationships than on the relationships being equal or being able to assert their own needs within them (Thurfjell *et*

al., 2006). It may be that it is not the strategies used that are problematic per se but rather the extent to which the strategies are used. The explanatory model presented in the results section (figure 2.1) indicates the factors that emerged as relevant to the young girls' use of these strategies. It is hypothesised that the more of these risk factors that are present in relationships the more likely individuals are to rely on protective social behaviours. The analysis and integration with the literature also suggested that individual differences in attachment and personality would play a role. This could be understood within a diathesis-stress model and warrants further investigation.

In terms of the likely impact of the strategies on relationships, it has been suggested that expressing differences can assist individuals to affirm their connection to others (Grotevant & Cooper, 1986), that confiding and sharing strengthens relationships (Alden & Bieling, 1998) and that confronting problems in relationships assists working through the problem and moving on (Azmitia *et al.,* 2005). It follows that the efforts to mask differences, conceal feelings and avoid conflicts described by the adolescents who participated in this study might unintentionally lead to further disconnection. In support of this, recent research has confirmed that individuals who are preoccupied with self-presentation goals are paradoxically less responsiveness to others and therefore perceived more negatively (Canevello & Crocker, 2010). Support is also growing for the perfectionism social disconnection model (PSDM, Hewitt *et al*., 2006) which posits that efforts to appear perfect lead individuals to behave in ways that inadvertently furthers both their objective and subjective disconnection from others (Rice *et al.* 2006; Sherry *et al.* 2008). In the current study the ongoing difficulties that the adolescents described were consistent with this model. One participant, for instance, described how she felt as though her friends had always "walked all over" her. This could be interpreted as resulting from her submissive interpersonal style. By refraining from challenging her friends this might reinforce their behaviour, leaving her feeling dissatisfied with her relationships.

4.1 Clinical implications

Given the potential impact of controlled social behaviours, both on the friendships themselves and on adolescent's self concept, this is an area that clinicians should be mindful of addressing. Gustafsson *et al*. (2011) suggest that since the various strategies

may be more or less functional depending on the specifics of the situation, interventions might focus on teaching patients to critically evaluate their use of the strategies dependent on the situation. This is likely to be a relevant and appropriate approach, however, it should be borne in mind that ED populations are known to demonstrate cognitive rigidity (Tchanturia *et al*., 2001). This provides a potential explanation for their failure to switch between different strategies. Indeed one participant commented that she was aware she always behaved the same way when she met new people (avoiding talking to them) even though she felt that this strategy was ineffective. Cognitive remediation therapy (CRT, Tchanturia *et al*., 2007) has been suggested as one way of targeting the cognitive styles associated with EDs and might be considered a useful adjunct to work on using social strategies more flexibly. It could also be beneficial to directly target perfectionism given its potential to create interpersonal difficulties. Although research into the effectiveness of interventions for perfectionism is sparse, the existing evidence is positive. An 8 week group, incorporating a focus on interpersonal interactions affected by perfectionism, showed significant reductions in perfectionism and improvements in distress for a group of university students (Kutlesa & Arthur, 2008).

Studies show that perfectionism, social anxiety and low self-esteem precede ED development (Azmitia *et al.,* 2005; Davila & Beck, 2002; Shahar *et al.,* 2004). This suggests that these traits may serve as vulnerability factors for EDs under certain conditions but may trigger different problems under other conditions (Bastiani *et al.,* 1995; McGee *et al*., 2005). Therefore, although the findings of this study would be most relevant to similar populations of adolescents with an ED, the observations from the current analysis might also be applicable to other populations presenting with heightened levels of these traits.

4.2 Limitations

The main limitation of the research is that the interviews were originally intended to explore the impact that developing an ED has on the experience of friendship and not to investigate how adolescents attempt to achieve acceptance in their relationships. The data presented in this paper therefore emerged largely from the participants spontaneous narratives and fewer follow up questions were directed at these statements. Although this can be considered an advantage in that the data did not emerge from the researcher's

preconceived ideas, it also meant that the analysis remained more descriptive in nature rather than achieving theory development. As a consequence of this, and in part due to the small sample size, theoretical saturation or sufficiency were felt to be less likely to have been reached.

All of the participants were in the upper years of secondary school (S4, 5, 6). This is potentially a reflection of the average age of ED development (Crisp *et al.,* 1980). However, by virtue of the fact that friendships change throughout adolescence, the findings may not resonate with younger adolescents. Some of the findings appeared specific to this particular life stage. For instance it emerged that participants felt able to tolerate ongoing difficulties in their friendships in the knowledge that they were coming to the end of their school career. This method of managing difficulties would not be available to younger adolescents. It would be necessary to seek the voices of younger adolescents in order to elaborate this and similar categories more fully.

Finally it is acknowledged that in common with all qualitative research there is the potential that another researcher would have found different meanings in the adolescents' accounts, pursued different lines of enquiry and developed their framework in a different way. The framework that is presented represents the joint meaning created by the researcher and the young people and requires further elaboration through additional research to substantiate the claims that are made.

4.3 Summary and conclusion

A framework was presented summarising the process by which adolescents appraise their acceptance in friendships and adopt strategies to further their acceptance. It was observed that adolescents with an ED express a feeling of being different or inferior to their friends and that this lead to them feeling insecure in their relationships. This was viewed as originating from both features of their friendships and individual factors. The strategies that they described using in their relationships meant putting other people first and taking care to present themself in a way that would be acceptable to others. It was discussed that these efforts might inadvertently lead to an increase in negative interactions and disconnection from friends.

References

Alden, L. E., & Bieling, P. (1998). Interpersonal consequences of the pursuit of safety. *Behaviour Research and Therapy, 36*(1), 53-64.

Alden, L. E., & Taylor, C. T. (2004). Interpersonal processes in social phobia. *Clinical Psychology Review, 24*(7), 857-882.

Allen, J. P., & Land, D. (1999). Attachment in adolescence. *Handbook of Attachment: Theory, Research, and Clinical Applications,* , 319-335.

Allen, J. P., & Manning, N. (2007). From safety to affect regulation: Attachment from the vantage point of adolescence. *New Directions for Child and Adolescent Development, 2007*(117), 23-39.

Andersen, S. M., & Chen, S. (2002). The relational self: An interpersonal social-cognitive theory. *Psychological Review, 109*(4), 619.

Azmitia, M., Ittel, A., & Radmacher, K. (2005). Narratives of friendship and self in adolescence. *New Directions for Child and Adolescent Development, 2005*(107), 23-39.

Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin, 112*(3), 461.

Bastiani, A. M., Rao, R., Weltzin, T., & Kaye, W. H. (1995). Perfectionism in anorexia nervosa. *International Journal of Eating Disorders, 17*(2), 147-152.

Boone, L. (2013). Are attachment styles differentially related to interpersonal perfectionism and binge eating symptoms? *Personality and Individual Differences,* 54, 931-935.

Bowlby, J. (2008). *A secure base: Parent-child attachment and healthy human development. USA:* Basic Books.

Brown, B. B. (2004). Adolescents' relationships with peers. *Handbook of Adolescent Psychology, 2*, 363-394.

Bruch, C. B., & Curry, J. A. (1978). Personal learnings: A current synthesis on the culturally different gifted. *Gifted Child Quarterly, 22*(3), 313-321.

Bruch, H. (1973). *Eating disorders*. New York: Basic Books.

Bukowski, W. M., & Sippola, L. K. (2005). Friendship and development: Putting the most human relationship in its place. *New Directions for Child and Adolescent Development, 2005*(109), 91-98.

Canevello, A., & Crocker, J. (2010). Creating good relationships: Responsiveness, relationship quality, and interpersonal goals. *Journal of Personality and Social Psychology, 99*(1), 78.

Castro, J., Gila, A., Gual, P., Lahortiga, F., Saura, B., & Toro, J. (2004). Perfectionism dimensions in children and adolescents with anorexia nervosa. *Journal of Adolescent Health, 35*(5), 392-398.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis* London: Sage.

Cockell, S. J., Hewitt, P. L., Seal, B., Sherry, S., Goldner, E. M., Flett, G. L., & Remick, R. A. (2002). Trait and self-presentational dimensions of perfectionism among women with anorexia nervosa. *Cognitive Therapy and Research, 26*(6), 745-758.

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*(1), 74.

Crisp, A., Hsu, L., Harding, B., & Hartshorn, J. (1980). Clinical features of anorexia nervosa: A study of a consecutive series of 102 female patients. *Journal of Psychosomatic Research, 24*(3), 179-191.

Cunha, A. I., Relvas, A. P., & Soares, I. (2009). Anorexia nervosa and family relationships: Perceived family functioning, coping strategies, beliefs, and attachment to parents and peers. *International Journal of Clinical and Health Psychology, 9*(2), 229-240.

Davila, J., & Beck, J. G. (2002). Is social anxiety associated with impairment in close relationships? A preliminary investigation. *Behavior Therapy, 33*(3), 427-446.

Deater-Deckard, K. (2001). Annotation: Recent research examining the role of peer relationships in the development of psychopathology. *Journal of Child Psychology and Psychiatry, 42*(05), 565-579.

Dykman, B. M. (1998). Integrating cognitive and motivational factors in depression: Initial tests of a goal-orientation approach. *Journal of Personality and Social Psychology, 74*(1), 139.

Fairburn, C. G., Cooper, Z., Doll, H. A., & Welch, S. L. (1999). Risk factors for anorexia nervosa: Three integrated case-control comparisons. *Archives of General Psychiatry, 56*(5), 468.

Fairburn, C. G., Welch, S. L., Doll, H. A., Davies, B. A., & O'Connor, M. E. (1997). Risk factors for bulimia nervosa: A community-based case-control study. *Archives of General Psychiatry, 54*(6), 509.

Flett, G. L., Hewitt, P. L., & De Rosa, T. (1996). Dimensions of perfectionism, psychosocial adjustment, and social skills. *Personality and Individual Differences, 20*(2), 143-150.

Flett, G. L., Hewitt, P. L., Shapiro, B., & Rayman, J. (2001). Perfectionism, beliefs, and adjustment in dating relationships. *Current Psychology, 20*(4), 289-311.

Galloway, L.L. (2013) A Systematic Review of the Relationship Between Perfectionism and Interpersonal Functioning in Adolescent Peer Relationships. This thesis.

Geller, J., Cockell, S. J., Hewitt, P. L., Goldner, E. M., & Flett, G. L. (2000). Inhibited expression of negative emotions and interpersonal orientation in anorexia nervosa. *International Journal of Eating Disorders, 28*(1), 8-19.

Godart, N., Flament, M., Lecrubier, Y., & Jeammet, P. (2000). Anxiety disorders in anorexia nervosa and bulimia nervosa: Co-morbidity and chronology of appearance. *European Psychiatry, 15*(1), 38-45.

Grisset, N. I., & Norvell, N. K. (1992). Perceived social support, social skills, and quality of relationships in bulimic women. *Journal of Consulting and Clinical Psychology, 60*(2), 293.

Grotevant, H. D., & Cooper, C. R. (1986). Individuation in family relationships. *Human Development, 29*(2), 82-100.

Gustafsson, S. A., Edlund, B., Davén, J., Kjellin, L., & Norring, C. (2011). How to deal with sociocultural pressures in daily life: Reflections of adolescent girls suffering from eating disorders. *Journal of Multidisciplinary Healthcare, 4*, 103.

Gustafsson, S., Edlund, B., Davén, J., Kjellin, L., & Norring, C. (2010). Perceived expectations in daily life among adolescent girls suffering from an eating disorder: A phenomenographic study. *Eating Disorders, 18*(1), 25-42.

Gustafsson, S., Edlund, B., Kjellin, L., & Norring, C. (2008). Personal standards, self‐evaluation and perceived benefits of thinness in girls and young women with disturbed eating. *European Eating Disorders Review, 16*(6), 463-471.

Halliwell, E., & Harvey, M. (2006). Examination of a sociocultural model of disordered eating among male and female adolescents. *British Journal of Health Psychology, 11*(2), 235-248.

Halmi, K. A., Eckert, E., Marchi, P., Sampugnaro, V., Apple, R., & Cohen, J. (1991). Comorbidity of psychiatric diagnoses in anorexia nervosa. *Archives of General Psychiatry, 48*(8), 712.

Harter, S. (2006). Developmental and individual difference perspectives on self-esteem. In Mroczek, D.K. & Little, T.D. (Eds) Handbook of Personality Development (pp. 311-334). Mahwah, NJ, US: Lawrence Erlbaum Associates.

Hartmann, A., Zeeck, A., & Barrett, M. S. (2010). Interpersonal problems in eating disorders. *International Journal of Eating Disorders, 43*(7), 619-627.

Hewitt, P. L., Flett, G. L., Sherry, S. B., & Caelian, C. (2006). Trait perfectionism dimensions and suicidal behavior. In T.E. Ellis (Ed.) Cognition and Suicide: Theory, research, and therapy (pp. 215-235) Washington, DC, US: American Psychological Association.

Hewitt, P. L., Flett, G. L., Sherry, S. B., Habke, M., Parkin, M., Lam, R. W., . . . Stein, M. B. (2003). The interpersonal expression of perfection: Perfectionistic self-presentation and psychological distress. *Journal of Personality and Social Psychology, 84*(6), 1303.

Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology, 30*, 1-46.

Higgins, E. T., Bond, R. N., Klein, R., & Strauman, T. (1986). Self-discrepancies and emotional vulnerability: How magnitude, accessibility, and type of discrepancy influence affect. *Journal of Personality and Social Psychology, 51*(1), 5.

Hill, R. W., Zrull, M. C., & Turlington, S. (1997). Perfectionism and interpersonal problems. *Journal of Personality Assessment, 69*(1), 81-103.

Holt, M. K., & Espelage, D. L. (2002). Problem‐Solving skills and relationship attributes among women with eating disorders. *Journal of Counseling & Development, 80*(3), 346-354.

Jack, D. C., & Dill, D. (1992). The silencing the self scale: Schemas of intimacy associated with depression in women. *Psychology of Women Quarterly, 16*(1), 97-106.

Jarvinen, D. W., & Nicholls, J. G. (1996). Adolescents' social goals, beliefs about the causes of social success, and satisfaction in peer relations. *Developmental Psychology, 32*(3), 435.

Kaye, W. H., Bulik, C. M., Thornton, L., Barbarich, N., & Masters, K. (2004). Comorbidity of anxiety disorders with anorexia and bulimia nervosa. *American Journal of Psychiatry, 161*(12), 2215-2221.

Kirsh, G., McVey, G., Tweed, S., & Katzman, D. K. (2007). Psychosocial profiles of young adolescent females seeking treatment for an eating disorder. *Journal of Adolescent Health, 40*(4), 351-356.

Klima, T., & Repetti, R. L. (2008). Children's peer relations and their psychological adjustment: Differences between close friendships and the larger peer group. *Merrill-Palmer Quarterly, 54*(2), 151-178.

Kutlesa, N., & Arthur, N. (2008). Overcoming negative aspects of perfectionism through group treatment. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 26*(3), 134-150.

Laible, D. J., Carlo, G., & Raffaelli, M. (2000). The differential relations of parent and peer attachment to adolescent adjustment. *Journal of Youth and Adolescence, 29*(1), 45-59.

Laible, D. J., Carlo, G., & Roesch, S. C. (2004). Pathways to self-esteem in late adolescence: The role of parent and peer attachment, empathy, and social behaviours. *Journal of Adolescence, 27*(6), 703-716.

Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. *Advances in Experimental Social Psychology, 32*, 1-62.

Leary, M. R., Cottrell, C. A., & Phillips, M. (2001). Deconfounding the effects of dominance and social acceptance on self-esteem. *Journal of Personality and Social Psychology, 81*(5), 898.

Mack, D. E., Strong, H. A., Kowalski, K. C., & Crocker, P. R. (2007). Self-presentational motives in eating disordered behavior: A known groups difference approach. *Eating Behaviors, 8*(1), 98-105.

Masten, A. S. (2005). Peer relationships and psychopathology in developmental perspective: Reflections on progress and promise. *Journal of Clinical Child and Adolescent Psychology, 34*(1), 87-92.

McClintock, J. M., & Evans, I. M. (2001). The underlying psychopathology of eating disorders and social phobia: A structural equation analysis. *Eating Behaviors, 2*(3), 247-261.

McGee, B. J., Hewitt, P. L., Sherry, S. B., Parkin, M., & Flett, G. L. (2005). Perfectionistic self-presentation, body image, and eating disorder symptoms. *Body Image, 2*(1), 29-40.

McVey, G. L., Pepler, D., Davis, R., Flett, G. L., & Abdolell, M. (2002). Risk and protective factors associated with disordered eating during early adolescence. *The Journal of Early Adolescence, 22*(1), 75-95.

Mufson, L., Dorta, K. P., Moreau, D., & Weissman, M. M. (2011). *Interpersonal psychotherapy for depressed adolescents* (2nd Ed) New York: Guilford Press.

Nevonen, L., & Broberg, A. G. (2000). The emergence of eating disorders: An exploratory study. *European Eating Disorders Review, 8*(4), 279-292.

Obeid, N., Buchholz, A., Boerner, K. E., Henderson, K. A., & Norris, M. (2013). Self-esteem and social anxiety in an adolescent female eating disorder population: Age and diagnostic effects. *Eating Disorders, 21*(2), 140-153.

Ojanen, T., Grönroos, M., & Salmivalli, C. (2005). An interpersonal circumplex model of children's social goals: Links with peer-reported behavior and sociometric status. *Developmental Psychology, 41*(5), 699.

Pike, K. M. (1995). Bulimic symptomatology in high school girls toward a model of cumulative risk. *Psychology of Women Quarterly, 19*(3), 373-396.

Rice, K. G., Leever, B. A., Christopher, J., & Porter, J. D. (2006). Perfectionism, stress, and social (dis) connection: A short-term study of hopelessness, depression, and academic adjustment among honors students. *Journal of Counseling Psychology, 53*(4), 524.

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (1998). Peer interactions, relationships, and groups. *Handbook of Child Psychology,*

Rudolph, K. D., Caldwell, M. S., & Conley, C. S. (2005). Need for approval and children's Well - Being. *Child Development, 76*(2), 309-323.

Salmivalli, C., Ojanen, T., Haanpää, J., & Peets, K. (2005). " I'm OK but you're not" and other peer-relational schemas: Explaining individual differences in children's social goals. *Developmental Psychology, 41*(2), 363.

Schutz, H. K., & Paxton, S. J. (2007). Friendship quality, body dissatisfaction, dieting and disordered eating in adolescent girls. *British Journal of Clinical Psychology, 46*(1), 67-83.

Shahar, G., Blatt, S. J., Zuroff, D. C., Krupnick, J. L., & Sotsky, S. M. (2004). Perfectionism impedes social relations and response to brief treatment for depression. *Journal of Social and Clinical Psychology, 23*(2), 140-154.

Sherry, S. B., Law, A., Hewitt, P. L., Flett, G. L., & Besser, A. (2008). Social support as a mediator of the relationship between perfectionism and depression: A preliminary test of the social disconnection model. *Personality and Individual Differences, 45*(5), 339-344.

Slade, P. D., & Dewey, M. E. (1986). Development and preliminary validation of SCANS: A screening instrument for identifying individuals at risk of developing anorexia and bulimia nervosa. *International Journal of Eating Disorders, 5*(3), 517-538.

Steinhausen, H., & Vollrath, M. (1993). The self - image of adolescent patients with eating disorders. *International Journal of Eating Disorders, 13*(2), 221-227.

Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin, 128*(5), 825.

Tchanturia, K., Davies, H., & Campbell, I. C. (2007). Cognitive remediation therapy for patients with anorexia nervosa: Preliminary findings. *Annals of General Psychiatry, 6*(1), 14.

Tchanturia, K., Serpell, L., Troop, N., & Treasure, J. (2001). Perceptual illusions in eating disorders: Rigid and fluctuating styles. *Journal of Behavior Therapy and Experimental Psychiatry, 32*(3), 107-115.

Thurfjell, B., Eliasson, M., Swenne, I., von Knorring, A., & Engström, I. (2006). Perceptions of gender ideals predict outcome of eating disorders in adolescent girls. *Eating Disorders, 14*(4), 287-304.

Troisi, A., Massaroni, P., & Cuzzolaro, M. (2005). Early separation anxiety and adult attachment style in women with eating disorders. *British Journal of Clinical Psychology, 44*(1), 89-97.

Troop, N. A., & Bifulco, A. (2002). Childhood social arena and cognitive sets in eating disorders. *British Journal of Clinical Psychology, 41*(2), 205-211.

Vaillant, G. E. (1994). Ego mechanisms of defense and personality psychopathology. *Journal of Abnormal Psychology, 103*(1), 44.

Wei, M., Heppner, P. P., Russell, D. W., & Young, S. K. (2006). Maladaptive perfectionism and ineffective coping as mediators between attachment and future depression: A prospective analysis. *Journal of Counseling Psychology, 53*(1), 67.

Welch, S. L., Doll, H., & Fairburn, C. (1997). Life events and the onset of bulimia nervosa: A controlled study. *Psychological Medicine, 27*(03), 515-522.

Wentz, E., Gillberg, C., Gillberg, I. C., & Råstam, M. (2001). Ten - year Follow - up of Adolescent - onset anorexia nervosa: Psychiatric disorders and overall functioning scales. *Journal of Child Psychology and Psychiatry, 42*(5), 613-622.

Zaitsoff, S. L., Fehon, D. C., & Grilo, C. M. (2009). Social competence and social-emotional isolation and eating disorder psychopathology in female and male adolescent psychiatric inpatients. *International Journal of Clinical and Health Psychology, 9*(2), 219-228.

Zaitsoff, S. L., Geller, J., & Srikameswaran, S. (2002). Silencing the self and suppressed anger: Relationship to eating disorder symptoms in adolescent females. *European Eating Disorders Review, 10*(1), 51-60.

Chapter 3: Main Journal Article

Prepared in accordance with the author guidelines for Qualitative Health Research (relevant exerts from the guidelines can be found in appendix 2)

Formatting and referencing is therefore in accordance with APA, 6th edition style

All names and potential identifiers have been changed

3. Experiencing Distance in Relationships: A Grounded Theory Exploration of Friendship in Adolescent Eating Disorders

Abstract

Very little is known about how adolescents' social relationships are affected by the development of an eating disorder (ED). The purpose of this grounded theory study was therefore to explore young peoples' experiences of friendship during this time. Eight females aged between 15 and 17 took part in an interview about their social relationships. Analysis revealed that a process of interpersonal distancing occurred following the development of an ED. The participants described a reduction in contact with their friends and increased feelings of emotional distance in their relationships. The distancing process was exacerbated by an initial failure to acknowledge the detrimental interpersonal impact of the ED, a reliance on avoidant forms of coping and an evasion of disclosure and discussion of the ED within friendships. The findings suggest that ED development has a significant impact on adolescent friendships and that young people do not feel equipped to address these difficulties.

