A Thesis submitted in Partial Fulfilment of the Regulations for the degree of Doctor of Clinical Psychology in the University of Birmingham

VOLUME I

RESEARCH COMPONENT

Literature Review: How can control in Anorexia Nervosa be understood in the framework of Perceptual Control Theory? A theoretical systematic review

Research Paper: What is the meaning of perfectionism for clients with eating disorders? A qualitative study

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Overview

This thesis is submitted in partial fulfilment of the requirements for the degree of Doctor of Clinical Psychology (Clin.Psy.D.) at the University of Birmingham. It comprises two volumes, a research and clinical component.

Volume I of the thesis is the research component containing a literature review and a research paper. The theoretical systematic literature review explores the way control in Anorexia Nervosa can be understood in the framework of Perceptual Control Theory. The review has been prepared for the submission to the Clinical Psychology Review with adaptations made to meet regulations of the University of Birmingham. The research paper explores the meaning of perfectionism for clients with eating disorders. The paper has been prepared for the submission to the International Journal of Eating Disorders. Finally, a public briefing document is included which summarizes both papers.

Volume II of the thesis is the clinical component which contains five clinical practice reports including a psychological models report, a service evaluation, a single case experimental design, a case study and an abstract of a case study presentation. These clinical practice reports were completed during clinical placements.

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To be edited for submission to the Clinical Psychology Review

HOW CAN CONTROL IN ANOREXIA NERVOSA BE UNDERSTOOD IN THE FRAMEWORK OF PERCEPTUAL CONTROL THEORY?

A THEORETICAL SYSTEMATIC REVIEW

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Abstract

The aim of this theoretical systematic review is to summarise the empirical literature on the role of control in Anorexia Nervosa (AN) and to evaluate evidence for the application of the framework of Perceptual Control Theory (PCT) to the role of control in AN. Following a comprehensive literature search, twelve studies related to the issue of control in AN were retrieved and reviewed. The reviewed studies revealed that the process of exerting control via disordered eating helped participants to feel in control and had a functional role for them. Despite terminological discrepancy, there appeared to be a good fit between PCT and findings of reviewed papers, indicating a potential explanatory value of PCT in relation to control in AN. This was mainly in the way anorexic behaviours could be understood as controlling perceptual experiences of feeling out of control. Limitations in relation to the application of PCT to the role of control in AN were described.

1. Current status of control in Anorexia Nervosa

1.1. The relevance of the concept of control to Anorexia Nervosa

The concept of control has been discussed in eating disorder literature for over 35 years. Bruch (1978) described anorexic behaviours as a dysfunctional way of obtaining control and self-reliant independence leading to conflict. Slade (1982) proposed that control was expressed in restricting, and was reinforced positively by feelings of achievement, and negatively by avoidance of problems and the fear of gaining weight. His conclusion was that control was a central feature of the development and maintenance of AN.

1.2. Existing literature reviews on control in Anorexia Nervosa

To date there have not been any systematic reviews on the role of control in AN. The only existing review on the subject examines three theoretical accounts on the hypothesized link between AN and psychological control (Surgenor, Horn, Plumridge, & Hudson, 2002). The theoretical accounts appear to be chosen by the researchers on the basis of their perceived importance, and they comprise the theory of AN as an escape from growth (Crisp, 1995), the psychodynamic theory of AN as the struggle for identity, control and competence (Bruch, 1973, 1982), and the feminist theory of AN as the way of regaining ownership of self (Orbach, 1978, 1986).

The three theoretical accounts conceptualise psychological control in a variety of ways. According to Crisp (1995), a sense of control is experienced individually and internally as feared or real loss of control of self, and a person's over-reliance on the control of their shape or weight is functioning as a mechanism of avoidance or resolution of psychobiological maturation. Bruch (1973, 1982) conceptualises the loss of control as internal

deficits in mechanisms of control as a result of an early developmental failure. Orbach (1978, 1986), on the other hand, discusses control of one's developing body as a conforming reaction to an external societal control, but also as the way the self resists that external control.

The review aims to scrutinize the way the above theories discuss predisposing and precipitating factors related to control, and points out that the concept of control within each of the theories is understood in a variety of ways, and thus, multiple meanings of control would need to be distinguished in future research studies. The strength of the review is in the fact that it identifies similarities between theories. What appears to be similar is the construction of AN as representing a problem of control of self, and differentiation is made between control positioned internally and externally. Moreover, what appears to be shared by all the theories is the link between control and behavioural and cognitive factors of AN. It is, however, highlighted that there is a clear disparity between the theoretical debate and the existing research on the relationship between control and AN. More studies investigating the experience of control are recommended to provide evidence for the theories. Equally, research comparing participants with AN and other clinical populations experiencing psychological control is recommended as helpful in demonstrating control issues pertinent to the maintenance and onset of disordered eating. However, the review is limited due to the subjective selection of theories. For example, there is no recognition of a cognitive behavioural model of the maintenance of AN proposed by Fairburn, Shafran and Cooper (1999). The review does not systematically review existing research, either. This could help to develop a more unified and empirically tested theory of control in AN.

1.3. Cognitive-behavioural model of control in Anorexia Nervosa

Fairburn et al. (1999) proposed the model of control in AN in the cognitive behavioural tradition. They acknowledged that even though control was perceived as clinically salient and was valued as a construct in the past, it did not receive much theoretical recognition. Their model, as noted by Cooper (2005), had its strength in the fact that the authors identified an extreme need to control eating as the central maintaining factor. This model had its value in the way it illustrated that people with AN attributed their self worth to shape and weight. Three mechanisms maintaining AN were identified. Firstly, restricting eating increased the sense of having control. This extended to control over eating in order to control things in life and to avoid facing family or relationship problems, and was likely to incorporate gaining control over feelings and helping to experience self-worth. Fairburn et al. (1999) noted that individuals linked their identity to restricting eating and started to describe themselves as being anorexic which added to the ego-syntonic presentation. The second mechanism was related to the fact that restricting was reinforced by the state of starvation. The third mechanism referred to the fact that restricted eating was encouraged by extreme worries about weight and shape and was culture specific. Fairburn et al. (1999) made recommendation for more research related to control and the meaning it had for people with AN. They also suggested investigating links between specific symptoms, their severity and control dimensions. Interestingly, this model has not been widely used or tested, which, as Cooper (2005) points out, was partially due to development of other cognitive-behavioural theories of eating disorders, but most importantly, because of the criticism it received within the approach. This was to do with the fact that the model did not add any new predictions

related to cognitions or their role in AN above those in other already existing models and offered only a limited description of the development and maintenance of AN.

2. Perceptual Control Theory

Perceptual Control Theory (PCT) (Powers, 1973, 2005) is a relatively new theory which utilises the notion of control and might potentially be a new addition to the understanding of control in AN. It explicitly addresses the issue of control and it would be important to find out, whether it could be used as an alternative theory of understanding control in AN. This might allow for addressing some of the criticism received by Fairburn et al.'s (1999) model. PCT understands effective functioning as controlling one's own experiences and postulates that people seek to control (to regulate) their perceptual experiences (input), not their behaviour (output). The goal is to make what is perceived from the environment match with 'internal standards' or goals.

PCT focuses on four key principles of human functioning and behaviour: control, hierarchical organisation, conflict and reorganisation (Higginson, Mansell, & Wood, 2011). Control will be the only tenet described in detail here as characteristics of other components of PCT are beyond the scope of this review.

2.1. Control in PCT

Control is perceived as a process by which a variable is kept within set limits in spite of disturbances from outside. If our perception of a certain experience differs from an internal standard or goal for that experience to which we compare the perceived one, we act in the way that changes our perception in order to reach that goal. Powers

(1973, 2005) uses the terms ‘discrepancy’ and ‘error’ to describe the difference between what people want and what they experience. Control is the process of reducing that error by means of a negative feedback loop. One of the elements of the negative feedback loop is the input function, where the environment is being sensed in the form of perceptual experience. It comprises the activity of the nervous system and in this way allows for understanding cognitions, sensations and feelings as perceptual signals. The discrepancy between the environment (where disturbances occur) and an internal reference value/ goal (occurring as a result of past perceptual experience or/ and as an inborn predisposition) is detected by the person’s comparator. The behaviour, understood as an output function, aims to decrease the discrepancy so that this particular perception of the environment is sustained (Mansell, 2005). The perceptual experience is the outcome of both the person and the environment (Goldstein, White, & Powers, 2011). The environmental impact comes in the form of external disturbances. According to Powers (1973) negative feedback loops comprise hierarchical levels with output (behaviour) from levels above setting reference values/ goals for the loops below. In this way, if one loop modifies its input, at the same time it modifies the reference value of loops below. At the lowest level of hierarchy the behaviour (output) is generated in the environment. Altogether, hierarchical levels of feedback loops form control systems of every living organism.

Goldstein, White and Powers (2011) describe a successfully working negative feedback loop as reducing tension or distress with the outcome of sought experience. If the error remains chronically unreduced, the person is unable to control their experiences successfully which then leads to their experience of distress and

dysfunction to the control system (Powers et al., 2011). An example of a negative feedback loop for the person suffering from AN is presented below.

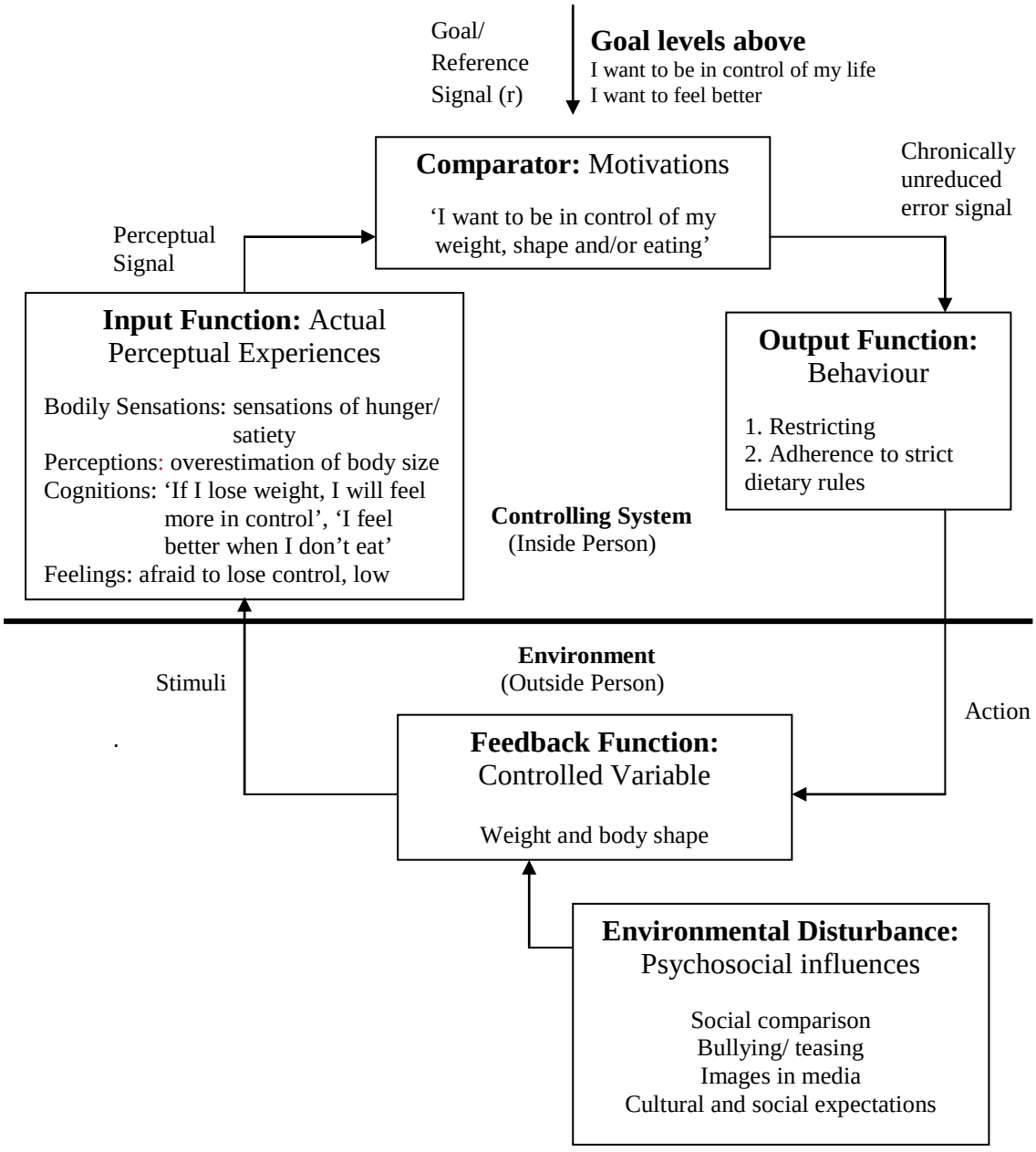


Figure 1. An example of a single negative feedback loop, adapted from Goldstein, White, and Powers (2011), for the person with AN

The loop illustrates the control of one of the variables, weight and body shape, which the person with AN might receive the input from. Each person has a goal for each variable, and in case of the person with AN it might be about the need to feel in control or to feel better. Current perceptual experiences (input) are deducted from the reference value causing an error signal. For example, the person with AN is feeling out of control in various aspects of their lives when they compare their perceived experience to their reference value/ internal goal of wanting to feel in control. This leads to the difference between the input and the reference signal. This discrepancy (error signal) between what is perceived and what is wanted leads to certain behaviours (output) in order to reduce that discrepancy. They may start restricting or adhering to strict dietary rules. This has an impact on the environment, for example, other people may notice and praise the change in the person's appearance. Normally, when the person detects and becomes aware of it, the error signal is reduced to zero and the behaviour stops. However, the error signal is chronically unreduced in AN, because the negative feedback loop receives contradictory reference signals from levels above. Whilst the behaviour matches the person's perception at the level of this particular negative feedback loop, the higher goal levels do not receive the input they requested and they become conflicted. Each of them will attempt to obtain the input satisfying their own goal, resisting the disturbance caused by the contradictory goal of another (Powers et al., 2011). This results in maladaptive control. Powers et al. (2011) state that it is not the symptoms of distress that should be perceived as the problem, but the inability to exercise control which, when reinstated, will reduce the cause of distress.

2.2. Perceptual Control Theory and Anorexia Nervosa

The application of PCT to understanding of AN has not been considered before. However, control is perceived as a central construct in the models of psychopathology proposed by PCT (Mansell, & Carey, 2009; Mansell, 2005). Mansell (2005) proposes that dysfunction in self-control is at the heart of many psychological disorders including eating disorders, and explains what causes the sensation of the loss of self-control to become feared.

Negative feedback loops comprise control levels or systems which can operate automatically without voluntary control. When two control levels or systems of a person are in conflict, one of them is being resisted through conscious attempts. The person gets the sense that the reactions caused by this system are involuntary. The behaviour (output) is likely to be perceived as involuntary and/or out of control, the more the control system is out of sync with the rest of the person's control hierarchy. Even though a change in perception at a certain level in the hierarchical control system triggers the initial response of a control system, Mansell (2005) proposes that some processes might enhance the loss of control shortly after an initial behavioural response (such as eating). Firstly, certain behaviours which appear to be out of control may be motivated by attempts to reduce negative affect and excessive self-awareness. For example, restricting food intake in AN has the function of suppressing the awareness of intolerable affect. In eating disorders' literature (Corstorphine, 2006), affect regulation difficulties are described as occurring on a spectrum of severity, with those with most severe affect regulation difficulties dissociating from their emotions and denying their existence (i.e. alexithymia common in AN). Secondly, Mansell (2005) is of the opinion that people will make no attempt to control their behaviour, if

they perceive they have no ability to control it, i.e., if they believe that a minor transgression equals a full loss of control ('zero-tolerance' beliefs), which takes place in AN characterised by rigid adherence to rules and cognitive inflexibility. Lastly, PCT describes awareness as an important factor. If awareness is restricted, the person who is continually pursuing a goal to an extremely high standard will be unaware of the effect of their behaviour on their own well-being and on that of others. For example, it is usually the family and friends who become worried and look for support for the person with AN. The person themselves presents as if unaware that there is something wrong. If the person cannot identify rewarding goals that are being blocked by their psychological problems, they are likely to be less motivated to change their behaviour.

In summary, PCT offers a unique understanding of control by proposing that the main source of psychological distress is the chronic conflict between two different control systems (or two different higher level goals). Focusing attention on the source of conflict at higher level goals instead of symptomatic distress (the way the conflict manifests) allows for reorganisation and restoring control (Mansell, 2005). Thus, it is not the symptoms of distress that should be perceived as the problem, but the inability to exert control, which when reinstated, will reduce the cause of distress. This can be achieved by constant focus on higher and higher level cognitions which lead to identification of goals that caused the conflict and their reorganisation into new perspectives (Mansell, 2005).

3. Focus of the review

3.1. Aim

This theoretical systematic review aims to summarise the empirical literature on the role of control in Anorexia Nervosa (AN) and to evaluate evidence for the application of the framework of Perceptual Control Theory (PCT) to the role of control in AN.

3.2. Objectives

The specific objectives of this review are as follows:

1. To evaluate the empirical evidence for the relevance of control as a concept in AN.
2. To evaluate the empirical evidence for the application of the framework of PCT to the role of control in AN.
3. To draw attention to the strengths and limitations of the possible application of PCT to the role of control in AN.
4. To highlight recommendations and future research directions in the area of control in AN and PCT.

4. Method

4.1. Literature search strategy

Ovid MEDLINE(R), Embase, PsycINFO electronic databases were searched from 2002[1] to current completed on April Week 5 2013. The search terms 'control' OR 'self-control' were applied which yielded 2,380,888 references. Following this the term 'anorexi*' was inputted and resulted in 57,364 references. The combined search by using 'AND' operator retrieved 8981 references which resulted in 6250 references after duplicates were removed.

4.2. Inclusion and exclusion criteria

Inclusion criteria for the literature review comprised 'peer-reviewed journals', 'English language', 'Human' and 'Humans'. When the inclusion criteria were applied, the search retrieved 4480 references. Additional inclusion and exclusion criteria were applied when screening the titles of the above 4480 articles. These were the following:

Inclusion criteria:

1. Anorexia Nervosa
2. Control

Exclusion criteria:

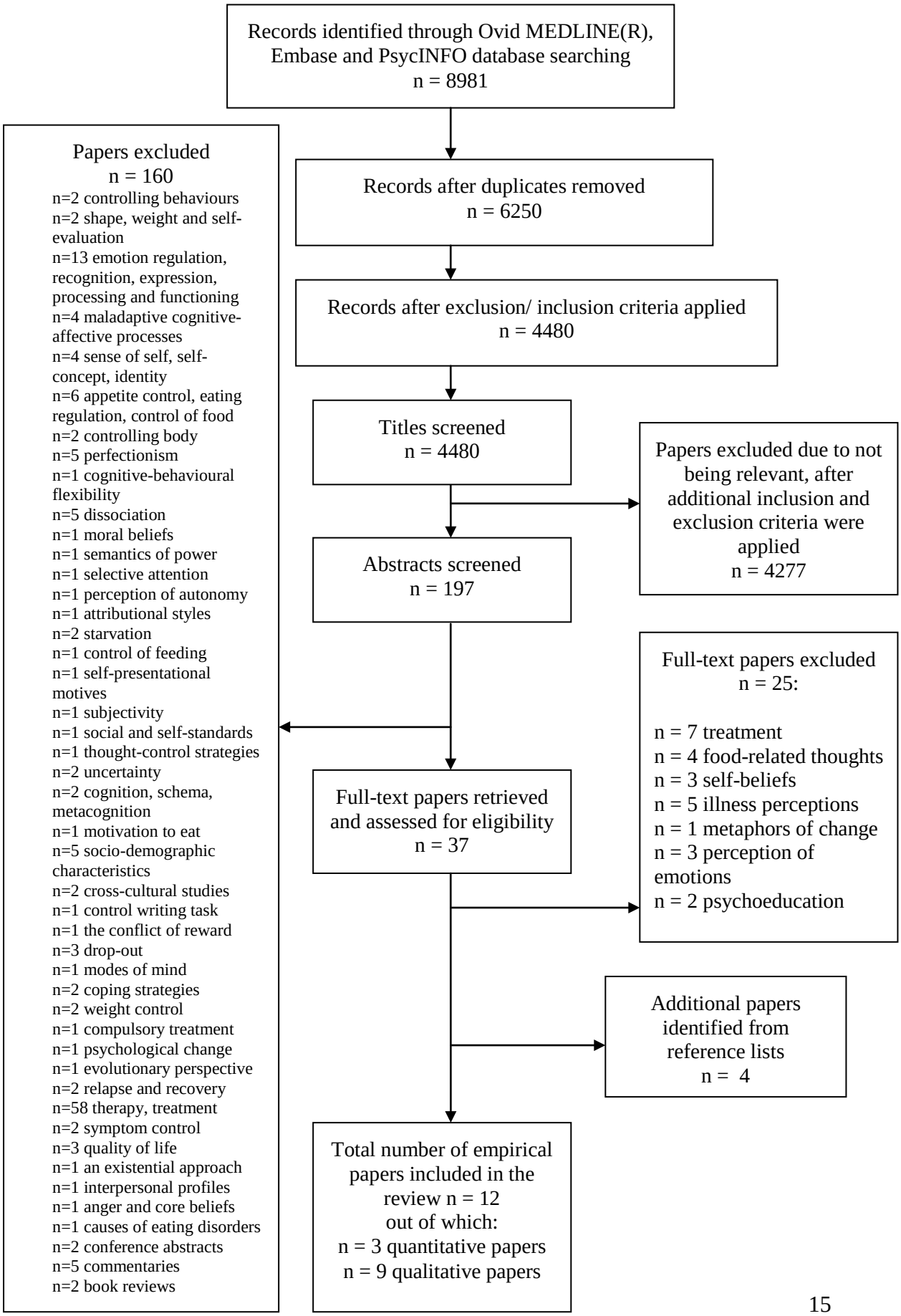
1. Medicine, physical health, neuropsychology, pharmacology and genetics
2. Comorbidity
3. Disorders (including other mental health disorders)
4. Family functioning, relationships, attitudes, conflicts and family members

[1] The decision to start the search from 2002 was dictated by the date of the review on control in AN (Surgenor, Horn, Plumridge, & Hudson, 2002).

