STRENGTHS, PERSONALITY TRAITS AND PSYCHOLOGICAL WELL-BEING IN FEMALES WITH BODY-DISSATISFACTION AND DRIVE FOR THINNESS.

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MARIA S. FISCHER

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To whom it may concern

Permission is hereby granted that the following manuscript:

Strengths, personality traits and psychological well-being in females with body-dissatisfaction and drive for thinness;

may be used by the first author, Marsia Fischer, for purposes of obtaining a Masters Degree in Psychology.

Sincerely

Dr. A.W. Nienaber	Dr. D.K. Kirsten
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PERSONAL STRENGTHS, PSYCHOLOGICAL WELL-BEING AND PERSONALITY TRAITS IN FEMALES WITH BODY-DISSATISFACTION AND DRIVE FOR THINNESS.

KEYWORDS: eating disorder; weight preoccupation; personality; strengths, psychological well-being, body dissatisfaction, drive for thinness.

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ABSTRACT

High levels of body-dissatisfaction (BD) and drive for thinness (DT), place youths at risk for development of eating disorders. Strengths and personal traits can act as buffers against pathology and enhance psychological well-being. The aim of this study was to determine whether low BD group (LBD, n = 10), high BD group (HBD, n = 11) and an eating disorder group (ED, n = 10), differ significantly regarding strengths, personality traits and psychological well-being (PWB). Groups were purposefully selected. The LBD group scored practically significantly lower than the ED group on neuroticism, depression, vulnerability, and forgiveness, and practically significantly higher than the ED group on autonomy and fantasy, whilst no differences were found between the LBD and HBD group. Contradictions in findings on forgiveness of others were explained in terms of differences regarding self-forgiveness, self-compassion, self-determination and motivational drives. The LBD group is typified as flourishing, the HBD as at risk, and the ED as languishing.

Word count: 170

OPSOMMING

Hoë vlakke van liggaamsontevredenheid (BD) en dryf om maer te wees (DT) verhoog die risiko vir jongmense om eetversteurings te ontwikkel. Sterktes en persoonlikheidseienskappe kan dien as buffers teen patologie en psigologiese welsyn bevorder. Die doel van hierdie studie was om te bepaal of 'n lae BD groep (LBD, n = 10), hoë BD groep (HBD, n = 11), en 'n eetversteuringsgroep (ED, n = 10), prakties betekenisvol van mekaar verskil met betrekking tot sterktes, persoonlikheidseienskappe en psigologiese welsyn (PWB). Groepe is doelgerig gekies. Die LBD groep verkry prakties betekenisvol laer tellings op neurotisisme, depressie, kwesbaarheid en vergifnis en prakties betekenisvol hoër tellings op fantasie, self-aanvaarding en outonomie as die ED groep. Die HBD groep behaal slegs prakties betekenisvol hoer tellings op outonomie en fantasie as die ED groep. Daar was geen verskille tussen LBD en HBD groepe nie. Teenstrydige bevindings oor vergifnis van ander is verdeuidelik in terme van selfvergifnis, medelye met die self, selfdeterminasie en motiverings dryfkrag. Die LBD groep kan getipeer word as florerend, die HBD groep as 'n risiko groep en die ED as psigologies verswak.

Woorde: 180

Preface

- This thesis was prepared in article format as indicated in rule A.14.4.2 of the year book of the North-West University, Potchefstoom Campus.
- This article are currently under review as it was submitted to the editor of the following journal: *Psychological Reports.*
- The article was formatted according to the style sheet of the American Psychological Association (APA). However, the guidelines for authors of the *Psychological Reports* are included for purposes of examination.
- Attached, please find the letter of consent, signed by the co-authors, authorizing me to use this article for purposes of submission for a M.A. degree.