Keywords: adolescents / youth; eating disorders; grounded theory; mental health and illness, children / adolescents; relationships; social development

1. Introduction

Peer relationships are considered to play an important role in healthy development during adolescence (Bigelow & LaGaipa, 1980; Vartanian, 2000). The peer group provides the adolescent with the basis for self-esteem, confidence, safety and identity (Ausubel, 2002; Schutz and Paxton, 2007). Contrastingly, problems in peer relationships during adolescence have been associated with the development of psychopathology (Deater-Deckard, 2001). Difficulties in navigating changing peer relationships, and subsequent issues with conflict, acceptance and intimacy, can impact on self worth and have been implicated in the emergence and maintenance of Eating Disorders (ED) (Smolak & Levine, 1996; Fairburn *et al.,* 2003). Adolescence is the life stage in which the risk of developing an ED is greatest (White, 2000).

Despite the centrality of peer relationships to the adolescent experience, there is an absence of literature exploring how the development of an eating disorder might affect these relationships. Instead, family and sociocultural variables have tended to dominate the adolescent research field (Hutchinson & Rapee, 2007). This is partly due to the success of family interventions in the treatment of adolescent EDs which has naturally focused research interest on the family unit and interpersonal functioning in this context (e.g. Dallos & Denford, 2008; Dimitropoulos *et al.,* 2009; Moulds *et al.,* 2000; Whitney & Eisler, 2005).

From a developmental perspective, peers could play many roles in the onset, maintenance, recovery and prevention of EDs. Given that our understanding of adolescent EDs remains in its infancy (Woodside, 2005) research should not neglect potential avenues for furthering knowledge. It is suggested that peer variables are, at the least, as relevant as sociocultural and family variables. Peer pressure to be thin is more strongly associated with disordered eating attitudes and behaviours than perceived pressures from the media and family are (Huon *et al,.* 1999; Stice, 1998) and in a recent study of attachment the primary variable that distinguished an anorexic group from a control group was a heightened feeling of detachment from peers, over and above any familial measure (Cunha *et al.,* 2009).

An exception to the neglect to study friendship variables has been the field of risk factor research. Low levels of peer acceptance (Gerner & Wilson, 2005), inadequate social support (Stice & Whitenton, 2002), teasing (Lieberman *et al.,* 2001; Meyer & Gast, 2008), alienation and conflict (Schutz & Paxton, 2007) have all been associated with increased body and weight concerns in non-clinical samples of adolescents. It has been suggested that interpersonal variables might function as potential risk factors for development of an ED. This is supported by retrospective accounts in which adults highlight interpersonal problems in adolescence as an important factor in triggering their ED (Nevonen & Broberg, 2000; Troop & Bifulco, 2002; Welch *et al.,* 1997). Theorists have suggested that experiencing interpersonal difficulties might encourage young people to engage in weight loss behaviours as a means to gaining acceptance and approval from their peers (Gerner & Wilson, 2005; Gustafsson *et al.,* 2008; Paxton *et al.,* 1999; Stice, 2002). The problems with the risk factor research are twofold: Firstly, the research has been conducted almost exclusively with populations of high school students and its generalisability to clinical populations remains unclear. Secondly, even if the results do generalise, this tells us little about how friendship is actually experienced or about the underlying mechanisms by which an ED might impair relationships.

In adulthood, limited research has reported that individuals with an ED experience problems in their relationships including increased conflict, lower perceived social support (Grissett & Norvell, 1992), high levels of submissive behaviour (Hartmann *et al.,* 2010) and difficulties with social problem solving (Holt & Espelage, 2002). These difficulties are apparent across the range of ED diagnoses. It is hypothesised that in addition to serving as a risk factor for ED development, disturbed social functioning also represents a maintaining factor and that, subsequently, the ED can both exacerbate and lead to the development of further interpersonal problems (Hartmann *et al.,* 2010).

Qualitative research provides a means of gaining insight into the lived experiences of individuals and in recent years has been used to explore the experiences of women living with an ED. Interviews reveal themes of not belonging, not being valued or not being understood in relationships (Budd, 2007; Patching & Lawler, 2009) and viewing the ED as a way of avoiding problems and eliciting care, concern and admiration (Nordbo *et al.,* 2006).

Individuals acknowledge the negative impact of the disorder on their social relationships, describing social withdrawal as a result of preoccupation with the ED (D'Abundo & Chally, 2004) and a resulting deterioration in relationships, isolation and loneliness (Espindola & Blay, 2009). Positively, relationships with a significant other, including supportive friendships, have also been described as important in the move towards recovery from an ED (Budd, 2007; D'Abundo & Chally, 2004; Tozzi *et al.,* 2003). The methods employed in these studies have been of variable quality, ranging from informal verbatim recording of participant responses (Tozzi *et al.,* 2003) to robust qualitative methods such as grounded theory (D'Abundo & Chally, 2004). Nonetheless, the growing body of qualitative research highlights the highly interpersonal nature of the ED experience. Unfortunately, as is often the case in ED research, similar research with adolescents is lacking. The differences between adolescent and adult friendship suggests that extrapolating from adult research is unlikely to be appropriate (Bigelow & La Gaipa, 1980). The current research was conducted with a view to beginning to address this gap.

Existing qualitative research with adolescents has explored how adolescents with anorexia nervosa (AN) feel their relationship with their sibling has been affected by the ED (Honey *et al.,* 2006). Adolescents considered that their relationship with their sibling had been a factor in the development of AN, contributed to the distress and upset they experienced during their illness but also provided them with a source of motivation to overcome the disorder. It is of interest to consider whether adolescents might view their relationships with their friends similarly. A further qualitative study explored issues around the onset of adolescent AN (Koruth *et al.,* 2012). One of the major themes to emerge from the research was how the participants felt that their interpersonal relations had been affected by the emerging ED. They described feeling overwhelmed by the illness and finding interactions with others difficult as a result. However, these feelings related to all of their relationships, i.e. with parents, professionals and peers and the specific impact on their friendships was not explored.

There is little doubt that the experience of an ED will have an effect on adolescents' friendships. At the most basic level, changes in physical appearance and missing school and recreational activities are features that set individuals with an eating disorder apart from their peers. Young people with an ED spend significantly less time socialising with their

peers than healthy controls do (Krug *et al.,* 2013). The personality traits and psychological characteristics associated with the EDs are also likely to contribute to difficulties in relationships. Traits commonly associated with EDs include low self-esteem, feelings of hopelessness, a tendency to seek external approval, perfectionism and hypersensitivity to criticism (Espindola & Blay, 2009). It is clear that each of these has the potential to play out in the interpersonal environment. The relationship that perfectionism, self-esteem and high approval-seeking share with interpersonal problems has been demonstrated (Azmitia *et al.,* 2005; Canevello & Crocker, 2011; Shahar *et al.,* 2004).

Although empirical evidence is sparse, this is not to say that the relevance of peer relationships in adolescent EDs have gone unnoticed. Groups to address friendship difficulties in EDs have been trialled in England (Davies *et al.,* 2004) and Interpersonal Psychotherapy (IPT) has been applied to the treatment of EDs on the basis of successful outcomes with adults (bulimia nervosa) or expert opinion (AN; The matrix, 2011). Reiger et al. (2010) have addressed the application of IPT to adolescent EDs proposing that the emergence of ED symptoms will trigger both direct and indirect sources of social validation from peers but will also trigger or exacerbate interpersonal problems. Davies (2004) suggests that adolescents with an ED find it difficult to sustain their friendships, feel unable to confide in their peers and misinterpret their friend's comments. So far, these claims have been based on clinical observation and generalisation from the adult literature, therefore, it is hoped that the current study will provide useful insights for clinicians working in this area and with these interventions.

Aims of research

The primary aim of the research was to address a significant gap in the literature by exploring how friendships are impacted on by the experience of an ED, from the perspectives of adolescents currently receiving treatment for an ED. As very little is known about this period the research was intended to be explorative in order to determine the issues of salience to the young people. It was anticipated that this would involve examining issues around maintenance of friendships, managing friends' awareness of the ED and satisfaction with current friendships. It was also of interest to understand the specific

interpersonal difficulties that might emerge in the context of the ED that could potentially be addressed by clinicians in treatment.

2. Method

2.1 Design

The study employed a concurrent process of data collection and analysis consistent with a social constructivist version of grounded theory. The approach taken in the current study was informed primarily by the work of Charmaz (2006) with some reference to the techniques described by Corbin & Strauss (2008). Grounded theory was considered an appropriate methodology in light of the minimal research that has been directed at the interpersonal experiences of adolescents experiencing an ED and the lack of consensus on which interpersonal variables might be relevant to focus future research efforts on. Through grounded theory analysis the researcher aimed to uncover the social processes underlying engagement in friendship for adolescents with an ED, in order to generate a substantive theory of friendship experience from the emerging data (Birks & Mills, 2011).

Grounded theory has appeared in many forms since its original conceptualisation (Glaser & Strauss, 1967) and there is great heterogeneity in the techniques that fall under the methodological umbrella of grounded theory (Eaves, 2001). Further, the different forms derive from separate philosophical traditions and it is therefore particularly important for grounded theory researchers to clarify their personal philosophical position. The researcher in this study aligned with the interpretive tradition believing that there are multiple, equally valid realities and that the reality brought to light in the interviews would represent a joint construction of the adolescents' perceptions, the social context and the researcher-participant interaction (Ponterotto, 2005). The researcher was acknowledged as part of the research endeavour and inevitably involved in the interpretation and analysis of the adolescents' narratives (Mills *et al.,* 2006).

2.2 Participants

Potential participants were young people between the ages of 12-18, currently receiving treatment for any ED within Child and Adolescent Mental Health Services (CAMHS). Young people were excluded if they were experiencing any co-morbid disorder that might cause participation to be distressing or that could bias the findings of the research. Adolescents who did not speak English as a first language were also excluded. Each potential participant's keyworker was asked to confirm that participation would be appropriate. Eight young people meeting inclusion criteria agreed to take part. The participants were all female between the ages of 15 and 17 and were currently being seen within tier 3 or 4 CAMHS. Further participant details are provided in table 3.1.

Table 3.1: Participant demographics

Demographic Information	Details N = 8
Sex	All female
Age	15-17 years (mean 16years)
Ethnicity	All white Scottish
Living situation	4 at home with both parents 3 at home with single parent 1 inpatient
Diagnosis	5 Anorexia 2 bulimia 1 EDNOS
Service currently receiving support from	4 Tier III outpatient team 3 Tier IV intensive treatment service 1 In-patient
Inpatient admissions	2 one admission 6 no admissions
School attendance	4 attending school (missed odd days only) 4 out of school (3-12 months since last in school)
Previous CAMHS input	4 no previous input 4 previous input (CFS, anxiety, mixed anxiety/depression/eating, sleep)

2.3 Procedure

Recruitment

Ethical approval for the study was sought and gained from the Scotland A Research Ethics Committee. Following the ethics approval process, the researcher attended team meetings across CAMHS to introduce the research and ask for the support of clinicians in identifying potential participants. Clinicians were asked to pass on an information sheet introducing the research as an investigation into adolescent personality and relationships. Young people fed back to their clinician at their next appointment whether they were interested in taking part in the research. There was a minimum gap of one week between presentation of the information sheet and service users agreeing to taking part in the research. Any young person who indicated they would like to take part were then contacted by the researcher, given a chance to ask any questions, and a suitable date and location were identified for the interview to take place.

Interviews

While most healthcare professionals are skilled at gathering clinical information, the skills of the qualitative research interview must be differentiated and developed (Holloway, 2005). The researcher therefore performed two practice interviews with adult volunteers from the non-clinical population to practice her interviewing technique, followed by one pilot interview with a young person with an ED. Following these interviews the interviewer listened back critically and reflected on methods of improving her technique. The interviews were considered using Whyte's (1982) scale of 'interviewer directiveness' and advice was sought from academic supervisors on how to adapt the interviewing style to yield more detailed dialogues.

An initial semi-structured interview guide was developed based on discussion with supervisors and a broad review of current literature. This formed a loose guide only, to allow participants to discuss topics pertinent to them. Each interview opened with the question "Can you tell me about your experiences of friendship over the last few years?". The interviewer focused on gathering detailed descriptions of events and probing the meaning of these events to the participants. In later interviews participants were explicitly

asked to comment on the processes that had been raised by other young people. The interviews ranged in length from 43 minutes to 70 minutes (mean 59 minutes).

Data management and analysis

All interviews were recorded on a digital voice recorder, transcribed verbatim and any identifying information was removed. All young people and their friends were given pseudonyms. A memo was made of initial impressions, thoughts or other relevant details immediately after each interview. Following transcription, all interviews were uploaded to QSR NVIVO10 software package. The first transcripts were analysed on a line by line basis with all content having a code applied to it, or a variety of codes if more than one potential meaning or process was apparent. This initial coding process is illustrated in the extract provided in box 3.1. Using the codes from the first two interviews, the third and fourth interviews were coded in NVIVO with additional initial codes added where necessary. This process produced around 600 initial codes. Implicit actions and meanings, personal intuitions and inconsistencies were recorded in memos in parallel with coding. Similar codes were tentatively clustered into broad emerging categories by analysing for incidents and were labelled to encapsulate all of the lower level codes contained within them.

The researcher honed her emerging ideas through a process of crystallization (Richardson, 2000) that involved continually shifting between data collection, analysis, reading of relevant literature, reflecting on the data, writing memos and discussing findings with colleagues. Two transcripts were second coded by F.D. to assist with this. The emerging categories were organised into an overall framework and areas requiring further investigation were noted. Initial categories included for example: *feeling different, behaviour in friendships, interpersonal triggers, managing disclosure* and *friends drifting*. These were followed up to clarify their properties, dimensions and how they related to each other. Other categories were omitted such as *family interactions* and *psychological work.*

From the first four interviews it became apparent that adolescents found it easier to provide rich descriptions of their friendships in the period prior to their ED developing. This lead the researcher to probe friendship experiences during the ED more comprehensively in later interviews in order to explore what was preventing the adolescents from connecting

Box 3.1: Extract of initial coding (Jane, participant 2)

Transcript	**Line-by-line coding**
JANE: Well all I could think was.. [1 sec] "I need to be by myself, I just need to have some time.. alone, I don't want to see anybody at all". And there was.. I think it was about a month, I just barely spoke to anybody, just stayed in my room all day. But that, um..I think that had a to do with my eating disorder because it was getting very bad at that point	Needing time alone, not wanting to see others, feeling preoccupied by thoughts, isolating in room Relating isolation to severity of ED, ED worsening
LG: Uh huh and what happened with your friends at that point?	
JANE: They just, they didn't speak to me and I didn't speak to them. [2 secs] But they, they tried to at first but, um, I would be very blunt [1 sec]and they just gave up.. after a while	Losing contact with friends, Friends making effort (initially), Rejecting friends, being blunt , friends giving up
LG: What kind of things would you do?	
JANE: Like, um.. [2 secs] if they tried to call me and get me out or, um, text me I would just say no, simply no, I wouldn't give any explanation or.. reason just no, I don't want to.. which wasn't very nice.	Avoiding friends, saying no, not offering explanation for withdrawal, reflecting on behaviour being unfair to friends
LG: ....and what happened?	
JANE: Then I went crawling back and said "I was wrong, I'm sorry, I miss you all", em, and they were fine. I..I don't know why they put up with me to be honest [2 secs] I can be so annoying and [4 secs] em...I mean.. I can be quite a horrible person to them from time to time, but, yeah they're still there, which I'm very grateful for	"crawling back" to friends, apologising, missing friends, reconciling Questioning friends ongoing commitment, Viewing self (as a friend) negatively, appreciating friends
LG: Mm. What do you mean when you say you can be horrible?	
JANE: Like I can be, go from being [2 secs] really, um,[2 secs] a really good friend to.. not really wanting to see much of them.. from.. in like a second [4 secs] and that must be.. hard for them.	Being an Inconsistent/unpredictable friend. Predicting friends struggling with behaviour.

with these experiences. The literature was also consulted at this stage. This highlighted, for instance, that existing research had explored interpersonal triggers for disordered eating but had not investigated the process of friends drifting away. This encouraged the researcher to focus on following this concept up in subsequent interviews.

The analysis became increasingly analytical employing focused coding to evaluate and refine the early conceptual categories. During this in-depth analysis the researcher made use of the techniques of constant comparison, theoretical sampling, seeking negative cases, questioning the data and actively considering other analytical possibilities. Further consultation with the literature allowed the researcher to flesh out the emerging model more extensively, question whether interpretations were theoretically valid and establish where the emerging theory fitted within existing knowledge. Diagramming was a valuable tool to assist the researcher's theorising about the model.

Determining theoretical sufficiency/saturation

The aim of grounded theory methodology is to arrive at a point where the relationships between categories are explained in a model and this model is able to explain variation in the participants experiences as inclusively as possible. Throughout the process the researcher engaged in continuous reflection on whether she was moving towards achieving saturation by considering: whether the data offered several complete accounts of the major issues and processes (Charmaz, 1990) and whether additional data no longer generated new categories or themes (Corbin & Strauss, 2008). The relatively small sample size in the current study precludes certainty that saturation was achieved for all categories. In this instance, it has been suggested that researchers employ the criteria of 'sufficient sampling' (Corbin and Strauss, 2008). It was considered that this criterion was met on the basis that all of the major categories displayed evidence of depth and variation and that the later interviews confirmed the organisation of these categories.

3. Results

A model is presented (see figure 3.1) representing a substantive grounded theory of the experience of friendship for adolescents with an ED. The main categories and underlying processes that emerged from the grounded theory analysis are presented, alongside an explanation of how these concepts are linked and how they relate to and extend the existing literature. The model focuses on the primary category that emerged from the interviews *'The ED creating distance from friends'.* The processes that were relevant in establishing this process are elucidated in the category '*The interpersonal route into the ED*' and the processes by which young people begin to move on are detailed in the category *'Reconnecting with friendships'.* The model evolved from the researcher's interpretations of participants' narratives and should therefore be considered preliminary, requiring validation through further research.

3.1 Summary of Grounded Theory

Prior to developing an ED, young people have a keenly developed sense of how well they 'fit in' with their peers. One of their primary goals is to be accepted by their peers and they engage in a range of controlled behaviours to achieve this. In the period preceding the development of an ED, adolescents express concern that their acceptance within their peer group is threatened. At the point of beginning to engage in weight loss strategies, they hold the belief that being thin will confer interpersonal benefits. Individuals evaluate the accuracy of this belief on the basis of their peers' reactions. Peer responses reinforce the adolescent's investment in restrictive practices and contribute to ED development [1].

As the ED develops, the young person becomes increasingly preoccupied with a drive to be thin that takes precedence over other priorities [2]. A paradoxical process occurs whereby, rather than securing acceptance, the developing ED increasingly distances the young person from their friends. This is experienced both as having reduced contact with their friends [3] and as feeling emotionally distant from them [4]. These two processes serve to

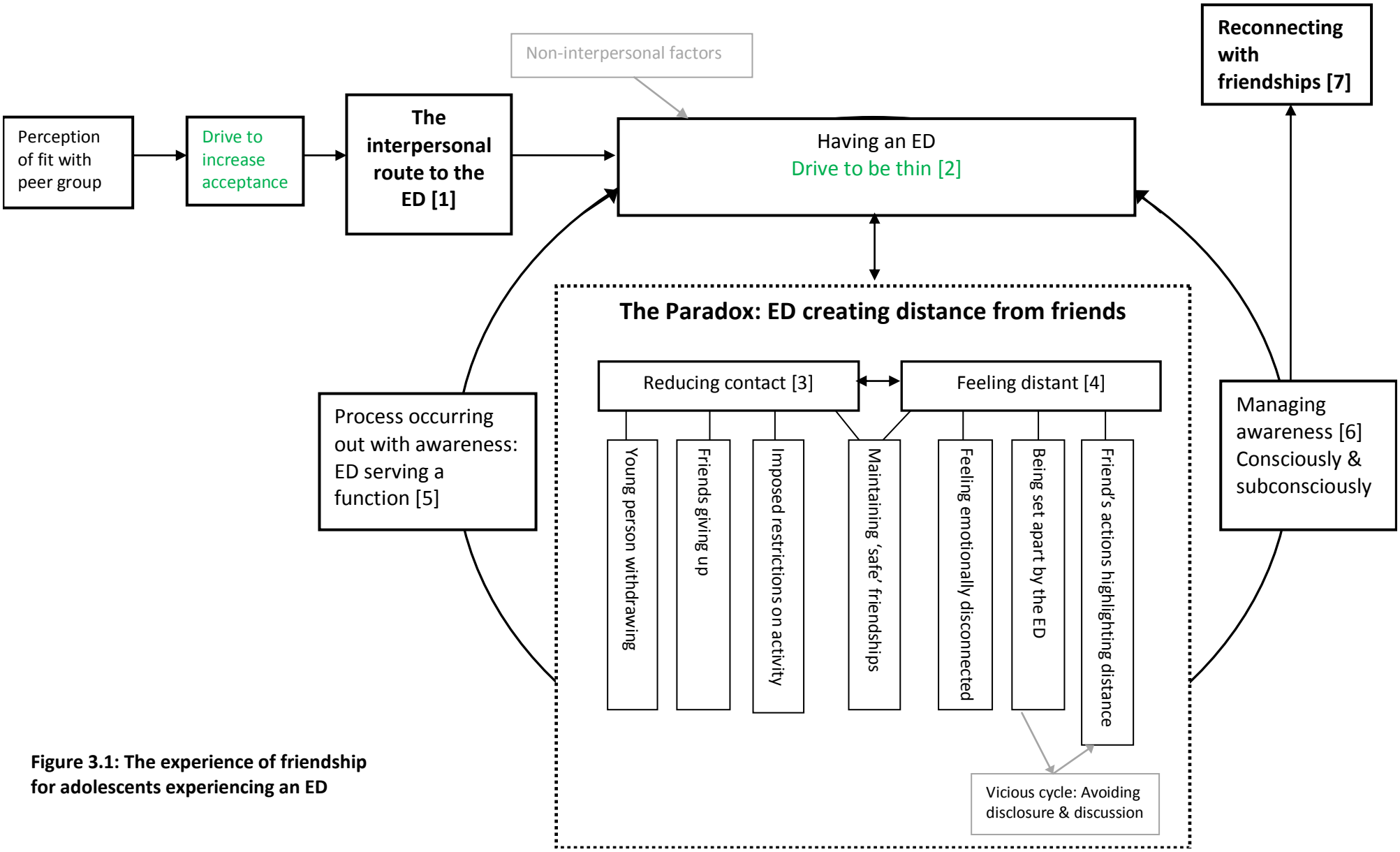

Figure 3.1: The experience of friendship for adolescents experiencing an ED

maintain and exacerbate one another. The distancing process is exacerbated by a process of avoiding disclosure and discussion of the ED.