5. Children, adolescents and older adults
6. Suicide
7. Obesity and binge eating
8. Personality
9. Risk
10. Attachment
11. Measures (including validation of measures)
12. Sports
13. Gender issues/ differences
14. Pregnancy

Their titles were screened and 4277 references were excluded as not relevant. Abstracts of the remaining 197 references were read and 160 papers were excluded on the basis of their irrelevance to the subject (see Figure 2 for specifics). Full copies of 37 remaining papers were retained and inspected against the inclusion criteria and the question of the review. Twenty-five papers were excluded as irrelevant to the subject on close inspection. This was necessitated by the fact that seven of them related to treatment, four papers were about food-related thoughts, three papers were about self-beliefs in eating disorders, five papers were about illness perceptions, one paper focused on metaphors of change, three papers related to the perception of emotions, and two papers focused on psychoeducation. Eight papers were chosen. To complement the search strategy reference lists from the 37 papers were examined and four more articles were retrieved. In total, 12 papers deemed suitable and were included in this review. Figure 2 presents the study selection process and the number of studies excluded in each phase.

Figure 2. Flow chart of the process of study selection



4.3. Methodological quality assessment

All studies were critically evaluated using the parallel qualitative and quantitative quality criteria developed by Sale and Brazil (2004) for primary mixed-method studies. The criteria were deemed suitable due to the mixture of qualitative and quantitative studies with varied designs present in this review. The quality assessment criteria, based on the premise that methods are related to paradigms, rely on the notions of rigor and trustworthiness used in the cross-paradigm framework proposed by Lincoln and Guba (1985, 1986) and comprise four separate goals for quantitative and qualitative methods. First, the truth value is expressed as credibility for qualitative studies and internal validity for quantitative studies. Second, applicability is expressed as transferability for qualitative studies and external validity for quantitative studies. Third, consistency is expressed as dependability for qualitative studies and reliability for quantitative ones. Lastly, neutrality is expressed as confirmability for qualitative studies and objectivity for quantitative ones.

Templates were created and quality assessment ratings for qualitative and quantitative[2] studies were provided in Appendices A and B respectively. The NICE rating system for methodological quality of studies (NICE, 2007) was adopted to assign a rating: (--) to show that the particular indicator of quality was not fulfilled; (+/-) to show that it was partially fulfilled; and the rating of (++) to show that the particular indicator of quality was fulfilled to a satisfactory level. The ratings were not scored, but described in a qualitative manner due to the diversity of studies.

[2] In terms of objectivity for quantitative studies, the question "Is bias acknowledged?" was added, as Sale and Brazil (2004) did not make this criterion explicit.

5. Results

5.1. Study characteristics

All twelve studies in this review varied in terms of their aims and a greater or lesser emphasis on the issue and meaning of control. The only studies addressing the issue of control or self-control in their title were three quantitative studies. From the remaining nine qualitative studies seven had 'control' as one of their themes. The remaining two studies discussed control as part of their data, referring to it as an aspect important to their participants in their analysis and discussion sections.

In terms of design, four qualitative studies employed variants of grounded theory and two of those used software programmes (Dignon, Beardsmore, Spain, & Kuan, 2006; Nordbø, Espeset, Gulliksen, Skarderud, & Holte, 2006), two studies used IPA, one study used thematic analysis, one used framework approach, and one utilised narrative life history. Within quantitative studies, one was cross-sectional (Surgenor, Horn, & Hudson, 2003), one was a case control study (Sassaroli, Gallucci, & Ruggiero, 2008), and one (Birgegård, Björck, Norring, Sohlberg, & Clinton, 2009) was a cohort study (exploratory phase) and case control (comparison phase), and all three employed questionnaires.

5.2. Study populations

Out of the twelve studies in this review, five were conducted in the United Kingdom, two in Australia, one in Norway, one in the United States of America, one in Sweden, one in New Zealand, and one in Italy. The sample sizes varied greatly and for qualitative studies they were between eight (Eivors, Button, Warner, & Turner, 2003) and 20 participants (Reid, Burr, Williams, & Hammersley, 2008; Patching, & Lawler,

2009), whereas quantitative studies had between 51 and 143 participants. In diagnostic terms, from nine qualitative studies, four included exclusively patients with AN and within those one study differentiated between AN and partial syndrome anorexia nervosa (PSAN), three studies included patients with AN or bulimia nervosa (BN), one study included participants with AN and eating disorder not otherwise specified (EDNOS), and one included those with AN, BN and EDNOS. Within quantitative studies, one compared a combined group of AN and BN patients with healthy controls, one included separate groups of AN and BN patients and one used only patients with AN. In terms of demographic information, the majority of studies had only female participants, and the four studies with male participants had only up to two of them. This is in line with a generally tendency of a diagnosis of AN being received by females (NICE, 2004). In terms of age, participants across the studies ranged from 17 years (Surgenor et al., 2003; D'Abundo & Chally, 2004; Reid et al., 2008) to 51 years (Birgegård et al., 2009; Patching & Lawler, 2009). Characteristics of the studies are summarised in Tables 1 and 2.

Table 1. Summary Table of Qualitative Studies

Author (year)	Country	Focus	Sample	Method of data collection	Analysis	Strengths/ Weaknesses	Themes	Main Findings	Resonance with PCT/ Understanding of control
Williams & Reid (2012)	UK participants located in: USA (n=8), UK (n=4), Australia (n=1), and Canada (n=1)	Experiences in AN of those wishing to recover who used pro-recovery websites	N=14 12 Females 2 Males 8 AN 6 EDNOS Age range = 21-50	Online focus group or an e-interview with a semi-structured topic schedule	IPA	<u>Strength</u> -Novel method of data collection -Triangulation of sources & investigators -Statement of researchers' assumptions included <u>Weakness</u> Sample bias-only participants who used internet	1.Relationship with anorexia nervosa 2.Striving for the perfect self 3.Controlling the self through the body 4.Battling the 'anorexic voice'	AN perceived as a functional tool to avoid and cope with negative emotions, to change identity and to obtain control	- The only thing participants feel they can control is their body - Initial sense of control over the body and dieting replaced later by feeling out of control over that controlled restriction - The anorexic voice experienced as an entity taking over control, but also being a companion, and thus difficult to let go
Williams & Reid (2010)	UK, but participants located in USA (n=5), Canada (n=2) Spain (n=1), South Africa (n=1), Australia (n=1), New Zealand (n=1),	Experiences of those who wish to maintain their AN and use pro-anorexia websites	N=14 AN 13 Females 1 Male Age range = 18-36	Self-report questionnaire EDE-Q, online focus group using a semi-structured approach, and 2 e-mail interviews	IPA	<u>Strength</u> -1st phenomeno-logical study with sample wishing to maintain AN -Triangulation of investigators -Well-developed analysis	Two overarching themes: 1. Ambivalence and conflict about AN - AN as a functional and controllable tool - AN: Friend or foe? - AN as an uncontrollable disease 2. Barriers to recovery - Low self-efficacy	Ambivalence about AN providing control and controlling participants, playing a positive or negative role, and whether to maintain anorexic behaviours or to recover	- Conflict between AN providing control and controlling individuals - Ambivalence about AN being a disease and an enemy or a functional tool that can be controlled

	Romania (n=1) and India (n=1)					Weakness Sample bias- only those using internet	- Perceived limitations of treatment		
Patching & Lawler (2009)	Australia	Developing, living with and recovering from AN or BN	N=20 6 recovered AN 2 recovered BN 12 recovered AN and BN Female Years recovered = 3-25 Age range = 24-51	Life-history interviews	Narrative	Strength -Well-developed analysis -Triangulation of investigators Weakness Informed consent not stated	1. Developing an eating disorder Control: Lack of control Connectedness: A sense of not belonging Using food to reconnect Conflict: Parental expectations 2. Living with an eating disorder Control: Controlled by the condition Connectedness: Ultimate disconnection - facing death Conflict: Conflict over cure 3. Recovering from an eating disorder Control: Relinquishing control Regaining control Connectedness: Reconnecting with life	Participants attributing development of their ED to a lack of control, a sense of non-connectedness to family and peers and to an extreme conflict with significant others Recovery occurred when participants re-engaged with life, developed skills necessary for conflict resolution and rediscovered their sense of self	Feeling a lack of control at the onset of AN A sense of control over eating and exercising expected to generalise to feeling in control of other areas of life and to a stronger sense of self In recovery, a sense of control gained via different ways than AN behaviours

							Conflict: Self-acceptance Self-determination		
Reid, Burr, Williams, & Hammersley (2008)	UK	Patients' perspectives of ED, experiences of treatment and service provision	N=20 19 Females 1 Male AN and/or BN Outpatients Age range = 17-41	Semi-structured interviews	Thematic Analysis	<u>Strength</u> Triangulation of investigators <u>Weakness</u> No justification for sampling strategy	1. Ambivalence about control and its role in treatment seeking 2. A practical and caring approach 3. Reliance on treatment	Ambivalence related to ED - whether it is a way of exerting control or it controls the person and this leads to seeking treatment	Control of eating has a function of a coping mechanism, but it is experienced as controlling once AN behaviours become too absorbing
McNamara, Chur-Hansen, & Hay (2008)	Australia	Exploration of emotional responses to food	N=10 Female 2 AN 5 BN 3 EDNOS Age range = 18–41 (M 29.1 years)	Semi-structured interviews during which participants were asked to talk about their thoughts in response to slides of a range of food	The Framework Approach	<u>Strength</u> -1st qualitative study about emotional responses to food -Triangulation of investigators <u>Weakness</u> -Under-developed sub-themes - No justification for sampling strategy	Central theme: Control comprising: 'Positive control', 'Negative control', 'Emotional reactions', 'Avoidance', 'Purging', 'Safety', 'Quantity', 'Power', 'Self-esteem', 'Weight', 'Obsession', 'Femininity', 'Knowledge'	Control is directly linked to negative emotional responses to the sight of food	Control and its maintenance as a central theme for participants with ED who were shown food images Control linked to certain experiences: - Positive emotions occur as a result of being in control of eating behaviour and outcome - Negative emotions occur when a person loses control over their eating behaviour and purges
Nordbø, Espeset, Gulliksen, Skarderud, & Holte (2006)	Norway	Systematic exploration of the meaning of anorexic	N=18 Female AN 14 Outpatients 4 Inpatients	Semi-structured 'experience interviews' developed from communication	Elements of Grounded theory	<u>Strength</u> -Searching for disconfirming evidence -Triangulation	Eight constructs: - Security - Avoidance - Mental Strength - Self-confidence	The eight constructs represent the subjective meaning participants	A diverse functional role of AN behaviours, i.e. giving a sense of stability and predictability, avoiding negative feelings

		behaviours for patients with AN	Age range = 20–34 (M 25.5 years)	theory	QSR-N*Vivo software program	of investigators Weakness Unclear analysis	- Identity - Care - Communication - Death	attributed to AN, are likely to have a central functional role in the maintenance of AN and should be taken into account during the assessment of patients' motivation and goals for treatment	and experiences, high expectations, giving a sense of inner drive and self-control, a different and better sense of self, helping to receive a sense of care from others and to communicate difficulties Self-control as one among many other functions of AN
Dignon, Beardsmore, Spain & Kuan (2006)	UK	Reasons for AN	N=15 AN 13 Female 2 Male Age range = not reported	Open-ended unstructured interviews	Grounded theory NUD.IST software package	Strength -Compre-hensive description of analysis -Peer debriefing Weakness No triangulation included	The core category: 'Becoming anorexic' Two subcategories: 'trigger', 'sustain' Within the sub-core category 'trigger': the categories 'unhappiness', 'body dissatisfaction' and 'control' Within the sub-core category 'sustain': the categories 'control', 'buzz', 'spiral', 'obsession', 'perfectionism', 'media' and 'more-than-just-slimming'	Participants used the strategy to control food to deal with their unhappiness The ability to exert control over food provided participants with enjoyment and pride which in turn helped them to overcome their fear of a loss of control	Control over food used to deal with the sense of unhappiness and to overcome the fear of the loss of control
D'Abundo & Chally (2004)	USA	Exploration of experiences of women who struggled	N=17 AN or BN Female Age range = 17-46	Semi-structured interviews, a focus group, participant observation	Grounded theory	Strength -Well-developed model -Triangulation of methods &	The circle of acceptance model is proposed consisting of: 1. Increasing severity of eating disorder	Repeated patterns Of ED and recovery, not returning to normal eating, but being at the stage	A sense of control gained by engaging in healthy eating during recovery

		with recovery				investigators -Statement of researchers' assumptions included - Searching for disconfirming evidence -Peer debriefing <u>Weakness</u> Informed consent not stated	2. Circle of acceptance 3. Decreasing severity of eating disorder	of atypical eating	
Eivors, Button, Warner, & Turner (2003)	UK	Reasons for high drop-out rate of AN patients	N=8 AN or PSAN Female Outpatients or inpatients who withdrew from assessment or treatment Age range = 21-43	Written accounts & semi-structured interviews	Social constructionist revision of Grounded theory	<u>Strength</u> Triangulation of sources <u>Weakness</u> Ethical review, statement about confiden-tiality, informed consent, and audiotaping procedures not stated	Interactional Model of Control involving interaction between 1. Attempt(s) to exert control 2. Others interventions 3. Loss of control	Control affected by interactions with the wider social system The battle for control between the anorexic and others resulting in drop out as a consequence of the treatment approach, timing and context recreating circumstances of the lost control	- Role of AN as a coping strategy emphasized by participants - During treatment, a conflict between further loss of control and giving up control - Dropping out as a way of regaining control - A cycle of conflict whereby family or professionals deal with AN symptoms without addressing their meaning which leads to the external conflict and separation of the AN person and the person's loss of their sense of control

IPA: Interpretative Phenomenological Analysis; PSAN: partial syndrome anorexia nervosa; AN: anorexia nervosa; BN: bulimia nervosa; EDNOS: eating disorder not otherwise specified; ED: Eating Disorder; EDE-Q: The Eating Disorder Examination-Questionnaire

Table 2. Summary Table of Quantitative Studies

Author (year)	Country	Focus	Sample	Study type	Method of data collection	Analysis	Measures used	Strengths/ Weaknesses	Main Findings	Resonance with PCT/ Understanding of control
Birgegård, Björck, Norring, Sohlberg, & Clinton (2009)	Sweden	The initial self-image and its relation to 36-month outcome for anorexic and bulimic patients	N=143 52 AN 91 BN Age range: AN=18–47 (M 25.3 years) BN 18–51 (M 25.6 years)	Cohort study (exploratory phase) & case control (comparison phase)	Self-report & interview-based measures at initial assessment and following 6, 12, 18, and 36 months	1. Stepwise regression 2. Multiple regression	RAB SASB EDI2 SCL63 BaT	<u>Strength</u> - Follow–up at four time points - Comparison group <u>Weakness</u> -High attrition: 42% AN and 40% BN initially diagnosed provided data at 36 months	In anorexia, variables related to self-control powerfully predicted outcome In bulimia, degree of self-hate/self-love moderately predicted outcome	Self-control as part of self-image High initial self-control results on items about restriction of impulses, efforts to achieve personal goals, and adherence to norms, indicated that participants perceived their anorexic behaviours as positive means of achieving their goals
Sassaroli, Gallucci, & Ruggiero (2008)	Italy	The effects of perception of control on ED and its interaction with self-esteem and perfectionism	N=55 ED 32 AN 23 BN 53 Females 2 Males Age range: (M 32.71 years) N=38 Healthy controls 37 Females 1 Male Age range: (M 30.02 years)	Case control	Measures	Multiple linear regression	Three symptomatic scales of EDI-3 (drive for thinness, bulimia, body dissatisfaction) MPS RSES ACQ	<u>Strength</u> - Focus on the importance of perception of control in ED - Control group <u>Weakness</u> - Groups of AN and BN combined in one group - No follow up	Perception of control and self-esteem for the ED group were significantly lower than for controls Their concern over mistakes, drive for thinness, body dissatisfaction and bulimia were significantly	Perception of low control over emotional responses and external threats considered to be a significant factor in ED

									higher than that of the control group Combined low self-esteem and low perception of control moderated the effects of concern over mistakes on drive for thinness, body dissatisfaction, and bulimia	
Surgenor, Horn, & Hudson (2003)	New Zealand	The relationship between a sense of control and the clinical and diagnostic variability of AN	N=51 Female Mild AN Outpatients Age range: 17–40 years	Cross sectional	Measures	1. t-tests and one-way ANOVA 2. correlation 3. Fisher's test	EDI SCI		<u>Strength</u> Multidimensional measure of control <u>Weakness</u> -Not possible to establish the causal direction of the relationship	A poor overall sense of control and dependence on negative strategies to gain control were linked to more severe eating disturbance	Control as a multidimensional concept Perception of control is not the only factor related to the severity of AN, but the behavioural aspect plays its part such as overreliance on predominantly negative passive strategies to regain that control, and the shortage of positive active strategies

RAB: The Rating of Anorexia and Bulimia; SASB: The Structural Analysis of Social Behavior (3rd surface, self-image); EDI-2: The Eating Disorders Inventory, version 2; SCL63: The Symptom Check List; BaT: The Background and Treatment Questionnaire; EDI: The Eating Disorders Inventory; SCI: The Shapiro Control Inventory; EDI-3: The Eating Disorders Inventory, version 3; MPS: The Multidimensional Perfectionism Scale; RSES: The Rosenberg self-esteem scale; ACQ: The Anxiety Control Questionnaire

5.3. Methodological quality assessment results

Quality assessment results of the twelve studies in the review suggest that none of the studies had majority of not fulfilled criteria (--), but there was a spread of fulfilled (++), partially fulfilled (+/-) and not fulfilled (--) criteria across all the studies. In summary, the studies were the mixture of methods and paradigms and their quality differed. None of the studies were excluded in order not to lose access to potentially informative findings. They will be described in more detail in Objective One of this review.

5.3.1. Critique of Qualitative Studies

In terms of credibility, all studies apart from Dignon et al. (2006) used at least one form of triangulation, and triangulation of investigators was most frequent. All studies made use of quotations, but only two studies (D'Abundo & Chally, 2004; Nordbø et al., 2006) described searching for disconfirming evidence. In relation to transferability, generally all the studies were good, but two studies (Reid et al., 2008; McNamara et al., 2008) were not clear about their sampling strategy. Moreover, the study by McNamara et al. (2008) had underdeveloped sub-themes, and in the study by Nordbø et al. (2006) the analysis was not very clear. This, however, did not influence the conclusions about the importance of the relevance of control as a concept for clients with AN. In terms of dependability and confirmability, studies generally presented as poor with no external audit of the process and only one study (Williams & Reid, 2012) used bracketing (see Appendix A). It is also worth noting that there was a selection bias in two studies using the internet sample (Williams & Reid, 2012; Williams & Reid, 2010). One might hypothesize that these areas are not well covered in majority of current qualitative studies.

5.3.2. Critique of Quantitative Studies

In terms of internal validity, confounding variables were identified in all studies, but none of the studies included a statement about protection of participants' confidentiality. In terms of external validity, as understood by Sale and Guba (2004), all studies defined their outcome measures and had explicitly described objectives. Only the study by Birgegård et al. (2009) had a clearly stated design and addressed the issue of non-respondents. None of the studies included the statement about addressing missing data. This, however, did not appear to preclude findings regarding control.

5.4. Objective One: To evaluate the empirical evidence for the relevance of control as a concept in AN

5.4.1. Results of Qualitative Studies

Nine qualitative papers were reviewed. This is not a full thematic synthesis as described by Thomas and Harden (2008), but it rather picks out overlapping parts on control and AN in the papers which then contribute towards the structure of categories. This was necessitated by the dispersed nature of findings related to control in the reviewed studies. The issue of control was explicitly present as one of the themes in seven studies, and discussed as part of the data, analysis and discussion in two studies. Final categories were discussed and approved in consultation with the author's supervisor.

5.4.1.1. Control

The issue of control and the lack of it appeared to be a core feature of an eating disorder. In the majority of studies (Eivors et al., 2003; D'Abundo & Chally, 2004; Dignon et al., 2006; Patching & Lawler, 2009; Reid et al., 2008; Williams & Reid, 2012), participants described the need to feel in control over aspects of their lives, and exerting control over eating, particularly when they felt out of control due to external circumstances (i.e. stressful events or transition). In the accounts of some participants, eating was the only thing they believed they could control (Dignon et al., 2006; Reid, et al., 2008). Some participants in the study by Dignon et al. (2006) were, however, aware that this type of control was a substitute for "a real" sense of control in other aspects of their daily functioning. Eivors et al. (2003) understood it as a functional coping strategy which offered a sense of achievement and enhanced self-esteem, but may not have been entirely conscious.

All participants in the study by Dignon et al. (2006) experienced a sense of pride and enjoyment at the fact that they were able to control their food and subsequent weight loss. They described a sense of "buzz" as a result of knowing that they were good at a task not easily achievable by other people. Williams and Reid (2012) concluded that the uncontrolled need for food was perceived by participants as a threat to control.

Participants in the study by Patching and Lawler (2009) reported changing dynamics of control over the course of their illness, with an initial belief that the eating disorder provided them with a sense of control and a sense of self. This was in opposition to their later understanding of gaining a sense of control without disordered eating in recovery. They reported relinquishing the sense of control provided by the eating

disorder as the first step to regain a sense of self free of the eating disorder. Participants expressed a belief that a sense of control achieved over food intake and exercise would extend to a sense of control over their lives, resulting in a stronger sense of self. This way of thinking was reported to persist for several months until they reached the point when they started feeling controlled by it and even more out of control than before the onset of their eating disorder. Patching and Lawler (2009) concluded this was to do with the self-imposed rigidity of eating and exercise rules and the self-limiting nature of the disorder participants started to be aware of. Studies by Eivors et al. (2003), Reid et al. (2008), and Williams and Reid (2012), resulted in similar findings with participants experiencing increased control at the beginning of their eating disorder followed by the later loss of that control to the eating disorder.

There was consistency among results of the aforementioned studies that at first disordered eating was used by participants as a coping strategy, but it no longer served that function when the control exerted by participants over their bodies and eating was experienced as “controlling” them. Participants in the study by Williams and Reid (2012) were able to locate the moment when their restrictive behaviours, perceived by them as dieting, became a controlling eating disorder. They reported that this transition was not chosen by them, nor did they have any control over it. According to participants, the change in their cognitions accompanied the process, and as Williams and Reid (2012) put it, this “switchover” was felt by participants as a split occurring between their anorexia and the self, and as a “battle” of two separate voices or minds. Participants used terms such as the “anorexic voice”, “Ana”, “anorexic mind”, “anorexic thoughts”, “negative tape in my head”, or “anorexic mode” to exemplify the critical, rigid and irrational entity “that battled against and

controlled their rational, true self" (Williams & Reid, pp. 808, 2012). The researchers concluded that participants' AN and anorexic cognitions were perceived by them as external and separate from their cognitions of the self, and thus they experienced them as alien entities which took over their lives and identities. Interestingly, even though the anorexic voice was described by participants mostly as a separate entity, according to researchers it was not always experienced as such.