STRENGTHS, PERSONALITY TRAITS AND PSYCHOLOGICAL WELL-BEING IN FEMALES WITH BODY-DISSATISFACTION AND DRIVE FOR THINNESS

Summary

Research in the field of eating disorders (ED) and associated risk or protective factors in youths are imperative, considering that the onset of eating disorders typically occurs during critical periods of maturation such as adolescence or young adulthood (APA, 2000); and that 25% of the world's total population are younger than 25 years old (United Nations Children's Fund, 2000). Westernised society increasingly advocates a slim, even under-weight physique. Thinness is thus glorified as the standard of beauty, whilst fatness is stigmatised (Levitt, 2003; Polivy & Herman, 2002). South Africa is definitely not immune to the powerful media forces that shape public perceptions regarding the value of thinness. It was found that 19% to 22% of multicultural samples of South African adolescents were at high risk for the development of eating disorders (Caradas, Lambert & Charlton, 2001; Szabo, 1999).

Since the "thinness ideal" is unattainable for the majority of females, chronic body-dissatisfaction (BD) and drive for thinness (DT) may result, and consequently higher risk status for development of full-blown clinical eating disorders (Garner, 2004; Polivy & Herman, 2002). In fact, BD is so common in Western society today, that it has been labeled a "normative discontent" (Striegel-Moore, Silberstein & Rodin, 1993). Body dissatisfaction occurs when individuals perceive discrepancies between their body

size and shape and the culturally determined "thinness ideal" (Garner, 2004). Consequently, present body size and shape are consistently over-estimated and devalued, while the importance of physical appearance over the other self-attributes are irrationally over-emphasised (Geller, Zaitsoff & Srikameswaran, 2002). Drive for thinness (DT) entails a firm willingness to alter body size and shape, and entails persistent weight over-concern, fear of fat and preoccupation with dieting (Celio *et al.,* 2000; Levitt, 2003). The severity of BD and DT can be plotted on an eating disorder continuum, which has been well-supported and researched (Franco & Omari, 1999; Mazzeo & Espelage, 2002; Godfrey, 2004; Mintz, O'Halloran, Mulholland & Schneider, 1997). Clinical eating disorders such as anorexia and bulimia nervosa are found on the most extreme end of the continuum; high levels and those with an eating disorder not otherwise specified on an intermediate point; and low levels evidencing asymptomatic behaviour, on the less severe en thereof (Godfrey, 2004).

The aetiology and associated risk factors of eating disorders are complex and multi-factorial, and include various internal and external factors. Although a large variety of risk factors have been identified (see Croll, Neumark-Sztainer, Story & Ireland, 2002; Geller *et al.,* 2002; Levitt, 2003; Möller & Bothma, 2001; Mussell, Binford Fulkerson, 2000; Phelps, Sapia, Nathanson & Nelson, 2000; Polivy & Herman, 2002; Posavac & Posavac, 2002; Steiner *et al.,* 2003; Stice, 2001), BD and DT have been consistently singled out as the most predictive factors associated with onset of ED (Garner, 2004; Polivy & Herman, 2002). Furthermore, it has been negatively correlated to all domains of PWB and self-determination (De Paz Fransisco, Kirsten & Du Plesis,

2007; Pelletier, Dion, & Lèvesque, 2004). However, despite being exposed to similar socio-cultural pressures and adverse environmental circumstances, many people neither develop eating disorders nor high levels of BD and DT. What protects them from it?

An enquiry into protective factors and what makes individuals, groups and institutions flourish despite adverse and difficult circumstances, falls in the field of Positive Psychology (Seligman, 2005). This field is also called the science of happiness and human strengths (Carr, 2004), and calls for as much focus on strength as on weakness. At an individual level the focus is on identifying and amplifying positive human strengths and traits that can act as protective factors against mental illness or languishing, and contribute to optimal psychological well-being or flourishing (Fredrickson & Losada, 2005; Keyes, 2002; Seligman, 2005). Traits theories argue that a persons' status with regard to personality traits may be associated with certain personal strengths. The Five-Factor Model of Personality (Costa & McCrae, 1995) dominates this theory, and high scores on the facets of the NEO-Personality Inventory Revised may be viewed as personal strengths.