The young person may experience impaired insight such that the process of interpersonal distancing remains largely out with their realm of awareness [5]. This, in turn, allows interpersonal relations to deteriorate further. At various points the adolescent gains increased recognition of the impairment in their interpersonal relationships. This is experienced as inconsistent with their hopes for the ED, leading to dissonance or distress. Young people, therefore, develop defensive strategies for dealing with these realisations such as denying the problems or reframing their values [6]. The defensive strategies serve to facilitate the maintenance of the interpersonal problems.

Eventually the interpersonal impact of the ED is acknowledged, the defensive strategies cease to be used and the young person attempts to balance the desire to maintain friendships against the ongoing demands of the ED [7].

3.2 Explanation of Main Categories

3.2.1 The interpersonal route to the ED [1]

3.2.1.1 Perception of fit with peer group

Young people expressed a desire to feel comfortable and accepted in their group of friends and in the wider peer group. Their perception of whether they were achieving this was influenced by a number of factors including the nature of their peer group, evaluations of their social self and the quality and closeness of their friendships. [2]

3.2.1.2 The drive to increase acceptance

On the basis of a perceived lack of success at fitting in with their peer group, young people engaged in efforts to increase their interpersonal acceptance. The strategies they described

[2] See journal article 1 for a full description of category

utilising to increase their potential for acceptance included aiming to be the best friend possible, presenting the self in a socially acceptable way and avoiding conflict.[3]

3.2.1.3 Beliefs about the interpersonal benefits of being thin

The young people expressed a set of beliefs about the interpersonal benefits that being thin could yield. They associated being thin with being liked more by peers, being more attractive to potential romantic partners, being admired by others, being similar to others and having greater confidence in social situations.

> ***Nicole****: If you were skinny then people would automatically be your friend... and it would make you a better person, it would make you, you know, it would, it would make you prettier if you were skinny, it would make you have more good qualities and, and it would make people just like you.*

This corroborates research from the general adolescent population in which individuals who display a greater conviction that being thinner will improve likeability and popularity amongst peers score higher on measures of disordered eating (Gerner & Wilson, 2005; Lieberman *et al.,* 2001; Oliver & Thelen, 1997).

3.2.1.4 The ED Developing

All eight adolescents identified that, at the time that they developed an ED, they were experiencing difficulties in their friendships. The specific circumstances that were described included both direct experiences of rejection such as bullying, a relationship ending or being ostracised by friends, as well as more indirect threats including feeling different or inferior to peers. This adds to previous research in which adults who developed an ED during adolescence retrospectively recall their illness having developed in the context of immediate or chronic interpersonal difficulties (Nevonen & Broburg, 2000; Troop & Bifulco, 2002; Welch *et al.,* 1997).

[3] See journal article 1 for a full description of category

> ***Ashley:*** *They were all in the same class and I was in a different class, and... they were all laughing together and I was always like, I felt I was on the edge and I just, I thought 'well what can I do to make myself fit in?'*
>
> ***Iris:*** *I used to get called fatty and tree trunk and then I got tagged in pictures as... just really nasty stuff and I think that's where like the anorexia and bulimia started, I started getting thoughts and started not eating.*

The young people reported regarding weight loss as a novel strategy for increasing their social worth. This supports the assertion that weight loss is one mechanism via which adolescents attempt to gain acceptance from their peers (Paxton *et al.,* 1999). The participants evaluated the success of this strategy by looking to the reactions of their peers. When peers responded positively this was regarded as a sign that the strategy was successful. Some participants reported receiving compliments from their friends, perceiving their peers taking an increased interest in them or receiving increased attention from potential romantic partners. Other participants reported that their peers expressed no reaction to their weight loss and that the anticipated acceptance failed to occur. These individuals concluded that this must evidence that they had not yet lost enough weight.

All of the adolescents reported viewing weight loss positively during the initial stages of the ED and believing that it could provide a solution to their feelings of detachment from their friends.

> ***Iris:*** *It was like as long as I've got anorexia with me I'll be alright, I can make friends, I can do things without being frightened, go to parties and look nice...It felt good, like it was like the control, and it just felt really, really good.*

The descriptions that the adolescents provided would fit within a sociocultural model of adolescent ED (e.g. Halliwell & Harvey, 2006) in which family, peers and the media are all proposed to play a role in ED development.

3.2.2 The paradox created by the ED: Distancing from friends

3.2.2.1 The drive to be thin [2]

As the ED progressed, the adolescents described becoming increasingly preoccupied by the illness. They described the ED becoming like a "mental obsession". This caused a shift in

their priorities such that the previously valued goal of fitting in was superseded by a stronger drive to be thin.

> ***Chrissie:*** *At that point I didn't really care about having friends, I just kind of, more just wanted to focus on what was wrong with me, in a way. Cause it was kind of like, em, even though they weren't there, I was happy anyway trying to make myself as skinny as I could.*

The participant's accounts suggested that an inevitable consequence of this shift was that they became increasingly distant from their friends. The adolescents noted that it was generally only in retrospect that they could identify this shift.

> ***Ashley:*** *I think it's only looking back, I think only actually thinking 'what did I do and when did I do it?' and then sort of linking it to 'oh, ok, so this was going on'.*

Not all of the participants acknowledged distance from their peers as an explicit concern during the interviews, although their narratives were equally replete with examples of interpersonal distance. This might be explained by these adolescents being at an earlier stage in ED recovery and therefore experiencing more impaired insight (Hasler *et al.,* 2004).

3.2.2.2 Reducing contact [3]

The adolescents provided accounts of diminished contact with friends, and a reduction in number of friends, as the ED progressed. It has previously been observed that young people with an ED experience depleted social networks (Tiller *et al.,* 1997). The present study made it apparent that a wide range of factors contribute cumulatively to this. Three key categories emerged: *the young person withdrawing, friends giving up,* and *imposed restrictions on activity.*

(i) The young person withdrawing

Individuals reported withdrawing and spending less time with their friends. This was attributed to the emotional, behavioural and physical consequences of the ED, experiencing internal conflicts, the ED replacing the need for friends, and feeling discontented with friends' behaviour.

Young people described feeling lower in mood and therefore less motivated to socialise, enjoying time with friends less and feeling irritable or withdrawn around their peers. Although not labelled as such by the participants, what they may have been describing was the development of low mood secondary to the ED and its subsequent impact on their relationships (Holsen *et al.,* 2001). Depression has been suggested to play a mediating role in the interpersonal difficulties apparent in disordered eating (Schutz & Paxton, 2007). In the current analysis only minimal sections of the participants' narratives were coded as representative of low mood suggesting that low mood only offers a partial account of the interpersonal difficulties experienced.

The adolescents also described feeling constantly exhausted, achy and cold which limited their ability or desire to go out. They reported beginning to prioritise exercise over seeing their friends and avoiding social situations where they might encounter food. The participants appraised the likelihood of encountering any of these difficulties each time they received a social invitation and made a decision on whether to attend accordingly. Avoidance was generally viewed as the easiest and safest option.

The participants noted feeling constantly aware of thoughts of food and weight. This meant that they found it difficult to engage fully with conversations, carried out frequent comparisons between themselves and their peers and began fearing that their friends might make them fat or prove to be a barrier to the ED. Prior to disclosure the young people were concerned with avoiding detection of the ED and post disclosure there was a fear of what friends might think if they saw them eating. It was observed that these worries could largely be avoided by isolating from friends.

> ***Chrissie**: Because I was trying to hide it from people it was kind of like 'oh I can't go out because if I don't eat or if I eat something really small or if I don't manage to finish something, they're going to wonder again why I'm acting that way' so, so I just kind of avoided it.*

The adolescents explained that when they did spend time with their friends, on top of battling these concerns, they were faced with their friends commenting on changes in their appearance and behaviour, encouraging them to eat or expressing concern. These

reactions were considered to be annoying or threatening and young people seemed to feel uncertain how to respond.

This pattern of avoiding social situations when they became more challenging was understood through consultation with the literature on coping styles. Conceptualisations of coping generally distinguish between approach or problem focused coping and avoidance or emotion-focused coping (Gross *et al.,* 1998). Avoidant styles of coping are considered to be maladaptive and serve to maintain difficulties (Cramer, 1998). The accounts provided by the adolescents in this study suggested a reliance on avoidant coping and a lack of problem focused coping. Avoidant coping styles and lower perceived social problem solving ability have consistently been associated with EDs (Ghaderi & Scott, 2000; Holt & Espelage, 2002; McClintock & Evans, 2001; Troop *et al.,* 1998) and interpersonal perfectionism (Besser *et al.,* 2010; Flett *et al.,* 1996; Park *et al.,* 2010) in adult populations. Recently socially prescribed perfectionism and low mood have both been linked with using distancing as a way of coping in adolescence (Flett *et al.,* 2012). Longitudinal research aims to delineate this relationship and has indicated that maladaptive coping mediates the relationship between perfectionism and low mood, at least in adults (Dunkley *et al.,* 2006). Although coping has not been assessed directly in adolescents with an ED the current study suggests that this population use avoidant coping behaviours, potentially driven by perfectionistic traits.

(ii) Friends giving up

Young people noted that, over time, their friends started to drift away and stopped making the effort to ask them out, check that they were okay or engage with them at school. There was some awareness amongst the participants that their behaviour could have contributed to their friends acting in this way. This process might represent a self-perpetuating interpersonal cycle (Alden & Taylor, 2004; discussed below).

> ***Nicole:*** *I just wouldn't, I wouldn't want to go out places, like she would ask me to go to [place name] after school and I would be like "no" because that obviously meant food and then I suppose it sort of put a strain on our friendship because I said no so many times that eventually she just stopped asking me.*

The young people recognised that it was unpleasant for their friends when they were irritable with them or turned down offers to go out, however, there was also a sense of feeling let down by friends when they withdrew. Somewhat contradictorily, the young people also expressed some relief at their friend's withdrawal because it provided them with additional time to focus on the ED. This is likely to have allowed the ED, and in turn the interpersonal difficulties, to worsen.

> ***Chrissie:*** *It made me feel like that was, like, less pressure on me because people constantly there telling me to eat and everything it made me feel like, emm, I was constantly under pressure to do it. But when they had, like, lifted the pressure and didn't really bother any more I thought 'right I can do this, now that I don't have anyone nagging at me to eat, I can restrict as much as I want'.*

This could be understood as another example of avoidance, this time using the ED behaviours to avoid the aversive emotions associated with being abandoned by friends. EDs have previously been hypothesised to serve an avoidant function (Cockell *et al.,* 2002).

(iii) Imposed restrictions on activity

The physical complications associated with the ED meant that young people were advised by professionals and their parents that they should be restful and restrict their activity. This inevitably meant a reduction in social activities. For some the illness progressed to such a stage that they were taken out of school or admitted to an inpatient unit. This caused difficulties both because they were unable to see their friends as frequently and because it meant missing out on normative social experiences such as sitting their exams with their friends.

> ***Georgia:*** *Em, and then when it was diagnosed and I had to stop running. I guess it was kind of in some ways easier because...I had all this spare time and I didn't know what to do with it but in some ways harder because they were at school and I wasn't, em, and now it's still hard because they're at school and I'm in here [inpatient unit].*

The impact of imposed restrictions are particularly relevant to consider in adolescence when ED treatment often involves encouraging parents to take control of managing the ED (Lock & LeGrange, 2005).

(iv) Maintaining 'safe' friendships

All of the participants did maintain some friendships throughout the illness. These were friendships that persisted despite the adolescent being able to see them less or not feeling as close to them. They were also friends that the individual felt safe around because they did not feel judged, did not feel they had to hide the ED from them and trusted them not to tell other people about it. Four different types of 'safe' friends were described: friends who also had a mental health problem (including, but not limited to, an ED), friends with similar experiences of bullying or rejection, friendships that had been established in early childhood and friendships with young people who attended a different school.

> ***Jane:*** *I think what made me comfortable with Connie and Ollie was knowing that they had problems too and it gave us something to really talk about (...) Because it was like having someone who.. understood... You knew you weren't gonna be judged*

Young people who had experienced similar psychological or interpersonal problems were considered to be more understanding and less judgemental because of their own experiences. When the friendships were very long standing it was considered more likely that friends would make allowances for the young person and would continue making efforts to maintain the friendship when things became difficult. When the friends were from another school, contact had always been more sporadic and the ED therefore made less of an impact on these friendships. Very few friendships were maintained with individuals who did not fall into one of these categories and all of the participants described having at least one of these types of friend.

3.2.2.3 Feeling Distant [4]

The adolescents experienced the ED impacting on how close they felt to their peers emotionally and on their perceived ability to fit in with their friends. Three key categories emerged: *feeling emotionally disconnected, being set apart by the ED* and *friends' actions highlighting difference.*

(i) Feeling emotionally disconnected

The participants' accounts indicated that the experience of having an ED undermined many of the variables that they identified as indicative of close, good quality friendships. The adolescents reported that they found difficulties obtaining support from friends, trusting friends and believing that their friends cared about them. This engendered a reduction in confiding in their friends, potentially bringing about interactions lacking depth or warmth.

Research has previously documented a lack of social support and difficulty trusting others in ED populations (Grissett & Norvell, 1992; Rorty *et al.,* 1999). The literature highlights that it is the perception of support rather than the actual support offered that is important. When individuals perceive less support is available, it follows that they are less likely to confide in others and are more prone to turn to maladaptive coping strategies. The absence of support that the adolescents reported in this study might account for their use of avoidant coping behaviours rather than engaging in efforts to maintain their friendships. Other research suggests that low perceived social support, negative social interactions and avoidant coping all stem from a common cause, heightened perfectionism (Dunkley *et al.,* 2006)

It is unclear whether low social support is a risk factor for the development of an ED or whether it emerges as a consequence of the ED. In the present study, the adolescents did describe their relationships as lacking in social support prior to developing an ED, however, the experience of developing an ED also appeared to trigger a further reduction in the support they perceived. This suggests that EDs may exacerbate difficulties in already fragile relationships.

The participants' decision to stop confiding in their friends might have also played a role in the earlier observation that their friends withdrew from them. Individuals who abstain from sharing tend to be liked less (Alden & Bieling, 1998) and decreased responsiveness in relationships can trigger correspondingly decreased responsiveness from others (Canevello & Crocker, 2010). This might be especially relevant in the period when peers are not aware of the ED diagnosis and are therefore at a loss as to what to attribute the changes in their friend to.

A feeling of a loss of closeness or detachment from friends was repeatedly coded across the transcripts. Adolescents attributed this to spending less time with their friends and having less in common with them. The young people described how feeling mentally exhausted affected their ability to connect with their friends or share in their interests or concerns when they did see them. Some individuals voiced the feeling that they were no longer acting in a manner consistent with being a 'good' friend.

> ***Nicole:*** *we don't see each other every day, we'd, we would always have that laugh in school and we don't have that anymore and it's you know, it's like we've got nothing else to talk about anymore and {2 secs} its probably really putting like a strain on our friendship now*

A final contributor to emotional detachment was considered to be the experience of the ED further diminishing the adolescents' self esteem, reinforcing their feelings of inferiority and lack of confidence in their social relationships.

> ***Tasha:*** *But also I think that that, in turn, affected my.. mindset, em.. because it affects your mood..[2 secs].. and..[3 secs].. I think yeah that feeling of being isolated and being, em, not.. not worth these other peoples time.. em.. having an eating disorder just kind of enhanced that..[3 secs].. and that feeling of like not, not being good enough.*

With some participants the emotional disconnection was not described but rather was apparent in the brevity and lack of emotional depth in the descriptions they provided of their friends.

> ***Melanie:*** *Em…..I mean eh there's, there's a group of us...Connie, Diana, Michelle em she's leaving for [place name] this year she's moving away em….who else.....I'm trying to think of names but all my friends names have gone em...[7 secs]...Liv. Yeah, so there's quite a few.*
>
> ***Georgia:*** *Well, they've got a really good sense of humour... and they all, em, they come quite often... to here [inpatient unit] and we'll just laugh and stuff, its good. Um.... yeah that's mostly it.*

(ii) Being set apart by the ED

It was apparent that having an ED served to enhance the participants' sense of being different to their friends. This was considered to be the case both prior to disclosure and post disclosure. Prior to disclosure the young people engaged in efforts to avoid detection of the ED by their friends who, they worried, would exert judgement and be unable to understand what they were going through. They expressed guilt at not being open with their friends. The feeling of being different was particularly apparent to the young people in social situations. They described their peers appearing care free and relaxed whilst they felt low and troubled by the constant ED presence. This is an outcome of social comparison (Corning *et al.*, 2006) that has not previously been considered in EDs.

Following disclosure of the ED it became more explicit that the young person was now different to their friends. Several participants described their parents telling their friends to "watch out" for them.

> ***Melanie:*** *A couple of years ago there was a dance trip to [place name] and I very nearly wasn't allowed to go... because of...the anorexia. [talks very slowly, quiet, seems embarrassed] Em so at that point I had to tell -, my friend Louise was also going, so I was told "look you can go on the condition you tell your dance teacher, you have to tell one of your friends that's going with you so that she can watch out for you"*

The adolescents described being aware of a marked distinction between "being thin" which they felt was viewed as socially desirable and "having an ED" which they felt was viewed negatively and not well understood, often being labelled as a "choice". This contributed to their desire to avoid disclosing the ED and to their sense of being set apart from their peers.

> ***Melanie****: I mean you talk about diets and so on and everybody's, yeah, everybody's very keen. And then, but you talk about eating disorders and everybody's suddenly like "oh my gosh, that's awful" and like "why would you do that to yourself?"*

The sense of being different was understood with reference to social identity theory (SIT; Tajfel, 2010). SIT suggests that certain traits or characteristics may be viewed negatively by others. Individuals who possess these traits will then become concerned with negative

judgement. Threats to social identity have been linked to experiencing emotional distress including depression and lowered self-esteem (Katz *et al.,* 2002). Research with adults suggests that EDs are perceived as having negative consequences on one's social identity (Ison & Kent, 2010; Rich, 2006). One study reported that women perceived their diagnosis to be stigmatising, poorly understand by others and likely to trigger rejection, leading them to attempt to hide this identity or join with groups in which it was considered less stigmatising. The accounts of the adolescents in the current study were highly similar and their reliance on 'safe friends' (described above) could be readily understood in terms of SIT. SIT is highly relevant in adolescence as a life stage in which self awareness and self consciousness are heightened (Kirsh *et al.,* 2007).

(iii) Friends actions highlighting distance

The adolescents described ways in which their friends' behaviour could add to them feeling disconnected. By trying to make supportive comments and looking out for them, participants reported that their friends inadvertently drew attention to them, causing them to feel "weird" or embarrassed. When peers made naive comments or more directive comments the young people would feel misunderstood, hurt or defensive. Some participants experienced their peers making derogatory comments about EDs which reinforced their feeling of being inferior and their concerns that their friends would judge them. Finally, when friends avoided saying anything this could be interpreted as evidence that their friends were not supportive.

> ***Iris:*** *They were like "it's really unhealthy you need to eat something" and then they'd try and give me some of their food and I'd be like "na just leave it, it's fine".*
>
> ***Melanie:*** *There was no support there, nobody's saying that this is wrong or you shouldn't be doing this or I'll try and help. There was nothing there like that.*

This process was complicated by the fact that there were times when the adolescents appreciated their friends checking how they were or believed that the best thing their friends could do was to act as if nothing had changed. Some participants acknowledged the contradiction inherent in their accounts, stating that what they found helpful one day was not necessarily helpful on another day. They recognised that it was difficult for friends to

consistently 'get it right' but, nonetheless, any failures to do so contributed to them feeling distant.

The young people were also aware that in the wider peer group at school rumours had circulated about them and other young people would speculate on what might be wrong with them. One participant stated "I was like the main topic of conversation but for all the wrong reasons". However it was noted that participants were often quick to volunteer this information during the interviews and this was interpreted as there being a certain sense of pride in being talked about. One young person reported feeling that she was never thin enough because she was not aware of having been talked about at school whereas another girl in her school was often spoken about for being "too thin".

3.2.2.3.1 Vicious Cycles: Avoidance of disclosure and discussion

The adolescents' efforts to carefully manage disclosures about the ED was observed to lead to the development of a self-perpetuating interpersonal cycle. According to interpersonal theories, an individual's behaviour is determined by their predictions of how others will treat them. Their behaviour in turn affects how others respond to them, tending to inadvertently trigger responses that confirm and maintain their expectations (Alden & Taylor, 2004; Canevello & Crocker, 2010).

The young people spoke about their concern that their friends would not care that they were unwell or would treat them differently if they knew about their diagnosis.

> ***Tasha:*** *I didn't want them to think badly of me..(...).. also just kind of that weakness and vulnerability of..[4 secs].. it being associated with not being able to cope with other things..em.. and just yeah the association, I didn't want to be 'that girl that had anorexia'.*

The anticipated negative reaction lead participants to refrain from confiding in their friends or turning to them for support. Instead, they adopted protective strategies of: avoiding disclosure for as long as possible, disclosing only when it became unavoidable (generally in a poorly controlled way), continuing to avoid sharing details with friends who were aware of the ED and neglecting to advise friends of ways in which they could help. In response,

friends followed suit and avoided addressing the issue, withdrew, became annoyed, talked about the young person with others or intervened in an often clumsy or insensitive way.

> ***Melanie:*** *You just want someone to care enough to say something em……and now looking back on it, it sounds like people did care and they did want to say something but they didn't know what to say.*

These reactions were interpreted as consistent with the young peoples' concerns about their friends' behaviour and the quality of the relationships, perpetuating the cycle of avoiding discussion of the ED. The process is presented in figure 3.2.

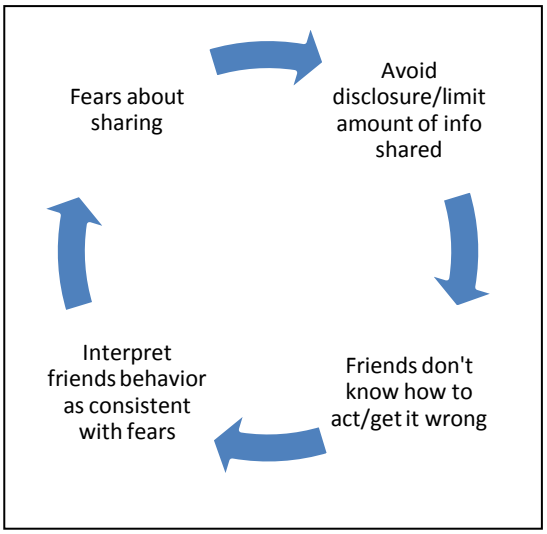

Figure 3.2: Self-perpetuating interpersonal cycle

3.2.2.4 Lacking awareness [5]

The overwhelming nature of experiencing an ED meant that often the young people were not aware of the impact that the ED was having on their relationships. Participants stated that it was only in retrospect that they could identify the changes that had occurred in their friendships. In particular, young people described a period of denial where they refused to accept that they had an ED and, by default, that it could be causing any problems. If individuals did not consciously acknowledge the existence of interpersonal problems then

they were very unlikely to act to change them, potentially facilitating further deterioration of the relationships.