It is very clear that control is important in eating disorders. The key message for the reader is that the way participants talk about control shows its dual meanings at the experiential level. The first meaning is related to the experience of exerting control, expressed as one's sense of agency ("will"). The second one refers to the experience of the loss of control or its absence in the face of other impulses, behaviours and habits. This was understood, mainly, as the eating disorder controlling the person, and thus, the eating disorder having hold of the agency. From the psychological point of view, this loss of agency might be about emotional decision making or impulse control, but experientially it is felt that the eating disorder is taking control or taking over.

Nordbø et al. (2006) in their study about the meaning of anorexic behaviours pointed out that the "mental strength", one of eight identified constructs, involved obtaining an inner sense of mastery and self-control by participants when they succeeded at losing weight. The researchers acknowledged that "control" was used most frequently and in a variety of ways in relation to the construct of mental strength. Hence, they decided not to use the term as one of their constructs as they perceived other constructs to be more clinically applicable and restrictive. The importance of the

study was in the fact that it explored psychological purpose, even if dysfunctional, of anorexic behaviours. The researchers concluded that the awareness of the purpose anorexic behaviours had for the person exhibiting them and the values they adhered to, could help articulate their conflicted personal motives.

5.4.1.2. Control and Recovery

The recovery from an eating disorder was perceived by participants as a process which involved giving up the idea that their condition could provide control. Patching and Lawler (2009) identified the theme of "relinquishing control", and made a note of how frightening this was for the participants who, at the same time, experienced a sense of "further loss of control" at the idea of giving up their eating disorder. Participants in the study by Dignon et al. (2006) reacted with anxiety and terror to the idea of relinquishing control as this meant that the only sense of control they had would be taken away once they started eating.

Studies by D'Abundo and Chally (2004), Reid et al. (2008), and Patching and Lawler (2009) described participants gaining a sense of control by engaging in healthy eating during recovery. The research findings of Patching and Lawler's (2009) study showed that all women remembered that what preceded the decision about their recovery was self-evaluation and acknowledgement of the fact that they felt further out of control with their disordered eating when compared to the time prior to it. They became aware that to regain that sense of control they would need to give up the behaviours for healthy ones. Even though they perceived recovery as a prolonged process, they described it as the decision time about getting better and regained control in a healthy way, which then generalised to other aspects of their functioning.

On the other hand, participants in Eivors et al.'s study (2003) disengaged from treatment to regain control and re-establish the role of their disordered eating as functional. In the remaining studies, participants had concerns that treatment would remove control, but in the end they relied on their treatment as their safety net. For example, Reid et al. (2008) found out that participants exerted control to carry on with treatment, rather than to drop out of it.

D'Abundo and Chally (2004) in their study of participants' experiences of recovery discussed a struggle for control as an important aspect of the aetiology of an eating disorder. Participants identified it as experiencing a general sense of the lack of control in every aspect of their functioning. Similarly to participants in other studies, exhibiting control over eating was the most suitable coping mechanism participants reported to use when not feeling in control of other parts of their lives. They described how it led, together with irrational thinking and withdrawal from society, to further deterioration until participants reached the pinnacle of their illness, feeling it controlled their lives. Once participants started to recover, they described gaining "a real sense of control", thinking rationally, and feeling a part of the society.

The reader can notice that in recovery the idea of giving up one's eating disorder is equated with giving up control. This evokes strong anxieties about the sense of self, which, at this point, is experienced as combined with the eating disorder. The reaction to it seems to differ. Some participants are able to look back and evaluate the impact of the eating disorder on their lives, and they make their decision about recovery on the basis of it. This encompasses regaining their sense of control without the eating

disorder. However, those who drop out of treatment, restore their control by carrying on with their eating disorder.

5.4.1.3. Control and Food

McNamara, Chur-Hansen and Hay (2008) explored emotional reactions of eating disordered participants to food images presented on slides. The researchers reported "control" to be the main theme and concluded that it was the first study to make this direct link between control and emotional reactions to food images. Participants described positive emotional reactions towards food, i.e. enjoyment and happiness, when they were able to control their eating. In contrast, the thought of losing that control led to their negative emotional reactions towards food, but also towards themselves. The researchers understood avoidance to be linked to the theme of control and discussed the tension visible in interviews between participants' desire to indulge in eating "bad food" and the desire to stay away from it. The researchers theorised about positive control as reinforced by avoidance, and about negative control as reinforced by the thought of eating bad food to excess, which evoked feelings of disgust and despair in participants. Similarly, the researchers linked small quantities of food to a positive sense of control, due to participants' belief that they would be able to exert control over their behaviour, which they feared would not happen, if they were presented with large amounts of food. The researchers also linked the sense of control to the sense of power in relation to being able to resist food. This successful "resistance" evoked feelings of strength in participants, whereas, a sense of failure and being weak came to the fore at the thought of participants giving in to the desire for food and losing control. Equally, high and low self-esteem and self-confidence were linked, respectively, to feeling in control or out of it, in relation to participants'

weight and eating. Participants felt preoccupied with food to the degree that they felt it controlled parts of their lives.

5.4.1.4. Control and Changing Sense of Self

Patching and Lawler (2009) explored the way that participants developed an eating disorder and recovered from it. This focus seems to have allowed for capturing the continuity of participants' experience and their changing sense of self. Participants, in their accounts, described how their capacity to grow a strong sense of self during childhood and adolescence was limited due to conflicted family relationships and their feelings of being out of control and disconnected from self and others. The researchers reported that all their participants held beliefs about their disordered eating, giving them the sense of connectedness to the self and other people, and building a stronger sense of self.

Participants' need to change their identity was a common theme in the study by Williams and Reid (2012). Participants reported that this occurred through exercising and restricting as ways of controlling their body and giving them a sense of control.

Nordbø et al. (2006), who identified "identity" as one of the constructs to exemplify meaning their participants attributed to their anorexic behaviours, discussed AN as helpful in constructing a different inner concept of self. The researchers noted that their participants talked about AN as involving their change of perception about who they were. In their experience, participants turned into different people, for example, they changed from strict to ascetic, from harsh to likeable, and from invulnerable to

vulnerable. The researchers concluded that participants ascribed a positive value to the change and got rid of their old identity thanks to their disordered eating.

To summarise, the eating disorder is perceived as providing not only a sense of control, but also a positive and stronger sense of self. It is evident that it is to compensate for the sense of self participants either did not develop or felt disconnected from.

5.4.1.5. Control and Coping

Eivors et al. (2003) identified starvation as a "functional coping strategy", used by participants throughout stages of their AN, which helped them deal with reactions to its symptoms. The research findings from Williams and Reid's (2012) study highlighted participants' belief that AN was the only way to cope due to the lack of other coping strategies, and partially due to their belief that it played a positive role, helping them to get through experiences which were unpleasant. For example, they discussed the focus on eating and food as helpful in avoiding negative emotions such as fear, anger, or pain and situations which could potentially aggravate them. Participants talked about their illness as a friend they could rely on when they needed it as a coping strategy. A similar meaning of AN as a friend who can be depended upon was identified in Williams and Reid's (2010) study. In this study, however, participants discussed how the friend progressively changed into an enemy when they felt they could not control their illness any more. Some participants talked about being consumed by their AN when it was difficult to cease the behaviours that came with it. Williams and Reid (2010) concluded that their research findings showed AN to be a multi-functional tool which helped with a variety of issues and provided participants

with a sense of achievement, control, strength, success, coping, and safety. Moreover, it was also a way to avoid the experience of difficult emotions and situations, to express feelings, to punish oneself or other people, to deal with puberty, and generally to "fix" any problems. Williams and Reid (2010) concluded that participants in their study perceived AN as ego-syntonic and felt in control of it when they treated it as a tool. When restricting, they reported experiencing positive emotions, being in control and being good as opposed to feeling bad, out of control, fat and hating themselves.

Similarly, Williams and Reid (2012) showed that participants' perception of AN changed from coping mechanism to "another thing they had to cope with". However, their experiential accounts seemed to suggest that they still attempted to maintain its functional value. They felt ambivalent about it, as they were becoming aware of its negative impact, but still carried on with their behaviours. In the study by Williams and Reid (2010) individuals talked about their ambivalence of not wanting to die but to get better, however, at the same time, they talked about not wanting to recover due to their fear of not knowing how to do it. The idea of recovery was terrifying for these participants, because they believed this would lead to gaining weight, and as discussed earlier, to the loss of their control.

To summarise, the role of AN as the coping strategy was important to participants, particularly when it was the only coping strategy they could rely on. When AN took over and participants could no longer control it, their became more ambivalent towards it, but still attempted to use it as their coping strategy.

5.4.1.6. Control and Conflict

Patching and Lawler (2009) identified two types of conflict which their participants described, the internal conflict which they linked to their poor sense of self, and the external conflict with family members and peers regarding differing expectations of participants' responsibilities and academic achievements. Having expectations conflicting with those of their parents and peers contributed to the development of disordered eating of all participants who described that the conflicts were exacerbated further by their eating behaviours. Patching and Lawler (2009) concluded that family relationships were involved in the development and maintenance of the eating disorder, particularly when parents did not understand the behaviours and made attempts to push participants to seek treatment. Participants perceived the conflict over cure as the parental way of exerting control. Patching and Lawler (2009) stressed that the recovery could occur only when the person was ready to make that choice and at their own pace. They concluded that sense of self-determination and self-acceptance was helpful in resolving internal and external conflicts.

Similarly, Williams and Reid (2012) described triggers identified by participants as leading to their onset of an eating disorder such as perfectionist tendencies in response to the pressure of socio-cultural and parental expectations related to achievement, body shape and family roles, a conflict between participants and their parents and among parents themselves. Eivors et al. (2003) noted that while participants perceived their behaviour as functional, others understood it as problematic which led to a conflict between participants' need to maintain this coping strategy and their relatives wanting to change their disordered eating.

5.4.1.7. Control and Ambivalence

Reid et al. (2008) described ambivalence about control, expressed by participants who oscillated between the need to feel safe and the need to exert control by means of disordered eating, and the fear of being controlled by their eating disorder. Participants reported this state to precipitate their crisis and seeking help. Similarly, Williams and Reid's (2010) study identified participants' conflict between their belief that AN provided a sense of control and that it was controlling them. The researchers understood this conflict to be present underneath the ambivalence about control and to fuel even more ambivalence. The ambivalence related to participants not being sure whether their AN was something to maintain, as it was functional and controllable, or something to stop, as it was simply the illness which could not be controlled.

5.4.1.8. Connectedness

Only in one study, by Patching and Lawler (2009), participants described a sense of not belonging, being misunderstood and devalued, which they experienced in their early life, adolescence and sometimes in adulthood. This was exacerbated further by the secrecy as part of their eating disorder. Some participants reported their attempts to fit in by behaving like their family members or friends. In the long run, they all experienced physical and mental exhaustion and were able to identify their symptoms. When re-connecting with life, all participants stated that it meant that the time and energy they spent on their eating disorder was spent on re-connecting with others, taking on new roles in their careers and relationships.

5.4.2. Summary of Qualitative Studies

In summary, there was the thematic clarity about the importance of control in AN, which was visible in two aspects. The first aspect related to the experience of exerting control, expressed as one's sense of agency, whereas the second one referred to the experience of the loss of control or its absence. This was understood mainly as the eating disorder controlling the person. The eating disorder was perceived as providing not only a sense of control, but also a positive and stronger sense of self. In recovery, the idea of giving up one's eating disorder was equated with giving up control, and these participants who made their decision about recovery, regained their sense of control without their eating disorder.

5.4.3. Results of Quantitative Studies

Three quantitative studies differed in terms of designs and it was decided that they would be presented separately to aid clarity. Most of the methodological criteria were fulfilled in each study, but certain criteria did not apply (see Appendix B).

5.4.3.1. Self-image and Control

The study by Birgegård et al. (2009) investigated what self-image variables predicted outcome in AN and BN using Benjamin's Interpersonal Structural Analysis of Social Behavior (SASB) model[3]. The model comprised two orthogonal dimensions, vertical autonomy (on a continuum from enmeshment to differentiation) and horizontal affiliation (on a continuum from love to hate) which formed eight behavioural clusters: self-affirmation, self-emancipation, self-protection, self-love, self-control, self-neglect, self-hate, and self-blame, as the outcome of the dimensional end points

[3] The model, based on the premise that social behaviours evoke equivalent complementary reactions, had been used to predict outcome, to explain dropout rates and distinguish between different forms of eating disorders.

and their combinations. The researchers estimated that AN would be mainly predicted by self-control (autonomy dimension) and significantly more than BN which would be predicted by self-hate. The study did not allow for any diagnostic crossover between two groups, as it was imperative for the researchers to find out, whether self-control was particularly detrimental to the outcome in AN, due to the assumption that the disorder may be chronic as a result of generalised rigid and excessive control over the self. To assess the eating disorder pathology, researchers used self-report and interview-based measures at initial assessment and following 6, 12, 18, and 36 months. Self-control powerfully predicted outcome in AN, whereas the degree of self-hate/self-love moderately predicted outcome in BN. This cohort and case control study had a follow-up at four time points and a control group, which was its strength, but it was weaker in terms of attrition which was high at 36 months (42% AN and 40% BN).

The research findings indicated that self-control was a fundamental feature of the pathology of AN. However, the study design did not allow for making inferences about the causal role of self-control, so it was not possible to conclude, whether it preceded AN or was affected by it. The authors pointed out that the findings were important, because they suggested that generalised self-control could be a strong maintaining factor for AN. High initial levels of self-control on the SASB (items about restriction of impulses, efforts to achieve personal goals and adherence to norms) indicated participants perceived their anorexic behaviours as a positive means of achieving their goals. Additionally, restrictive symptoms related more to self-image in AN, indicating that they were ego-syntonic, thus difficult to change.

The authors discussed their findings related to self-control as consistent with the cognitive model of AN (Fairburn et al., 1999) in which it was perceived to be the central perpetuating factor. However, they argued that because of self-neglect, part of the autonomy dimension, explaining additional variance in their research, a theoretical model comprising control-autonomy conflict would be better fitted than the one-dimensional model of Fairburn et al. (1999).

5.4.3.2. Relationship between control and Anorexia Nervosa

In the study by Surgenor et al. (2003), the relationship between psychological sense of control and clinical variability of AN was investigated. Control, measured by the Shapiro Control Inventory (SCI; Shapiro, 1994), was understood as a multidimensional construct consisting of the sense of control, mode of control, motivation for control and agency of control.

The authors concluded that particular aspects of control were linked to particular aspects of AN. A significant relationship was reported between greater overall severity of AN and larger reduced overall sense of control. Participants were reported to rely too much on negatively experienced passive strategies, and too little on positively experienced active strategies to gain control. The researchers concluded that participants' perception of control was central to its relationship with the severity of AN, and to the way they responded to challenges related to control (i.e. with the use of strategies which were mostly negative). For example, participants who were diagnosed six or more years ago, stated that they relied more on over-controlling, manipulating and being dogmatic in order to gain a sense of control, than those diagnosed less than a year ago. According to Surgenor et al. (2003), the negative

assertive style of gaining control (such as over-controlling or manipulating), was related to illness chronicity, whereby the person had the experience of themselves as controlling too much, but felt unable to change it. The cross-sectional nature of the study did not allow for establishing a causal direction of the relationship between control and the clinical and diagnostic variability of AN.

5.4.3.3. Low Perception of Control

The study by Sassaroli et al. (2008) investigated the effects of perception of control on AN and BN and its interaction with self-esteem and perfectionism. The researchers pointed out that it was one of the first studies to provide empirical evidence for the importance of perception of control in eating disorders. In particular, they referred to two dimensions, as measured by the Anxiety Control Questionnaire (ACQ; Rapee, Craske, Brown, & Barlow, 1996), perception of control over external threats and perception of control over internal emotional reactions. The research findings showed statistically significant lower average scores on perception of control and self-esteem for the ED group when compared with the control group, and statistically significant higher average scores on concern over mistakes (the dimension of perfectionism), and on drive for thinness, body dissatisfaction, and bulimia (three dimensions of the Eating Disorder Inventory- version 3, EDI-3, Garner, 2004). In terms of control, these findings were indicative of the eating disorder population perceiving they had lower control over external events and internal emotional states. The authors stated that perception of control, concern over mistakes and self-esteem were interrelated, however, they acknowledged that it was not possible to infer causality of the relationships due to the correlational nature of the study. They suggested that eating disorder symptoms were unlikely to be caused by only perfectionism without low

self-esteem and a sense of lack of control. This was confirmed by the research findings of self-esteem and perception of control having moderating effect on the correlation between pathological levels of eating disorders and concern over mistakes. The authors discussed eating disorder difficulties as a way of re-gaining a sense of self-esteem and control by aiming to be perfect in the area of weight, body shape and eating.

In order to address the limitation of combining eating disorder and healthy controls groups in the multiple regression analyses, the researchers performed additional analyses only with the eating disorders group. These resulted in the statistically significant interaction between perception of control and concern over mistakes, but not self-esteem and concern over mistakes. The outcome was understood as confirming the significance of the perception of control in this population. This study had a control group, but no follow-up which could improve its findings.

5.4.4. Summary of Quantitative Studies

In summary, control was an important concept in AN in the aforementioned quantitative studies. The three studies pointed at lower perception of control over external events and internal emotional states in AN, perception of control being central to its relationship with the severity of AN, self-control being a fundamental feature of the pathology of AN and its interaction with self-esteem and perfectionism. However, the evidence base appeared to be less developed in terms of studies elucidating the role of control in transitional states from illness to recovery. There may also be a general need to explore control in relation to goals in AN in cross-sectional studies.

5.5. Objective Two: To evaluate the empirical evidence for the application of the framework of PCT to the role of control in AN

5.5.1. Results of Qualitative Studies and their Resonance with PCT

One of the core tenets of PCT is the idea that individuals control their perceptual experiences by means of behaviour (Powers, 1973). In other words, the function of the behaviour is to control what they experience. It appears that all the qualitative studies refer to the functional role of anorexic behaviours, which are to help participants feel in control when they perceive they lack that control. The studies do not use the same terms as PCT, but there is a clear indication that anorexic behaviours could be understood as the way participants control their perceptual experiences of feeling out of control (in accordance with PCT).

In some studies participants reported that control over eating provided them with a sense of control over their lives (Patching & Lawler, 2009), helped to deal with unhappiness (Dignon et al., 2006), and that control over food resulted in positive emotions (McNamara et al., 2008). This, however, was only a temporary state, because participants felt out of control over restricting later (Williams & Reid, 2012), and talked about AN providing control at first, but then controlling them (Reid et al., 2008; Williams and Reid, 2010). One may wonder whether the findings relate to another theoretical premise of PCT, whereby the reduction of the error between perceptual experiences and the reference value causes the behaviour to stop. However, if the error is chronically unreduced, despite participants' attempts to regain control by anorexic behaviours, their ability to control their perceptual experiences is limited and contributes to further distress and the dysfunction of their control system (Powers et al., 2011). This might show as participants feeling controlled by their AN.

In summary, all the studies appear to be unanimous in their findings regarding the functional role of anorexic behaviours as providing a sense of control. This resonates with the core tenet of PCT about behaviours reducing the error between the goal and the perceptual experience. However, one might need to be cautious about making premature claims about the reviewed papers providing enough evidence to substantiate claims of PCT having a wider explanatory potential for AN at this stage.

5.5.2. Results of Quantitative Studies and their Resonance with PCT

In the study by Birgegård et al. (2009), high initial self-control results of SASB on items about restriction of impulses, efforts to achieve personal goals, and adherence to norms, indicated that participants perceived their anorexic behaviours as positive means of achieving their goals. This seemed to be relevant to the understanding of anorexic behaviour as a way of reducing discrepancy between what participants perceived and what their goal was.

The findings of the study by Surgenor et al. (2003) indicated that participants' perception of control was not the only factor related to the severity of AN, but the behavioural aspect also played its part. In particular, participants with AN overly relied on predominantly negative passive strategies to regain control, and hardly used any positive active strategies. There appeared to be resemblance to two aspects of the negative feedback loop described in PCT, mainly perceptual experiences (input function) and behaviours (output function) used to decrease the discrepancy between perceptual experiences and the reference value (Powers, 1973).

In the study by Sassaroli et al. (2008), the concept of control in relation to eating disorders was understood as persistent perception of the lack of control not only as part of dietary restriction, but also as a core belief. In this aspect, PCT appears to recognize control as a process distinct from core beliefs, and addresses core beliefs as goals or part of the perceptual experiences (Mansell, 2005). As stated earlier, PCT focuses on perceptual experiences and behaviours (such as dietary restriction) to modulate these perceptual experiences. Thus, the study findings are in line with PCT's focus on the functional role of disordered eating.

5.6. Objective Three: To draw attention to the strengths and limitations of the possible application of PCT to the role of control in AN

The strength of the application of PCT to the role of control in AN appears to be in its explanatory potential regarding how anorexic behaviours are used to regulate perceptual experiences of feeling "out of control". However, PCT in its current form is a more complex theory and further work is required to provide a cohesive theoretical foundation for the concept of control in AN. This review is the first step in this direction. What is missing and could be addressed in future reviews, is the focus on other tenets of PCT framework, which could have relevance for AN and future research.

The question of most importance is what it is that PCT brings to the table over and above existing theories (Bruch, 1973, 1982; Crisp, 1995; Orbach, 1978, 1986) and models (Fairburn et al., 1999) of control in AN. The scope of the current review permits a preliminary answer. In terms of its comparison with Fairburn et al.'s (1999) model, the research evidence suggests a tentative answer in favour of PCT as a

relatively attractive theory of control applicable to understanding of AN. Firstly, the accumulated evidence base shows that aspects of PCT could be testable and its predictions are in agreement with what is known about AN. The lack of this "external criterion" was one of the weaknesses of Fairburn et al.'s (1999) model, and would be the weakness of any theory aspiring to be "good" (Cooper, 2005; Kukla, 1981). In terms of "internal criteria" of a "good" theory (Kukla, 1981), PCT does not always present as internally consistent. This might have been mitigated by the fact that it was developed as a generic theory applicable to processes and various life phenomena occurring in all living organisms in general (Powers, 1973). It lacks descriptive simplicity, if considered in its fullest, however, it appears to offer an attractive and simple explanation of anorexic behaviours as a way of control. Maybe, it is just a matter of time for it to be refined and widely applied to clinical practice and tested in research to explain disordered eating.