Information regarding personal strengths may thus be useful in that strengths act as protective factors, which are positively correlated with improved resilience, resistance and the six dimensions of Ryff and Keyes' (1995) eudaimonic model of psychological well-being (PWB) (Park, Peterson & Seligman, 2004; Peterson & Park, 2004; Steck, Abrams & Phelps, 2004). The eudaemonic perspective on PWB moves beyond the hedonic notion that subjective well-being is the presence of positive moods and the

absence of negative moods (Diener, 2000; Ryan & Deci, 2001). It defines PWB much broader than the mere absence of unhappiness (Wissing & Van Eeden, 2002); and in terms of the degree to which a person is self-determined (Ryan & Deci, 2000; 2001) and has operationalised the six dimensions of PWB of Ryff and Keyes (1995). These dimensions are: self-acceptance, positive relations, purpose in life, environmental mastery, personal growth and autonomy. Apart from Ryff's six dimensions and self-determination, protective factors and traits specifically associated with reduced risk for ED onset are: self-regulation, internal locus of control, positive self- and body-esteem, rationality, optimism, self- and coping-efficacy, social competence, resistance to stress, spirituality and mindfulness (Brown & Ryan, 2003; O'Dea & Abraham, 2000; Paradise & Kernis, 2002; Pelletier *et al.,* 2004; Phelps *et al.,* 2000; Smith, Hardman, Richards & Fischer, 2003; Steck, Abrams & Phelps, 2004; Steiner *et al.,* 2003).

Since the relevance of Positive Psychology to the field of ED is relatively young, more research is needed in order to refine existing risk-protective intervention models and to find pathways to enhance well-being and build buffering strengths. In the field of ED no research exist that compares personal strengths *per se* with personality traits and psychological well-being in those with low and high levels of BD and DT, and ED. Consequently, the aim of this study was to determine whether females with low BD and DT differ significantly from those with high levels of BD and DT, and ED respectively, regarding personal strengths, personality traits and PWB. Our first hypothesis was that there would be statistically significantly differences in personality traits, strengths and psychological well-being of the High Body Dissatisfaction Group, the Low Body

Dissatisfaction Group and the Eating Disordered Group. The second hypothesis was that there would be similarities in personality traits, strengths and psychological well-being of the High Body Dissatisfaction Group and the Eating Disordered Group.

METHOD

Research Design

A one-time cross-sectional research design was used, utilizing surveys for data collection (Neuman, 2000).

Participants

From a sample of 120 residential female students, two sub-groups were allocated according to the results obtained from the Eating Disorder Inventory (EDI-2) (Garner, Olmsted & Polivy, 1983). (a) The Low Body Dissatisfaction group consisted of 10 students with a mean age of 19,5. This group had low scores (<20) on the Drive for Thinness sub-scale as well as low scores (<10) on the Body Dissatisfaction sub-scale of the EDI-2. (b) The High Body Dissatisfaction group consisted of 11 students with a mean age of 19,7 years. This group had high scores (>25) on the Drive for Thinness sub-scale as well as high scores (>10) on the Body Dissatisfaction sub-scale of the EDI-2. Both these groups have normal Body Mass Indexes. (c) A third group of in-patients of Tara Psychiatric Hospital's Eating Disorder Section diagnosed with either anorexia nervosa or bulimia nervosa, consisted of 10 females with a mean age of 20,3, and a mean Body Mass Index of 17,9.

Inventories

The Eating Disorder Inventory (EDI-2, Garner, *et al.,* 1983) was included as screening instrument for the selection of the groups of students and also as a measure of BD and DT. The scale consists of 64 items organised in eight (8) sub-scales, e.g. Drive for Thinness, Bulimia, Body Dissatisfaction. The items are scored on a 6-point Likert scale (from "always" to "never"). Higher scores reflect higher levels of pathology. Garner, *et al.* (1983) report good reliability indices for different groups, and in the current study a Cronbach alpha coefficient of 0,94 were obtained.

The Revised NEO-Personality Inventory (NEO PI-R, Costa & McCrae, 1995) consists of 240 items and uses a Five-Factor Model of Personality, namely Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. Costa and McCrae (1995) reported reliability indices of between 0,75 and 0,93. In the current study Cronbach alpha indices between 0,15 and 0,87 were obtained, of which the alphas for Excitement-seeking and Values were 0,49 and 0,15 respectively. Hence, findings on these two sub-scales will not be interpreted.

The Values in Action Inventory of Strengths (VIA-IS, Peterson & Seligman, 2001) is a 240-item self-report questionnaire used to determine the strengths of a person. The questionnaire consists of 24 strengths, of which the five with the highest scores are the person's "signature strengths". In this study Cronbach alphas of between 0,54 and 0,9 were obtained.