It seemed that, during this phase, individuals were often invested in the positive function that the ED was serving and by focusing on this were naive to the negative interpersonal consequences. The adolescents described the ED providing a distraction from their worries, feelings of control, increased confidence and a sense of success and superiority. This is consistent with accounts that suggest that EDs may acquire a functional status (Cockell *et al.,* 2002; Nordbo *et al.,* 2006; Troop, 1998). By utilising ED behaviours the adolescents were able to divert their attention away from their interpersonal problems and feel in control of the negative emotions these interactions had been causing them. It seemed that the ED came to be viewed as a more reliable source of garnering esteem and regulating affect than engaging with friendships did.

> ***Tasha:*** *It was something to think about that wasn't.. "my friends don't like me anymore" [laughs] em ..[4 secs].. but I was also kind of, because.. I had lost weight and I, I felt like I looked better it was kind of a confidence thing being able to wear smaller sized clothes and, em, feeling like "oh it's ok that they don't like me as much because.." that's, it wasn't what I was concentrating on probably at the time so yeah, yeah I would just say it was kind of like an escape really.*

For some individuals, the presence of the ED became so magnified that it occupied the majority of their time or came to be viewed as another person. This removed the need or distracted the young person from spending time with friends such that interactions were avoided almost entirely.

> ***Jane:*** *I sort of think like.. of my eating disorder as, like, another person, another person.. um, this makes me sound totally crazy, um..Yeah and I sort of think, you know, that's enough, as long as I have my eating disorder I don't need anybody else.*

The adolescent's accounts support Rieger *et al*'s (2010) proposal that ED behaviours become a substitute for functional social relationships. It seems that when this occurs friendships may be perceived as redundant or at least are not missed.

3.2.2.5 Managing awareness [6]

All of the young people appeared to have experienced periods in which they were aware, on some level, of the interpersonal difficulties that the ED had created. These periods were associated with feeling confused, stuck, overwhelmed or ambivalent.

> ***Jane:*** *I got very, very paranoid for ages that everyone was just going to leave me and I was going to be alone and em, [2 secs] because.. all I wanted to talk about was food, um, [2 secs] which doesn't make much sense because I wanted to be alone in a way and.., so it was all really confusing*

It was apparent that the adolescents had developed a range of strategies to manage the negative feelings associated with awareness. This is consistent with models of emotion regulation where individuals are presumed to use strategies to alter their emotional experience or the emotion-eliciting event (Aldao *et al.,* 2010). The strategies used can be both adaptive and maladaptive, conscious or subconscious.

Individuals tended to reframe the experiences in a more ED consistent manner to avoid experiencing their current behaviours and priorities as dissonant (Festinger, 1956). This could take the form of asserting that having friends was no longer necessary or important to them.

> ***Nicole*** *I suppose it just sort of came gradually like it would just sort of be, like, friend by friend I would drift away from and then, yeah, then I sort of eventually realised that I don't need all these friends, I mean I've got two good friends that I can trust and I've got my family and why would I need friends?*

Other strategies included viewing the negatives as an exception to the rule, blaming their friends rather than the ED, and holding onto the belief that things would improve when they lost more weight.

> ***Chrissie:*** *I kind of thought well if I'm skinnier, then eventually people will want to talk to me anyway and they'll want to be friends with me.*

Some participants appeared to adopt a form of denial in which they talked about past relationships as though they were current and ongoing. This strategy became apparent through contradictions in their narratives, for example, the provision of details later in the interview indicating that they had not seen these friends with any consistency for several months.

The various strategies that the adolescents described were considered to be largely analogous to the ego defense styles of denial, rationalisation and displacement (Vaillant, 1994). Defense mechanisms are relatively unconscious regulatory processes that reduce uncomfortable emotional states. Defenses serve an adaptive function in reducing anxiety, however, they also prevent the resolution of problems by keeping them outside of awareness (Vaillant, 1994). It is considered that some defense styles are more maladaptive than others. Vaillant (1994) organises the different mechanisms into a hierarchy progressing from psychotic defenses, through immature, and neurotic, to mature defenses. Defenses lower in the hierarchy are associated with greater psychological distress and maladjustment (Flett *et al.,* 2005). Mature defenses do not develop until later in development and adolescents are thus naturally predisposed towards the use of immature defense mechanisms (Cramer, 1998). Further, socially prescribed perfectionism and depression have both been associated with the use of immature and neurotic defense styles (Flett *et al.,* 2005; Kennedy *et al.,* 2001). This suggests the population in this study might be particularly prone to rely on maladaptive defense mechanisms. In support of this a relatively early study found that adolescents with AN were differentiated from control adolescents by the use of more immature defense mechanisms (Gothelf *et al.,* 1995).

3.2.3 Reconnecting with friendships [7]

Some participants had entered a phase of acknowledgement in which they recognised the problems in their relationships and were beginning to make efforts to overcome them rather than continuing to rationalise or deny them. This phase seemed to be associated with an increased insight into the negative consequences of having an ED and a move to working towards recovery. Adolescents described returning to a reliance on the strategies that they had previously used to secure acceptance, forming new friendships or adjusting their expectations for their current friendships. This assisted them to rely less on the ED.

The participants described feeling vulnerable in this stage due to having fewer friends, worrying about the ongoing or lasting impact of the ED on their friendships and a fear of relapse occurring.

> ***Melanie:*** *Yeah, I think just generally I was, I still am, a bit worried about being left behind and so on*
> ***LG:*** *Yeah…. What do you mean by 'left behind'?*
> ***Melanie:*** *Well as in, if friendship groups have moved on and kind of I don't really know where I fit in any more, that sort of thing*

The young people expressed feeling embarrassed at having shared the ED and feeling stressed by the demands of balancing the ongoing ED symptoms with spending time with friends. They voiced that a return to interpreting events in an ED consistent manner or managing difficulties through their eating was an ongoing issue for them.

> ***Iris:*** *And, em, I've had a couple of things with like people when they've, like, not being quite, not nasty but stop talking to you and then sometimes it goes back like "oh it's because I've put on weight"*

Friends were viewed as much more important again in this phase and were seen as helpful in the move towards recovery. Friends could be distracting, remind young people of life without an ED and provide an incentive to get better.

> ***Jane:*** *It can be sort of therapeutic in a way just to.. remember that there's... other people... in the world and there's something beyond like your eating disorder and your problems.*

This builds on qualitative research with adults indicating that supportive relationships might be helpful in recovery from EDs (Budd, 2007; D'Abundo & Chally, 2004; Tozzi *et al.,* 2003).

4. Discussion

As illustrated in figure 3.2, the analysis revealed that the adolescents experienced the development of an ED distancing them from their friends, both emotionally and socially.

This was contradictory to their initial expectation that weight loss would have a beneficial impact on their acceptance in relationships. Limited insight and a range of defensive mechanisms prevented the young people from acknowledging this and allowed both their relationships and their illness to deteriorate further.

The analysis suggested that individuals who develop an ED have pre-existing interpersonal difficulties, potentially due to underlying psychological traits or an insecure attachment style (Galloway, 2013b) but that the development of the ED also serves to exacerbate these problems. A predisposition towards maladaptive coping, self-presentation behaviours, neurotic defense styles, a failure to utilise social supports and becoming caught in self-perpetuating interpersonal cycles all appear to be constructs that can be exacerbated or become apparent through developing an ED. The ED also introduces new risk factors for social disconnection through being visible, limiting activity, changing priorities and lowering mood.

A number of the findings resonate with previous research in the ED field. Namely, that social difficulties can be triggering for disordered eating (e.g. Budd, 2007), that beliefs about the benefits of thinness might play a part in restrictive practices (e.g. Gerner & Wilson, 2005) and that social isolation results from the ED (e.g. Espindola & Blay, 2009). It has been suggested that social isolation arises from withdrawal related to shame or an avoidance of activities involving food or alternatively that isolation arises as others withdraw in response to changes in mood (Rieger *et al.,* 2010; Schutz & Paxton, 2007; Steinhausen & Vollrath, 1993). The current research built on this by achieving a more in depth understanding of how peer difficulties arise and are maintained in the context of experiencing an ED. Additional routes to interpersonal impairment that were identified included having restrictions imposed on activity, finding friends' reactions challenging, experiencing a reduced investment in friendship, and peers 'giving up'. Additionally, it was apparent that adolescents not only become socially isolated but also emotionally isolated from their peers. This contributed to the young peoples' reticence to spend time with their friends. To the authors knowledge this is not an aspect of adolescent ED experience that has been explored in previous research.

A common finding was that the participants maintained friendships with other young people who they felt safe with. Friends that were considered to be safe appeared to be those who did not challenge the ED behaviour. Whilst it was positive that the adolescents were able to preserve social relationships, some of these relationships might be maintaining of ED difficulties, particularly those in which the young person's role within the group was defined by having an ED. One young person described her friend group as "the mental health group" and rated her one friend who did not have a mental health diagnosis as "the odd one out". For these adolescents difficulties with disconnection might be introduced by recovery making it risky for them to relinquish the ED.

In their theoretical IPT-ED model, Rieger *et al* (2010) give negative social evaluation a central role in both the development and maintenance of ED symptoms. They highlight that minimal research has been conducted to back this up and that the key interpersonal maintaining factors need to be further delineated in order to inform IPT intervention. By confirming that interpersonal functioning deteriorates in the peer context and exploring the potential mechanisms underlying this process, the current research supports the extension of this model to adolescent EDs. The current research highlights that it is not just a negative evaluation of self that needs to be taken into account as a maintaining factor but also a dissatisfaction with peer responses to the ED and the use of defense mechanisms that keep the negative social consequences out with awareness.

Implications for practice

It appears that young people with an ED are at risk of experiencing unsatisfactory relationships, might lack social problem solving skills and rely on avoidant coping methods to address difficulties in their friendships. These are issues that could be addressed in therapy. However, adolescents may under report difficulties to professionals either through a wish to present a socially desirable image or because of impaired insight. It was observed that not all of the young people in the current study rated their friendships as problematic. Clinicians should be aware that adolescents are prone to use defensive strategies to protect against awareness of problems in their friendships. This suggests that a key role for clinicians is to explore interpersonal relationships fully, revisit initial claims that everything

is ‘fine’, assist young people to recognise and articulate difficulties and equip them with the motivation and skills to begin making changes.

The pressing demands to treat the physical and behavioural aspects of EDs could potentially preclude addressing interpersonal functioning in therapy or lead to social relationships only being targeted laterally. Family therapy is the treatment of choice for adolescent EDs (The Matrix, 2011) in which peer relationships might not be brought up or addressed. The risk is that friendships will continue to deteriorate or end altogether. Impairment in social functioning has been found to persist past the point of recovery from an ED highlighting that difficulties do not spontaneously resolve alongside recovery (Steiner & Lock, 1998). NICE guidelines highlight that the social needs of adolescents should be considered in treatment (NICE, 2004). The present research corroborates the importance of this and suggests that early intervention could be key in order to preserve adolescent’s social functioning.

It was clear that all of the young people experienced a great reluctance to disclose their ED to their peers and, after disclosure, to engage in conversations about it. As a result it was very difficult for friends to ‘get it right’. It might be useful to explicitly consider with adolescents how they might be able to share information with their peers. Further, several young people commented that education on EDs in their school was poor and that knowledge amongst their peers was lacking. This contributed to their reluctance to share with their friends. Increased education on EDs as part of curriculums on increasing awareness of mental health difficulties could be one way to address this.

Future research

Some of the participants described becoming aware of difficulties in their relationships, wanting to improve this and making efforts to re-establish their friendships. However, not all of the adolescents were able to comment on this and this process was therefore under developed in the current research. Future research might explore this with adolescents further along in recovery in order to gain a better understanding of the experience of reconnecting with friendships and the factors that help to achieve or hinder this.

It might also be useful to consider investigating the perspectives of the friends of young people with an ED, in order to gain a better understanding of their experiences during this time. This could inform future clinical interventions with patients as well as the development of interventions to provide support to peers who might feel confused or helpless. This research has previously been undertaken in relation to sibling relationships (Areemit *et al.,* 2010).

It was observed that traits such as perfectionism, low mood, social anxiety and self esteem could all be relevant to the impaired relationships apparent in ED populations. Some of these traits are thought to precede ED development and persist past the point of recovery (Kaye *et al.,* 2004; Sassaroli & Ruggiero, 2005). Future research could therefore begin to clarify which traits are most closely related to different interpersonal difficulties and the potential mechanisms underlying these links. The current research suggests that coping styles might be one avenue for further investigation.

Strengths

Despite the importance of peer relationships in adolescence, this is an area that has rarely been addressed in either qualitative on quantitative ED research. A review and synthesis of qualitative research (Espindola & Blay, 2009) identified the perception of not belonging in the family as an important factor in AN but no studies were identified citing the importance of belonging in peer relationships. The current research provides a move towards addressing this gap and highlights the salience of this topic to this population.

Limitations

A clear limitation of the research was the small sample size which precluded reaching saturation, a central goal in grounded theory research (Charmaz, 2006). The potential remains that additional interviews may have introduced new categories or nuances to the analysis. The results presented can only be considered to reflect the experiences of the young people interviewed although the results can be used as hypotheses for clinical work or future research and may generalise to other young people experiencing an ED.

No males were included in the research. Although the prevalence of EDs is lower in males, eating difficulties do arise and this is a highly under researched area. Although male friendships are qualitiatively different to female relationships (Azmitia *et al.,* 2005) some of the themes such as concern about stigma may be highly relevant to explore in male populations.

Young people who declined to take part may have differed in important ways from those who participated. In particular, individuals who had experienced complete detachment from their peers may have been reluctant to take part either through discomfiture or through a belief that they had nothing to contribute to the research. Although some participants did have very depleted social networks, no participant was lacking friends entirely.

A heterogeneous sample was used in terms of ED diagnosis. The rationale for this was that diagnosis in adolescence is complicated by shifting symptoms not fitting neatly within one diagnosis meaning that adolescents often receive an EDNOS diagnosis (Nicholls *et al*., 2000). Previous research has hypothesised that different EDs have the same underlying problems (Clinton & Glant, 1992) and qualitative research has suggested individuals with different EDs provide narratives that are more similar than different (Nevonen & Broberg, 2000). However, the potential remains that different results might have been found if the sample had been restricted to a particular diagnosis.

Finally, although not a limitation as such, it is acknowledged that EDs do not emerge solely through interpersonal problems nor are the difficulties associated with EDs exclusively interpersonal in nature. There is consensus among researchers and clinicians that the aetiologies of EDs are complex and multifactorial involving biological, psychological, social and familial factors (Nevonen & Broberg, 2000; Szmukler *et al.,* 1995). The current research reports only on the friendship experiences of the adolescents interviewed and does not therefore offer a full account of other factors that may have contributed to or interacted with the issues discussed.

Conclusions

The findings of the research reveal the highly multifaceted nature of the social and emotional isolation and detachment that young people with an ED experience in their relationships. This was experienced as overwhelming for the adolescents who reacted by attempting to distance themselves from the difficulties via avoidant coping, denial and a reliance on safe friendships. The outcome was a failure to acknowledge and address the problems in their relationships with a resultant self-perpetuating cycle of interpersonal distance. The research highlights the need for clinicians to be aware of the interpersonal nature of the ED experience and the need to address these difficulties as early as possible.

References

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review, 30*(2), 217-237.

Alden, L. E., & Bieling, P. (1998). Interpersonal consequences of the pursuit of safety. *Behaviour Research and Therapy, 36*(1), 53-64.

Alden, L. E., & Taylor, C. T. (2004). Interpersonal processes in social phobia. *Clinical Psychology Review, 24*(7), 857-882.

Areemit, R. S., Katzman, D. K., Pinhas, L., & Kaufman, M. E. (2010). The experience of siblings of adolescents with eating disorders. *Journal of Adolescent Health, 46*(6), 569-576.

Ausubel, D. P. (2002). *Theory and problems of adolescent development* (3rd Ed) United States: iUniverse.

Azmitia, M., Ittel, A., & Radmacher, K. (2005). Narratives of friendship and self in adolescence. *New Directions for Child and Adolescent Development, 2005*(107), 23-39.

Besser, A., Flett, G. L., & Hewitt, P. L. (2010). Perfectionistic Self‐Presentation and trait perfectionism in social problem - solving ability and depressive symptoms. *Journal of Applied Social Psychology, 40*(8), 2121-2154.

Bigelow, B. J., & LaGaipa, J. J. (1980). The development of friendship values and choice. *Friendship and Social Relations in Children,* , 15-44.

Birks, M., & Mills, J. (2011). *Grounded theory: A practical guide*. London: Sage.

Budd, G. (2007). Disordered eating: Young women's search for control and connection. *Journal of Child and Adolescent Psychiatric Nursing, 20*(2), 96-106.

Canevello, A., & Crocker, J. (2010). Creating good relationships: Responsiveness, relationship quality, and interpersonal goals. *Journal of Personality and Social Psychology, 99*(1), 78.

Charmaz, K. (1990). 'Discovering'chronic illness: Using grounded theory. *Social Science & Medicine, 30*(11), 1161-1172.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis.* London: Sage.

Clinton, D., & Glant, R. (1992). The eating disorders spectrum of DSM-III-R: Clinical features and psychosocial concomitants of 86 consecutive cases from a swedish urban catchment area. *The Journal of Nervous and Mental Disease, 180*(4), 244-250.

Cockell, S. J., Hewitt, P. L., Seal, B., Sherry, S., Goldner, E. M., Flett, G. L., & Remick, R. A. (2002). Trait and self-presentational dimensions of perfectionism among women with anorexia nervosa. *Cognitive Therapy and Research, 26*(6), 745-758.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory.* United States: Sage.

Corning, A.F., Krumm, A.J., & Smitharn, L.A. (2006). Differential social comparison process in women with and without eating disorder symptoms. *Journal of Counseling Psychology, 53(3), 338-349.*

Cramer, P. (1998). Coping and defense mechanisms: What's the difference? *Journal of Personality, 66*(6), 919-946.

Cunha, A. I., Relvas, A. P., & Soares, I. (2009). Anorexia nervosa and family relationships: Perceived family functioning, coping strategies, beliefs, and attachment to parents and peers. *International Journal of Clinical and Health Psychology, 9*(2), 229-240.

D'Abundo, M., & Chally, P. (2004). Struggling with recovery: Participant perspectives on battling an eating disorder. *Qualitative Health Research, 14*(8), 1094-1106.

Dallos, R., & Denford, S. (2008). A qualitative exploration of relationship and attachment themes in families with an eating disorder. *Clinical Child Psychology and Psychiatry, 13*(2), 305-322.

Davies, S. (2004). A group-work approach to addressing friendship issues in the treatment of adolescents with eating disorders. *Clinical Child Psychology and Psychiatry, 9*(4), 519-531.

Deater-Deckard, K. (2001). Annotation: Recent research examining the role of peer relationships in the development of psychopathology. *Journal of Child Psychology and Psychiatry, 42*(05), 565-579.

Dimitropoulos, G., Klopfer, K., Lazar, L., & Schacter, R. (2009). Caring for a sibling with anorexia nervosa: A qualitative study. *European Eating Disorders Review, 17*(5), 350-365.

Dunkley, D. M., Sanislow, C. A., Grilo, C. M., & McGlashan, T. H. (2006). Perfectionism and depressive symptoms 3 years later: Negative social interactions, avoidant coping, and perceived social support as mediators. *Comprehensive Psychiatry, 47*(2), 106-115.

Eaves, Y. D. (2001). A synthesis technique for grounded theory data analysis. *Journal of Advanced Nursing, 35*(5), 654-663.

Espindola, C. R., & Blay, S. L. (2009). Anorexia nervosa's meaning to patients: A qualitative synthesis. *Psychopathology, 42*(2), 69-80.

Fairburn, C. G., Cooper, Z., & Shafran, R. (2003). Cognitive behaviour therapy for eating disorders: A "transdiagnostic" theory and treatment. *Behaviour Research and Therapy, 41*(5), 509-528.

Festinger, L., Riecken, H. W., & Schachter, S. (1956). When prophecy fails. Minneapolis, MN, US: University of Minnesota Press.

Flett, G. L., Besser, A., & Hewitt, P. L. (2005). Perfectionism, ego defense styles, and depression: A comparison of Self‐Reports versus informant ratings. *Journal of Personality, 73*(5), 1355-1396.

Flett, G. L., Druckman, T., Hewitt, P. L., & Wekerle, C. (2012). Perfectionism, coping, social support, and depression in maltreated adolescents. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 30*(2), 118-131.

Flett, G. L., Hewitt, P. L., Blankstein, K. R., Solnik, M., & Van Brunschot, M. (1996). Perfectionism, social problem-solving ability, and psychological distress. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 14*(4), 245-274.

Galloway, L.L. (2013b) Efforts to Achieve Acceptance: A Grounded Theory Exploration of Friendship in Adolescent Eating Disorders. This Thesis.

Geller, J., Cockell, S. J., Hewitt, P. L., Goldner, E. M., & Flett, G. L. (2000). Inhibited expression of negative emotions and interpersonal orientation in anorexia nervosa. *International Journal of Eating Disorders, 28*(1), 8-19.

Gerner, B., & Wilson, P. H. (2005). The relationship between friendship factors and adolescent girls' body image concern, body dissatisfaction, and restrained eating. *International Journal of Eating Disorders, 37*(4), 313-320.

Ghaderi, A., & Scott, B. (2000). Coping in dieting and eating disorders: A population-based study. *The Journal of Nervous and Mental Disease, 188*(5), 273-279.

Glaser, B. G., & Strauss, A.L. (1967) The discovery of grounded theory. Chicago: Aldine.

Gothelf, D., Apter, A., Ratzoni, G., Orbach, I., Weizman, R., Tyano, S., & Pfeffer, C. (1995). Defense mechanisms in severe adolescent anorexia nervosa. *Journal of the American Academy of Child & Adolescent Psychiatry, 34*(12), 1648-1654.

Grisset, N. I., & Norvell, N. K. (1992). Perceived social support, social skills, and quality of relationships in bulimic women. *Journal of Consulting and Clinical Psychology, 60*(2), 293.

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology, 2*(3), 271.

Gustafsson, S.A., Edlund, B., Kjellin, L., & Norring, C. (2008). Personal standards, self‐evaluation and perceived benefits of thinness in girls and young women with disturbed eating. *European Eating Disorders Review, 16*(6), 463-471.

Halliwell, E., & Harvey, M. (2006). Examination of a sociocultural model of disordered eating among male and female adolescents. *British Journal of Health Psychology, 11*(2), 235-248.