5.7. Objective Four: To highlight recommendations and future research directions in the area of control in AN and PCT

Studies in this review comprised a variety of methodologies and paradigms, but none of them had the philosophical underpinning of PCT. Thus, specific research relating to tenets of PCT in relation to control in AN would be beneficial. For example, future studies might focus on the development of measures specific for this particular theoretical framework of control.

Conducting studies investigating maladaptive control and its relationship with goal conflict in early, middle and recovery stages of AN could give grounds for establishing PCT as an important theory of control in AN. Preliminary support for this

recommendation comes from qualitative studies in this review which showed participants' dilemma of wanting to be in control by means of anorexic behaviours versus wanting to recover from AN at the same time. Moreover, Mansell (2005) proposes that PCT could provide a framework for formulation of case studies. Predictions derived from these could be tested in research and utilised in therapy. This is the area that Fairburn et al.'s (1999) model fell short of.

This review shows the prevalence of qualitative studies in relation to control in AN. The quantitative evidence base is less developed and points at lower perception of control over external events and internal emotional states in AN, perception of control being central to its relationship with the severity of AN, and self-control being a fundamental feature of the pathology of AN. There maybe a general need to explore control in relation to goals in AN and to other processes in both cross-sectional and longitudinal studies which would further elucidate the role of control in transitional states from the onset of the illness to recovery.

6. Discussion

6.1. Summary and interpretation of findings

The aim of this literature review was to summarise the empirical literature on the role of control in Anorexia Nervosa (AN) and to evaluate evidence for the application of the framework of Perceptual Control Theory (PCT) to the role of control in AN. Altogether, twelve studies related to the issue of control in AN were retrieved during the search of electronic databases. The review followed on from the review by Surgenor et al. (2002).

The reviewed studies revealed that the process of exerting control via disordered eating helped participants to feel in control and had a functional role for them. The disproportionate amount of qualitative versus quantitative studies indicated that control in AN was more of a concern for participants than it was for researchers. Control had not been commonly measured, however, the fact that it was coming up in themes of qualitative studies implied that it was an important experiential aspect that researchers might have been overlooking. Therefore, there is a scope for further quantitative exploration of control, for example, in relation to goals in AN and to other processes which would explain the role of control in transitional states from the onset of the illness to recovery.

Despite terminological discrepancy, there appeared to be a good fit between PCT and findings of reviewed papers, indicating a potential explanatory value of PCT in relation to control in AN. This was mainly in the way anorexic behaviours could be understood as controlling perceptual experiences of feeling out of control.

There are limitations in relation to the application of PCT to the role of control in AN. These are related to the complexity of this theoretical framework and some untested aspects which limit its application to clinical practice and research in the field of control in AN. Specific studies could address this limitation by investigating other aspects of PCT in relation to control in AN, developing measures specific for this particular theoretical framework of control, and investigating maladaptive control and its relationship with goals and other processes in the context of early, middle and recovery stages of AN.

6.2. Strengths and weaknesses of review

The strength of this review was in the fact that it was the first review addressing potential application of PCT to control in AN. Another strength is in the fact there was the thematic clarity about the importance of control in AN (see Objective 1). PCT aside, control was visible in two aspects. The first one related to the experience of exerting control, expressed as one's sense of agency (will). The second one referred to the experience of the loss of control or its absence. This was understood mainly as the eating disorder controlling the person. Moreover, the review took into consideration both qualitative and quantitative methodologies, and studies were conducted in various countries.

Nevertheless, the review has been limited in a number of areas. First, it took into consideration only one tenet of PCT, control, and did not consider other tenets such as an excessive psychological conflict which PCT framework associates with psychopathology (Mansell, 2005). Second, PCT is still developing as a theory and the reviewer risked oversimplification of a dynamic literature. Third, the studies chosen

for the review drew on a variety of methods and paradigms and their quality differed. The quality assessment was performed by one quality rater and it was not possible to measure inter-rater reliability. A further limitation related to the fact that the qualitative thematic synthesis was limited and might have influenced the choice of overlapping categories. Lastly, the literature search was limited to English, therefore there was a scope for omission of studies pertinent to this review.

7. Conclusions and recommendations

7.1. Implications of findings

The findings of the reviewed studies point at clinically relevant implications. The results provide evidence for the relevance of PCT's theoretical stance to the issue of control in AN. Understanding that anorexic behaviours have a functional role of reducing the discrepancy between what is experienced and what is wanted could potentially generate a dialogue between an individual and a clinician regarding what goal the individual would like to achieve instead of exerting control over their eating, weight and shape.

PCT proposes a novel way of thinking by stating that it is the loss of control, not control per se, that is the problem when people are psychologically distressed (Mansell, 2005). The theory has a potential to inform formulation of patients with the issues around control and self-control. In terms of intervention, the negative feedback loop has been used to develop a new type of intervention called the Method of Levels which has been used with Primary Care clients (Carey, 2008; Mansell, Carey, & Tai, 2012) within PCT tradition. Moreover, PCT (Mansell, 2005) provides an account of the mechanisms of change within psychotherapy by postulating that the essential feature of successful change in treatment is the shifting of a person's awareness to higher perceptual levels (goals) so that the conflict in control systems can be reorganized. PCT postulates four stages of psychological change:

1. The person is aware of the loss of control over important aspects of their life.
2. The person becomes gradually aware of the conflicted goal systems leading to the lack of control.
3. The higher level systems are reorganized on a trial-and-error basis.

4. The systems subsequently reorganize over time so that the conflict is reduced and the person regains a sense of purpose and improved control over their lives.

This therapeutic approach does not appear to have been explicitly used with the AN population so far and future reviews and future primary research might address this gap.

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WHAT IS THE MEANING OF PERFECTIONISM FOR CLIENTS WITH EATING DISORDERS?

A QUALITATIVE STUDY

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Abstract

Aims: This is a qualitative study which explores the meaning of perfectionism for clients with eating disorders. This has not been previously investigated. The main aim of the study is to explore the way in which clients with eating disorders make sense of perfectionism. This includes exploration of the clients' understanding of their own perfectionism, its role and impact on their lives, as well as its relationship with their own eating disorder. **Design:** The qualitative design comprises a focus group of service users to inform the design of semi-structured individual interviews which are conducted with clients, and analysed using Interpretative Phenomenological Analysis (IPA). **Results:** The analysis identified three super-ordinate themes: *"perfectionism as a dichotomous trait"*, *"the interchangeable and complementary nature of perfectionism and an eating disorder"* and *"opening out in recovery"*. **Discussion:** This study tackled the interface between perfectionism and eating disorders, showing the value of qualitative inquiry in this area. The dual nature of perfectionism as a dichotomous trait was reflected in clients referring to not feeling good enough and anticipating failure, which seemed to encompass a more unsettling aspect of perfectionism. They strived to be the best and relentlessly pursued high standards, rules and goals which, on the other hand, exemplified a more valued aspect of perfectionism. The second theme, referring to the complementary and interchangeable nature of perfectionism with an eating disorder, was exemplified by rules which clients followed and by perfectionism and the eating disorder being used as coping strategies for each other. The final theme of "opening out in recovery" exemplified changes which occurred in participants, including their increased flexibility around rules, a more relaxed attitude, and their capacity to reflect on their recovery process. This qualitative study has important clinical, research and theoretical implications.

1. Introduction

The relationship between perfectionism and eating disorders is well documented. The main findings in relation to this subject are that perfectionism increases vulnerability for and maintains eating disorders (Egan, Wade, & Shafran, 2011) and that service users with anorexia nervosa and bulimia nervosa have significantly higher perfectionism than controls (Cockell et al., 2002). There is also evidence that those who recover from eating disorders have significantly lower levels of perfectionism (Bardone-Cone, Sturm, Lawson, Robinson, & Smith, 2010), although this questions previous research which has shown that individuals who recovered from anorexia nervosa had elevated levels of perfectionism when compared to healthy controls (Bardone-Cone et al., 2007). A review by Bardone-Cone et al. (2007) shows that perfectionism prospectively predicts anorexic and bulimic symptoms and that high levels of perfectionism are related to treatment dropout and poor prognosis five to ten years after admission among clients with anorexia nervosa. With this said, these levels of perfectionism do not influence bulimia nervosa outcome. Evidence suggesting that perfectionism predicts treatment outcome and prognosis for eating disorder individuals is important in clinical practice, but requires further work to benefit clients.

Severe perfectionism is discussed as one of four maintaining mechanisms of an eating disorder in the cognitive-behavioural tradition (Fairburn, Cooper, & Shafran, 2003). Shafran, Cooper and Fairburn (2002) proposed the term “clinical perfectionism” to refer to the over-evaluation of striving to achieve standards which are personally demanding. Indeed, as perfectionism co-occurs with eating disorders, this term is applied to attempts to control shape, weight and eating. What follows is a heightened

fear of failure, frequent and selective attention to performance, and self-criticism stemming from negative appraisals of performance. The probability of the person achieving the standards becomes lower and consequently, the perceived or real failure leads to perpetuating processes of even more self-criticism, the fear of failure and so on.

What appears to be absent in the literature is a description of the explanatory mechanisms which lead from perfectionism to eating disorders. There are suggestions that they may involve attempts to maintain and attain social status. For example, individuals might be looking for more objective and external sources of self-validation such as social feedback (comparison on body weight dimension) because of their excessive concerns over mistakes, doubts regarding the quality of their behaviour and heightened sensitivity to the expectations of other people (Bardone-Cone et al., 2007). Attempts to hide mistakes and imperfections could represent another such mechanism, as long-term effects of attempts to conceal mistakes may limit available feedback regarding how serious the mistakes were and any opportunities to learn from that feedback. McGee, Hewitt, Sherry, Parkin and Flett (2005) show there is a relationship between this perfectionist way of self-appearance and eating disorders, whereas Cockell et al. (2002) demonstrate that non-disclosure of imperfection is salient in anorexia nervosa. It is thought that qualitative in-depth exploration of subjective accounts and lived experiences of perfectionism of clients with eating disorders may lead to identification of the mechanisms they feel play a part in their illness and to better understanding of those described above. With all of this in mind, the main aim of this study is to explore the way in which people with

eating disorders make sense of perfectionism, its role, impact, and its relationship with their own eating disorder.

Existing research in the area of eating disorders and perfectionism is predominantly quantitative in nature, with prevalence of cross-sectional designs using various conceptualisations of perfectionism. Perfectionism has been understood, broadly speaking, as a unidimensional or multidimensional construct. This resulted in development of different measures of the construct and investigation of the contribution of their dimensions in the prediction of symptoms of eating disorders (Chang, Ivezaj, Downey, Kashima, & Morady, 2008). Boone, Soenens, Braet and Goossens (2010) conclude that a combination of high personal standards and evaluative concerns (aspects of perfectionism as a multidimensional construct) demonstrate the strongest relationship with symptoms of eating disorders. In their systematic review, Bardone-Cone et al. (2007) state that there is some limited evidence for certain dimensions of perfectionism being elevated among eating disorder types, for example, achievement striving and maladaptive perfectionism are high in anorexia nervosa; however, the results are not consistent in bulimia nervosa. Similarly, Castro-Fornieles et al. (2007) state that eating disorder participants score significantly higher than controls on self-oriented perfectionism; however, there is no difference between bulimic and anorexic participants.

What seems to be most striking, though, is that the voice of the person with an eating disorder has not been represented at all in perfectionism research. Therefore, the secondary aim of the present qualitative study will be an attempt to shed some light

on the specificity of perfectionism by exploring potential similarities and differences in the way bulimic and anorexic participants construct the meaning of perfectionism.

There appears to be a lack of a good description of perfectionism in the eating disorder literature. As already mentioned, perfectionism has been operationalised in a variety of ways, which shows discrepancy between measures and a general lack of agreement about its useful description. There is not much clarity about how perfectionism relates to an eating disorder and what explanatory mechanisms lead from perfectionism to an eating disorder. What is necessary is the research which would help conceptualise perfectionism without the use of concepts provided by researchers.

This study contributes to the literature by using a qualitative design to explore this topic for the first time. Such a framework allows us to step outside the already available knowledge base. In particular, a phenomenological method of inquiry will allow for an exploration of lived experiences of clients with eating disorders, their understanding of perfectionism, its role, impact, and its relationship with their eating disorder.

2. Method

2.1. Design

The study aimed to explore the way in which clients with eating disorders made sense of perfectionism. The qualitative design of this study comprised a focus group of service users to inform the design of semi-structured individual interviews. The interviews were conducted with clients, and analysed using Interpretative Phenomenological Analysis (IPA) due to the focus on exploration of individual experiences and understanding of their meaning for individuals (Smith, Flowers, & Larkin, 2009).

2.2. Service Context

All participants taking part in individual interviews and two participants for the focus group were recruited from the Eating Disorder Service in Birmingham. This is a tertiary regional service which offers an inpatient, outpatient and day treatment specialist provision for eating disorder clients from the age of 16. The team is multi-disciplinary, consisting of psychiatrists, clinical psychologists, psychological therapists, mental health nurses and trainees on placements.

2.3. Ethics

This study was granted a favourable ethical approval by South Birmingham Research Ethics Committee (see Appendix D).

2.4. Recruitment

To begin with, clinicians from the Eating Disorder Service were introduced to the study by way of a short briefing letter summarising its main points together with inclusion and exclusion criteria (see Appendix E). Potential participants were identified, approached and contacted by the clinicians who provided clients meeting the inclusion and exclusion criteria with information packs. These packs included a covering letter addressed to the participant (see Appendix F), information sheets about the focus group and semi-structured individual interviews (see Appendix G) as well as contact consent forms (see Appendix H). My clinical supervisor, the Consultant Clinical Psychologist at the Eating Disorder Service, acted as a link person to the study, but was not directly involved in recruitment.

Identified potential participants were approached by the researcher only after they had shown interest in taking part in the study, consented to provide contact details, and provided contact details on the contact consent form. Once the potential participants expressed interest in taking part in the focus group, I set up an information session lasting no longer than 20-30 minutes in order to discuss the participant consent form (see Appendix I) and information sheet, and to answer any questions. Clients were contacted using their preferred means of contact which they provided on their contact consent form. All participants were made aware of their right to withdraw from the study at any point until two weeks after data collection, without the need to state reasons, and without their current or future NHS care being affected. They were informed about all parts of the research protocol. Capacity to consent to research was assessed by the clinicians from the Eating Disorder Service during the process of recruitment and by the researcher during the information session. The clinicians from

the Eating Disorder Service also assessed the ability of the client to meaningfully take part in the focus group or interview about their experiences of perfectionism.

Clients had at least 72 hours after the initial information session to decide whether they would like to take part and they were contacted by the researcher to confirm their decision. The researcher discussed times, dates and venues for the focus group or individual interviews with those clients who decided to participate. An e-mail confirming the arrangements was also sent out. Participants were invited to sign the consent form at the beginning of an interview or focus group.

2.5. Participants

The sample was intended to be purposive and homogenous, consisting of those who could offer a meaningful perspective on perfectionism, in line with the IPA approach. Recruitment was based on the inclusion and exclusion criteria summarised in Table 3.

Table 3. Participants' inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
•Participant meets full DSM-IV criteria for anorexia nervosa or bulimia nervosa and this is their primary diagnosis.	•Participant does not meet full DSM-IV criteria for anorexia nervosa or bulimia nervosa and/or this is not their primary diagnosis.
•Participant is currently accessing services for eating disorders as an inpatient or outpatient at the Eating Disorder Service.	•Participant is male. This is to improve the homogeneity of the study.
•Participant is female. This is to improve the homogeneity of the study.	•Participant does not speak English so their meaningful participation might be difficult.
•Participant must have capacity to give informed consent in order to be able to participate meaningfully and to reflect.	•Participant is likely to become distressed (judgement to be made by clinical team).
•Participant must be available for the focus group or individual semi-structured interview.	

Discussions took place whether to recruit participants with eating disorder not otherwise specified (EDNOS), as those clients comprise a significant proportion of the eating disorder population. One of the aims of the study was to explore similarities and differences in the way bulimic and anorexic participants made sense of perfectionism, and thus to obtain a meaningful picture of experiential differences between these two presentations. Clients within EDNOS present with features of both AN and BN without fully meeting either of their diagnostic criteria, and it was agreed that they would not take part, as this could impact on the clarity of findings.

A total of six clients were recruited for individual interviews. A sample size of six is a fairly typical size for IPA (Smith et al., 2009). The reason for IPA sample sizes being modest is that there should be a balance between the sense of commonality and divergence in order to conceptualise a particular process, concept or event. Only two clients were recruited for the focus group. Due to difficulties with further recruitment for the focus group, a third participant for the focus group was recruited through Sure Search, a network of Service Users in Research and Education at the University of Birmingham. At the outset, one more potential participant for the focus group met with the researcher for the initial information session and confirmed her decision to take part following the 72-hour period. However, she declined her attendance on the day of the scheduled focus group.

Tables 4 and 5 provide relevant demographic characteristics of the participants of the focus group and individual interviews, respectively.

Table 4. Table of focus group participant information

Participant Pseudonym	Age	Age of eating disorder onset	Diagnostic type of eating disorder, symptoms and relevant background information	Treatment received (at time of meeting)	BMI (at time of meeting)
Sheila	22	17	Anorexia Nervosa. Restriction and exercise which began during A-levels and continued throughout university. Previously inpatient. Discharged 3 months ago when she reached her target weight and maintained it. Currently living at home with her family and hopes to return to university.	In-patient treatment between February 2012 and August 2012. Had 9 individual sessions of CBT with psychologist during admission, mainly focusing on formulation and dealing with beliefs around weight gain. Was waiting for out-patient therapy at time of meeting.	21.6
Molly	23	14	Anorexia Nervosa. Weight loss, excessive exercise and starvation. After undergoing 5 months of inpatient treatment, she has been maintaining a healthy BMI for the last 2 months. Taking anti-depressants to cope with anxiety problems. She underwent outpatient counselling when she was 15 years old, and found it effective for 2 years before her relapse when at the university.	In-patient treatment between January 2012 and June 2012. Had individual CBT therapy since February 2012, coming to the end of therapy.	20.2

Pat	59	12	Bulimia Nervosa. Comfort eating, bingeing and purging, yo-yo dieting and taking laxatives on and off for 40 years. In her late 30s, it was in combination with depression and alcohol problem. She received help from psychiatric services and counsellors and tried various alternative therapies over the years, all with mixed results. She feels she overcame bingeing and purging in the end, but still feels uneasy about what to eat.	Not in treatment	Not available

Table 5. Table of individual interview participant information

Participant Pseudonym	**Age**	**Age of eating disorder onset**	**Diagnostic type of eating disorder, symptoms and relevant background information**	**Treatment received (at time of meeting)**	**BMI (at time of meeting)**
Natalie	21	16	Anorexia Nervosa. Restriction and exercise when she was at school and had friends who were on the border of an eating disorder. She thinks it was to do with her fear of growing up and her brother moving out. She went into day treatment, but after half a year her bingeing and purging	Had two periods of in-patient CBT treatment in the past (one in 2008 and one in 2009). Had about 2½ years of psychodynamic therapy subsequently. Recently discharged from therapy at time of meeting.	16.4

			started during her A-levels and she was admitted as an inpatient. She was later re-admitted as an outpatient during her first year at the university. Her bulimic symptoms subsided.		
Emily	26	22	Anorexia Nervosa. Restricting and compulsive exercise. Thoughts about controlling food and concerned with the way she looked when she was 17, but she said these developed into a full-blown illness 5 years after that. She went through a phase of bingeing and purging when she was 20 and writing her dissertation at university. This stopped when she graduated. She has had two admissions as an inpatient and is currently staying at her family home.	Had three periods of in-patient CBT treatment in the past (two in 2011, and one in 2012). Just discharged from in-patient (Sept 2012) at the time of meeting. Had about two years of psychodynamic therapy, which was coming to an end.	19.1
Laura	23	10	Anorexia Nervosa. Restricting and compulsive exercising. First treatment at the age of 23 as she had not sought help.	Day treatment between June and November 2012. Individual sessions with psychologists during this period primarily focusing on CBT formulation.	20.0

Jayne	22	14	Anorexia Nervosa. Restricting and compulsive exercising, involving long distance running. Hospitalised at the age of 14, during which time her normal weight was restored. Received support until sixth form and was stable for 3 years. The illness returned when she started university and went abroad in the summer, following which she was admitted to hospital.	Day treatment between January and June 2013. Individual sessions with psychologist during day treatment for short-term CBT focused work.	17.1
Steph	21	14	Bulimia Nervosa. Restricting at the age of 14 which changed into restricting, bingeing and purging in sixth form. At the university her symptoms narrowed to bingeing and Bulimia Nervosa. Actively involved in competitive sports.	Had CBT group treatment (16 sessions) between September 2011 and January 2012. Had about 9 months of individual psychodynamic therapy that ended in August 2012. Just started day treatment at the time of meeting.	20.2
Jodie	20	16	Anorexia Nervosa. Restricting. It developed when her parents divorced and she was to start college. She passed her A-levels and interviews for a place at university whilst ill. She was seeing a hypnotherapist to	Day treatment between January and July 2013. Individual sessions with psychologist for some short-term CBT focused work whilst in day treatment.	19.1

	provide her with support. She had a breakdown in September just before moving out to start university. She received treatment and has recently been in the day care programme, with plans to return to university in September.

2.6. Procedure

2.6.1. The Focus Group – service-user consultation

Three participants who consented to take part in the focus group were asked to help develop the individual semi-structured interview schedule about perfectionism in an eating disorder population (see Appendix K). The focus group is a method engaging a small number of participants in an informal group discussion about a particular topic to capture a range of views (Wilkinson, 2008). This service user consultation was important in light of the lack of qualitative research in this area, and thus, it was useful to obtain clarity regarding whether clients would be able to talk and understand perfectionism, and whether it was functioning merely as a scientific concept or as an everyday term and an idea. I incorporated the service users' key feedback into the interview schedule (see Appendix L). What I learnt from facilitating the group was that participants found talking about perfectionism viable, expressed opinions about it freely and provided examples from their own life. The focus group did not result in any change of main questions, but I added more prompts (i.e. "What areas of your life does it affect?") to the final schedule.

2.6.2. The individual semi-structured interviews

The individual semi-structured interviews took place following the focus group. They were held in a room at the Eating Disorder Service and lasted between 47 and 82 minutes. Participants had an option to stop the interview and meet again, should this become necessary, but each interview was completed during one meeting. The interviews began with the researcher inviting the interview participants to sign the consent form and making sure that they had signed it. Questions and concerns were discussed and demographic data was collected. A semi-structured interview schedule, based on topics generated during the focus group, covered broad questions regarding what it is like to be a perfectionist, how perfectionism developed, what role it played and how it impacted on participants' lives. Interviews were audiotaped for the purpose of transcription and data analysis. Once each interview was completed, the participant was debriefed and asked whether there was any information they would like to retract so that it would not be used in the analysis.