The Scales of Psychological Well-being (SPWB, Ryff & Keyes, 1998) is used to measure degrees of psychological well-being. The scale consists of 84 items, sub-divided into six scales, namely autonomy, environmental mastery, personal growth, positive relations with other, purpose in life and self-acceptance. Reliability indices of between 0,83 and 0,91 were reported by Ryff and Keyes (1998), and in this study indices of between 0,81 and 0,85 were obtained.

The Body Mass Index (BMI, Must & Strauss, 1999) is determined by dividing the person's weight (mass) by the person's length, squared. The boundaries of BMI are as follows: Underweight is a BMI < 18,5, normal weight is a BMI between 18,5 and 25 and overweight is a BMI > 25 (World Health Organisation, 1995).

Procedure

In the first phase a random sample of 120 students were selected from the six largest female residences on the Potchefstroom Campus of the North-West University. These students all completed the EDI-2 as a screening measure, where after they were divided into two groups by using the results of their scores on the Drive for Thinness and Body Dissatisfaction sub-scales. In the second phase a third group was formed, using in-patients of the Eating Disorder Section of Tara Psychiatric Hospital. All these patients had had less than three months of treatment at the time of the testing. In the third phase of the study all the participants completed the whole battery of measuring instruments. This study was approved by the Ethics Committee of the North-West University and all

ethical standards as prescribed by the Health Professions Council of South Africa (http://www.aps.org/ethics/), were followed.

RESULTS

The EDI-2 was used to screen the random sample of female students regarding Drive for Thinness and Body Dissatisfaction. From these results (in Table 1) the two groups, Low Body Dissatisfied (LBD) and High Body Dissatisfied (HBD) were chosen. Descriptive statistics (means and standard deviation) and practical significance were calculated to determine effect size of the differences between the groups (Steyn, Smit, du Toit & Strasheim, 1998).

TABLE 1 HERE

Table 1 shows that the LBD and HBD groups differ practically significantly in terms of BD and DT.

In Table 2, the significant differences between the LBD, HBD and ED groups regarding their personal strengths as measured on the VIA-IS are reported. Descriptive statistics (means and standard deviation) and practical significance were calculated to determine effect size of the differences between the groups (Steyn, Smit, du Toit & Strasheim, 1998).

TABLE 2 HERE

Table 2 shows that there is only a practically significant difference regarding forgiveness between the LBD group and the ED group. The HBD group does not differ significantly regarding forgiveness from the LBD and ED groups.

In Table 3 significant differences between the three groups regarding personality traits as measured on the NEO PI-R are reported. Descriptive statistics (means and standard deviation) and practical significance were calculated to determine effect size of the differences between the groups (Steyn, Smit, du Toit & Strasheim, 1998).

TABLE 3 HERE

Table 3 shows hat the ED group scores practically significantly higher than the LBD group on neuroticism, depression and vulnerability and practically significantly lower on fantasy. The HBD group does not differ significantly on any of these traits compared to the former two groups, except for fantasy being practically significantly higher than in the ED group.

In Table 4 significant differences between the groups regarding their psychological well-being as measured on the SPWB are reported. Descriptive statistics (means and standard deviation) and practical significance were calculated to determine effect size of the differences between the groups (Steyn, Smit, du Toit & Strasheim, 1998).

TABLE 4 HERE

From Table 4 it is clear that the ED group is practically significantly less autonomous than the LBD and HBD groups respectively, and practically significantly less self-accepting than the LBD group. No differences were found on any of the other domains of PWB between the three groups.

DISCUSSION

The LBD group scored practically significantly lower than the ED group on traits such as neuroticism, depression, vulnerability, and practically significantly higher on fantasy, and domains of PWB such as self-acceptance, and autonomy. The ED group scored practically significantly higher on forgiveness than the LBD and HBD groups respectively. The HBD group did not differ significantly from any of the two former groups, except for autonomy and fantasy that was practically significantly higher than in the ED group.