Harter, S., Waters, P., & Whitesell, N. R. (1998). Relational Self‐Worth: Differences in perceived worth as a person across interpersonal contexts among adolescents. *Child Development, 69*(3), 756-766.

Hartmann, A., Zeeck, A., & Barrett, M. S. (2010). Interpersonal problems in eating disorders. *International Journal of Eating Disorders, 43*(7), 619-627.

Hasler, G., Delsignore, A., Milos, G., Buddeberg, C., & Schnyder, U. (2004). Application of prochaska's transtheoretical model of change to patients with eating disorders. *Journal of Psychosomatic Research, 57*(1), 67-72.

Holloway, I. (2005). *Qualitative research in health care* McGraw-Hill International.

Holsen, I., Kraft, P., & Røysamb, E. (2001). The relationship between body image and depressed mood in adolescence: A 5-year longitudinal panel study. *Journal of Health Psychology, 6*(6), 613-627.

Holt, M. K., & Espelage, D. L. (2002). Problem‐Solving skills and relationship attributes among women with eating disorders. *Journal of Counseling & Development, 80*(3), 346-354.

Honey, A., Clarke, S., Halse, C., Kohn, M., & Madden, S. (2006). The influence of siblings on the experience of anorexia nervosa for adolescent girls. *European Eating Disorders Review, 14*(5), 315-322.

Huon, G., Hayne, A., Gunewardene, A., Strong, K., Lunn, N., Piira, T., & Lim, J. (1999). Accounting for differences in dieting status: Steps in the refinement of a model. *International Journal of Eating Disorders, 26*(4), 420-433.

Hutchinson, D. M., & Rapee, R. M. (2007). Do friends share similar body image and eating problems? the role of social networks and peer influences in early adolescence. *Behaviour Research and Therapy, 45*(7), 1557-1577.

Ison, J., & Kent, S. (2010). Social identity in eating disorders. *European Eating Disorders Review, 18*(6), 475-485.

Katz, J., Joiner Jr, T. E., & Kwon, P. (2002). Membership in a devalued social group and emotional well-being: Developing a model of personal self-esteem, collective self-esteem, and group socialization. *Sex Roles, 47*(9-10), 419-431.

Kaye, W. H., Bulik, C. M., Thornton, L., Barbarich, N., & Masters, K. (2004). Comorbidity of anxiety disorders with anorexia and bulimia nervosa. *American Journal of Psychiatry, 161*(12), 2215-2221.

Kennedy, B. L., Schwab, J. J., & Hyde, J. A. (2001). Defense styles and personality dimensions of research subjects with anxiety and depressive disorders. *Psychiatric Quarterly, 72*(3), 251-262.

Kirsh, G., McVey, G., Tweed, S., & Katzman, D. K. (2007). Psychosocial profiles of young adolescent females seeking treatment for an eating disorder. *Journal of Adolescent Health, 40*(4), 351-356.

Koruth, N., Nevison, C., & Schwannauer, M. (2012). A grounded theory exploration of the onset of anorexia in adolescence. *European Eating Disorders Review, 20*(4), 257-264.

Krug, I., Penelo, E., Fernandez-Aranda, F., Anderluh, M., Bellodi, L., Cellini, E., . . . Nacmias, B. (2013). Low social interactions in eating disorder patients in childhood and adulthood: A multi-centre european case control study. *Journal of Health Psychology, 18*(1), 26-37.

Lieberman, M., Gauvin, L., Bukowski, W. M., & White, D. R. (2001). Interpersonal influence and disordered eating behaviors in adolescent girls: The role of peer modeling, social reinforcement, and body-related teasing. *Eating Behaviors, 2*(3), 215-236.

Lock, J., & le Grange, D. (2005). Family‐based treatment of eating disorders. *International Journal of Eating Disorders, 37*(S1), S64-S67.

The Matrix (Ed.). (2011). *A guide to delivering evidence based psychological therapies in Scotland.* Scottish Government.

McClintock, J. M., & Evans, I. M. (2001). The underlying psychopathology of eating disorders and social phobia: A structural equation analysis. *Eating Behaviors, 2*(3), 247-261.

Meyer, T. A., & Gast, J. (2008). The effects of peer influence on disordered eating behavior. *The Journal of School Nursing, 24*(1), 36-42.

Mills, J., Bonner, A., & Francis, K. (2008). The development of constructivist grounded theory. *International Journal of Qualitative Methods, 5*(1), 25-35.

Moulds, M. L., Touyz, S. W., Schotte, D., Beumont, P. J., Griffiths, R., Russell, J., & Charles, M. (2000). Perceived expressed emotion in the siblings and parents of hospitalized patients with anorexia nervosa. *International Journal of Eating Disorders, 27*(3), 288-296.

National Institute for Health and Clinical Excellence (NICE). (2004). *National clinical practice guideline number CG9: Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders* British Psychological Society.

Nevonen, L., & Broberg, A. G. (2000). The emergence of eating disorders: An exploratory study. *European Eating Disorders Review, 8*(4), 279-292.

Nordbø, R. H., Espeset, E., Gulliksen, K. S., Skårderud, F., & Holte, A. (2006). The meaning of self‐starvation: Qualitative study of patients' perception of anorexia nervosa. *International Journal of Eating Disorders, 39*(7), 556-564.

Oliver, K. K., & Thelen, M. H. (1997). Children's perceptions of peer influence on eating concerns. *Behavior Therapy, 27*(1), 25-39.

Park, H., Paul Heppner, P., & Lee, D. (2010). Maladaptive coping and self-esteem as mediators between perfectionism and psychological distress. *Personality and Individual Differences, 48*(4), 469-474.

Patching, J., & Lawler, J. (2009). Understanding women's experiences of developing an eating disorder and recovering: A life‐history approach. *Nursing Inquiry, 16*(1), 10-21.

Paxton, S. J., Schutz, H. K., Wertheim, E. H., & Muir, S. L. (1999). Friendship clique and peer influences on body image concerns, dietary restraint, extreme weight-loss behaviors, and binge eating in adolescent girls. *Journal of Abnormal Psychology, 108*(2), 255.

Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of Counseling Psychology, 52*(2), 126.

Rich, E. (2006). Anorexic dis (connection): Managing anorexia as an illness and an identity. *Sociology of Health & Illness, 28*(3), 284-305.

Richardson, L. (2000). New writing practices in qualitative research. *Sociology of Sport Journal, 17*(1), 5-20.

Rieger, E., Van Buren, D. J., Bishop, M., Tanofsky-Kraff, M., Welch, R., & Wilfley, D. E. (2010). An eating disorder-specific model of interpersonal psychotherapy (IPT-ED): Causal pathways and treatment implications. *Clinical Psychology Review, 30*(4), 400-410.

Rorty, M., Yager, J., Buckwalter, J. G., & Rossotto, E. (1999). Social support, social adjustment, and recovery status in bulimia nervosa. *International Journal of Eating Disorders, 26*(1), 1-12.

Rudolph, K. D., Caldwell, M. S., & Conley, C. S. (2005). Need for approval and children's Well‐Being. *Child Development, 76*(2), 309-323.

Sassaroli, S. & Ruggiero, G.M. (2005). The role of stress in the association between low self-esteem, perfectionism, and worry, and eating disorders. *International Journal of Eating Disorders, 37 (2), 135-141.*

Schutz, H. K., & Paxton, S. J. (2007). Friendship quality, body dissatisfaction, dieting and disordered eating in adolescent girls. *British Journal of Clinical Psychology, 46*(1), 67-83.

Shahar, G., Blatt, S. J., Zuroff, D. C., Krupnick, J. L., & Sotsky, S. M. (2004). Perfectionism impedes social relations and response to brief treatment for depression. *Journal of Social and Clinical Psychology, 23*(2), 140-154.

Smolak, L., & Levine, M. P. (1996). Adolescent transitions and the development of eating problems. *The Developmental Psychopathology of Eating Disorders, ,* 207-233.

Steiner, H., & Lock, J. (1998). Anorexia nervosa and bulimia nervosa in children and adolescents: A review of the past 10 years. *Journal of the American Academy of Child & Adolescent Psychiatry, 37*(4), 352-359.

Steinhausen, H., & Vollrath, M. (1993). The self‐image of adolescent patients with eating disorders. *International Journal of Eating Disorders, 13*(2), 221-227.

Stice, E. (1998). Modeling of eating pathology and social reinforcement of the thin-ideal predict onset of bulimic symptoms. *Behaviour Research and Therapy, 36*(10), 931-944.

Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin, 128*(5), 825.

Stice, E., Killen, J. D., Hayward, C., & Taylor, C. B. (1998). Age of onset for binge eating and purging during late adolescence: A 4-year survival analysis. *Journal of Abnormal Psychology, 107*(4), 671.

Stice, E., & Whitenton, K. (2002). Risk factors for body dissatisfaction in adolescent girls: A longitudinal investigation. *Developmental Psychology, 38*(5), 669.

Szmukler, G. I., Dare, C. E., & Treasure, J. E. (1995). *Handbook of eating disorders: Theory, treatment and research.* John Wiley & Sons.

Tajfel, H. (2010). *Social identity and intergroup relations* Cambridge University Press.

Tiller, J. M., Sloane, G., Schmidt, U., Troop, N., Power, M., & Treasure, J. L. (1997). Social support in patients with anorexia nervosa and bulimia nervosa. *International Journal of Eating Disorders, 21*(1), 31-38.

Tozzi, F., Sullivan, P. F., Fear, J. L., McKenzie, J., & Bulik, C. M. (2003). Causes and recovery in anorexia nervosa: The patient's perspective. *International Journal of Eating Disorders, 33*(2), 143-154.

Troop, N. A. (1998). Eating disorders as coping strategies: A critique. *European Eating Disorders Review, 6*(4), 229-237.

Troop, N. A., & Bifulco, A. (2002). Childhood social arena and cognitive sets in eating disorders. *British Journal of Clinical Psychology, 41*(2), 205-211.

Troop, N. A., Holbrey, A., & Treasure, J. L. (1998). Stress, coping, and crisis support in eating disorders. *International Journal of Eating Disorders, 24*(2), 157-166.

Vaillant, G. E. (1994). Ego mechanisms of defense and personality psychopathology. *Journal of Abnormal Psychology, 103*(1), 44.

Vartanian, L. R. (2000). Revisiting the imaginary audience and personal fable constructs of adolescent egocentrism: A conceptual review. *Adolescence, 35*(140), 639-661.

Welch, S. L., Doll, H., & Fairburn, C. (1997). Life events and the onset of bulimia nervosa: A controlled study. *Psychological Medicine, 27*(03), 515-522.

White, J. H. (2000). The prevention of eating disorders: A review of the research on risk factors with implications for practice. *Journal of Child and Adolescent Psychiatric Nursing, 13*(2), 76-88.

Whitney, J., & Eisler, I. (2005). Theoretical and empirical models around caring for someone with an eating disorder: The reorganization of family life and inter-personal maintenance factors. *Journal of Mental Health, 14*(6), 575-585.

Whyte, W. F. (1982). Interviewing in field research. In R. G. Burgess (Ed.), *Field research: A source book and field manual* (pp. 111-122). London: George Allen & Unwin.

Woodside, D. B. (2005). Treatment of anorexia nervosa: More questions than answers. *International Journal of Eating Disorders, 37*(S1), S41-S42.

Chapter 4: Additional Methodological Considerations

4. Additional Methodological Considerations

4.1 Philosophical considerations

The philosophical paradigm in which a researcher situates themself provides a set of interrelated assumptions about the social world and how that world can be studied (Filstead, 1979). The techniques of grounded theory are often considered neutral in philosophical stance, with their precise use determined by the ontological and epistemological orientation of the individual researcher (Charmaz, 2006; Eaves, 2001). The researcher in the present study therefore dedicated a significant amount of time during the initial stages of planning the research to reading widely on philosophical traditions and considering which perspective matched most closely her own beliefs about knowledge and reality. Birks & Mills (2011) provide a knowledge exercise that can be completed by the novice researcher to assist with exploring their existing beliefs. This was completed in order to clarify the researcher's thinking. An excerpt of this is provided in box 4.1 to make this process transparent.

Box 4.1: Extract from memo "The nature of knowledge & reality

The nature of knowledge & reality

A well conducted interview should provide an insight into the interviewees view of the world – but this depends on many factors such as establishing a relationship within the interview where they feel able to speak openly and truthfully, avoiding leading questions but also using the right questions – those that set up an interview where the individual will delve into their inner world rather than providing surface information. In this way the data gathered is hugely influenced by the interviewer not just by what they say and the questions they ask but also by how they *are* in the interview e.g. laid back vs. anxious, male vs. female, known vs. stranger, age etc all influence the stories the person will tell and how they will tell them – influence of the interviewer can never be fully removed.

In the same way that I wouldn't expect a patient to be able to come into their first session with me and tell me exactly why they were depressed, I don't expect my research subjects to be able to tell me the full story in my interviews....I imagine that as a psychologist I am more introspective than average but in an hour I couldn't provide a complete insight into my experiences. I would inevitably omit things either through forgetfulness or in order to fit with the image of myself I want to convey. I would go off on tangents and be unable to find the right words to convey what I meant or explain myself poorly and assume that someone else knew exactly what I meant. Having someone to keep me on track and clarify would help but would still be unlikely to uncover an absolute picture of reality. But if you interviewed 10 psychologists, they wouldn't all forget or omit the same things – and by comparing accounts you could start to build a coherent whole.

In practice, the participant's perception of reality is what's important, more so than an 'absolute' truth if that even exists. Our perception of reality affects how we think, feel, act etc and in a way becomes the 'real' reality because it is the one that we're living in. So for instance if someone believes they can live without food it doesn't really matter that this isn't a reality because if they believe it and act as if it is true then that determines the consequences.

The beliefs that the researcher identified were considered to be most consistent with an interpretive perspective as adopted by Charmaz (2006) and the researcher therefore aligned herself with Charmaz' constructivist grounded theory. The social constructivist approach considers how social phenomena develop in social contexts.

Ontology: The nature of reality.

The belief that reality is subjective and influenced by the context of the situation is a relativist perspective on reality, that is, the belief that there is no absolute truth or validity, truth is always relative and there are multiple equally valid realities (Mills *et al*., 2008). If one believes that there are multiple realities then it necessarily follows that there are multiple meanings not just in the minds of the individual but also multiple interpretations of the data (Ponterotto, 2005). Interpretation therefore should seek to consider the potential influence of a broad range of contexts such as theoretical frameworks, society, culture and the setting in which the meaning was produced (Mills *et a*l., 2008). Research in the interpretive paradigm is about asking how people construct and act on their view of reality. In light of this the researcher in the current study was careful not to accept her initial interpretation of the data as the final interpretation that she would use. Instead she questioned the data and looked for other ways in which it could be understood in order to achieve a more in depth perspective.

Epistemology: The nature of knowledge

Adopting an epistemological position means having a sense of what kind of things it is possible to find out through research (Willig, 2013). In grounded theory the goal of research is to understand the lived experience of the participants, however, it is acknowledged that these experiences may be outside the immediate awareness of the individual. It is believed that the interview interaction brings these experiences to light and leads to deeper exploration and insights (Ponterotto, 2005). The belief that the researcher-participant interaction is central in uncovering the inner world of the participants implies a subjectivist stance epistemologically, in which Knowledge and meaning are co-constructed through dialogue and interaction (Ponterotto, 2005). The acknowledgement that researchers interpret participants' meanings implies that the researcher should therefore be considered as part of the research endeavour, not an objective observer. In other words, the researcher's values and experiences should be accepted as forming part of the resulting

analysis (Mills *et al.,* 2008). It is suggested that the researcher should acknowledge, describe and bracket their values and expectations but not believe that they can be eliminated.

This subjectivist stance fitted with the researcher's beliefs that her experiences would inevitably form a part of the interpretation and analysis. The researcher is therefore described below and the impact of her experiences on the results is considered. This is known as adopting a reflexive stance. Reflexivity involves critically and thoughtfully considering one's own values and personal and professional experiences, in relation to the area under study.

4.2 The Researcher

The researcher was a third year trainee clinical psychologist working within a tier IV CAMH service. She did not have any personal experience with EDs however she was working clinically with young people with an ED diagnosis during the time that the research was carried out. By working with young people experiencing an ED on a week by week basis she was aware of the fluctuating nature of adolescent's investment in their ED and the tendency to deny negatives associated with the ED. This prompted her to probe adolescents' experiences more deeply than she might have. This involved revisiting their assertions that their friendships were trouble free through asking alternative questions that might facilitate a more in depth dialogue. The researcher kept a journal of reactions and feelings throughout the analysis process to assist remaining aware of her assumptions that might be entering into the analysis (Corbin & Strauss, 2008). This involved for instance writing a memo on her impressions of each participant immediately after each interview. During analysis she was able to return to these memos and consider how much her impressions were involved in her interpretations of the participants' words. Memos were also important to ensure that, although her clinical work might unavoidably inform her interpretations of the interview data, this did not become more influential than the information she had gathered from the participants.

4.3 Quality and trustworthiness

The issue of determining quality in qualitative research has been written about and debated extensively over recent years. In a widely cited paper, Yardley (2000) puts forward suggestions for evaluating the quality and value of qualitative research. She points out that there are long established criteria for evaluating quantitative research but that the relative infancy of qualitative research means that a similar set of robust criteria do not exist for qualitative research. The risk inherent in this is that qualitative studies will be judged by quantitative standards such as sample size, representative sample and inter-rater reliability that are inappropriate, and in the main, irrelevant to qualitative methodology. However, without an alternative means of evaluating qualitative research it would not be impossible to say that any one piece of research was of better quality than another, despite the fact that there will clearly be differences in the conduct of qualitative research. Lacking a means to appraise qualitative research would also undermine the practical significance of research findings. Yardley therefore proposed 4 dimensions on which qualitative studies could be evaluated: sensitivity to context, commitment and rigour, transparency and coherence and impact and importance. It is acknowledged that the great degree of variation between the various qualitative methodologies means that the way in which different studies will demonstrate meeting these criteria will necessarily be quite different. The way in which these dimensions were addressed in the current study is thus presented below.

Sensitivity to context

It is important to be aware of relevant literature, both studies employing similar methods and those exploring similar topics. However, at the same time it is necessary to ensure that the analysis emerges from the data itself. In order to achieve this balance in the current study, empirical evidence was integrated with the results but only following initial line by line coding and development of a preliminary framework. The researcher also actively sought and incorporated unexpected findings, or so called negative cases in order to achieve a complete representation of the participants' experiences.

It is recommended that researchers attend to the socio-cultural setting of the study in order to evaluate potential influences on the beliefs, disclosures, expectations and values of

the participants. In order to achieve this the researcher referred to her own understanding of adolescence, formed through working clinically with adolescents and her own experiences of adolescence, discussions with others working in the field and additional research to increase understanding of unfamiliar topics that the participants discussed. For instance, participants mentioned two online forums 'formspring' and 'askfm' in their narratives and these were researched in order to contextualise their accounts.

The social context of the interview and the characteristics of the researcher should also be mentioned. Speech is selected based on whom one is interacting with so the interviewer is crucial in the way that each participant presents during the interview. The interviewer determines the identity that the participant adopts during the interaction. The role of the researcher as a trainee clinical psychologist within CAMHS was considered likely to have introduced a power imbalance and potentially influenced the responding of the participants. In particular it should be noted that all of the participants were currently being seen by clinicians within CAMHS for treatment of an ED. The physical risks associated with EDs often mean that clinicians must take an authoritative stance and the young people therefore may have anticipated a similar experience from the interviews. In order to minimise this the researcher made an effort to dress less formally, to engage the young people in casual conversation prior to commencing the interview and reminded them that the interview was not connected with their treatment in any way.

The researcher believed that somebody with different values, for instance who was an adolescent longer ago or with a background in a profession other than psychology would have picked up on different things in the adolescents' narratives and interpreted their statements differently.

Commitment and Rigour

Commitment encapsulates a lengthy engagement with the topic, immersion in the data and acquiring aptitude in qualitative methods. This was achieved through commencing planning of the study in year one of a three year doctorate, reading widely on qualitative methods, attending a workshop on qualitative research run by Odette Parry, forming a qualitative research group with fellow doctorate researchers, receiving supervision from

two academic supervisors skilled in qualitative methodology, transcribing all data independently and continually returning to re-read the raw data throughout the analysis process. In reporting the analysis, excerpts from the transcripts were provided to allow independent judgement of the fit of the analysis with the data.

Within the qualitative literature concerns have been raised about the quality of published research labelled as grounded theory (Benoliel, 1996; May, 1996). The concern is that all too often the label GT is applied to research that does not make use of the full complement of GT principles and analytical methods. The researcher was therefore clear to make use of the 'essential' elements of grounded theory and report on each of these in her method section (Birks & Mills, 2011)

On reflecting in her competence, skill and engagement with the topic the researcher recognised that she was relatively new to the field of EDs and was aware during the early stages of the research that many of her preconceived ideas came in fact from other more experienced clinicians whom she had discussed her ideas for the project with. She became aware that the emerging data did not necessarily fit with these ideas yet part of her wanted it to because she felt that she should trust the ideas of more experienced clinicians. In a memo reflecting on this she recognised that holding this belief would constrain her research and that the most important thing was to capture the voices of the young people. This lead her to commit to maintaining a more neutral stance towards the data rather than feel constrained by inexperience. She reframed her lack of preconceptions as a positive and acknowledgement of this gave her the confidence to be lead more by the data.

Rigour is a term used to describe the completeness of data collection and analysis. Efforts to ensure rigour involved engaging in theorising in memos and employing triangulation of data analysis by having a supervisor check and code two of the transcripts, discussing interpretations with both supervisors, consulting the literature and checking emerging ideas in subsequent interviews.

Triangulation

One of the supervisors was a clinical psychologist working primarily with EDs and the academic supervisor was experienced in qualitative research methods. This meant that

both supervisors were able to input into the research in different ways. For instance the academic supervisor provided advice during the process of moving towards focused coding. The researcher became preoccupied with which of the initial codes should be grouped together particularly when it appeared that a code could belong in more than one place. The academic supervisor advised to include the codes in both categories to avoid being overly restrictive at this early stage.

The researcher took a list of emerging categories into the interviews with her to serve as an aide memoir to follow up these ideas in more detail if they were mentioned by the participants. As categories became clearer the young people were asked about them more explicitly in order to develop their properties and dimensions more fully.

Consultation with the literature throughout analysis aided the researcher in clarifying her emerging ideas and looking at them in different ways. This also clarified areas where research had already been done and those where research was more sparse. Consultation with the literature was made transparent throughout the results section to enable the reader to see where this took place and how it was used to aid understanding. It was made clear whether the literature was included in support of the findings emerging from the current research, whether the current research added new insights or whether the literature helped the researcher to achieve a broader understanding of the processes the young people were describing.