Originally, it was hoped that the findings of the individual interviews analysis would be taken to the focus group participants. Obtaining their feedback in the form of comments would provide "respondent validation" (Yardley, 2008). However, due to the time frame of the study, this did not prove feasible.

2.6.3. Interview data analysis

The interviews were transcribed verbatim (see Appendix M) and analysed using Interpretative Phenomenological Analysis (IPA) by the researcher. Participants were allocated pseudonyms in order to make their identities anonymous.

IPA is a qualitative methodology concerned with detailed exploration of how people make sense of their social and personal world. It benefits from small sample sizes in an attempt to get as close as possible to participants' personal experience of a concept, process or event (Larkin & Thompson, 2012; Smith, 2008). As a good description of mechanisms that link perfectionism with eating disorders was lacking, and the field was conceptually messy, an experientially informed methodology was needed; the methodology which would engage with participants' sense making. IPA methodology was an appropriate choice for that purpose. This idiographic mode of inquiry was well-suited for the current study as it offered a detailed analysis of particular instances of lived experiences of perfectionism by examining each case in detail, investigating similarities and differences between cases, and finishing with accounts of patterns of meaning (Smith et al., 2009).

2.6.4. Interview analysis process

The process of analysis, conducted manually, followed the principles of IPA developed and described by Smith et al. (2009), and by Larkin and Thompson (2012). Table 6 presents the steps of the analysis together with a description of the specific processes involved, credibility monitoring and references to appropriate Appendices.

Table 6. Steps of the analysis process

Steps	Description of specific processes	Credibility checking
1	Each transcript was read and annotated with comments about my initial reflections and associations. This was to ensure that I acknowledged my own preconceptions or any a-priori theories I adhered to ("bracketing", Larkin & Thompson, 2012) and was able to relate to participants' experiences.	Regular discussions and monitoring the analysis in supervision to ascertain plausibility and coherence of interpretations at each step.
2	Line-by-line coding was performed whereby events, concepts, processes and relationships ("objects of concern"; Larkin & Thompson, 2012) which mattered for each participant were noted down. The meaning, together with the linguistic and conceptual clues ("experiential claim"; Larkin & Thompson, 2012) which each participant attributed to the above was written down, from the researcher's perspective. What followed was the development of an Excel file containing objects of concern, experiential claims, relevant quotes together with their line and page number, their summaries and tentative interpretations for each of the six participants (see Appendix N). I made sure that the interpretations were grounded in participants' accounts.	
3	Clusters of meaning were developed by analysing cumulative and contradictory patterns across participants' analyses of experiential claims and initial interpretations. A table was created with initial patterns of meaning for all participants together.	
4	Emergent themes were identified by grouping clusters of meaning together (see Appendix O). This process involved several rounds of re-grouping and re-naming until super-ordinate themes began to emerge.	

5	Themes to which less then three participants contributed were removed. A similar process occurred with themes irrelevant to the aims of the study.	
6	Three super-ordinate themes and 11 sub-themes were identified together with appropriate quotes from all interviews. The final themes were those which accommodated most variability and specificity of clients' experiences.	

A further, final step was to have involved the researcher looking for patterns separately among the groups of bulimic and anorexic participants. However, this did not prove feasible due to the limited number of bulimic participants.

2.6.5. Epistemological and ontological position

The phenomenological stance of IPA is concerned with an individual perception of experience rather than with an objective representation of it, whereas its interpretative aspect refers to the fact that both participants and the researcher attempt to make sense of participants' experience rather than to observe it in an objective way (Smith & Osborn, 2008). Both aspects were strongly embedded in the process of this research as the researcher consistently engaged in deriving meaning from transcribed interviews in the analysis, and during interviews by making sure that participants were staying close to their experience.

IPA recognises the process of research as a dynamic one with the researcher playing an active part by attempting to stay close to participants' personal experience. In doing so, the researcher unavoidably influences the process, but this intersubjectivity

of relating to data and participants allows for the emergence of new meanings (Smith & Osborn, 2008; Yardley, 2008).

2.6.6. The researcher

I am a female Trainee Clinical Psychologist in my 30s. This research is part of my Clinical Doctorate thesis which all the participants were made aware of. My interests in the area of eating disorders have developed during this project, resulting in my therapy work with a number of clients recovering from anorexia nervosa during one of my final placements.

I would describe my stance as open, and curiosity-driven during the process of data collection and analysis. I did not know what to expect due to the lack of prior experience in this area, however, I welcomed this "not knowing" as an important milestone in my development as a qualitative researcher. At the same time, I was aware that my psychotherapy training prior to the training in clinical psychology might have helped me suspend my preconceptions and remain non-directive.

2.6.7. Validity

To ensure transparency of the analysis, I discussed the process of coding and generating interpretations on a regular basis with my researcher supervisor who has experience in conducting, publishing and teaching about IPA studies. This form of triangulation of perspectives (Yardley, 2008), was essential and helped improve coherence and consistency of interpretation through the identification of themes not captured in coding and modification of existing codes. It also minimised the likelihood of the analysis being confined only to the researcher's perspective. I used

supervision to check plausibility of my interpretations and responded by further developing emerging and final themes. For example, I changed the name of the first theme "perfectionism as a valued trait" into "a dichotomous trait" following discussions around its sub-themes.

In order to ensure that stages of the analysis were retraceable and transparent, I kept the "paper trail" (Yardley, 2008) which included a set of transcripts with line-by-line coding, records of emerging themes and a supervision diary. I also provided examples of the stages of the process in the write-up.

2.6.8. Reflections on the process of data collection and analysis

To help put findings in perspective, I kept a reflective diary throughout the process of data collection and analysis, which involved, in general, my observations during data collection, early insights whilst conducting free coding, my associations, reflections and new meanings during line-by-line coding and finalisation of themes. Some of my reflections related particularly to participants, for example, to their use of language and its linguistic functions (Smith et al., 2009). The way participants talked during their individual interviews was quite striking. Their accounts seemed detailed and analytic, but included observations and reflections rather than descriptions of direct experiences of perfectionism. This was something that I discussed with my research supervisor when I brought my first transcript. It was decided that I should adapt my interview style by asking clients directly about examples from their lives if that was required.

3. Analysis and findings

During the process of analysis three super-ordinate themes and eleven sub-themes were derived. They are presented in Table 1 together with participants who contributed to each sub-theme.

Table 7. Super-ordinate themes, sub-themes and participants contributing

Super-ordinate theme	Subthemes (three or more participants contributing)	Participants contributing
Perfectionism as a dichotomous trait	Not being good enough	All participants
	Fear of failure	All participants except Laura
	Striving to be the best	All participants
	Relentless pursuit of high standards, rules and goals	All participants
The interchangeable and complementary nature of perfectionism and an eating disorder	Something to fall back on	All participants except Steph
	Impossibility of striving	Natalie, Jayne, Steph, Jodie
	Sense of achievement	Natalie, Jayne, Jodie
	Rules to follow	All participants except Steph
Opening out in recovery	Seeing things differently in hindsight	All participants except Steph
	Changing focus	All participants except Laura
	A more relaxed attitude	Emily, Laura, Jayne, Jodie

Below is a detailed description of all three super-ordinate themes and their sub-themes, which illustrate participants' subjective experiences of perfectionism. Relevant extracts from participants' interviews are used to illustrate key sub-themes along with their interpretations.

All the participants presented as very reflective throughout their interviews, but at times quite abstract. This may well have indicated their state of being detached from their experience, or could have perhaps reflected the dichotomy of their experience and making sense of it. This seems to be depicted by the first theme.

3.1. Perfectionism as a dichotomous trait

All the participants seemed to relate to perfectionism as a dichotomous trait, which meant the duality of their experiences, the unsettling and positive aspects of perfectionism. The sub-themes illustrated this duality of their experience and understanding of it as well as the processes embedded in it. On the one hand, participants referred to not feeling good enough and anticipating failure, which accentuated a more unsettling aspect of perfectionism. On the other hand, they strived to be the best and relentlessly adhered to high standards, rules and goals which, consequently, led to their experience of it as a positive and valued trait.

3.1.1. Not being good enough

All participants appeared to identify the feeling of "not being good enough", as a feature of their perfectionism. For example, here Steph describes her mixed feelings regarding the competitive athletics which she was actively involved in. The

experience of her successes appeared to be completely overshadowed by her self-criticism and devaluation of her achievements:

"Um, so it was high jump and I always wanted to get back into it, but I was never happy with what I did, I was always really upset after. I'd always want to do better. It's like if I won, I wouldn't care that I'd won, 'cause I'd think that I hadn't jumped as high as I should have done, so the positive of the competition that I wouldn't be happy 'cause I'd won it, whereas anyone else probably would… I'd just beat myself up for all the things that I did wrong." (Steph)

External recognition (for instance, in the form of a won tournament) did not seem to change participants' internal experience of never being good enough and feeling that they could never succeed. Consequently, they never felt satisfied with their achievements or were proud of themselves for doing their real best. All the participants described their experiences of not achieving 100% in their chosen area, and their negative feelings related to it. Their preoccupation appeared to be mainly with grades and sports activities, for example:

"When I got my A-level results back, they'd just brought in that A star, like the year that I did it and I got four A-levels and I got two As and two A stars… [pauses]... and I was one mark off my third A star, so I went to my Mum, I was like, oh, for God's sake… [pauses]... that's so annoying. I was so annoyed, I was like, I can't believe I haven't, she just looked at me as if to say, are you being serious, considering, in hindsight, I look back now and I think, I don't even know how hell I did that because I was so ill, but I just, and I look back and I was just really angry that I hadn't got that

one extra mark, when I should have been overjoyed at the fact that I'd got, that I'd even got an A-level, in the state that I was in" (Jodie)

Similar to the previous quote, here Jodie reflects upon the discrepancy between her internal experience of annoyance, upset, and general unhappiness about her performance, and the performance itself which is perceived by others as successful. Internally, clients appear to devalue and invalidate themselves with the help of their distorted cognitions. There is a sense that "never being good enough" is a maladaptive, but prevalent feature of what encompasses their self. The next sub-theme of "fear of failure" shows a parallel maladaptive mechanism by which clients navigate through their internal experiences.

3.1.2. Fear of failure

The fear of failure was a prevalent emotional characteristic for the majority of participants. One of its functions seemed to be preventing participants from putting effort in so that they avoided potential failure on terms which might reflect badly on their own value or quality. Some portrayed it as not trying very hard with their work, if they thought they could not do it perfectly. Steph said:

'I'm scared of not being able to do what is right in my head… [pauses]... I'm scared of achieving what in my head is okay to achieve or would be the… [pauses]... the right thing to achieve… [pauses]... so I'd rather just not bother. (…) Well, 'cause what if I put all the effort in and then I do fail? It's embarrassing, so I'd rather just not put the effort in and fail, 'cause then I've not put the effort in, so how can anyone say that I'm thick or that I'm not good enough, 'cause I've not put the effort in, so it's easier that way, at the moment anyway. I've not got the motivation to do it." (Steph)

This extract illustrates the idea that failure can be personal. However, this can be avoided if no commitment is made. This fear of personalised failure resonates with choices which participants made with regards to their daily activities. For example, it appeared striking that even a small transgression from the structured progress in Jayne's training regime made her avoid the whole experience of comparing the times of her running:

"If I was doing a run and the same route every time I'd wanted, if it was, I'd be so scared that it was going to be slower than the time before, um, or if it wasn't, and if it was, then I'd just be so disappointed and I'd have to make lots of excuses to myself in my head, like, oh, it must be 'cause of this, it must be 'cause of that, it couldn't be just like, oh, you didn't run as fast today… And then in the end, it was stressing me out so much, I never used to be able to run the same route twice, in case I did a slower time, um… [pauses]... which I suppose is quite perfectionist." (Jayne)

It seems that Jayne's avoidance strategies prevented her from seeing her progress, by preventing feedback. The fear of negative feedback deprived her of the chance to obtain positive feedback.

The fear of failure seemed to be closely intertwined with the fear of not being the best. For Jodie it presented as being fearful of going to college or university despite the fact that her good grades and achievements in other areas granted this. In her perception, she still feared that she would not be the best in her class, she would not understand, or just simply that other people would be cleverer.

3.1.3. Striving to be the best

The sub-theme of striving to be the best involved trying the hardest, living up to one's abilities, and feeling awful when that was not possible, unless it could be avoided as above. In this way, it appeared to relate to the previous sub-theme of the "fear of failure" and the tension which the avoidance strategy created.

Jodie felt that her family would be disappointed if she was not trying hard enough and did not continue to improve. Some participants related it directly to their self:

"If you don't strive, if I didn't strive to be perfect, I wouldn't, it wouldn't just so happen that I happened to be an okay person, I think I'd just be… [pauses]... failing or… Just not really succeeding in it or going anywhere" (Emily)

For all the participants, "striving to be the best" appeared to equal "being better than everyone else" and thus involved a process of constant comparison with others. For example:

"If I want to do well in a particular area, then I'll compare myself to everyone else in that area that I know, um… [pauses]... it's like on my degree course, with the rest of the people on my degree, if I'm running, the rest of the people in the club, um… [long pause]... with weight, probably… [pauses]... mainly my friends and people who I know and family, but then even if I see someone who I think… [pauses]... is thinner than me, I'd, who I don't even know, I don't, I don't like it…" (Jayne)

Some participants described the process of "striving to be the best" in a detailed, almost prescriptive, step-by-step way. For Steph, who strongly felt that she did not want to be average, it encompassed becoming better than everyone else in her swimming group, and once she saw herself as being a bit better, becoming much better then everyone else. This then resulted in her moving up, and the whole process of getting better started again. Closely related to this was the idea expressed by some participants that striving for something they were not good at was not worth pursuing. As with the previous sub-theme of the "fear of failure", it indicated the use of avoidance strategies. If the chance of achieving the desired effect was less than certain, the person would not strive for it, although this limited their opportunities for novel experiences:

"The amount of times I've sat with my therapist talking about things that I could do to try and… [pauses]... come out of it, like make things or play an instrument or learn something new, but I just wouldn't, [chuckles], because she was like, well, you might not be the best at it straight away, well, I'm not doing it then, [chuckles], learning a new language, like I'd love to do it, but because I don't know it straight away… [pauses]... well, there's always going to be someone better than me, I find it really hard, just know where to start…' (Jodie)

While acknowledging that they worked hard, some participants felt they needed to achieve the same outcome year after year, as otherwise it would mean that they had gone backwards. Natalie explained:

"It's more pressure than if I hadn't done well and then you haven't got that thing to live up to… Um, it's all about building this good and correct reputation, but then also the flip side of if I then do get that reputation, it's, I panic a lot about keeping it. (...) Um, [laughs], just panic a lot, but keep trying harder." (Natalie)

What was interesting about "striving to be the best" was its relevance to the self (not being "an okay person") and to the perception of self by others ("disappointing others when not improving"). The preoccupation with the outcome of an activity which participants were good at and the consistency of that outcome over time was a prevailing characteristic, likely to necessitate the use of avoidance strategies and, again, narrowing opportunities for enriching experiences in other areas. Even though the idea of "striving to be the best" was in its essence positive, it had a limiting effect in terms of participants' focus. This is reflected even more clearly in the next sub-theme relating to the "relentless pursuit of high standards, rules and goals".

3.1.4. Relentless pursuit of high standards, rules and goals

All participants contributed to the sub-theme of relentless pursuit of high standards, rules and goals. For some, endless re-doing appeared to capture the significance of the pursuit:

"I've been crocheting a blanket and sometimes there's like a little bit that's gone wrong, so I have to unravel all of it and redo it, [laughs], because I can't cope with it not being done properly, [laughs], so I would say that's being a perfectionist. [Laughter]. Yeah, it's done, but it would irritate me if I hadn't have undone all of it. I wouldn't feel good." (Laura)

The motivation behind re-doing appeared to be more intrinsic and was a consequence of "not feeling good" about a specific outcome. Participants made sure that the final product, whether a university essay, school work, or a blanket, was up to the standard of what they perceived to be good. Some participants focussed on every minute detail of their work and daily life whilst acknowledging that everything mattered to them, to the extent that even attempting to be less than perfect (i.e. normal) was something they had to think hard about and do right:

"I always want to be a really nice person, but also, really nice people are kind of annoying, when they're so nice and it's like, just be a normal person, you know [chuckles], and so it's kind of, it's getting kind of wound up in knots about the things that actually, a person who's not a perfectionist, it wouldn't even occur to them to think." (Natalie)

Participants appeared to find leaving any tasks until the next day particularly uncomfortable and described pursuing tasks and goals relentlessly until they were fully completed. This ability to exercise one's will despite unfavourable internal and external circumstances gave the impression of a high sense of self-mastery and self-discipline. The downside of it was a very definite and fixed way of executing tasks and very little room for any manoeuvre:

"... just generally setting high goals for myself, and if I've decided to do something, doing it, when it comes to it, whether I want to or not, that's irrelevant, if I've decided that it's got to be done, it's got to be done. (…) Um… [pauses]... if I've decided that I'm going to do so many hours of work on a Sunday, no matter how tired I am when it

comes to it, towards the end, I'll just keep, 'cause I've decided on that many hours, if I've decided on going on a run that day, then it doesn't matter how tired I am or if I don't want to or if something else comes up, no, that has to come first and whatever else will fit around that…" (Jayne)

Participants' focus on every single detail of their work combined with endless re-doing until their work was up to their standard, gave the impression of a ruthless and exhausting pursuit. Participants' inability to leave any work until the next day exemplified the same trait; a relentless pursuit of goals at the expense of a more flexible approach.

3.2. The interchangeable and complementary nature of perfectionism and an eating disorder

This theme refers to the complementary and almost interchangeable nature of perfectionism with an eating disorder. Perfectionism appears to be applied to many aspects of life, as illustrated in the first theme of "perfectionism as a dichotomous trait", such as school and university work, or personal qualities. In the current theme, perfectionism is portrayed as applying primarily to weight, shape, and eating behaviours. Participants perceived both their eating disorder and perfectionism as something to fall back on. They described striving to "eat less" as impossible, because there is no end to it. They spoke of rules that they follow and their overall sense of achievement when they lose weight.

3.2.1. Something to fall back on

Some participants appeared to talk about resorting to the eating disorder as a coping strategy when they were getting stressed out by not being able to live up to their perfectionist rules, or if anything else did not go well in their lives. Laura described rules she adhered to with regards to her eating disorder and the way perfectionism was an underlying driving force used to comply with these rules:

"I had rules, um, about my food and, err, I couldn't have more than 500 calories a day, you know, I'd have to, used to go to the gym every day and I'd exercise and had to burn off like 400 calories, so it was quite precise. I'd, um, I would kind of feel good when I kept within those rules, so I suppose that drive to succeed and meet those rules, could kind of see the perfectionism sort of driving that really, um, and I found it quite rewarding when I had got to the end of the day and kept those rules… Um, so I can sort of see a link there... [pauses]... and, um… [long pause]... yes, I think it encourages it and if perfectionism was making me want to do really well at work, and if I didn't feel I was doing well at work, or if life wasn't going well, that would make me want to turn to my eating disorder… So if I'd failed to meet my standards, then I might fall back on the eating disorder, to make me feel better and to cope with it, whereas if I didn't have those rules and that drive to, you know, try and be perfect, then I wouldn't feel bad, so then I wouldn't necessarily need my eating disorder quite so much. I'd say that it's like I said before, the eating disorder almost ties into the perfectionism in that if I didn't reach the standards, then I worked out that one way of coping would be to restrict my eating." (Laura)

The reader might notice that in the second half of the quote, Laura refers to the situation when she feels she fails in her striving and predicts using her eating disorder to aid the situation. She hypothesises about underlying mechanisms, particularly about the negative emotional impact of being driven by perfectionist rules which makes her more susceptible and vulnerable to disordered eating.

Looking back at how she approached her favourite sport, playing netball, Jodie made a distinction between healthy striving and perfectionism. She described having a lot of joy out of playing it prior to her anorexia. She perceived her current thoughts about "being an embarrassment, if she was not in the first team", as holding her back and taking over any enjoyment. Jodie described a situation opposite to Laura's, whereby her perfectionist traits appeared to be exacerbated by the eating disorder:

"I had perfectionism a little bit in me before I had my eating disorder, but I could say then, I don't think it was perfectionism then, I think it was like healthy striving. I just liked to do things that I enjoyed. I liked to be good at things, but it wasn't the end of the world if I wasn't, but then I think with your eating disorder, I think it developed into that everything has to be… [pauses]... it's just very black and white, like you will have to be perfect or you're a failure. Um, and I think only, it developed into quite obsessional with work and things like having to be the best at stuff." (Jodie)

From this extract it is evident that what was exacerbated by the eating disorder was the perfectionist thinking pattern, leading to a more distorted mind. One might speculate that Jodie's polarised "black and white" thinking simplified the complexity of real life situations for her.

3.2.2. Impossibility of striving

In this sub-theme, I am going to introduce perfectionism as applied to eating behaviours. When striving to be thin or to have the perfect amount of food, participants talked about the impossibility of such an endeavour:

"Although at the time it gives you that buzz that you've done it, it's never enough… It is still that being the best at it, in that it's never ending… [pauses]... it's never ending, it doesn't stop… [pauses]... whereas with something like a test, you can get 100%, you can't do any better than that, so once you've got that, you've done the best or whatever. With weight, where do you stop? You don't." (Jodie)

The fact that one can always become thinner and weigh less meant that there was never any end to the striving. For example, Steph described being perfect as being "stick thin" when anorexic, and her efforts to make sure that she was thinner than anybody else. At the same time, she felt it was impossible to do this when she attempted to adhere to guidelines on food packaging:

"There's all these guidelines everywhere on every bloody packaging of every food you have and you want to make sure that you have the right amount of everything, and if you have a bit too much, it's disastrous, I may as well, I just go and binge because, oh, if I've had a little bit too much, I may as well go to the whole extreme and go mad, so I just go and binge and vomit… [pauses]... so having these stupid things telling me, all these guidelines, I feel I have got to stick to them so I'd be really… [pauses]... ridiculous with it. I'd want to have less, but it got to the point where I wanted to have the perfect amount, which is when the binging and that has come, 'cause you can't

have the perfect amount of anything, it's impossible to have the perfect levels of everything, you just… [pauses]... it's pretty hard to achieve. So it led to a lot of binging, 'cause you can't be perfect" (Steph)

Similarly, Natalie described bingeing and purging as "the flip side" of perfectionism, when something went slightly wrong, and she gave up instead of anorexic pushing further and never relenting.