Some researchers advocate for the use of 'member checking' in qualitative research, that is, returning to the participants and checking interpretations of the data with them. This was not employed in the current study for two reasons. Firstly, the analytical process involved in interpreting the data and making sense of multiple accounts means that participants may not immediately recognise their narrative in the analysis (Cohen & Crabtree, 2008; Morse et al. 2002). Secondly, in the current study it was noted that adolescents tended to use defensive strategies to defend against recognition that the ED was damaging their friendships. Some adolescents may therefore have disputed the analysis or have found being confronted with the analysis upsetting.

Transparency and coherence

These criterion are intended to address the 'persuasiveness' of the analysis and presented theory. Transparency entails making clear the process that was followed from initial data collection through to constructing the final theory. The researcher aimed to achieve this in the current study by describing the analysis process in detail, providing excerpts of coded data and reflective memos and describing how the researcher's background may have influenced the analysis process. Coherence refers to consistency in the method used and a clear presentation of the findings. The researcher left sufficient time in preparing the draft of the paper to commit time to improving the coherence of the paper as a whole and also submitted drafts to supervisors for feedback.

Impact and importance

These two final criteria entail assessing how influential the results of the research are and how well the objectives of the study were addressed. By highlighting and beginning to address a significant gap in the literature, as well as suggesting areas for future research and intervention it is hoped that the research meets the criteria for this final principle. The young people participating in the research expressed a belief that the topic was highly relevant to them and colleagues also supported the exploration of the topic.

References

Benoliel, J. Q. (1996). Grounded theory and nursing knowledge. *Qualitative Health Research, 6*(3), 406-428.

Birks, M., & Mills, J. (2011). *Grounded theory: A practical guide*. London: Sage.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis* Pine Forge Press.

Cohen, D. J., & Crabtree, B. F. (2008). Evaluative criteria for qualitative research in health care: Controversies and recommendations. *The Annals of Family Medicine, 6*(4), 331-339.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* Sage.

Eaves, Y. D. (2001). A synthesis technique for grounded theory data analysis. *Journal of Advanced Nursing, 35*(5), 654-663.

Filstead, W.J. (1979) Qualitative methods: A needed perspective in evaluation research. In Cook, T. D., & Reichardt, C. S. (Eds). *Qualitative and quantitative methods in evaluation research* Sage publications Beverly Hills^ eCA CA.

May, K. A. (1996). Diffusion, dilution or distillation?: The case of grounded theory method. *Qualitative Health Research, 6*, 309.

Mills, J., Bonner, A., & Francis, K. (2008). The development of constructivist grounded theory. *International Journal of Qualitative Methods, 5*(1), 25-35.

Morse, J. M. (2002). *Readme first for a user's guide to qualitative methods* SAGE Publications, Incorporated.

Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of Counseling Psychology, 52*(2), 126.

Willig, C. (2013). *Introducing qualitative research in psychology* Open University Press.

Yardley, L. (2000). Dilemmas in qualitative health research. *Psychology and Health, 15*(2), 215-228.

Full Reference List

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review, 30*(2), 217-237.

Alden, L. E., & Bieling, P. (1998). Interpersonal consequences of the pursuit of safety. *Behaviour Research and Therapy, 36*(1), 53-64.

Alden, L. E., & Taylor, C. T. (2004). Interpersonal processes in social phobia. *Clinical Psychology Review, 24*(7), 857-882.

Allen, J. P., & Land, D. (1999). Attachment in adolescence. In J. Cassidy & P.R. Shaver (Eds.) *Handbook of Attachment: Theory, Research, and Clinical Applications (*pp 319-335) New York, NY, US: Guilford Press.

Allen, J. P., & Manning, N. (2007). From safety to affect regulation: Attachment from the vantage point of adolescence. *New Directions for Child and Adolescent Development, 2007*(117), 23-39.

Andersen, S. M., & Chen, S. (2002). The relational self: An interpersonal social-cognitive theory. *Psychological Review, 109*(4), 619.

Areemit, R. S., Katzman, D. K., Pinhas, L., & Kaufman, M. E. (2010). The experience of siblings of adolescents with eating disorders. *Journal of Adolescent Health, 46*(6), 569-576.

Asher, S. R., & Wheeler, V. A. (1985). Children's loneliness: A comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology, 53*(4), 500.

Ausubel, D. P. (2002). *Theory and problems of adolescent development* (3rd Ed) United States: iUniverse.

Azmitia, M., Ittel, A., & Radmacher, K. (2005). Narratives of friendship and self in adolescence. *New Directions for Child and Adolescent Development, 2005*(107), 23-39.

Bagwell, C. L., Newcomb, A. F., & Bukowski, W. M. (1998). Preadolescent friendship and peer rejection as predictors of adult adjustment. *Child Development, 69*(1), 140-153.

Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin, 112*(3), 461.

Bastiani, A. M., Rao, R., Weltzin, T., & Kaye, W. H. (1995). Perfectionism in anorexia nervosa. *International Journal of Eating Disorders, 17*(2), 147-152.

Benoliel, J. Q. (1996). Grounded theory and nursing knowledge. *Qualitative Health Research, 6*(3), 406-428.

Berndt, T. J. (1979). Developmental changes in conformity to peers and parents. *Developmental Psychology, 15*(6), 608.

Berndt, T. J. (1982). The features and effects of friendship in early adolescence. *Child Development,* 53, 1447-1460.

Berndt, T. J. (2002). Friendship quality and social development. *Current Directions in Psychological Science, 11*(1), 7-10.

Besser, A., Flett, G. L., & Hewitt, P. L. (2010). Perfectionistic Self‐Presentation and trait perfectionism in social problem - solving ability and depressive symptoms. *Journal of Applied Social Psychology, 40*(8), 2121-2154.

Bigelow, B. J., & LaGaipa, J. J. (1980). The development of friendship values and choice. *Friendship and Social Relations in Children,* , 15-44.

Birks, M., & Mills, J. (2011). *Grounded theory: A practical guide*. London: Sage.

Blashfield, R. K., & Aldenderfer, M. S. (1978). The literature on cluster analysis. *Multivariate Behavioral Research, 13*(3), 271-295.

Blyth, D. A., Hill, J. P., & Thiel, K. S. (1982). Early adolescents' significant others: Grade and gender differences in perceived relationships with familial and nonfamilial adults and young people. *Journal of Youth and Adolescence, 11*(6), 425-450.

Boone, L. (2013). Are attachment styles differentially related to interpersonal perfectionism and binge eating symptoms? *Personality and Individual Differences,* 54, 931-935.

Bowlby, J. (2008). *A secure base: Parent-child attachment and healthy human development. USA:* Basic Books.

Broman-Fulks, J. J., Hill, R. W., & Green, B. A. (2008). Is perfectionism categorical or dimensional? A taxometric analysis. *Journal of Personality Assessment, 90*(5), 481-490.

Brown, B. B. (2004). Adolescents' relationships with peers. *Handbook of Adolescent Psychology, 2*, 363-394.

Bruch, C. B., & Curry, J. A. (1978). Personal learnings: A current synthesis on the culturally different gifted. *Gifted Child Quarterly, 22*(3), 313-321.

Bruch, H. (1973). *Eating disorders*. New York: Basic Books.

Budd, G. (2007). Disordered eating: Young women's search for control and connection. *Journal of Child and Adolescent Psychiatric Nursing, 20*(2), 96-106.

Bukowski, W. M., & Sippola, L. K. (2005). Friendship and development: Putting the most human relationship in its place. *New Directions for Child and Adolescent Development, 2005*(109), 91-98.

Burns, D. D. (1980). The perfectionist's script for self-defeat. *Psychology Today, 14*(6), 34-52.

Canevello, A., & Crocker, J. (2010). Creating good relationships: Responsiveness, relationship quality, and interpersonal goals. *Journal of Personality and Social Psychology, 99*(1), 78.

Castro, J., Gila, A., Gual, P., Lahortiga, F., Saura, B., & Toro, J. (2004). Perfectionism dimensions in children and adolescents with anorexia nervosa. *Journal of Adolescent Health, 35*(5), 392-398.

Centre for Reviews and Dissemination (CRD) (2009). *Systematic reviews: CRD's guidance for undertaking reviews in heathcare* York, CRD: University of York.

Chalmers, T. C., Frank, C. S., & Reitman, D. (1990). Minimizing the three stages of publication bias. *JAMA: The Journal of the American Medical Association, 263*(10), 1392-1395.

Charmaz, K. (1990). 'Discovering'chronic illness: Using grounded theory. *Social Science & Medicine, 30*(11), 1161-1172.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis* London: Sage.

Chen, C., Hewitt, P. L., Flett, G. L., Cassels, T. G., Birch, S., & Blasberg, J. S. (2012). Insecure attachment, perfectionistic self-presentation, and social disconnection in adolescents. *Personality and Individual Differences, 52*(8), 936-941.

Clinton, D., & Glant, R. (1992). The eating disorders spectrum of DSM-III-R: Clinical features and psychosocial concomitants of 86 consecutive cases from a swedish urban catchment area. *The Journal of Nervous and Mental Disease, 180*(4), 244-250.

Cockell, S. J., Hewitt, P. L., Seal, B., Sherry, S., Goldner, E. M., Flett, G. L., & Remick, R. A. (2002). Trait and self-presentational dimensions of perfectionism among women with anorexia nervosa. *Cognitive Therapy and Research, 26*(6), 745-758.

Cohen, D. J., & Crabtree, B. F. (2008). Evaluative criteria for qualitative research in health care: Controversies and recommendations. *The Annals of Family Medicine, 6*(4), 331-339.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory.* United States: Sage.

Corning, A.F., Krumm, A.J., & Smitharn, L.A. (2006). Differential social comparison process in women with and without eating disorder symptoms. *Journal of Counseling Psychology, 53(3), 338-349.*

Cramer, P. (1998). Coping and defense mechanisms: What's the difference? *Journal of Personality, 66*(6), 919-946.

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*(1), 74.

Crisp, A., Hsu, L., Harding, B., & Hartshorn, J. (1980). Clinical features of anorexia nervosa: A study of a consecutive series of 102 female patients. *Journal of Psychosomatic Research, 24*(3), 179-191.

Crowe, L., Beauchamp, M., Catroppa, C., & Anderson, V. (2011). Social function assessment tools for children and adolescents: A systematic review from 1988 to 2010. *Clinical Psychology Review, 31*(5), 767-785.

Cunha, A. I., Relvas, A. P., & Soares, I. (2009). Anorexia nervosa and family relationships: Perceived family functioning, coping strategies, beliefs, and attachment to parents and peers. *International Journal of Clinical and Health Psychology, 9*(2), 229-240.

D'Abundo, M., & Chally, P. (2004). Struggling with recovery: Participant perspectives on battling an eating disorder. *Qualitative Health Research, 14*(8), 1094-1106.

Dallos, R., & Denford, S. (2008). A qualitative exploration of relationship and attachment themes in families with an eating disorder. *Clinical Child Psychology and Psychiatry, 13*(2), 305-322.

Davies, S. (2004). A group-work approach to addressing friendship issues in the treatment of adolescents with eating disorders. *Clinical Child Psychology and Psychiatry, 9*(4), 519-531.

Davila, J., & Beck, J. G. (2002). Is social anxiety associated with impairment in close relationships? A preliminary investigation. *Behavior Therapy, 33*(3), 427-446.

Deater-Deckard, K. (2001). Annotation: Recent research examining the role of peer relationships in the development of psychopathology. *Journal of Child Psychology and Psychiatry, 42*(05), 565-579.

Dickersin, K., & MIN, Y. (1993). Publication bias: The problem that won't go away. *Annals of the New York Academy of Sciences, 703*(1), 135-148.

Dimitropoulos, G., Klopfer, K., Lazar, L., & Schacter, R. (2009). Caring for a sibling with anorexia nervosa: A qualitative study. *European Eating Disorders Review, 17*(5), 350-365.

Dubow, E. F., & Ullman, D. G. (1989). Assessing social support in elementary school children: The survey of children's social support. *Journal of Clinical Child Psychology, 18*(1), 52-64.

Dunkley, D. M., Sanislow, C. A., Grilo, C. M., & McGlashan, T. H. (2006). Perfectionism and depressive symptoms 3 years later: Negative social interactions, avoidant coping, and perceived social support as mediators. *Comprehensive Psychiatry, 47*(2), 106-115.

Dykman, B. M. (1998). Integrating cognitive and motivational factors in depression: Initial tests of a goal-orientation approach. *Journal of Personality and Social Psychology, 74*(1), 139.

Eaves, Y. D. (2001). A synthesis technique for grounded theory data analysis. *Journal of Advanced Nursing, 35*(5), 654-663.

Espindola, C. R., & Blay, S. L. (2009). Anorexia nervosa's meaning to patients: A qualitative synthesis. *Psychopathology, 42*(2), 69-80.

Fairburn, C. G., Cooper, Z., & Shafran, R. (2003). Cognitive behaviour therapy for eating disorders: A "transdiagnostic" theory and treatment. *Behaviour Research and Therapy, 41*(5), 509-528.

Fairburn, C. G., Cooper, Z., Doll, H. A., & Welch, S. L. (1999). Risk factors for anorexia nervosa: Three integrated case-control comparisons. *Archives of General Psychiatry, 56*(5), 468.

Fairburn, C. G., Welch, S. L., Doll, H. A., Davies, B. A., & O'Connor, M. E. (1997). Risk factors for bulimia nervosa: A community-based case-control study. *Archives of General Psychiatry, 54*(6), 509.

Festinger, L., Riecken, H. W., & Schachter, S. (1956). When prophecy fails. Minneapolis, MN, US: University of Minnesota Press.

Filstead, W.J. (1979) Qualitative methods: A needed perspective in evaluation research. In Cook, T. D., & Reichardt, C. S. (Eds). *Qualitative and quantitative methods in evaluation research* Sage publications Beverly Hills^ eCA CA.

Flett, G. L., & Hewitt, P. L. (2002). *Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues.* In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 5-31) American Psychological Association.

Flett, G. L., & Hewitt, P. L. (2012). Perfectionism and cognitive factors in distress and dysfunction in children and adolescents: Introduction to the special issue. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 30*(2), 53-61.

Flett, G. L., Besser, A., & Hewitt, P. L. (2005). Perfectionism, ego defense styles, and depression: A comparison of Self‐Reports versus informant ratings. *Journal of Personality, 73*(5), 1355-1396.

Flett, G. L., Druckman, T., Hewitt, P. L., & Wekerle, C. (2012). Perfectionism, coping, social support, and depression in maltreated adolescents. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 30*(2), 118-131.

Flett, G. L., Hewitt, P. L., & De Rosa, T. (1996). Dimensions of perfectionism, psychosocial adjustment, and social skills. *Personality and Individual Differences, 20*(2), 143-150.

Flett, G. L., Hewitt, P. L., Blankstein, K. R., Solnik, M., & Van Brunschot, M. (1996). Perfectionism, social problem-solving ability, and psychological distress. *Journal of Rational-Emotive and Cognitive-Behavior Therapy, 14*(4), 245-274.

Flett, G. L., Hewitt, P. L., Garshowitz, M., & Martin, T. R. (1997). Personality, negative social interactions, and depressive symptoms. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement, 29*(1), 28.

Flett, G. L., Hewitt, P. L., Oliver, J. M., & Macdonald, S. (2002). Perfectionism in children and their parents: A developmental analysis. In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 89-132) American Psychological Association.

Flett, G. L., Hewitt, P. L., Shapiro, B., & Rayman, J. (2001). Perfectionism, beliefs, and adjustment in dating relationships. *Current Psychology, 20*(4), 289-311.

Flett, G., Hewitt, P., Boucher, D., Davidson, L., & Munro, Y. (1997a). The child-adolescent perfectionism scale: Development, validation, and association with adjustment. *Unpublished Manuscript.*

Fraley, R. C., & Waller, N. G. (1998). Adult attachment patterns. In J.A. Simpson & W.S. Rholes *Attachment Theory and Close Relationships* (pp 77-114) Guildford Press.

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14*(5), 449-468.

Galloway, L.L. (2013) A Systematic Review of the Relationship Between Perfectionism and Interpersonal Functioning in Adolescent Peer Relationships. This thesis.

Galloway, L.L. (2013b) Efforts to Achieve Acceptance: A Grounded Theory Exploration of Friendship in Adolescent Eating Disorders. This Thesis.

Gauze, C., Bukowski, W. M., Aquan‐Assee, J., & Sippola, L. K. (1996). Interactions between family environment and friendship and associations with self‐perceived well‐being during early adolescence. *Child Development, 67*(5), 2201-2216.

Geller, J., Cockell, S. J., Hewitt, P. L., Goldner, E. M., & Flett, G. L. (2000). Inhibited expression of negative emotions and interpersonal orientation in anorexia nervosa. *International Journal of Eating Disorders, 28*(1), 8-19.

Gerner, B., & Wilson, P. H. (2005). The relationship between friendship factors and adolescent girls' body image concern, body dissatisfaction, and restrained eating. *International Journal of Eating Disorders, 37*(4), 313-320.

Ghaderi, A., & Scott, B. (2000). Coping in dieting and eating disorders: A population-based study. *The Journal of Nervous and Mental Disease, 188*(5), 273-279.

Gilman, R., Adams, R., & Nounopoulos, A. (2011). The interpersonal relationships and social perceptions of adolescent perfectionists. *Journal of Research on Adolescence, 21*(2), 505-511.

Gilman, R., Ashby, J. S., Sverko, D., Florell, D., & Varjas, K. (2005). The relationship between perfectionism and multidimensional life satisfaction among Croatian and American youth. *Personality and Individual Differences, 39*(1), 155-166.

Glaser, B. G., & Strauss, A.L. (1967) The discovery of grounded theory. Chicago: Aldine.

Godart, N., Flament, M., Lecrubier, Y., & Jeammet, P. (2000). Anxiety disorders in anorexia nervosa and bulimia nervosa: Co-morbidity and chronology of appearance. *European Psychiatry, 15*(1), 38-45.

Goldner, E. M., Cockell, S. J., & Srikameswaran, S. (2002). Perfectionism and eating disorders. In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 319-340) American Psychological Association.

Gothelf, D., Apter, A., Ratzoni, G., Orbach, I., Weizman, R., Tyano, S., & Pfeffer, C. (1995). Defense mechanisms in severe adolescent anorexia nervosa. *Journal of the American Academy of Child & Adolescent Psychiatry, 34*(12), 1648-1654.

Grisset, N. I., & Norvell, N. K. (1992). Perceived social support, social skills, and quality of relationships in bulimic women. *Journal of Consulting and Clinical Psychology, 60*(2), 293.

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology, 2*(3), 271.

Grotevant, H. D., & Cooper, C. R. (1986). Individuation in family relationships. *Human Development, 29*(2), 82-100.

Gustafsson, S. A., Edlund, B., Davén, J., Kjellin, L., & Norring, C. (2011). How to deal with sociocultural pressures in daily life: Reflections of adolescent girls suffering from eating disorders. *Journal of Multidisciplinary Healthcare, 4*, 103.

Gustafsson, S., Edlund, B., Davén, J., Kjellin, L., & Norring, C. (2010). Perceived expectations in daily life among adolescent girls suffering from an eating disorder: A phenomenographic study. *Eating Disorders, 18*(1), 25-42.

Gustafsson, S., Edlund, B., Kjellin, L., & Norring, C. (2008). Personal standards, self‐evaluation and perceived benefits of thinness in girls and young women with disturbed eating. *European Eating Disorders Review, 16*(6), 463-471.

Habke, A. M., & Flynn, C. A. (2002). Interpersonal aspects of trait perfectionism. In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 151-180) American Psychological Association.

Habke, A. M., Hewitt, P. L., & Flett, G. L. (1999). Perfectionism and sexual satisfaction in intimate relationships. *Journal of Psychopathology and Behavioral Assessment, 21*(4), 307-322.

Halliwell, E., & Harvey, M. (2006). Examination of a sociocultural model of disordered eating among male and female adolescents. *British Journal of Health Psychology, 11*(2), 235-248.

Halmi, K. A., Eckert, E., Marchi, P., Sampugnaro, V., Apple, R., & Cohen, J. (1991). Comorbidity of psychiatric diagnoses in anorexia nervosa. *Archives of General Psychiatry, 48*(8), 712.

Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior,* 15(1), 27-33.

Harter, S. (1990). Processes underlying adolescent self-concept formation. In R. Montemayor, G.R. Adams & T.P. Gullotta (Eds.), From childhood to adolescence: A Transitional period? Advances in adolescent development: An annual book series, Vol 2 (pp. 205-239). Thousand Oaks, CA, US: Sage Publications.

Harter, S. (2006). Developmental and individual difference perspectives on self-esteem. In Mroczek, D.K. & Little, T.D. (Eds) Handbook of Personality Development (pp. 311-334). Mahwah, NJ, US: Lawrence Erlbaum Associates.

Harter, S., Waters, P., & Whitesell, N. R. (1998). Relational Self‐Worth: Differences in perceived worth as a person across interpersonal contexts among adolescents. *Child Development, 69*(3), 756-766.

Hartmann, A., Zeeck, A., & Barrett, M. S. (2010). Interpersonal problems in eating disorders. *International Journal of Eating Disorders, 43*(7), 619-627.

Hartup, W. W., & Stevens, N. (1999). Friendships and adaptation across the life span. *Current Directions in Psychological Science, 8*(3), 76-79.

Hasler, G., Delsignore, A., Milos, G., Buddeberg, C., & Schnyder, U. (2004). Application of prochaska's transtheoretical model of change to patients with eating disorders. *Journal of Psychosomatic Research, 57*(1), 67-72.

Herman, K. C., Trotter, R., Reinke, W. M., & Ialongo, N. (2011). Developmental origins of perfectionism among African American youth. *Journal of Counseling Psychology, 58*(3), 321.

Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology, 60*(3), 456.

Hewitt, P. L., Blasberg, J. S., Flett, G. L., Besser, A., Sherry, S. B., Caelian, C., . . . Birch, S. (2011). Perfectionistic self-presentation in children and adolescents: Development and validation of the perfectionistic self-presentation Scale—Junior form. *Psychological Assessment, 23*(1), 125.

Hewitt, P. L., Flett, G. L., & Ediger, E. (1995). Perfectionism traits and perfectionistic self-presentation in eating disorder attitudes, characteristics, and symptoms. *International Journal of Eating Disorders, 18*(4), 317-326.

Hewitt, P. L., Flett, G. L., Sherry, S. B., & Caelian, C. (2006). Trait perfectionism dimensions and suicidal behavior. In T.E. Ellis (Ed.) Cognition and Suicide: Theory, research, and therapy (pp. 215-235) Washington, DC, US: American Psychological Association.