3.2.3. Sense of achievement

In this sub-theme, I am going to introduce perfectionism as applied to weight loss. For some participants the fact that they were constantly successful at weighing less provided them with a sense of pride and achievement. Natalie said:

"I sort of almost am proud of, in a way… because it feels like I'm working harder, that I'm achieving something and there's kind of the rules that I've stuck to and they've paid off and you can see it on the scales" (Natalie)

Weighing less was something participants felt they could always succeed in, even if they were disappointed in themselves when they felt they were not as productive as they wanted or did not concentrate hard enough, for example:

"So even if I'm disappointed in myself in other ways and I haven't quite… [pauses]... done what I wanted to do or… [pauses]... reached a certain goal that I might have set myself, then at least in the day I will have achieved something by skipping a meal or

not eating something when I should or… [pauses]... um, kind of takes away a lot of guilt, in a way." (Jayne)

Emily appeared to be an exception, as she described how she was unable to achieve the idea in her head of what she wanted to do and what it would look like whilst adopting a perfectionist attitude regarding her study at Fine Art. She found the experience of having the idea in her head and being unable to get it out frustrating.

3.2.4. Rules to follow

The sub-theme of "rules to follow" related closely to the interchangeable nature of perfectionism and eating disorders by being part of both. Jayne clearly defined both in relation to rules:

"An eating disorder is setting the rules for yourself, but everyone can set rules for themselves and break them sometimes, but it's perfectionism if you don't break them ever… So that's probably how it links into the eating disorder… [pauses]... I didn't want to just… [pauses]... lose weight or not eat as much, I wanted to… [pauses]... almost see just how far I could go… [long pause]... and always had to go that little step further." (Jayne)

Participants discussed rules in different configurations. For instance, Natalie felt that the eating disorder pandered to her perfectionist tendencies, because of the set of clear rules that she knew how to follow and the neat numbers that worked for her. The rules that participants adhered to varied. They might have allowed themselves to eat only certain food groups or they would be the only ones to prepare food so that they knew

what was in it. Some used to choose certain food types at a specific time for their day to be perfect. Emily described how her food needed to be exactly the right temperature to be consumed:

"I used to have that with sometimes my food, like if it's not the exact right temperature, then in my idea of what is perfect, what I've constructed in my head as being perfect, then it's not worth even bothering about eating, so I can't eat it." (Emily)

Participants talked about the neatness and clarity of the rules they followed. Interestingly, they applied these only to things which were easily measurable and quantifiable. The expected result was easy to predict and in this sense rules were likely to offer a great sense of reliability which, otherwise, could not be that easily achieved, for example, with emotions, other people or life events.

3.3. Opening out in recovery

This last theme related to the process of recovery which led to changes in the way participants perceived their illness and perfectionism, mainly distancing themselves and seeing things differently in hindsight. This resulted in their changed focus and a more relaxed attitude.

3.3.1. Seeing things differently in hindsight

This sub-theme illustrates that whilst in recovery participants' awareness of their condition changed and only in hindsight were they able to explore the intricacy of their eating disorder and perfectionism. This involved the cause of their illness, their

routines, thinking processes, and their way of relating to other people. Jodie concluded that she always felt pressure to improve from people who perceived her as clever and doing well. For example, she remembered her mother telling her "just to do her best" whatever Jodie did. When she became ill, her mother's attitude changed, but Jodie was unable to reflect on that until in her recovery:

"She actually said to me when I was really ill, [pauses]... you're not going to do as well as you've done previously, because look at the state of you basically… [pauses]... but I still took that as, [chuckles], somehow, that they wouldn't be happy unless I got… No matter what, I just thought they were lying to me… Like, err, yeah, a bit of like a reverse psychology thing, oh, just do your best, your best's fine, but I know now that's me that's projected that onto them… [pauses]... but I wouldn't have never known that before without, I wouldn't have, [hesitates], realised and that's what's just made me… [pauses]... carry on" (Jodie)

Participants' awareness of the processes which led to their full-blown illness (and maintained it) changed quite dramatically in recovery. It was expressed by their increased capacity to reflect, make links and normalise their healthy behaviours for themselves.

3.3.2. Changing focus

This sub-theme appears to encompass participants' reflections on their recovery process and their changing focus. They perceived striving to achieve as still important, but no longer wished to pursue it by means of an eating disorder. There

was a clear recognition that certain behaviours which they enjoyed had the potential of reverting them back to their eating disorder:

"I want to be competitive and I want to be determined, and I want to strive to achieve things and get a real feeling of satisfaction when I do, but not, not through this… Not anymore. Not for… [pauses]... not for being the thinnest or… [pauses]... exercising the most or running the fastest… Although running's a tough one for me because it is something I do really enjoy, not, not just for the compulsion. It did become compulsive, I know that, so it is something I do want to go back to, but at the same time I know it's quite dangerous, 'cause there's always going to be that pull there towards it." (Jayne)

When participants stopped engaging in tasks to ascertain that they were perfect, they realised they needed to redefine how to re-engage in them without replicating the same situations. In terms of her preoccupation with shape, Steph said:

"I used to want to be skinnier than everyone else, whereas now I just want to be the prime, I want to be perfectly healthy, so I want to make sure that I've got everything, I'm taking enough of every food group or doing the perfect amount of exercise or… [pauses]... so it's kind of changed, so it's less" (Steph)

Steph seemed to acknowledge her progress with regards to the focus which was now more on her healthy diet rather than restricting, but her preoccupation with things being perfect did not entirely vanish. This may show that changing patterns of relating to one's eating disorder (and perfectionism) might be a subtle and yet challenging

process which requires insightful awareness of what feeds into the ego-syntonic nature of the illness.

All of the above insights are very useful experientially and appear to portray the moment when participants are taking a step from the contemplation stage to preparatory stage of change (Prochaska & DiClemente, 1992). What changes is not their perfectionism in striving to achieve per se, but the ways in which they try to do it. Disordered eating and compulsive exercise are recognised as no longer feasible. Hence, participants appear to re-engage in their favourite activities with caution, so that they do not trigger their old behavioural patterns.

3.3.3. A more relaxed attitude

Some of the participants seemed to acknowledge that their perfectionism lessened with treatment and they did not feel that they had to do everything perfectly from one day to another. This was reflected in adhering to fewer routines. Laura said:

"It's even hard for me to remember a bit what it was like when, just before I came into treatment, 'cause it's like you're living in a little bubble, [chuckles], and you're just, all day, every day, you're thinking about food, exercise, keeping everything really rigid and everything that, um, and sticking to all the rules and everything, so… I don't have as many rules in my life now as when I started to, so then I suppose the rules kind of tie in with the perfectionism, so like I've got to do this and I've got to do that… And it's more relaxed now." (Laura)

The above extract exemplifies two states of being which appear opposite. The first shows rigidity and preoccupation with the eating disorder. In this state any reflection seems peripheral and the person's ability to relate to anything other than disordered eating appears highly impeded. The second state seems to incorporate some flexibility around rules and a more relaxed attitude. It is quite striking, though, that Laura does not seem to remember the "ill" self.

Some participants, however, felt it was too difficult to let perfectionism go completely, as they still found it helpful:

"Part of the reason that I find it difficult to let go of the unhealthy aspects of it, um, is because it helps me kind of form the person that I want to be, like I know that I always strive hard to be kind or say the right thing, or help out with the right amount of stuff or whatever, um, and that's how I know what kind of person I want to be, because I obviously care about those things, so it kind of helps me know what I'm trying to do with my life, um… So I guess it can give you some direction, if you know that you care about something that much, then that's obviously something that is important, um… [pauses]... so yeah, I find it helpful…" (Natalie)

The above quote by Natalie depicts the dilemma that clients are likely to face in the course of their treatment. Letting unhealthy perfectionism go appeared to be a scary prospect for someone like Natalie, who relied on it to provide her with a sense of direction in life. Indeed, were she to lose this, she might experience it as the loss of sense of self. Clients might truly wish to recover, but it inevitably involves temporary "not knowing" who they are without their illness until they re-define themselves. This

could evoke strong anxieties around losing the sense of self; something which should be addressed in psychological therapy. Perhaps this is the reason why, for Jodie, striving to be perfect is still a healthy sign. Although she did not feel entirely satisfied with it, she also did not appear to be ready to allow herself to explore other avenues:

"Probably not to the extent that I've experienced it… [pauses]... but I still think it's healthy to strive to be perfect because… [pauses]... you've got to strive towards something… [Pauses]... But then I know myself, I know that perfection is not reachable, it's not, so you are setting yourself up to fail, but that's the other side of me, I can't see the point in striving to be alright at something… [pauses]... like what good's that? [Laughs]." (Jodie)

This final theme of "opening out in recovery" exemplifies the changes that occurred in participants, mainly relating to their increased flexibility around rules, a more relaxed attitude, and their capacity to reflect on their recovery process. They tended to focus on more adaptive behaviours than striving to achieve by means of their eating disorder, but the process of reclaiming their healthy self was yet to be completed.

4. Discussion

4.1. Summary of findings

The aim of this qualitative study was to explore the meaning of perfectionism for clients with eating disorders, with a focus on their understanding of their own perfectionism, its role and impact on their lives and its relationship with their eating disorder. The analysis identified three super-ordinate themes: *"perfectionism as a dichotomous trait"*, *"the interchangeable and complementary nature of perfectionism and an eating disorder"* and *"opening out in recovery"*. Clients referred to perfectionism as a dichotomous trait due to the perceived duality of their experiences. They initially described their experiences of not feeling good enough and their anticipation of failure, which accentuated a more unsettling aspect of their perfectionism. However, they also strived to be the best and adhered to high standards, rules and goals which showed their experience of perfectionism as a positive and valued trait. In terms of an eating disorder and perfectionism, it appeared that these phenomena were rather complementary and almost interchangeable. Specifically, clients perceived them as something they could fall back on, which gave them a sense of achievement and pride. On the other hand, they both involved impossible striving and rules which participants did not like to divert from. The theme of opening out in recovery showed a noticeable change in the way clients perceived their eating disorder and perfectionism. This referred mainly to their ability to look at their illness from a different standpoint (*"seeing things differently in hindsight"*) which resulted in changes in their focus and an attitude which was more relaxed and markedly less rigid.

4.2. Perfectionism as a dichotomous trait

It appeared that the most experientially meaningful and complex theme in this study was clients' experience and perception of perfectionism as a dichotomous trait. The dual nature of it was reflected in clients referring to not feeling good enough and anticipating failure, which seemed to encompass a more unsettling aspect of perfectionism. They strived to be the best and relentlessly pursued high standards, rules and goals which, on the other hand, exemplified a more valued aspect of perfectionism.

Accentuating the above aspects of perfectionism would not divert far from current research and the dominant "transdiagnostic" cognitive behavioural theory of eating disorders in which perfectionism has an important place (Fairburn et al., 2003). In fact, clinically relevant and dysfunctional perfectionism observed in clinical populations (Shafran et al., 2002) has been understood as consisting of the pursuit and rigid adherence to very high personal standards and self-evaluation reliant on meeting these standards. In other words, a person judges their self-worth largely on the basis of striving for and achieving their self-imposed standards and goals which are high and demanding personally to them, and engages in their pursuit regardless of significant adverse results.

All of the participants in this research certainly assigned a significant personal value to striving to be the best and to the relentless pursuit of their high standards, rules and goals. The driving force behind it was not their motivation to improve, but rather their fear of failure and not feeling good enough. Even if participants' performance was validated by other people and objectively perceived as an achievement, their internal

experience was the opposite, full of annoyance, upset, and general unhappiness about themselves. Internally, participants devalued themselves, thus, the sense of "never being good enough" was a maladaptive, but prevalent feature of the self.

The "fear of failure" resonated with choices which participants made with regards to their daily activities and indicated their use of avoidance strategies. This is, perhaps, showing the emotion dysregulation difficulties common amongst clients with eating disorders. Haynos and Fruzzetti's (2011) review recognizes avoidance and other maladaptive strategies such as rumination, inhibition or suppression, and eating-disordered behaviours themselves, as used by clients to regulate their emotions. If the chance of achieving the desired effect was less than certain, the person would not strive towards it. This limited clients' opportunities for novel experiences. For example, even a small transgression from the structured progress in Jayne's training regime made her avoid the whole experience of comparing the times of her running and, in consequence, receiving the feedback which would have helped her develop further.

The two perfectionist aspects of clients' experience described above appeared to have quite an unsettling impact on them, whereas "striving to be the best" and the "relentless pursuit of high standards, rules and goals" accentuated a more positive and valued aspect of perfectionism.

Even so, these aspects still had a limiting effect on clients' functioning, as they were significantly preoccupied with how they performed at activities they were good at and with the consistency of that performance over time. Recent neuropsychology research

(Southgate, Tchanturia, & Treasure, 2009) suggests that people with eating disorders have neuro-cognitive inefficiencies in the domains of central coherence, set-shifting (an ability to think flexibly), impulsivity and inhibitory control. In particular, weak central coherence characterising people with anorexia nervosa indicates that they are likely to experience difficulties with integration and organisation of information, whereas not being able to think flexibly is mainly responsible for behavioural and cognitive rigidity and perfectionist behaviours. The clients participating in this study relentlessly pursued their goals and engaged in endless re-doing to meet their standard of what they perceived to be good. This considerably overshadowed other aspects of their lives, but was still valued by them. What this study illustrates is that what underlies perfectionist behaviours, and appears to be involuntary, still has a positive meaning for clients.

Shafran et al. (2002) acknowledged that the pursuit of high standards occurred only in those areas which were highly significant to the perfectionist. Things that mattered to participants in this study were related not only to their dietary restriction, weight, and shape, but also to other areas of their daily life such as their studies, work, sports activities, and personal qualities (being a nice person). Some participants focussed on every minute detail of their work and daily life and acknowledged that everything mattered to them. Others were unable to leave any work until the next day. All in all, this appeared to be a ruthless and exhausting pursuit, at the expense of a more flexible approach which could be adapted to life circumstances. Such an approach, as noted earlier, necessitated the use of avoidance strategies and narrowed opportunities for enriching experiences in other areas of participants' functioning. This was also visible in the style of participants' interviews, which were precise and reflective, giving the

impression that they, indeed, were experts on themselves, knowing their eating disorder and perfectionism inside out. However, this might have concealed the fact that by focussing on their observations, participants were less open to the exploration of these experiences they could not make sense of, and disregarded them as insignificant. Perhaps, some of the clients monitored their thoughts excessively while in the interview with the researcher ("metacognitive dysfunction", McDermott, & Rushford, 2011). One might wonder whether in this way the emotional, impulsive, highly unpredictable and chaotic aspects of the self were kept in check.

Various aspects of participants' accounts showed their critical relationship with their own sense of self. For example, "striving to be the best" and failing was related to judgements made on their self (not being "an okay person") and projecting those judgements onto the perception of self by others ("disappointing others when not improving"). On the other hand, clients' persistence in pursuing tasks and goals relentlessly until they were fully completed, implied their high sense of self-mastery and self-discipline, and thus, their perception of self appeared to be less critical and more favourable. This is relevant in the context of the ego-syntonic nature of the eating disorder (Waller et al., 2007). Not only is the eating disorder considered as congruent with their sense of self, goals and values, but so is perfectionism.

4.3. The interchangeable and complementary nature of perfectionism and an eating disorder

The second theme in this study refers to the complementary and almost interchangeable nature of perfectionism with an eating disorder. Their likely interface was around weight, shape, and eating behaviours. Particularly accentuated was the

impossibility of striving to be thin. The fact that one could always become thinner and weigh less meant that there was never any end to the striving. When perfectionism was applied to weight loss, some participants experienced a sense of pride and achievement at the fact that they were constantly successful at it, even if they were disappointed in themselves.

One of the aims of the research was to explore any distinctive features in the ways that clients with anorexia nervosa and bulimia nervosa made sense of perfectionism. Although this did not reveal any disorder-specific understandings, one participant shed some light on the topic. Natalie described bingeing and purging as "the flip side" of perfectionism: when something went slightly wrong, a bulimic might gave up, whereas as an anorexic she felt that she would continue pushing further without relenting. One interesting observation regarding the available sample, which consisted mostly of those who currently restricted and were involved in compulsive exercise, was that they were fairly consistent with regards to the way they discussed their perfectionism and disordered eating. It was remarkable that clients saw their eating disorder and perfectionism as so intertwined. When they referred to their eating disorder and perfectionism as "something to fall back on", their understanding was that they resorted to the eating disorder as a coping strategy whenever they experienced distress at not being able to live up to their perfectionist rules, or if anything else did not go well in their lives. On the other hand, their perfectionist traits were also exacerbated by the eating disorder. This was reflected in their description of their distorted mind, in particular, and in their polarised "black and white" thinking patterns.

"Rules to follow" appeared to reflect the views dominating the eating disorder literature (Shafran et al., 2002). Mainly, that perfectionists had a tendency to operationalise their internal high standards as rules. Fairburn (2008), while discussing CBT-E treatment for eating disorders which incorporates clinical perfectionism, pointed out that the psychopathology of clinical perfectionism resembled that of the eating disorder. What the current study added to the literature was the emphasis on the interchangeable and almost complimentary nature of perfectionism and the eating disorder, i.e. by showing that rules were part of both. The rules varied, for example, clients might have allowed themselves to eat only certain food groups or they would choose certain food types at a specific time for their day to be perfect. The significance of their rules was in the fact that they were clear cut and neat, and thus, when applied to measurable and quantifiable things, it was easy for participants to predict their expected result. In this sense rules offered a sense of reliability, not that easily achievable elsewhere.

4.4. Opening out in recovery

The final theme related to the process of "opening out in recovery" and exemplified changes that occurred in participants such as their increased flexibility around rules, a more relaxed attitude, and their capacity to reflect on their recovery process.

Participants' awareness of their condition changed; however, it was only in hindsight that they were able to explore the intricacy of their eating disorder and perfectionism. This "opening out" to potential new meanings was visible in the way participants reflected with increased capacity on the cause of their illness, their routines, thinking

processes, and their way of relating to other people. They made links and normalised their healthy behaviours for themselves.

In terms of their changing focus, participants perceived striving to achieve as still important, but tended to use more adaptive behaviours rather than pursuing it by means of an eating disorder. What appeared to change was not so much their perfectionist striving, but the ways in which they strived. Disordered eating and compulsive exercise were recognised as no longer feasible, and participants' re-engagement with their favourite activities was a cautious process. Re-defining themselves appeared to be a leitmotif of participants' accounts; however, it occurred predominantly through tasks they engaged in. This was possibly due to the fact that their preoccupation with things being perfect did not entirely vanish or that it reflected the hardship of changing any patterns relating to one's eating disorder and perfectionism.

The research evidence showed that perfectionism stayed elevated following recovery (Bardone-Cone et al., 2007). Indeed, some participants found perfectionism too helpful to let it go completely. For someone who, like Natalie, relied on perfectionism to help her navigate through life, to suddenly lose that could evoke strong anxieties about who she was without it. The goal of making herself completely free of the illness was yet to be accomplished. However, this research showed that adhering to fewer routines was a clear indication for most participants that their perfectionism lessened with treatment. This may indicate that clients with eating disorders define changes in intensity of their perfectionism by the changes in their behaviour.

4.5. Limitations

While the strength of this research was in the application of the qualitative exploration to the area of perfectionism and eating disorders, the study also has its limitations. Firstly, the recruitment process took much longer than predicted and it was not possible to re-run the focus group at the end of it. The focus group, which actively involved service users in the design of the project, was also intended to extend the credibility of the study at its conclusion. This was to happen by inviting participants to comment on the analysis outcome. I have acknowledged, however, that time constraints of the doctoral project and limited availability of focus group participants in the specific time frame were not unusual. This could have been improved by recruiting participants from more than one site, probably out of region.

Another limitation of the study was related to the fact that the available data set did not allow for a full exploration of differences in the way anorexic and bulimic clients made sense of their perfectionism. I was aware that their diagnostic criteria were not clear cut and that in the course of their illness clients usually moved between diagnostic categories. Thus, it might have been more clinically relevant to look at the sample as consisting of clients who were restricting, bingeing and purging. Nonetheless, the majority of participants were restricting, and it was only by recruiting more participants with bingeing and purging symptoms, which was not achievable at this point in time, that the exploration of their understanding of perfectionism in relation to their symptoms could occur. This is certainly something which could be the focus of a future investigation.

In terms of validity, I took necessary precautions by ensuring transparency of the study and triangulating perspectives. The triangulation of perspectives (Yardley, 2008) could still be improved, for example, by making arrangements for another person to code the data independently of the researcher. This, however, is not easily achievable within constraints of doctoral projects.

4.6. Clinical, research and theoretical implications

This qualitative study has important clinical, research and theoretical implications. Firstly, the fact that it tackled the interface between perfectionism and eating disorders, allowed for the addition of a different perspective to existing theories. The overlap between eating disorders, particularly anorexia nervosa, and perfectionism, has long been acknowledged in the literature. Contrary to the findings of this study, the transdiagnostic theory of eating disorders (Fairburn et al., 2003) went as far as to state that eating disorders were not a mere co-occurrence with perfectionism, but could be perceived as a direct expression of perfectionism. On the other hand, perfectionism was acknowledged as one of the maintaining mechanisms of eating disorders (see Introduction). The findings of the current study pointed to a more intricate relationship between both phenomena. For example, the fact that an eating disorder can be a coping strategy for perfectionism, and the other way round, shows a more complementary aspect of this relationship. What it means clinically, is that clients appear to be able to make links, differentiate between and verbalise different but related aspects of their experience. Thus, it might be beneficial to explore in treatment how their internal map of different aspects of the experience of their illness changes throughout recovery. Taking into consideration anxieties and struggles related to letting perfectionism go completely, as well as their capacity for reflection

and conceptual thinking, it might be normalising for clients to take a note of the changes. For example, their perfectionist traits might disappear for a while just to reappear in a different, healthier configuration with other aspects of the self. The fact that in this study perfectionism has different meanings at different times may contribute towards mapping out when it is helpful and when it becomes a sign of resilience rather than a risk issue for clients with eating disorders. This might be an interesting topic for a qualitative study on perfectionism with this population. Moreover, the finding that perfectionism and the eating disorder are perceived by clients as interchangeable may imply that they are changing in parallel in recovery. Indeed, there may well be certain risks involved as they are both closely associated with valued characteristics (i.e. used as coping strategies) and their loss might equal discomfort which is difficult to bear. Partially, the discomfort could be experienced as "not feeling good enough" and "not knowing who one is anymore" (the loss of identity). The question of what develops instead and in which way this development can be facilitated in recovery is an important clinical consideration. The finding that participants in this study experienced a sense of opening out with their increased awareness, changing focus and less rigid rules, implies important shifts in identity. One may hypothesise that these shifts would be in the direction of "normal" or "adaptive" perfectionism (Hamachek, 1978; Lo & Abbott, 2013) exemplified by the person's ability to derive a sense of pleasure from striving to achieve standards which are challenging, yet attainable, and their flexibility in adapting their personal standards to the demands of a particular situation. Whilst there are eating disorder treatments which tackle perfectionism, for example, the enhanced cognitive-behavioural therapy for eating disorders (CBT-E; Fairburn, 2008), more research is required to establish whether or not the changes in clients' eating disorder and

perfectionism are, indeed, experienced by them as parallel. Additional research should also focus on the nature of the long-term implications for clients when it comes to shifts in the perfectionist identity. A great deal remains to be discovered about the way in which the perfectionist identity changes in people with eating disorders.

Secondly, there may well be a relatively strong temptation to exclude certain aspects of clients' functioning and experience from qualitative inquiry, particularly in relation to phenomena which are long established and well operationalised in the course of quantitative investigation. For example, Shafran et al. (2002) expressed an opinion that perfectionism has been conceptualized mostly through its measurement methods. Indeed, during the early stages of this project I experienced the push to move away from exploring the meaning of perfectionism. During discussions precipitating the finalisation of the research proposal, concerns were raised with regards to the way clients would be able to talk about and understand perfectionism, whether it was functioning as an everyday term and an idea, or purely as a scientific concept. If only the latter was the case, then the likelihood of this concept lending itself to the exploration of meaning would not have strong grounds. Researchers might have some difficulty with learning from participants' experiences when there is a model in place, already. This study shows that perfectionism <u>is</u> a salient term and has an absolute value for people with eating disorders.

Thirdly, the research and clinical practice in the field of eating disorders has pointed to their ego-syntonic nature, thus meaning that clients perceive their disordered eating behaviours as consistent with their feelings, beliefs about themselves and values, particularly in the most severe stages of illness (Waller et al, 2007). The findings of

this study imply that perfectionism, by sharing certain aspects with the eating disorder, plays a similar, ego-syntonic role. There is a lack of clarity in the literature regarding the exact definition of perfectionism (a process, a set of cognitive-behavioural characteristics, or a personality trait; Egan et al., 2011). A focus on the ego-syntonic aspects of perfectionism might prove to be an interesting addition. Stairs, Smith, Zapolski, Combs and Settles (2012) appear to refer to this idea in their study which aims to construct a new multidimensional measure of perfectionism. The researchers labelled two factors respectively, "ego-syntonic" perfectionism to signify the traits which were embraced by people, and "ego-dystonic" perfectionism which comprised subjective distress. The researchers concluded that these two higher order dimensions could represent one common element, but their study did not provide evidence for the existence of a single personality trait of perfectionism. The findings of the current study seem to challenge those of Stairs et al. (2012). Firstly, perfectionism understood as the dichotomous trait encompasses both of its sides, the unsettling site and the valued site. Next, the focus on adherence to rigid rules and relaxing those in recovery suggest that perfectionism is not ego-dystonic, but that consequences of the degree or intensity of one's commitment to it cause distress. These ways of thinking about how perfectionism works in clients with eating disorders certainly merit further work and could clarify how clients are able to keep their perfectionist tendencies in healthier ways.

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PUBLIC DOMAIN BRIEFING PAPER

Literature Review: How can control in Anorexia Nervosa be understood in the framework of Perceptual Control Theory? A theoretical systematic review

Research Paper: What is the meaning of perfectionism for clients with eating disorders? A qualitative study

This public domain paper is a summary of a literature review and a research paper submitted by Katarzyna Murach as Volume I of this thesis in partial fulfilment of the requirements of a Doctorate in Clinical Psychology.

Literature Review

The aim of this theoretical systematic review is to summarise the empirical literature on the role of control in Anorexia Nervosa (AN) and to evaluate evidence for the application of the framework of Perceptual Control Theory (PCT) to the role of control in AN. Following a comprehensive literature search, twelve studies related to the issue of control in AN were retrieved and reviewed.

Literature Review Implications

The reviewed studies revealed that the process of exerting control via disordered eating helped participants to feel in control and had a functional role for them. Despite terminological discrepancy, there appeared to be a good fit between PCT and findings of reviewed papers, indicating a potential explanatory value of PCT in relation to control in AN. This was mainly in the way anorexic behaviours could be understood as controlling perceptual experiences of feeling out of control.

There are limitations in relation to the application of PCT to the role of control in AN. These are related to the complexity of this theoretical framework and some untested aspects which limit its application to clinical practice and research in the field of control in AN. Specific studies could address this limitation by investigating other aspects of PCT in relation to control in AN, developing measures specific for this particular theoretical framework of control, and investigating maladaptive control and

its relationship with goals and other process in the context of early, middle and recovery stages of AN.

The strength of the application of PCT to the role of control in AN appears to be in its explanatory potential regarding how anorexic behaviours are used to regulate perceptual experiences of feeling “out of control”. However, PCT in its current form is a more complex theory and further work is required to provide a cohesive theoretical foundation for the concept of control in AN. This review is the first step in this direction. What is missing and could be addressed in future reviews, is the focus on other tenets of PCT framework, which could have relevance for AN and future research.

The findings of the reviewed studies point at clinically relevant implications. The results provide evidence for the relevance of PCT’s theoretical stance to the issue of control in AN. Understanding that anorexic behaviours have a functional role of reducing the discrepancy between what is experienced and what is wanted could potentially generate a dialogue between an individual and a clinician regarding what goal the individual would like to achieve instead of exerting control over their eating, weight and shape.

Research Paper

Existing research in the area of eating disorders and perfectionism is predominantly quantitative in nature, with prevalence of cross-sectional designs using various conceptualisations of perfectionism. What seems to be most striking is that the voice of the person with an eating disorder has not been represented at all in perfectionism research.

The aim of the present qualitative study is to explore the meaning of perfectionism for clients with eating disorders. The main aim of the study is to explore the way in which clients with eating disorders make sense of perfectionism. This includes exploration of the clients' understanding of their own perfectionism, its role and impact on their lives, as well as its relationship with their own eating disorder.

The qualitative design comprises a focus group of service users to inform the design of semi-structured individual interviews which are conducted with clients, and analysed using Interpretative Phenomenological Analysis (IPA).

The analysis identified three super-ordinate themes: *"perfectionism as a dichotomous trait"*, *"the interchangeable and complementary nature of perfectionism and an eating disorder"* and *"opening out in recovery"*.

This study tackled the interface between perfectionism and eating disorders, showing the value of qualitative inquiry in this area. The dual nature of perfectionism as a dichotomous trait was reflected in clients referring to not feeling good enough and anticipating failure, which seemed to encompass a more unsettling aspect of

perfectionism. They strived to be the best and relentlessly pursued high standards, rules and goals which, on the other hand, exemplified a more valued aspect of perfectionism. The second theme, referring to the complementary and interchangeable nature of perfectionism with an eating disorder, was exemplified by rules which clients followed and by perfectionism and the eating disorder being used as coping strategies for each other. The final theme of "opening out in recovery" exemplified changes which occurred in participants, including their increased flexibility around rules, a more relaxed attitude, and their capacity to reflect on their recovery process.

Clinical, research and theoretical implications of the research paper

The qualitative study has important clinical, research and theoretical implications. Firstly, the fact that it tackled the interface between perfectionism and eating disorders, allowed for the addition of a different perspective to existing theories. The overlap between eating disorders, particularly anorexia nervosa, and perfectionism, has long been acknowledged in the literature. The findings of the current study pointed to a more intricate relationship between both phenomena, mainly accentuating a more complementary aspect of this relationship. What it means clinically, is that clients appear to be able to make links, differentiate between and verbalise different but related aspects of their experience. Thus, it might be beneficial to explore in treatment how their internal map of different aspects of the experience of their illness changes throughout recovery. Taking into consideration anxieties and struggles related to letting perfectionism go completely, as well as their capacity for reflection and conceptual thinking, it might be normalising for clients to take a note of the changes. For example, their perfectionist traits might disappear for a while just to reappear in a different, healthier configuration with other aspects of the self. The fact

that in this study perfectionism has different meanings at different times may contribute towards mapping out when it is helpful and when it becomes a sign of resilience rather than a risk issue for clients with eating disorders. This might be an interesting topic for a qualitative study on perfectionism with this population. Moreover, the finding that perfectionism and the eating disorder are perceived by clients as interchangeable may imply that they are changing in parallel in recovery. Indeed, there may well be certain risks involved as they are both closely associated with valued characteristics (i.e. used as coping strategies) and their loss might equal discomfort which is difficult to bear. Partially, the discomfort could be experienced as "not feeling good enough" and "not knowing who one is anymore" (the loss of identity). The question of what develops instead and in which way this development can be facilitated in recovery is an important clinical consideration. The finding that participants in this study experienced a sense of opening out with their increased awareness, changing focus and less rigid rules, implies important shifts in identity. One may hypothesise that these shifts would be in the direction of "normal" or "adaptive" perfectionism (Hamachek, 1978) exemplified by the person's ability to derive a sense of pleasure from striving to achieve standards which are challenging, yet attainable, and their flexibility in adapting their personal standards to the demands of a particular situation. Whilst there are eating disorder treatments which tackle perfectionism, more research is required to establish whether or not the changes in clients' eating disorder and perfectionism are, indeed, experienced by them as parallel. Additional research should also focus on the nature of the long-term implications for clients when it comes to shifts in the perfectionist identity. A great deal remains to be discovered about the way in which the perfectionist identity changes in people with eating disorders.

Secondly, there may well be a relatively strong temptation to exclude certain aspects of clients' functioning and experience from qualitative inquiry, particularly in relation to phenomena which are long established and well operationalised in the course of quantitative investigation. Researchers might have some difficulty with learning from participants' experiences when there is a model in place, already. This study shows that perfectionism is a salient term and has an absolute value for people with eating disorders.

Thirdly, the research and clinical practice in the field of eating disorders has pointed to their ego-syntonic nature. The findings of this study imply that perfectionism, by sharing certain aspects with the eating disorder, plays a similar, ego-syntonic role. There is a lack of clarity in the literature regarding the exact definition of perfectionism and a focus on the ego-syntonic aspects of perfectionism might prove to be an interesting addition. Firstly, perfectionism understood as the dichotomous trait encompasses both of its sides, the unsettling site and the valued site. These ways of thinking about how perfectionism works in clients with eating disorders certainly merit further work and could clarify how clients are able to keep their perfectionist tendencies in healthier ways.

APPENDICES OF RESEARCH COMPONENT

Appendices

Appendix A: Instructions for publication in journals

Appendix B: Table of quality review of qualitative studies

Quality criteria	*Journal Article*								
	Williams & Reid (2012)	Williams & Reid (2010)	Patching & Lawler (2009)	Reid, Burr, Williams, & Hammersley (2008)	McNamara, Chur-Hansen, & Hay (2008)	Nordbø, Espeset, Gulliksen, Skarderud, & Holte (2006)	Dignon, Beardsmore, Spain, & Kuan (2006)	D'Abundo & Chally (2004)	Eivors, Button, Warner, & Turner (2003)
1. Truth Value: Credibility									
Is there triangulation of sources?	++	--	--	--	--	--	--	--	++
Is there triangulation of methods?	--	--	--	--	--	--	--	++	--
Is there triangulation of investigators?	++	++	++	++	++	++	--	++	--
Is there triangulation of theory/perspective?	--	--	--	--	--	--	--	--	--
Is peer debriefing included?	--	--	--	--	--	--	++	++	--
Is negative case analysis or searching for disconfirming evidence included?	--	--	--	--	--	++	--	++	--
Are there member checks?	++	++	++	++	++	++	--	++	--
Are quotations used?	++	++	++	++	++	++	++	++	++
Is informed consent stated?	++	++	--	++	++	++	++	--	--
Is ethical review or human subject review undertaken?	++	++	++	++	++	++	++	++	--

Is there statement that confidentiality/anonymity protected?	++	++	++	++	++	++	++	++	--
Are consent procedures described?	++	++	--	++	++	++	++	--	++
2. Applicability: Transferability/ Fittingness									
Is statement of purpose included?	++	++	++	++	++	++	++	++	++
Is statement of research question(s) included?	++	++	++	++	++	++	++	++	++
Is phenomenon of study stated?	++	++	++	++	++	++	++	++	++
Is rationale for the use of qualitative methods included?	--	++	++	++	++	++	++	++	++
Is rationale for the tradition within qualitative methods included?	++	++	++	+/-	++	++	++	++	++
Is description of study context or setting included?	++	++	++	+/-	++	++	++	++	++
Is statement of how setting was selected included?	++	++	++	++	++	--	++	--	++
Is sampling procedure described?	++	++	++	++	++	++	++	++	++
Is there justification or rationale for sampling strategy?	++	++	++	--	--	++	++	++	++
Is description of participants or informants included?	++	++	++	+/-	++	++	++	+/-	++
Are data gathering procedures described?	++	++	++	++	++	++	++	++	++

Are audiotaping procedures described?	--	N/A[4]	++	++	++	++	+/-	++	--
Are transcription procedures described?	--	++	++	++	++	++	+/-	++	--
Are field note procedures described?	--	--	--	--	--	--	--	--	--
Is data analysis described?	++	++	++	++	++	++	++	++	++
Are coding techniques described?	++	++	++	++	++	++	++	++	++
Is data collection to saturation specified?	--	--	--	--	++	++	++	++	++
Is statement that reflexive journals or logbooks kept included?	--	--	--	--	+/-	--	--	--	--
Is description of raw data included?	--	++	--	--	--	--	--	--	--
3. Consistency: Dependability									
Is external audit of process included?	--	--	--	--	--	--	--	--	--
4. Neutrality: Confirmability									
Is external audit of data and reconstructions of the data included?	--	--	--	+/-	--	+/-	--	--	--
Is bracketing included?	++	--	--	--	--	--	--	--	--
Is statement of researcher's assumptions or statement of researcher's perspective present?	++	+/-	--	--	--	--	--	++	-/+

[4] N/A = Not applicable.

Appendix C: Table of quality review of quantitative studies

Quality criteria	*Journal Article*		
	Birgegård, Björck, Norring, Sohlberg, & Clinton (2009)	Surgenor, Horn, & Hudson (2003)	Sassaroli, Gallucci, & Ruggiero (2008)
1. Truth value: Internal Validity			
Are extraneous or confounding variables identified?	++	+/-	++
Are extraneous or confounding variable(s) or baseline differences controlled for in the analysis?	++	--	++
Is statement about comparability of control group to intervention group at baseline present?	--	N/A	++
Is statement that comparison group treated equally to aside from intervention present?	N/A	N/A	++
Is informed consent stated?	--	++	++
Is ethical review undertaken?	++	++	++
Is statement that confidentiality protected included?	--	--	--
2. Applicability: External Validity/Generalizability			
Is statement of purpose included?	+/-	+/-	++
Is objective of study explicitly stated or described?	++	++	++
Is intervention described, if appropriate?	N/A	N/A	N/A
Are outcome measures defined?	++	++	++
Is assessment of outcome blinded?	--	--	--
Is setting, or conditions under which data was collected, described?	++	++	++
Is design clearly stated ?	++	--	--
Is subject recruitment or sampling selection described?	++	++	+/-
Is sample randomly selected?	--	--	--

Are inclusion and exclusion criteria for subject selection stated explicitly?	++	++	++
Is study population defined or described?	++	++	++
Is source of subjects stated, i.e. is sampling frame identified?	++	+/-	+/-
Is source of controls stated?	--	N/A	++
Is selection of controls described?	--	N/A	++
Is control or comparison group described?	++	N/A	++
Is statement about non-respondents or dropouts or deaths included?	++	--	--
Is missing data addressed?	--	--	--
Is power calculation to assess adequacy of sample size or sample size calculated for adequate power included?	--	--	--
Are statistical procedures referenced or described?	++	++	++
Are *p* values stated?	++	++	++
Are confidence intervals given for main results?	++	++	++
Are data gathering procedures described?	++	++	++
Are data collection instruments or source of data described?	++	++	++
Is at least one hypothesis stated?	++	+/-	++
Is both statistical and clinical significance acknowledged?	++	++	++
3. Consistency: Reliability			
Is standardization of observers described?	--	--	--
3. Neutrality: Objectivity			
Is bias acknowledged?	+/-	+/-	+/-

Appendix D: Ethical approval from Research Ethics Committee

Appendix E: Covering letter to clinician

UNIVERSITY OF BIRMINGHAM

Dear Colleague,

We would be grateful if you could hand out invitations to clients who may be willing to take part in a study regarding **'The meaning of perfectionism for clients with eating disorders'.**

This is a qualitative study which explores the meaning of perfectionism for participants with anorexia nervosa and bulimia nervosa. The main aim of the study is to explore the way in which participants with eating disorders make sense of perfectionism. This includes exploration of the participants' understanding of their own perfectionism, its role and impact on their lives and its relationship with their eating disorder. The secondary aim of the study will be to explore similarities and differences in the way bulimic and anorexic participants construct the meaning of perfectionism.

The study consists of two parts, namely the focus group and individual interviews. Participants are invited to take part in one of them. The focus group is designed to help identify questions about perfectionism, whilst the interviews are to give a more in-depth understanding of perfectionism. We have included information sheets about each of them.

Principal inclusion criteria include:

- Participant meets full DSM-IV criteria for anorexia nervosa or bulimia nervosa and this is their primary diagnosis.
- Participant is currently accessing services as an inpatient or outpatient at the Eating Disorders Service.
- Participant is female.
- Participant must have the capacity to give informed consent in order to be able to participate meaningfully and to reflect.
- Participant must be available for the focus group or individual semi-structured interview.

Principal exclusion criteria include:

- Participant does not meet full DSM-IV criteria for anorexia nervosa or bulimia nervosa and/or this is not their primary diagnosis.
- Participant is male.
- Participant does not speak English so their meaningful participation might be difficult.
- Participant is likely to become distressed (judgement to be made by clinical team).

Thank you in advance for your assistance.

Yours sincerely,

Kasia Murach
Trainee Clinical Psychologist

Dr Newman Leung
Consultant Clinical Psychologist

Appendix F: Covering letter to participant

UNIVERSITY OF BIRMINGHAM

Dear Client,

You are invited to take part in a study regarding **'The meaning of perfectionism for clients with eating disorders'.**

The study consists of two parts, namely the focus group and individual interviews. You are invited to take part in one of them. We have included information sheets about each of them.

If you think you would like to take part in either part of the study, please fill in the reply slip (contact consent form). Your consent will allow one of the investigators to arrange to meet up with you to explain the research to you and give you an opportunity to specify whether you would like to take part in the focus group or interview. You may return it either to clinicians from the Eating Disorders Service or send it by post in the enclosed pre-paid envelope within 72 hours.

May we emphasise that participation is entirely voluntary and all information provided will be treated with the strictest confidence. If you decide not to take part, your current or future treatment will not be affected in any way.

We look forward to hearing from you.

Yours sincerely,

Kasia Murach
Trainee Clinical Psychologist

Newman Leung
Consultant Clinical Psychologist

Appendix G: Participant Information Sheet Focus Group

UNIVERSITY OF BIRMINGHAM

Participant Information Sheet Focus Group

The meaning of perfectionism for clients with eating disorders

You are invited to take part in a research study. Before you decide whether to take part, it is important that you understand why the research is being conducted and what it will involve. Please take time to carefully read the following information and discuss the study with others if you wish. If there is anything which is not clear, or if you would like more information, please do not hesitate to ask. Take time to decide whether or not you wish to take part.

What is the purpose of the study?
Perfectionism is one of the factors which makes eating disorders difficult to treat. Although many suggest that this is the case, no-one has actually asked people with eating disorders about the way in which they make sense of perfectionism, or what they think about its role and impact on their lives.

We would like to know more about your experiences and thoughts relating to perfectionism so that we can develop a better understanding of its role in eating disorders.

Why have I been chosen?
We are asking women with current experience of anorexia nervosa or bulimia nervosa and those who are using eating disorder services to take part either in a focus group or an individual interview to help us learn more about perfectionism.

Do I have to take part?
It is up to you whether or not you decide to take part and this information sheet is to help you make this decision. Even if you decide that you would like to help us in this research and talk about your thoughts and experiences regarding perfectionism, you are free to withdraw at any time up until two weeks after data collection, without the need to state reasons. This is not going to affect your current or future NHS care.

What will happen to me if I take part?

If you decide to take part in the focus group…
The focus group will last approximately 60–90 minutes and will take place at the University of Birmingham. There will be 3-4 participants in the group. At the beginning of the group we will ask you to sign a consent form which states that you have agreed to take part and you will receive a signed copy to keep. We will discuss ground rules outlining confidentiality, anonymity and instructions for participants.

We will ask you and other focus group participants to help us develop questions for the individual interviews to better understand the meaning of perfectionism for clients with eating disorders. This will include questions about your thoughts on perfectionism and whether people with eating disorders are perfectionists. We will audio record the focus group and write it word-for-word so that we can capture important nuances of your views and experience. At the end of the group, we will ask you which parts, if any, you would prefer us not to use.

We will get in touch once again once the data have been analysed for your permission to contact you so that we can ask you what you think about the outcome of the analysis. There is no obligation for you to take part.

What do I have to do?
If you think you would like to take part, you may fill in the reply slip included in this information sheet and return it either to clinicians from the Eating Disorders Service or send it by post in the enclosed pre-paid envelope within 72 hours. The reply slip is a means by which you can consent to us contacting you so as to arrange a meeting time.

During the meeting (lasting no more than 20-30 minutes), we will discuss this information sheet and participant consent form, whilst you will also have an opportunity to ask any questions about this research. You will have at least 72 hours to decide whether you would like to take part and help us in this research. After that time, we will contact you by telephone. If you decide to take part in the focus group, we will arrange a time, date and venue to meet. We will send you a written confirmation of your scheduled focus group by post.

We will reimburse your expenses for travel to the Eating Disorders Service or the University of Birmingham up to a total of £10. We will ask you to keep all tickets for public transport and parking.

What are the possible disadvantages and risks of taking part?
There are no disadvantages or risks of taking part. It is possible that sharing your thoughts and experiences about perfectionism and eating disorders may bring up difficult memories. We can suggest a break, stop or can reschedule the focus group if required, and offer support, for example someone to talk to. We have provided other sources of support at the end of this sheet.

What are the possible benefits of taking part?
There are no direct benefits to you taking part; however, sharing your thoughts and experiences with us could facilitate a better understanding of eating disorders and potentially lead to better treatment outcomes in the longer term.

What happens when the research study stops?
When the focus group and individual interviews have taken place, we will analyse the data in order to reveal common themes relating to the meaning of perfectionism. If you have taken part in the focus group, we will approach you again at this point to invite you to tell us what you think about the analysis.