Hewitt, P. L., Flett, G. L., Sherry, S. B., Habke, M., Parkin, M., Lam, R. W., . . . Stein, M. B. (2003). The interpersonal expression of perfection: Perfectionistic self-presentation and psychological distress. *Journal of Personality and Social Psychology, 84*(6), 1303.

Hewitt, P. L., Habke, A. M., Lee-Baggley, D. L., Sherry, S. B., & Flett, G. L. (2008). The impact of perfectionistic self-presentation on the cognitive, affective, and physiological experience of a clinical interview. *Psychiatry: Interpersonal and Biological Processes, 71*(2), 93-122.

Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology, 30*, 1-46.

Higgins, E. T., Bond, R. N., Klein, R., & Strauman, T. (1986). Self-discrepancies and emotional vulnerability: How magnitude, accessibility, and type of discrepancy influence affect. *Journal of Personality and Social Psychology, 51*(1), 5.

Higgins, J. P., & Green, S. (2011). Cochrane handbook for systematic reviews of interventions. Retrieved 06/15, 2013, from www.handbook.cochrane.org

Higgins, J. P., Green, S., & Collaboration, C. (2008). *Cochrane handbook for systematic reviews of interventions.* Wiley Online Library.

Hill, R. W., Zrull, M. C., & Turlington, S. (1997). Perfectionism and interpersonal problems. *Journal of Personality Assessment, 69*(1), 81-103.

Hodges, E. V., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology, 35*(1), 94.

Holloway, I. (2005). *Qualitative research in health care* McGraw-Hill International.

Holsen, I., Kraft, P., & Røysamb, E. (2001). The relationship between body image and depressed mood in adolescence: A 5-year longitudinal panel study. *Journal of Health Psychology, 6*(6), 613-627.

Holt, M. K., & Espelage, D. L. (2002). Problem - Solving skills and relationship attributes among women with eating disorders. *Journal of Counseling & Development, 80*(3), 346-354.

Honey, A., Clarke, S., Halse, C., Kohn, M., & Madden, S. (2006). The influence of siblings on the experience of anorexia nervosa for adolescent girls. *European Eating Disorders Review, 14*(5), 315-322.

Horney, K. (1950). Neurosis and human growth: The struggle towards self-realization. *New York: Norcross.*

Huon, G., Hayne, A., Gunewardene, A., Strong, K., Lunn, N., Piira, T., & Lim, J. (1999). Accounting for differences in dieting status: Steps in the refinement of a model. *International Journal of Eating Disorders, 26*(4), 420-433.

Hutchinson, D. M., & Rapee, R. M. (2007). Do friends share similar body image and eating problems? the role of social networks and peer influences in early adolescence. *Behaviour Research and Therapy, 45*(7), 1557-1577.

Ialongo, N. S., Kellam, S. G., & Poduska, J. (Eds.). (1999). *Manual for the peer nomination inventory* (Tech.Rep.No.4 ed.). Baltimore, MD: Johns Hopkins University.

Ison, J., & Kent, S. (2010). Social identity in eating disorders. *European Eating Disorders Review, 18*(6), 475-485.

Jack, D. C., & Dill, D. (1992). The silencing the self scale: Schemas of intimacy associated with depression in women. *Psychology of Women Quarterly, 16*(1), 97-106.

Jarvinen, D. W., & Nicholls, J. G. (1996). Adolescents' social goals, beliefs about the causes of social success, and satisfaction in peer relations. *Developmental Psychology, 32*(3), 435.

Jüni, P., Witschi, A., Bloch, R., & Egger, M. (1999). The hazards of scoring the quality of clinical trials for meta-analysis. *JAMA: The Journal of the American Medical Association, 282*(11), 1054-1060.

Juster, H. R., Heimberg, R. G., Frost, R. O., Holt, C. S., Mattia, J. I., & Faccenda, K. (1996). Social phobia and perfectionism. *Personality and Individual Differences, 21*(3), 403-410.

Katz, J., Joiner Jr, T. E., & Kwon, P. (2002). Membership in a devalued social group and emotional well-being: Developing a model of personal self-esteem, collective self-esteem, and group socialization. *Sex Roles, 47*(9-10), 419-431.

Kaye, W. H., Bulik, C. M., Thornton, L., Barbarich, N., & Masters, K. (2004). Comorbidity of anxiety disorders with anorexia and bulimia nervosa. *American Journal of Psychiatry, 161*(12), 2215-2221.

Kennedy, B. L., Schwab, J. J., & Hyde, J. A. (2001). Defense styles and personality dimensions of research subjects with anxiety and depressive disorders. *Psychiatric Quarterly, 72*(3), 251-262.

Kirsh, G., McVey, G., Tweed, S., & Katzman, D. K. (2007). Psychosocial profiles of young adolescent females seeking treatment for an eating disorder. *Journal of Adolescent Health, 40*(4), 351-356.

Klima, T., & Repetti, R. L. (2008). Children's peer relations and their psychological adjustment: Differences between close friendships and the larger peer group. *Merrill-Palmer Quarterly, 54*(2), 151-178.

Koruth, N., Nevison, C., & Schwannauer, M. (2012). A grounded theory exploration of the onset of anorexia in adolescence. *European Eating Disorders Review, 20*(4), 257-264.

Krug, I., Penelo, E., Fernandez-Aranda, F., Anderluh, M., Bellodi, L., Cellini, E., . . . Nacmias, B. (2013). Low social interactions in eating disorder patients in childhood and adulthood: A multi-centre european case control study. *Journal of Health Psychology, 18*(1), 26-37.

Kutlesa, N., & Arthur, N. (2008). Overcoming negative aspects of perfectionism through group treatment. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 26*(3), 134-150.

Laible, D. J., Carlo, G., & Raffaelli, M. (2000). The differential relations of parent and peer attachment to adolescent adjustment. *Journal of Youth and Adolescence, 29*(1), 45-59.

Laible, D. J., Carlo, G., & Roesch, S. C. (2004). Pathways to self-esteem in late adolescence: The role of parent and peer attachment, empathy, and social behaviours. *Journal of Adolescence, 27*(6), 703-716.

Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. *Advances in Experimental Social Psychology, 32*, 1-62.

Leary, M. R., Cottrell, C. A., & Phillips, M. (2001). Deconfounding the effects of dominance and social acceptance on self-esteem. *Journal of Personality and Social Psychology, 81*(5), 898.

Lee, R. M., Draper, M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal of Counseling Psychology, 48*(3), 310.

Lieberman, M., Gauvin, L., Bukowski, W. M., & White, D. R. (2001). Interpersonal influence and disordered eating behaviors in adolescent girls: The role of peer modeling, social reinforcement, and body-related teasing. *Eating Behaviors, 2*(3), 215-236.

Lock, J., & le Grange, D. (2005). Family - based treatment of eating disorders. *International Journal of Eating Disorders, 37*(S1), S64-S67.

Mack, D. E., Strong, H. A., Kowalski, K. C., & Crocker, P. R. (2007). Self-presentational motives in eating disordered behavior: A known groups difference approach. *Eating Behaviors, 8*(1), 98-105.

Masicampo, E., & Lalande, D. R. (2012). A peculiar prevalence of p values just below. 05. *The Quarterly Journal of Experimental Psychology, 65*(11), 2271-2279.

Masten, A. S. (2005). Peer relationships and psychopathology in developmental perspective: Reflections on progress and promise. *Journal of Clinical Child and Adolescent Psychology, 34*(1), 87-92.

May, K. A. (1996). Diffusion, dilution or distillation?: The case of grounded theory method. *Qualitative Health Research, 6*, 309.

McClintock, J. M., & Evans, I. M. (2001). The underlying psychopathology of eating disorders and social phobia: A structural equation analysis. *Eating Behaviors, 2*(3), 247-261.

McCloskey, L. A., & Stuewig, J. (2001). The quality of peer relationships among children exposed to family violence. *Development and Psychopathology, 13*(1), 83-96.

McGee, B. J., Hewitt, P. L., Sherry, S. B., Parkin, M., & Flett, G. L. (2005). Perfectionistic self-presentation, body image, and eating disorder symptoms. *Body Image, 2*(1), 29-40.

McVey, G. L., Pepler, D., Davis, R., Flett, G. L., & Abdolell, M. (2002). Risk and protective factors associated with disordered eating during early adolescence. *The Journal of Early Adolescence, 22*(1), 75-95.

Meyer, T. A., & Gast, J. (2008). The effects of peer influence on disordered eating behavior. *The Journal of School Nursing, 24*(1), 36-42.

Mills, J., Bonner, A., & Francis, K. (2008). The development of constructivist grounded theory. *International Journal of Qualitative Methods, 5*(1), 25-35.

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Annals of Internal Medicine, 151*(4), 264-269.

Morse, J. M. (2002). *Readme first for a user's guide to qualitative methods* SAGE Publications, Incorporated.

Moulds, M. L., Touyz, S. W., Schotte, D., Beumont, P. J., Griffiths, R., Russell, J., & Charles, M. (2000). Perceived expressed emotion in the siblings and parents of hospitalized patients with anorexia nervosa. *International Journal of Eating Disorders, 27*(3), 288-296.

Mufson, L., Dorta, K. P., Moreau, D., & Weissman, M. M. (2011). *Interpersonal psychotherapy for depressed adolescents* (2nd Ed) New York: Guilford Press.

Nangle, D. W., Erdley, C. A., Newman, J. E., Mason, C. A., & Carpenter, E. M. (2003). Popularity, friendship quantity, and friendship quality: Interactive influences on children's loneliness and depression. *Journal of Clinical Child and Adolescent Psychology, 32*(4), 546-555.

National Institute for Health and Clinical Excellence (NICE) (2012). *Methods for the development of NICE public health guidance (3rd ed) appendix G: Quality appraisal checklist - quantitative studies reporting correlations and associations*. London.

National Institute for Health and Clinical Excellence (NICE). (2004). *National clinical practice guideline number CG9: Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders* British Psychological Society.

Nevonen, L., & Broberg, A. G. (2000). The emergence of eating disorders: An exploratory study. *European Eating Disorders Review, 8*(4), 279-292.

Nordbø, R. H., Espeset, E., Gulliksen, K. S., Skårderud, F., & Holte, A. (2006). The meaning of self - starvation: Qualitative study of patients' perception of anorexia nervosa. *International Journal of Eating Disorders, 39*(7), 556-564.

Obeid, N., Buchholz, A., Boerner, K. E., Henderson, K. A., & Norris, M. (2013). Self-esteem and social anxiety in an adolescent female eating disorder population: Age and diagnostic effects. *Eating Disorders, 21*(2), 140-153.

Ojanen, T., Grönroos, M., & Salmivalli, C. (2005). An interpersonal circumplex model of children's social goals: Links with peer-reported behavior and sociometric status. *Developmental Psychology, 41*(5), 699.

Oliver, K. K., & Thelen, M. H. (1997). Children's perceptions of peer influence on eating concerns. *Behavior Therapy, 27*(1), 25-39.

Park, H., Paul Heppner, P., & Lee, D. (2010). Maladaptive coping and self-esteem as mediators between perfectionism and psychological distress. *Personality and Individual Differences, 48*(4), 469-474.

Parker, W. D. (1997). An empirical typology of perfectionism in academically talented children. *American Educational Research Journal, 34*(3), 545-562.

Parkhurst, J. T., & Asher, S. R. (1992). Peer rejection in middle school: Subgroup differences in behavior, loneliness, and interpersonal concerns. *Developmental Psychology, 28*(2), 231.

Patching, J., & Lawler, J. (2009). Understanding women's experiences of developing an eating disorder and recovering: A life - history approach. *Nursing Inquiry, 16*(1), 10-21.

Paxton, S. J., Schutz, H. K., Wertheim, E. H., & Muir, S. L. (1999). Friendship clique and peer influences on body image concerns, dietary restraint, extreme weight-loss behaviors, and binge eating in adolescent girls. *Journal of Abnormal Psychology, 108*(2), 255.

Petty, S. C., Sachs-Ericsson, N., & Joiner Jr, T. E. (2004). Interpersonal functioning deficits: Temporary or stable characteristics of depressed individuals? *Journal of Affective Disorders, 81*(2), 115-122.

Pike, K. M. (1995). Bulimic symptomatology in high school girls toward a model of cumulative risk. *Psychology of Women Quarterly, 19*(3), 373-396.

Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of Counseling Psychology, 52*(2), 126.

Reynolds, C. R., & Kamphaus, R. W. (Eds.). (2004). *Manual for behavioural assessment system for children* (2nd ed.) Circle Pines, MN: American Guidance Service.

Rice, K. G., & Preusser, K. J. (2002). The Adaptive/Maladaptive perfectionism scale. *Measurement and Evaluation in Counseling and Development,* 34(4), 210-222.

Rice, K. G., Ashby, J. S., & Gilman, R. (2011). Classifying adolescent perfectionists. *Psychological Assessment, 23*(3), 563.

Rice, K. G., Leever, B. A., Christopher, J., & Porter, J. D. (2006). Perfectionism, stress, and social (dis) connection: A short-term study of hopelessness, depression, and academic adjustment among honors students. *Journal of Counseling Psychology, 53*(4), 524.

Rich, E. (2006). Anorexic dis (connection): Managing anorexia as an illness and an identity. *Sociology of Health & Illness, 28*(3), 284-305.

Richardson, L. (2000). New writing practices in qualitative research. *Sociology of Sport Journal, 17*(1), 5-20.

Rieger, E., Van Buren, D. J., Bishop, M., Tanofsky-Kraff, M., Welch, R., & Wilfley, D. E. (2010). An eating disorder-specific model of interpersonal psychotherapy (IPT-ED): Causal pathways and treatment implications. *Clinical Psychology Review, 30*(4), 400-410.

Robinson, J., Shaver, P., & Wrightsman, L. (1997). Measures of personality and social psychological attitudes (ZF yang, YY yang & ZX zhang, trans.).

Robinson, N. S. (1995). Evaluating the nature of perceived support and its relation to perceived self-worth in adolescents. *Journal of Research on Adolescence, 5*(2), 253-280.

Rorty, M., Yager, J., Buckwalter, J. G., & Rossotto, E. (1999). Social support, social adjustment, and recovery status in bulimia nervosa. *International Journal of Eating Disorders, 26*(1), 1-12.

Roxborough, H. M., Hewitt, P. L., Kaldas, J., Flett, G. L., Caelian, C. M., Sherry, S., & Sherry, D. L. (2012). Perfectionistic Self‐Presentation, socially prescribed perfectionism, and suicide in youth: A test of the perfectionism social disconnection model. *Suicide and Life-Threatening Behavior, 42*(2), 217-233.

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (1998). Peer interactions, relationships, and groups. *Handbook of Child Psychology,*

Rudolph, K. D., Caldwell, M. S., & Conley, C. S. (2005). Need for approval and children's Well‐Being. *Child Development, 76*(2), 309-323.

Runge, T. E., & Archer, R. L. (1981). Reactions to the disclosure of public and private self-information. *Social Psychology Quarterly,* 44(4), 357-362.

Ruscio, J., & Ruscio, A. M. (2000). Informing the continuity controversy: A taxometric analysis of depression. *Journal of Abnormal Psychology, 109*(3), 473.

Salmivalli, C., Ojanen, T., Haanpää, J., & Peets, K. (2005). " I'm OK but you're not" and other peer-relational schemas: Explaining individual differences in children's social goals. *Developmental Psychology, 41*(2), 363.

Sassaroli, S. & Ruggiero, G.M. (2005). The role of stress in the association between low self-esteem, perfectionism, and worry, and eating disorders. *International Journal of Eating Disorders, 37 (2), 135-141.*

Schutz, H. K., & Paxton, S. J. (2007). Friendship quality, body dissatisfaction, dieting and disordered eating in adolescent girls. *British Journal of Clinical Psychology, 46*(1), 67-83.

Schwartz, D., Farver, J. M., Chang, L., & Lee-Shin, Y. (2002). Victimization in south korean children's peer groups. *Journal of Abnormal Child Psychology, 30*(2), 113-125.

Scottish Intercollegiate Guidelines Network (SIGN) (2008). *SIGN 50: A guideline developer's handbook*. Edinburgh.

Shahar, G., Blatt, S. J., Zuroff, D. C., Krupnick, J. L., & Sotsky, S. M. (2004). Perfectionism impedes social relations and response to brief treatment for depression. *Journal of Social and Clinical Psychology, 23*(2), 140-154.

Sherry, S. B., Hewitt, P. L., Stewart, S. H., Mackinnon, A. L., Mushquash, A. R., Flett, G. L., & Sherry, D. L. (2012). Social disconnection and hazardous drinking mediate the link between perfectionistic attitudes and depressive symptoms. *Journal of Psychopathology and Behavioral Assessment, 34*(3), 370-381.

Sherry, S. B., Law, A., Hewitt, P. L., Flett, G. L., & Besser, A. (2008). Social support as a mediator of the relationship between perfectionism and depression: A preliminary test of the social disconnection model. *Personality and Individual Differences, 45*(5), 339-344.

Sherry, S. B., MacKinnon, A. L., Fossum, K., Antony, M. M., Stewart, S. H., Sherry, D. L., . . . Mushquash, A. R. (2013). Perfectionism, discrepancies, and depression: Testing the perfectionism social disconnection model in a short-term, four-wave longitudinal study. *Personality and Individual Differences 54, 54*, 692-697.

Slade, P. D., & Dewey, M. E. (1986). Development and preliminary validation of SCANS: A screening instrument for identifying individuals at risk of developing anorexia and bulimia nervosa. *International Journal of Eating Disorders, 5*(3), 517-538.

Slaney, R. B., & Johnson, D. G. (1992). *The almost perfect scale.* Unpublished manuscript.

Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The revised almost perfect scale. *Measurement and Evaluation in Counseling and Development,* 34(3) 130-145.

Smolak, L., & Levine, M. P. (1996). Adolescent transitions and the development of eating problems. *The Developmental Psychopathology of Eating Disorders,* , 207-233.

Steiner, H., & Lock, J. (1998). Anorexia nervosa and bulimia nervosa in children and adolescents: A review of the past 10 years. *Journal of the American Academy of Child & Adolescent Psychiatry, 37*(4), 352-359.

Steinhausen, H., & Vollrath, M. (1993). The self - image of adolescent patients with eating disorders. *International Journal of Eating Disorders, 13*(2), 221-227.

Stice, E. (1998). Modeling of eating pathology and social reinforcement of the thin-ideal predict onset of bulimic symptoms. *Behaviour Research and Therapy, 36*(10), 931-944.

Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin, 128*(5), 825.

Stice, E., & Whitenton, K. (2002). Risk factors for body dissatisfaction in adolescent girls: A longitudinal investigation. *Developmental Psychology, 38*(5), 669.

Stice, E., Killen, J. D., Hayward, C., & Taylor, C. B. (1998). Age of onset for binge eating and purging during late adolescence: A 4-year survival analysis. *Journal of Abnormal Psychology, 107*(4), 671.

Sullivan, H. S. (1953). The interpersonal theory of psychiatry. New York, NY, US: W W Norton & co.

Szmukler, G. I., Dare, C. E., & Treasure, J. E. (1995). *Handbook of eating disorders: Theory, treatment and research.* John Wiley & Sons.

Tajfel, H. (2010). *Social identity and intergroup relations* Cambridge University Press.

Tchanturia, K., Davies, H., & Campbell, I. C. (2007). Cognitive remediation therapy for patients with anorexia nervosa: Preliminary findings. *Annals of General Psychiatry, 6*(1), 14.

Tchanturia, K., Serpell, L., Troop, N., & Treasure, J. (2001). Perceptual illusions in eating disorders: Rigid and fluctuating styles. *Journal of Behavior Therapy and Experimental Psychiatry, 32*(3), 107-115.

The Matrix (2011). *A guide to delivering evidence based psychological therapies in Scotland.* Scottish Government.

Thurfjell, B., Eliasson, M., Swenne, I., von Knorring, A., & Engström, I. (2006). Perceptions of gender ideals predict outcome of eating disorders in adolescent girls. *Eating Disorders, 14*(4), 287-304.

Tiller, J. M., Sloane, G., Schmidt, U., Troop, N., Power, M., & Treasure, J. L. (1997). Social support in patients with anorexia nervosa and bulimia nervosa. *International Journal of Eating Disorders, 21*(1), 31-38.

Tozzi, F., Sullivan, P. F., Fear, J. L., McKenzie, J., & Bulik, C. M. (2003). Causes and recovery in anorexia nervosa: The patient's perspective. *International Journal of Eating Disorders, 33*(2), 143-154.

Troisi, A., Massaroni, P., & Cuzzolaro, M. (2005). Early separation anxiety and adult attachment style in women with eating disorders. *British Journal of Clinical Psychology, 44*(1), 89-97.

Troop, N. A. (1998). Eating disorders as coping strategies: A critique. *European Eating Disorders Review, 6*(4), 229-237.

Troop, N. A., & Bifulco, A. (2002). Childhood social arena and cognitive sets in eating disorders. *British Journal of Clinical Psychology, 41*(2), 205-211.

Troop, N. A., Holbrey, A., & Treasure, J. L. (1998). Stress, coping, and crisis support in eating disorders. *International Journal of Eating Disorders, 24*(2), 157-166.

Vaillant, G. E. (1994). Ego mechanisms of defense and personality psychopathology. *Journal of Abnormal Psychology, 103*(1), 44.

van de Mortel, Thea F. (2008). Faking it: Social desirability response bias in self-report research. *Australian Journal of Advanced Nursing, 25*(4), 40.

Vartanian, L. R. (2000). Revisiting the imaginary audience and personal fable constructs of adolescent egocentrism: A conceptual review. *Adolescence, 35*(140), 639-661.

Von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gøtzsche, P. C., & Vandenbroucke, J. P. (2008). The strengthening the reporting of observational studies in epidemiology [STROBE] statement: Guidelines for reporting observational studies. *Gaceta Sanitaria, 22*(2), 144-150.

Wang, K. T., Yuen, M., & Slaney, R. B. (2009). Perfectionism, depression, loneliness, and life satisfaction a study of high school students in hong kong. *The Counseling Psychologist, 37*(2), 249-274.

Wei, M., Heppner, P. P., Russell, D. W., & Young, S. K. (2006). Maladaptive perfectionism and ineffective coping as mediators between attachment and future depression: A prospective analysis. *Journal of Counseling Psychology, 53*(1), 67.

Welch, S. L., Doll, H., & Fairburn, C. (1997). Life events and the onset of bulimia nervosa: A controlled study. *Psychological Medicine, 27*(03), 515-522.

Wentz, E., Gillberg, C., Gillberg, I. C., & Råstam, M. (2001). Ten - year Follow - up of Adolescent - onset anorexia nervosa: Psychiatric disorders and overall functioning scales. *Journal of Child Psychology and Psychiatry, 42*(5), 613-622.

Werthamer-Larsson, L., Kellam, S., & Wheeler, L. (1991). Effect of first-grade classroom environment on shy behavior, aggressive behavior, and concentration problems. *American Journal of Community Psychology, 19*(4), 585-602.

White, J. H. (2000). The prevention of eating disorders: A review of the research on risk factors with implications for practice. *Journal of Child and Adolescent Psychiatric Nursing, 13*(2), 76-88.

Whitney, J., & Eisler, I. (2005). Theoretical and empirical models around caring for someone with an eating disorder: The reorganization of family life and inter-personal maintenance factors. *Journal of Mental Health, 14*(6), 575-585.

Whyte, W. F. (1982). Interviewing in field research. In R. G. Burgess (Ed.), *Field research: A source book and field manual* (pp. 111-122). London: George Allen & Unwin.

Willig, C. (2013). *Introducing qualitative research in psychology* Open University Press.

Woodside, D. B. (2005). Treatment of anorexia nervosa: More questions than answers. *International Journal of Eating Disorders, 37*(S1), S41-S42.

Wyatt, R., & Gilbert, P. (1998). Dimensions of perfectionism: A study exploring their relationship with perceived social rank and status. *Personality and Individual Differences, 24*(1), 71-79.

Yardley, L. (2000). Dilemmas in qualitative health research. *Psychology and Health, 15*(2), 215-228.

Ye, H. J., Rice, K. G., & Storch, E. A. (2008). Perfectionism and peer relations among children with obsessive-compulsive disorder. *Child Psychiatry and Human Development, 39*(4), 415-426.

Zaitsoff, S. L., Fehon, D. C., & Grilo, C. M. (2009). Social competence and social-emotional isolation and eating disorder psychopathology in female and male adolescent psychiatric inpatients. *International Journal of Clinical and Health Psychology, 9*(2), 219-228.

Zaitsoff, S. L., Geller, J., & Srikameswaran, S. (2002). Silencing the self and suppressed anger: Relationship to eating disorder symptoms in adolescent females. *European Eating Disorders Review, 10*(1), 51-60.

Appendices

Appendix 1: Author guidelines

CLINICAL PSYCHOLOGY REVIEW

AUTHOR INFORMATION PACK

(Relevant extracts)

DESCRIPTION

Clinical Psychology Review publishes substantive reviews of topics germane to clinical psychology.
Papers cover diverse issues including: psychopathology, psychotherapy, behavior therapy, cognition and cognitive therapies, behavioral medicine, community mental health, assessment, and child development. Papers should be cutting edge and advance the science and/or practice of clinical psychology.

Use of wordprocessing software

It is important that the file be saved in the native format of the wordprocessor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the wordprocessor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc.
To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your wordprocessor.

Article structure

Manuscripts should be prepared according to the guidelines set forth in the Publication Manual of the American Psychological Association (6th ed., 2009). Manuscripts should ordinarily not exceed 50 pages.

Essential title page information

Title.
Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.

Abstract
A concise and factual abstract is required (not exceeding 200 words). This should be typed on a separate page following the title page. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separate from the article, so it must be able to stand alone. References should therefore be avoided, but if essential, they must be cited in full, without reference to the reference list.

Highlights

Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

Keywords
Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Tables
Number tables consecutively in accordance with their appearance in the text. Place footnotes to tables below the table body and indicate them with superscript lowercase letters. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

Reference style
Citation in text
Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

References
References should be arranged first alphabetically and then further sorted chronologically if necessary.
More than one reference from the same author(s) in the same year must be identified by the letters "a", "b", "c", etc., placed after the year of publication.
References should be formatted with a hanging indent (i.e., the first line of each reference is flush left while the subsequent lines are indented).

Appendix 2: Author guidelines

Qualitative Health Research

An International, Interdisciplinary Journal

(Relevant extracts)

QUALITATIVE HEALTH RESEARCH, widely referred to as ***QHR***, is an international, interdisciplinary, refereed journal for the enhancement of health care. Published monthly, it is designed to further the development and understanding of qualitative research methods in health care settings. The journal is an invaluable resource for researchers, practitioners, academics, administrators, and others in the health and social service professions, and graduate students who seek examples of qualitative methods.

General Guidelines

Write both the abstract and the text of your manuscript in *first-person, active voice.*
Each study participant referred to in the manuscript should be assigned a pseudonym. Study sites, such as hospitals, clinics, or other organizations, should not be named, but instead should be described; for example: "Study participants were recruited from the coronary care unit of a large metropolitan hospital on the eastern seaboard of the United States."

Length of manuscript

There is no predetermined word or page limit.

Provided they are "tight" and concise, *without unnecessary repetition* and/or irrelevant data, manuscripts should be as long as they need to be.

Title

Make your title 10 to 12 words (or fewer) in length; avoid long, "wordy" titles.
Avoid titles with colons or quotations unless they are *necessary* to convey an important concept or idea in the article.
Type your title in *Title Case*; this means you should:
* capitalize the (first letter of) the first word
* capitalize all important words
* capitalize *all words that have four (4) or more letters*
* capitalize the first word after a colon (:), period (.), or em dash (—)

Abstract

The abstract should be placed at the top of page 1 of the main manuscript document. It should be a single paragraph, no more than 150 words in length, and briefly describe your article. It should not contain headings or citations, and should not be divided into sections. Place your keywords below the abstract, on the same page.

Keywords

Your keywords are words related to the article topics that readers or researchers could search on to find your published article. They are also used to assist *QHR* in selecting appropriate reviewers for your manuscript during the review process.

Keywords should follow on the same page as the abstract. Leave a blank, double-spaced line between the abstract and the keywords.
Include keywords *selected only from the QHR Keyword List*. List them exactly as they are shown in the keyword list, in lowercase letters (except for proper names), horizontally across the page, *in the order in which they appear on the keyword list*. Try to select at least five keywords. Use the most specific keywords possible from the list provided.
Individual keywords should be separated by semicolons; note that some keywords are actually two or more words, and might include commas. Do not capitalize the first keyword unless it is a proper name (i.e., Africa), and do not add a period (full stop) at the end of the keywords.

Main Manuscript
The main text of the manuscript should be broken into appropriate sections by the use of section headings. Sections should flow in a logical sequence, and include, at a minimum, *Methods*, *Results*, and *Discussion* (these are all level-1 headings); other level-1 headings and subheadings may be used at the author's discretion.

Headings
QHR uses 4 distinct levels of headings. Use *at least two* heading levels.
Use two or more level-2 headings below a given level-1 heading, or use no level-2 headings; you may not use just one.
Use two or more level-3 headings below a given level-2 heading, or use no level-3 headings; you may not use just one.
Use two or more level-4 headings below a given level-2 or level-3 heading, or use no level-4 headings; you may not use just one.

Quotations
Quotations of 40 or more words should be set as separate paragraphs, with the entire quotation indented .5 inches (approximately 1.3 cm.) from the left margin (this is also referred to as a "block quote" or "excerpt"). Do not use quotation marks for block quotes unless there is a separate, internal quotation within the larger quotation; in that case, use double quotation marks (") for the internal
quotation only. *Make sure all quotations are properly capitalized and punctuated*.

References
References begin on a new page, after the end of the manuscript text.
Each type of reference must be formatted in accordance with the precise guidelines contained in *APA*, 6th edition.
References should be listed in hanging paragraph format (with indentations at ½ inch or 1.3 cm.), in alphabetical order by the last name of the first author.

Appendix 3: Table of near misses

Author (year)	Participant characteristics	Aim	Measures	Relevant findings	Reason for exclusion
1. Gilman & Ashby (2003)	185 middle school students 12-15 years	To compare school, interpersonal, parent-related and self perception variables with perfectionism levels and clusters.	APS-R BASC – social stress	APS discrepancy correlated with social stress. APS discrepancy was a unique predictor of social stress. Adaptive perfectionists reported significant fewer difficulties with social relations than maladaptive perfectionists or non-perfectionists. There were no significant differences between maladaptive and non-perfectionists.	Global measure, no specific interpersonal measure.
2. Gilman & Ashby (2003)	132 middle school students	Paper not accessed	APS-R MSLSS - Friends domain	Paper not accessed	Global measure, no specific interpersonal measure.
3. Gilman et al (2005)	341 American students 14.59 years 291 Croatian Students 15.14 years	To investigate perfectionism in adolescents from 2 different cultures. To compare perceived QOL in perfectionism classes in 2 different cultures.	APS-R MSLSS - Friends domain	Among the American group adaptive perfectionists reported significantly higher satisfaction with friends than maladaptive perfectionists and non-perfectionists. There was no difference in friend satisfaction between the three perfectionism classes in the Croatian sample.	Global measure, no specific interpersonal measure.
4. LoCicero et al (2000)	195 middle school students aged 12-17, mean 13.	To compare lifestyle themes in different classes of perfectionists.	APS-R BASIC-C	Adaptive perfectionists scored higher than non-perfectionists on belonging/social interest and wanting recognition. Adaptive perfectionists scored higher than both other groups on going along. Maladaptive perfectionists scored higher on wanting recognition than non-perfectionists.	'Lifestyle themes' are personality styles and therefore intrapersonal not interpersonal

5. Nounopoulos et al (2006)	166 students 12.59 years	To investigate the relationship between perfectionism, coping resources and GPA.	APS-R CRISEE - social confidence and peer acceptance subscales	CRISEE peer acceptance significantly correlated with APS standards. No significant relationship with APS discrepancy. No significant relationship between social confidence and either APS subscale.	Global measure, no specific interpersonal measure.
6. Ommundsen et al (2005)	1719 experienced Norwegian soccer players aged 12-19	To investigate the relationship between achievement goals, perfectionism and peer relationship quality in soccer players	F MPS SFQS	The 'loyalty and free discussion' and 'companionship' subscales correlated negatively with maladaptive perfectionism. The conflict subscale was associated with maladaptive perfectionism. The peer acceptance subscale correlated negatively with maladaptive perfectionism.	Interpersonal measure relates to peer relationships with sporting team mates only.
7. Ongen (2009)	445 Turkish school pupils (15-18 years, M=16.07)	To examine the association between perfectionism and life satisfaction.	APS-R MSLSS	Satisfaction with friends correlated negatively with the discrepancy subscale and positively with the standards subscale.	Global measure, no specific interpersonal measure.
8. Rice et al (2004)	113 fourth and fifth grade children (9-11 years, M=10.35)	To examine the association between scores on the AMPS dimensions and self concept to determine external validity of the AMPS.	AMPS PHSCS – popularity subscale	For boys, sensitivity to mistakes was significantly associated with lower perceived popularity and contingent self-esteem was associated with greater perceived popularity. For girls, only the association between sensitivity to mistakes and lowered perception of popularity was significant. Multiple regression: AMPS subscales accounted for variation in popularity scores for boys but not for girls. For boys sensitivity to mistakes was the most significant predictor of lower scores on the popularity subscale.	Global measure, no specific interpersonal measure.
9. Rice et al (2011)	875 ninth graders aged 14.6 years	To empirically derive a set of cut off scores on the APS-R that could be used with adolescents.	APS-R MSLSS - Friends domain BASC – social stress subscale	Adaptive perfectionists scored higher than the other 2 groups on friend satisfaction, no differences between maladaptive and non-perfectionists. Adaptive perfectionists scored lower on	Global measure, no specific interpersonal measure.

				social stress then the other 2 groups, maladaptive perfectionists scored significant higher than the other 2 groups.	
10. Sali & Akyol (2010)	1390 children	To examine the peer relationships, social support perceptions and perfectionism of working and non-working children.	PRS Social Support Evaluation Scale for Children and Adolescents (Gökler, 2007) MPS (Turkish version, Özbay & Ta demir, 2003)	n/a	No test of an association between perfectionism and interpersonal variables

APS-R Almost Perfect Scale – Revised; BASC Behavioural assessment system for children CAPS Child-Adolescent Perfectionism Scale; CRISEE Coping Resources Inventory Scales for Education Enhancement; FMPS Frost Multidimensional Perfectionism Scale; MPS Multidimensional Perfectionism Scale; MSLSS Multidimensional students life satisfaction scale; PHSCS Piers-Harris self-concept scale; PRS Peer Relationships Scale (Kaner, 2000); PSPs-Jr Perfectionistic self presentation scale junior form; RQ Relationship Questionnaire; SCS-R Social connectedness scale revised; SFQS Sport Friendship Quality (Scale Weiss & Smith, 1999)

Appendix 4: Data extraction form

Title:		Notes for quality criteria ratings
Author (year)		
Type of study		
Country of origin		
Primary focus (hypotheses)		
Secondary focus (hypotheses)		
Inclusion/exclusion criteria		
Population type/setting		
No of participants		
Age of participants (range, mean, SD)		
Other participant details reported (gender, ethnicity, SES)		
Consent rate		
Perfectionism measure		
Interpersonal measure		
Informants		
Analyses used		
Descriptive stats provided (mean, SD)		
Confounds controlled for (gender, age, diagnosis, ethnicity)		
Key findings		
Limitations (author identified)		
Limitations (reviewer identified)		
Any other notes		

Quality Criteria for Systematic Review

Review Question: Is there a relationship between perfectionism and interpersonal functioning in adolescent peer relationships?

(If yes, secondary questions: What are the interpersonal correlates of perfectionism? What mechanisms underlie this association?)

Quality Criteria	
1	The participant characteristics are reported sufficiently
2	The consent is rate reported and adequate
3	An adequate sample size is used, based on an appropriate power analysis
4	The measures used are reliable and valid
5	The measures used are appropriate for use with an adolescent population
6	Multiple informants rate the interpersonal outcome measures
7	Statistical tests are clearly stated and appropriate
8	Confounding variables (gender/age/ethnicity/mental health diagnoses) are considered in the analysis
9	Results are clearly stated, reported sufficiently to permit independent judgement
10	Effect sizes are reported are large

Operalisation of Quality Criteria

1 – The participant characteristics are reported sufficiently

Well covered	Participant demographics reported in full (N, %, range, SD as appropriate) – age (1), gender (1), population/setting (1), SES (1), ethnicity (1), inclusion/exclusion criteria (1) (5-6 of these reported in full).
Adequately addressed	Some of the above details provided but numbers not all reported/some details missing (Full info for 3-4 of these).
Poorly addressed	Significant gaps in the information and numbers that are reported
Not addressed	
Not reported	
Not applicable	

2 – Consent rate is reported and adequate

Well covered	Consent rate >80%
Adequately addressed	Consent rate >60%
Poorly addressed	Consent rate <60%
Not addressed	
Not reported	
Not applicable	

3 – Adequate sample size, based on a power calculation

Well covered	Power calculation reported and sample size is at least as big as needed
Adequately addressed	No power analysis reported but sample size is very likely to be sufficient (320 to detect a medium effect size for correlation)
Poorly addressed	Power calculation but power not reached
Not addressed	No power calculation, unclear if sample size sufficient
Not reported	
Not applicable	

4 – Measures used are reliable and valid

Well covered	Measures used are reliable (e.g. Cronbach's alpha 0.70-0.90) and valid. Psychometric properties are reported for both (and citation provided confirming that reliable/valid)
Adequately addressed	Some info missing on either reliability or validity OR psychometric properties reported but less than ideal (e.g. Cronbach's alpha <0.70 or limited validity)
Poorly addressed	Face validity but no info provided on psychometrics OR measure designed for this study so no psychometrics available i.e. poorly robust
Not addressed	
Not reported	
Not applicable	

5 – The measures used are appropriate for use with an adolescent population

Well covered	Measures used were designed and validated for use with an adolescent population
Adequately addressed	Mix of child and adult measures, information reported providing reassurance that measure appropriate with children/validated for use with children
Poorly addressed	All adult measures, some attempt made to make appropriate (used cut offs from another study with adolescents, limited evidence for use with adolescents) (or over 50% adult measures with no attempt to ensure that appropriate)
Not addressed	All adult measures, no justification provided
Not reported	
Not applicable	

6 – Multiple informants rate the interpersonal measures

Well covered	Multiple informants for **same** interpersonal variable
Adequately addressed	Multiple informants but reporting on a different interpersonal variable
Poorly addressed	Multiple self-report measures used
Not addressed	Self report only
Not reported	
Not applicable	

7 – Statistical tests are clearly stated and appropriate.

Well covered	Correlational analyses and multivariate stats e.g. Structural Equation Modelling or Confirmatory Factor Analysis or bootstrapping
Adequately addressed	Correlational analyses and multiple regression analyses/ANOVA
Poorly addressed	Correlation only/stats inappropriate
Not addressed	
Not reported	
Not applicable	

8 – Confounding variables are considered in analysis

Well covered	2 or more relevant confounds (gender, age, ethnicity, mental health diagnoses) considered in analysis and all details provided
Adequately addressed	At least 1 of the above confounds considered in analysis OR state that more than 1 considered but details missing
Poorly addressed	Acknowledged as a confound but not controlled for in analysis (e.g. because sample size insufficient to allow this)
Not addressed	No mention of potential confounds? Or mentioned and not controlled for?
Not reported	
Not applicable	
Notes	

9 – Results clearly stated, reported sufficiently to permit independent judgement

Well covered	Results clearly reported in full for all analyses/outcome measures – means (1), SDs (1), test statistic (1), (exact) p-values (2), summary table (1) (5-6 of these) (if mean/SD only reported for perfectionism measures/interpersonal measures not both then score 0.5)
Adequately addressed	Some of the above reported but not consistently for all measures (3-4 of the above) OR non-significant findings not reported
Poorly addressed	Narrative report of results only (significant lack of numerical data)
Not addressed	
Not reported	
Not applicable	

10 – Effect sizes are reported

Well covered	Effect sizes are reported and large
Adequately addressed	Effect sizes are reported and medium
Poorly addressed	Effect sizes are reported and small
Not addressed	
Not reported	
Not applicable	

Appendix 6: Effect sizes

Association	Statistic	Effect size (*sig) (^sig at <.1)
Chen et al (2012)		
PSP & SCS	Correlation	.15*
NDSI & SCS	Correlation	.29*
NDI & SCS	Correlation	.22*
Flett et al (2012)		
SPP & Peer support	Correlation	-.20
SPP & classmate support	Correlation	-.15
Gilman et al (2011)		
HS & Int Probs	Correlation	-.24*
HS & Likability	Correlation	.10*
HS & helps others	Correlation	.26*
HS & Admired	Correlation	.20*
HS & Disrupts	Correlation	-.21*
D & int probs	Correlation	.38*
D & likeability	Correlation	-.05
D & helps others	Correlation	-.05
D & admired	Correlation	-.05
D & disrupts	Correlation	.02
Help others Adapt vs Mal	ANOVA	.07
Help others Mal vs Non	ANOVA	.46*
Help others Adapt vs non	ANOVA	.59*
Admired Adapt vs mal	ANOVA	.23*
Admired Mal vs Non	ANOVA	.24*
Admired Adapt vs non	ANOVA	.46*
Likeability Adapt vs mal	ANOVA	.19
Likeability Mal vs non	ANOVA	.07
Likeability Adapt vs non	ANOVA	.24*
Roxborough et al (2012)		
SPP & bullying	Correlation	.13
PSP & bullying	Correlation	.20*
NDSI & bullying	Correlation	.27*
NDI & bullying	Correlation	.17*
SPP & hopelessness	Correlation	.27*
PSP & hopelessness	Correlation	.29*
NDSI & hopelessness	Correlation	.26*
NDI & hopelessness	Correlation	.30*
Wang et al (2009)		
HS & loneliness	Correlation	-.08
D & Loneliness	Correlation	.37*
Loneliness Adapt vs maladapt/non	ANOVA	0.09*
Loneliness Adapt vs maladapt/non	ANOVA	0.03
Ye et al (2008)		
Sensitivity to mistakes & Loneliness	Correlation	.64*
Contingent self-esteem & loneliness	Correlation	-.44*
Comp & lonelinesss	Correlation	.26
Need for admiration & loneliness	Correlation	.13
Sensitivity to mistakes & victimisation	Correlation	.52*
Contingent self-esteem & victimisation	Correlation	-.20
Comp & victimisation	Correlation	.27
Need for admiration & victimisation	Correlation	.27
Sensitivity to mistakes & peer r'ships	Correlation	-.35^
Contingent self-esteem & peer r'ships	Correlation	.50*

Comp & peer r'ships	Correlation	-.15
Need for admiration & peer r'ships	Correlation	.11
Perfectionism & loneliness	Multiple regression	.36*
Perfectionism & victimisation	Multiple regression	.23*
Perfectionism & peer r'ships	Multiple regression	.26*
Perfectionism & loneliness (confounds controlled)	Multiple regression	.22*
Perfectionism & victimisation (confounds controlled)	Multiple regression	.24*
Perfectionism & peer r'ships (confounds controlled)	Multiple regression	.13^

Appendix 7: Ethics approval

Scotland A Research Ethics Committee

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NHS SCOTLAND

Dr Emily P Taylor
Clinical Psychologist
NHS Lothian
CAMHS Tipperlinn
Royal Edinburgh Hospital
Tipperlinn Road
Edinburgh
EH10 5HF

30 APR 2010

Date: 29 April 2010
Your Ref.:
Our Ref.: 09/MRE00/93

Enquiries to: Walter Hunter
Extension: 89026
Direct Line: 0131 536 9026
Email: walter.hunter@nhslothian.scot.nhs.uk

Dear Dr Taylor

Study title: **The role of perfectionism in a general adolescent population and in a clinical sample**

REC reference: **09/MRE00/93**

Thank you for your e-mail dated 23 April 2010, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information was considered [in correspondence] by a sub-committee of the REC [at a meeting held on [date]. A list of the sub-committee members is attached.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Chairman Dr Ian Zealley
Vice-Chairman Dr Malcolm Booth

Scotland A Research Ethics Committee

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04 AUG 2011

NHS SCOTLAND

01 August 2011

Dr Emily P Taylor
Clinical Psychologist
NHS Lothian
CAMHS Tipperlinn
Royal Edinburgh Hospital
Tipperlinn Road, Edinburgh
EH10 5HF

Dear Dr Taylor

Study title:	**The role of perfectionism in a general adolescent population and in a clinical sample**
REC reference:	**09/MRE00/93**
Protocol number:	**N/A**
Amendment date:	**19 July 2011**

The above amendment was reviewed by Scotland A Research Ethics Sub-Committee meeting, held in correspondence on 28th July 2011.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

Chairman Dr Ian Zealley
Vice-Chairman Dr Colin Selby

NHS
SCOTLAND

Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Covering Letter		19 July 2011
Notice of Substantial Amendment (non-CTIMPs)		19 July 2011
Participant Information Sheet: with tracked changes shown	CAMHS V4	30 June 2011

Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

R&D approval

All investigators and research collaborators in the NHS should notify the R&D office for the relevant NHS care organisation of this amendment and check whether it affects R&D approval of the research.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

09/MRE00/93: ***Please quote this number on all correspondence***

Yours sincerely

Dorothy Gerrow

Dr Colin Selby
Sub Committee Chairman