What if there is a problem?
It is unlikely that there will be any problems. If you feel distressed during the research, we will offer support and suggest breaks, termination, another time to meet or withdrawal from the study in case of severe distress. During the focus group, which is held at the University of Birmingham, support from Dr Larkin will be available if necessary. You are welcome to seek additional support, should you wish to do so. We have included other available services at the end of this sheet. Should you disclose any abuse, the research team will follow vulnerable adult protections procedures.

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. Kasia Murach can be contacted on 0121 4147124. Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. If you remain unhappy and wish to complain formally, you can do this through the NHS Complaints Procedure. Details can be obtained from your hospital.

Will my taking part in the study be kept anonymous?
Prior to the focus group you will be allocated a reference number and a pseudonym to anonymise your identity when transcribing and analysing data. All electronic data will be stored in files protected by passwords. When not in use, paper materials will be kept in locked cabinets with access limited only to the research team.

If you decide to take part in the focus group, your anonymity will be maintained by not attributing any of the comments to you as an individual. At the end of the focus group, you will be asked whether there is any information you would like to retract so that it is not used in the analysis. These parts will not be transcribed. After the Chief Investigator has received her doctorate, the digital audio files will be destroyed. Other anonymised data will be kept for up to 10 years.

What will happen to the results of the research study?
We will send you a written summary sheet of the main findings without any identifying information or direct quotations. The thesis reporting results of the study will be submitted by the Chief Investigator to the University of Birmingham as part of a doctoral dissertation in Clinical Psychology. The thesis will be kept in the University of Birmingham Library. Direct quotations without any identifying information will be included in the final write up and publication, but will be used only in presentations to academic conferences and in academic papers. It will not be possible to identify whose quotations these are. The results may be presented at conferences related to eating disorders or published in peer reviewed journals.

Who has reviewed the study?
All research in the NHS is reviewed in order to ensure that your rights, safety, dignity and well-being are protected. This research has been reviewed and approved by the South Birmingham Research Ethics Committee.

Contact Details
If you have any questions and would like further information about any aspect of this study, please contact either Kasia Murach or Dr Michael Larkin.

Chief Investigator:
Kasia Murach
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E-mail: m.larkin@bham.ac.uk
Telephone: 0121 4146036

Useful Contact Numbers	
Patient Advice Liaison Service (PALS)	Helpline: 0800 953 0045 Email: pals@bsmhft.nhs.uk Website: http://www.bsmhft.nhs.uk/service-user-and-carer/pals/
Beating Eating Disorders (Beat)	Helpline: 0845 634 1414 Email: help@b-eat.co.uk Website: http://www.beat.co.uk/Home
MIND (mental health information)	Helpline: 0845 7660163
NHS Direct (24 hour information helpline)	Helpline: 0845 4647
The Samaritans	Helpline: 0845 7678000

Appendix H: Participant Information Sheet Interview

UNIVERSITY OF BIRMINGHAM

Participant Information Sheet Interview

The meaning of perfectionism for clients with eating disorders

You are invited to take part in a research study. Before you decide whether or not to take part, it is important that you understand why the research is being conducted and what it will involve. Please take time to read the following information carefully and discuss the study with others if you wish. If there is anything which is not clear, or if you would like more information, please do not hesitate to ask. Take time to decide whether or not you wish to take part.

What is the purpose of the study?
Perfectionism is one of the factors which make eating disorders difficult to treat. Although many people suggest that this is the case, no-one has actually asked people with eating disorders about the way in which they make sense of perfectionism, or what they think about its role and impact on their lives.

We would like to know more about your experiences and thoughts regarding perfectionism so that we can develop a better understanding of its role in eating disorders.

Why have I been chosen?
We are asking women with current experience of anorexia nervosa or bulimia nervosa and those who are using eating disorder services to take part either in a focus group or an individual interview to help us learn more about perfectionism.

Do I have to take part?
It is up to you whether you decide to take part and this information sheet is to help you make that decision. Even if you decide that you would like to help us in this research and talk about your thoughts and experiences of perfectionism, you are free to withdraw at any time up until two weeks after data collection, without the need to state reasons. This is not going to affect your current or future NHS care.

What will happen to me if I take part?

If you decide to take part in the individual interview…
The individual interview will last approximately 60–90 minutes and will take place at the Eating Disorders Service. We will ask you to sign a consent form which states that you have agreed to take part and you will receive a signed copy to keep. You are welcome to ask questions and share any concerns you might have.

The interview will cover broad questions about your experiences, possibly including a bit about your history of eating difficulties, about what it is like to be a perfectionist, how perfectionism developed, what role it played and how it has impacted on your life. We will audio record the interview and write it word-for-word so that we can capture important nuances of your views and experience. There will be an option to complete the interview in two sessions within the same amount of time, should you request it. At the end of your interview we will ask you whether or not there are any parts which you would prefer us not to use.

What do I have to do?
If you think you would like to take part, you may fill in the reply slip included in this information sheet and return it either to clinicians from the Eating Disorders Service or send it by post in the enclosed pre-paid envelope within 72 hours. The reply slip is a means by which you can consent to us contacting you so as to arrange a meeting time.

During the meeting (lasting no more than 20-30 minutes), we will discuss this information sheet and the participant consent form, whilst you will also have an opportunity to ask any questions about this research. You will have at least 72 hours to decide whether you would like to take part and help us in this research. After that time, we will contact you by telephone. If you decide to take part in the individual interview, we will arrange a time, date and venue to meet. We will send you a written confirmation of your scheduled interview by post.

We will reimburse your expenses for travel to the Barberry Centre up to a total of £10. We will ask you to keep all tickets for public transport and parking.

What are the possible disadvantages and risks of taking part?
There are no disadvantages or risks to taking part. It is possible that sharing your thoughts and experiences about perfectionism and eating disorders may bring up difficult memories. We can suggest a break, stop or can reschedule the interview if required, and offer support, for example someone to talk to. We have provided other sources of support at the end of this sheet.

What are the possible benefits of taking part?
There are no direct benefits to you taking part; however, sharing your thoughts and experiences with us could facilitate a better understanding of eating disorders and potentially lead to better treatment outcomes in the longer term.

What happens when the research study stops?
When the focus group and individual interviews have taken place, we will analyse the data in order to reveal common themes relating to the meaning of perfectionism.

What if there is a problem?
It is unlikely that there will be any problems. If you feel distressed during the research, we will offer support and suggest breaks, termination, another time to meet or withdrawal from the study in case of severe distress. During individual interviews, which are held at the Eating Disorders Service, support from the clinical team of qualified mental health professionals at the Eating Disorders Service will be offered. Dr Leung will be available if necessary. You are welcome to seek additional support and to contact your GP should you wish to do so. We have included other available services at the end of this sheet. Should you disclose any abuse, the research team will follow vulnerable adult protections procedures.

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. Kasia Murach can be contacted on 0121 4147124. Any complaint about the way in which you have been dealt with during the study or any possible harm you might suffer will be addressed. If you remain unhappy and wish to formally complain, you can do this through the NHS Complaints Procedure. Details can be obtained from your hospital.

Will my taking part in the study be kept anonymous?
Prior to the interview you will be allocated a reference number and a pseudonym to anonymise your identity when transcribing and analysing data. All electronic data will be stored in files protected by passwords. When not in use, paper materials will be kept in locked cabinets with access limited only to the research team.

What will happen to the results of the research study?
We will send you a written summary sheet of the main findings without any identifying information or direct quotations. The thesis reporting results of the study will be submitted by the Chief Investigator at the University of Birmingham as part of a doctoral dissertation in Clinical Psychology. The thesis will be kept in the University of Birmingham Library. Direct quotations without any identifying information will be included in the final write up and publication and will be used only in presentations to academic conferences and in academic papers. It will not be possible to identify whose quotations these are. The results may be presented at conferences related to eating disorders or published in peer reviewed journals.

Who has reviewed the study?
All research in the NHS is reviewed to ensure that your rights, safety, dignity and well-being are protected. This research has been reviewed and approved by the South Birmingham Research Ethics Committee.

Contact Details
If you have any questions and would like further information about any aspect of this study, please contact either Kasia Murach or Dr Michael Larkin.

Chief Investigator:
Kasia Murach
School of Psychology
University of Birmingham
[redacted]

Academic Supervisor:
Dr Michael Larkin
School of Psychology
[redacted]

Useful Contact Numbers	
Patient Advice Liaison Service (PALS)	Helpline: 0800 953 0045 Email: pals@bsmhft.nhs.uk Website: http://www.bsmhft.nhs.uk/service-user-and-carer/pals/
Beating Eating Disorders (Beat)	Helpline: 0845 634 1414 Email: help@b-eat.co.uk Website: http://www.beat.co.uk/Home
MIND (mental health information)	Helpline: 0845 7660163
NHS Direct (24 hour information helpline)	Helpline: 0845 4647
The Samaritans	Helpline: 0845 7678000

Appendix I: Contact Consent Form

If you think you would like to take part, please, fill in this reply slip and return it either to clinicians from the Eating Disorders Service or send it by post in the enclosed pre-paid envelope within 72 hours. The reply slip is a means by which you can consent to us contacting you so as to arrange a meeting time.

……

UNIVERSITY OF BIRMINGHAM

CONTACT CONSENT FORM

Title of Project: What is the meaning of perfectionism for clients with eating disorders?

Research Ethics Committee Number: 12/WM/0009

Name of Researcher: Kasia Murach

This is to confirm that I, _____, have given permission to Kasia Murach to contact me, so that she tells me more about the above study.

My preferred means of contact are:

(please tick and provide details of those which apply)

☐ E-mail: _____

☐ Phone call: _____

☐ Text: _____

☐ Letter: _____

_____

Signature _____ Date_____

Appendix J: Consent Forms

UNIVERSITY OF BIRMINGHAM

CONSENT FORM FOR FOCUS GROUP

Title of Project: The meaning of perfectionism for clients with eating disorders.

Name of Researcher: Kasia Murach

Research Ethics Committee Number: 12/WM/0009

1. I confirm that I have read and understand the information sheet dated 20 October 2011 (version 1) for the above study. I have attended an information session during which the research was explained to me, and. I have also had at least 72 hours to consider the information, ask questions and have had these answered satisfactorily. ☐

2. I understand that my participation in the study is voluntary and that I am free to withdraw at any time up until two weeks after data collection, without giving any reason, and without my current or future NHS care or legal rights being affected. ☐

3. I agree to my participation in the focus group being audio recorded and for these recordings to be transcribed word-for-word. ☐

4. I understand that the information I provide will be anonymised. ☐

5. I understand that relevant sections of the data collected during the study may be looked at by responsible individuals from the University of Birmingham, from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to this information. ☐

6. I agree to my direct quotes from the focus group being used in the doctoral thesis and in any future published reports. ☐

7. I give the research team permission to contact clinicians from the Eating Disorders Service should I become very distressed during the research. ☐

8. I agree to take part in the above study. ☐

Participant Name _____ Signature_____ Date _____

Name of person taking consent/researcher: Kasia Murach

Researcher_____ Signature _____ Date_____

UNIVERSITY OF BIRMINGHAM

CONSENT FORM FOR INTERVIEW

Title of Project: The meaning of perfectionism for clients with eating disorders.

Name of Researcher: Kasia Murach

Research Ethics Committee Number: 12/WM/0009

1. I confirm that I have read and understand the information sheet dated 20 October 2011 (version 1) for the above study. I have attended an information session during which the research was explained to me. I have also had at least 72 hours to consider the information, ask questions and have had these answered satisfactorily. ☐

2. I understand that my participation in the study is voluntary and that I am free to withdraw at any time up until two weeks after data collection, without giving any reason, and without my current or future NHS care or legal rights being affected. ☐

3. I agree to my interview being audio recorded and for these recordings to be transcribed word-for-word. ☐

4. I understand that the information I provide will be anonymised. ☐

5. I understand that relevant sections of the data collected during the study may be looked at by responsible individuals from the University of Birmingham, from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to this information. ☐

6. I agree to direct quotes from my interview being used in the doctoral thesis and in any future published reports. ☐

7. I give the research team permission to contact clinicians from the Eating Disorders Service should I become very distressed during the research. ☐

8. I agree to take part in the above study. ☐

Participant Name _____ Signature_____ Date _____

Name of person taking consent/researcher: Kasia Murach

Researcher _____ Signature _____ Date_____

Appendix K: Research topic guide for the focus group

RESEARCH TOPIC GUIDE FOR THE FOCUS GROUP

1. What do you think about perfectionism?

2. Do you think people with eating disorders are perfectionists?

3. What questions could I ask during individual interviews to gain a better understanding of the meaning of perfectionism for clients with eating disorders?

4. What questions should I avoid asking during individual interviews?

5. Is there any part of the focus group today that you would prefer not to be used?

    Prompt: Are you happy for all the information we have discussed today to be used in the research project?

    Prompt: Which parts are you not happy with us using?

Appendix L: Semi-structured interview schedule

SEMI-STRUCTURED INTERVIEW SCHEDULE

1. Tell me a bit about your history of eating difficulties.

2. What do you think about perfectionism?

    Prompt: What does perfectionism mean to you?

    Prompt: Would you see it as a good thing or a bad thing?

    Prompt: What kind of character thing is it?

    Prompt: Where might it be helpful to be a perfectionist?

    Prompt: Where might it be unhelpful to be a perfectionist?

    Prompt: Can you think about somebody you would describe as a perfectionist? Tell me about them.

3. To what extent would you see yourself as a perfectionist?

    Prompt: How has your perfectionism developed over time?

    Prompt: Have you always been like that?

    Prompt: What are you perfectionist about?

    Prompt: What areas of your life does it affect?*[5]

4. How did perfectionism affect your eating disorder?

[5] *Questions added following the focus group.

Prompt: Which do you think came first?*

Prompt: How do you see that link between your eating disorder and perfectionism now?*

Prompt: How has your perfectionism changed through recovery?*

5. Is there any part of your interview today which you would prefer not to be used?

Prompt: Are you happy for all the information we have discussed today to be used in the research project?

Prompt: Which parts are you not happy with us using?

Appendix M: Extract from Steph's interview transcript

[pauses]... so it's kind of changed, so it's less, [hesitates], yeah, then when I'm swimming, I've got to be better than everyone else there in my group, like…

Mm-hmm.

It'll start like in my group, once I see myself being a bit better than everyone else, I want to be way better than everyone else and then I want to move up and then I want to be better than everyone else there… [pauses]... but I don't know why. It's just like one of these things that I can't, I guess you just, I just strive to be better and then I want to be better than everyone else as well, just because… [pauses]... I don't know… [pauses]... I don't want to be normal, I don't want to be average.

If there's no perfectionism, then it means being average?

Yeah, so I don't want to be average. Who wants to be average? Like there's no point, if you're just going to be average, I just don't really…

So are you saying you would not enjoy swimming without striving?

I couldn't do it, I'd be embarrassed, I embarr, be embarrassed going for a swim if I wasn't swimming fast or if I wasn't like looking like I looked good… I wouldn't, I wouldn't want to go.

Why?

I don't know, I think it's just the way my Dad, my Dad is, like he's, well, he was an international athlete but he's not content, he was injured before he was meant to go to The Olympics, so he feels like he's a failure and I think that's like rubbed off on me so I feel like unless I'm an international athlete, that I'm shit at sport…

Mm-hmm.

[Pauses]… so I don't feel like if I'm just plodding up and down and someone

said, oh, you, you swim then, I, I wouldn’t tell them as well, if I was just going for a little plod, I wouldn’t tell them, I'd tell them I did nothing, 'cause I wouldn’t think it is exercise, I wouldn’t want to tell anyone, 'cause I'd be embarrassed. I don’t know… Yeah.

Would you see perfectionism as a good thing or a bad thing?

[Pauses]... Um, I think in my case at the moment it’s a bad thing, 'cause it’s preventing me from doing anything, like I'm not doing my uni work, 'cause I'm too scared of failing, so I'm not picking anything up.

Appendix N: Extract from line-by-line coded transcript of Steph

Page/ Line	Objects of concern (oc) / Experiential claims (ec)	Evidence	Summary	Interpretations
3/93	oc= perfectionism ec= I've got to be better than everyone else there in my group ec= once a bit better, I want to be way better than everyone else ec= then I want to move up and then I want to be better than everyone else there ec= I don't want to be normal and average	*[hesitates], yeah, then when I'm swimming, I've got to be better than everyone else there in my group, like… It'll start like in my group, once I see myself being a bit better than everyone else, I want to be way better than everyone else and then I want to move up and then I want to be better than everyone else there… [pauses]... but I don't know why. It's just like one of these things that I can't, I guess you just, I just strive to be better and then I want to be better than everyone else as well, just because… [pauses]... I don't know… [pauses]... I don't want to be normal, I don't want to be average. (…) Yeah, so I don't want to be average. Who wants to be average? Like there's no point, if you're just going to be average, I just don't really…*	She describes gradation in the workings of her perfectionism and an underlying goal of not wanting to be average and normal	Perfectionism as a solution to not wanting to be average
3/107	oc= embarrassed ec= if I wasn't swimming fast ec= it's just the way my Dad is	*I couldn't do it, I'd be embarrassed, I embarr, be embarrassed going for a swim if I wasn't swimming fast or if I wasn't like looking like I looked good… I wouldn't, I wouldn't want to go. (…) I don't know, I think it's just the way my Dad, my Dad is, like he's, well, he was an international athlete but he's not*	She appears to take after her father in her "black and white" thinking	The feeling of failure and the lack of contentment can rub off on you

	ec= I feel like unless I'm an international athlete, that I'm shit at sport	*content, he was injured before he was meant to go to The Olympics, so he feels like he's a failure and I think that's like rubbed off on me so I feel like unless I'm an international athlete, that I'm shit at sport…*		
4/117	oc= going for a little plod ec= I wouldn't tell them, I'd tell them I did nothing ec= I wouldn't think it is exercise, I'd be embarrassed	*[Pauses]… so I don't feel like if I'm just plodding up and down and someone said, oh, you, you swim then, I, I wouldn't tell them as well, if I was just going for a little plod, I wouldn't tell them, I'd tell them I did nothing, 'cause I wouldn't think it is exercise, I wouldn't want to tell anyone, 'cause I'd be embarrassed. I don't know… Yeah.*	Her idea of what swimming is differs from that of other people and she feels embarrassed as in her eyes it is just a little plod that she does A cognitive bias?	Feeling of embracement, if what she does is not up to her high standard
4/123	oc= perfectionism is a bad thing ec= preventing me from doing anything ec= too scared of failing	*[Pauses]... Um, I think in my case at the moment it's a bad thing, 'cause it's preventing me from doing anything, like I'm not doing my uni work, 'cause I'm too scared of failing, so I'm not picking anything up.*	Fear of failing makes her give up even before she starts a task	Perfectionism as fear of failure

Appendix O: Extract from a table with initial emergent themes

Initial emergent themes	Participants contributing	Key cross-references
Not putting effort in to avoid failure	I1, I2, I5	I1 (11/397) I2 (13/444) I5 (4/120, 4/124, 4/140, 11/394)
Fear of not being the best	I5, I6	I5 (8/304) I6 (16/645)
Not striving perceived as negative	I1, I2, I6	I1 (3/107) I2 (13/453) I6 (8/316)
Reputation to keep up (for others, for oneself)	I1, I4	I1 (12/426, 12/446) I4 (3/83, 4/152)
Not pursuing what you are not good at	I5, I6	I5 (5/176) I6 (2/48, 8/304, 15/607)
To be better than everyone else/to be the best	I4, I5	I4 (5/190, 6/205) I5 (2/60, 3/93)
Comparison with others (constant, not in one's favour, difficult)	I1, I2, I3, I4	I1 (9/338) I2 (22/815) I3 (10/333, 10/354) I4 (7/260, 9/338)
Doing one's best	I3, I4, I6	I3 (5/163) I4 (2/75, 5/170) I6 (7/279, 11/440)
Doing the best for others	I2, I3, I5, I6	I2 (21/742) I3 (3/84, 7/207) I5 (4/129) I6 (7/279, 8/325)
Endless re-doing	I2, I3, I5	I2 (14/490) I3 (2/53, 4/123, 5/138) I5 (10/377)

Strict adherence to own routines and rules to follow	I2, I4, I6	I2 (19/674) I4 (10/372) I6 (14/558)
Relentless pursuit of tasks and goals until completion	I3, I4, I5	I3 (6/170) I4 (4/134, 9/355) I5 (10/384)
Every detail matters (overanalysing)	I1, I2, I6	I1 (4/138, 15/559) I2 (11/399) I6 (18/751)
Adherence to rules about food	I4, I5	I5 (11/405, 11/422) I4 (8/283, 8/289)
Never good enough	I2, I4, I5, I6	I2 (18/639) I4 (3/104) I5 (2/54, 8/290) I6 (12/488)
Nothing less than 100% matters	All	I1 (6/191) I2 (21/765) I3 (6/190) I4 (3/82, 3/104) I5 (3/106, 4/115, 7/241) I6 (7/271, 10/414, 11/430)
Makes one worry	I1, I2	I1 (7/225, 7/249, 10/352, 12/446) I2 (15/515)
Stands in the way of learning and enjoying new experiences	I6	I6 (13/542)
Difficulty letting go of the unhealthy aspect	I1, I6	I1 (5/172) I6 (9/375, 17/716)
Striving towards a goal of being stick thin/ the thinnest/ weighing the least	I4, I5, I6	I4 (6/223, 6/235) I5 (8/273) I6 (16/668)

Achievement	I1, I4	I1 (18/688) I4 (2/48)
Something to fall back on	I1, I2, I4	I1 (13/487) I2 (19/674) I4 (7/246)
Constant pushing further	I1, I6	I1 (10/375) I6 (9/345)
Reputation to keep up	I1, I5	I1 (12/446) I5 (2/42)
Gaining control (overeating instead of feelings, over transition and family problems)	I2, I3	I2 (23/833) I3 (1/28, 9/298)
Not breaking rules (set up by ED)	I1, I3, I4, I6	I1 (14/518) I3 (9/307) I4 (8/297, 8/302) I6 (4/131)
Very precise conditions under which eating food is right	I2, I6	I2 (10/364, 17/595, 17/612) I6 (4/151)
Distorted mind	I2, I6	I2 (22/815) I6 (8/336, 15/620)
Impossibility of one's perfectionist striving	I1, I5	I1 (18/661, 18/693) I5 (11/405)
Trapped in the goal achievement mind-set	I5	I5 (9/345)
Something to fall back on	I1, I3	I1 (13/471) I3 (8/252)
Out of control	I6	I6 (5/186)