The pattern of strengths, personality traits and domains of psychological well-being in the LBD group typifies them as emotionally stable, rational, coping-competent, self-efficacious, self-determined, and able to generate positive emotions from within by actively engaging in a vivid imaginary life and creating an interesting inner-world (Costa & McCrae, 1995). They display practically significant higher levels of PWB than the ED group, because they operationalise key constructs such as self-acceptance, autonomy, competence and self-determination, which have consistently been identified in the literature to protect against ED and enhance PWB (Carr, 2004; Ryan & Deci, 2001; Ryff & Keyes, 1995; Pelletier *et al.,* 2004). Consequently, according to the self-determination

theory (Ryan & Deci; 2000, 2001), their motivational drives clearly differ significantly from the ED group, because self-acceptance and autonomy reflect intrinsic motivational drives associated with eudaemonic well-being. Being more autonomous they will evaluate themselves by personal standards and not give in to social pressures to act or think in certain ways, hence low BD and DT (Ryff & Keyes, 1995). From a developmental perspective they appear to have successfully integrated a unique sense of identity, which is one of the main psycho-social development tasks during adolescence according to Erikson (1959). The LBD group thus clearly is the more flourishing group (Keyes, 2002).

Contrary to the above, the ED group is typified by the findings as individuals that are emotionally fragile, non-resilient, irrational, self-rejecting, non-self-determined, and prone to guilt and shame (Carr, 2004; Ryan & Deci, 2001; Ross, Kendall, Matters, Wrobel & Rye, 2004; Ryff & Keyes, 1995; Pelletier *et al.,* 2004). Their high levels of BD and DT also reflect tendencies to self-objectification, i.e. to view oneself as an object to be criticized, and uncompassionately so (Tiggemann & Lynch, 2002). The ED group's high scores on neuroticism and depression imply that they are prone to irrational thoughts and beliefs and experiencing negative affect. They are also very susceptible to psychological distress and cope poorly with stress (Costa & McCrae, 1995). Their practically significant higher vulnerability score indicates that they are easily discouraged in the face of life's challenges, feel hopelessness and become dependent on others to make decisions for them (Costa & McCrae, 1995). They are also practically significantly less self-accepting, self-determined and autonomous than the LBD and HBD groups

respectively. This finding corresponds with that of Pelletier *et al.* (2004). Low levels of autonomy means that they are more concerned about the expectations and evaluations of others and do not reflect a unique set of values and beliefs. This also implies that they tend to conform to social pressures and relies on others to make important decisions for them (Ryff & Keyes, 1995).

Also, according to the self-determination theory (Ryan & Deci, 2000) the motivational drive associated with BD and DT specifically reflects an extrinsic motivational drive and lack in autonomy, as it is motivated by "perceived controls, restrictions, and pressures, arising either from social or contextual forces" (Brown & Ryan, 2004:105). Externally regulated behaviours have consistently been associated with ill-being, since it sets up conditions that cause conflict amongst basic human needs and addresses these needs indirectly (Ryan & Deci, 2000, 2001). In this regard BD and DT causes conflict between the need to be accepted and conform to societal norms of thinness, versus the need for self-acceptance, autonomy and self-actualisation, which are all intrinsic motivational drives (Ryan & Deci, 2001). The ED group does not accept the various positive and negative traits within themselves, not their past (Ryff & Keyes, 1995). When one's judgment of one's personal worth and capabilities are low, PWB is also low (Carr, 2004), consequently, these findings typifies the ED group as a languishing group (Keyes, 2002)

However, the question to be asked is why does the ED group score low on PWB, whilst they score practically significantly higher on forgiveness? For example, they

forgive others easily. This seems contradictory to forgiveness research, since forgiving people were found to differ from less-forgiving people in that they reported less negative affect and depression and were relatively low in neuroticism (Costa & McCrae, 1995; McCullough, 2001). Considering the ED group's high standing on depression, neuroticism and vulnerability, this does not make sense. However, the above-mentioned studies did not explicitly distinguish between other- and self-forgiveness and consequently mixed findings were reported (McCullough & Witvliet, 2005). In comparative studies other-forgiveness was found to be positively correlated to high levels of altruism and low levels of hostility (Ross, Kendall, Matters, Wrobel & Rye, 2004). Our findings on other-forgiveness in this study do not reflect the same picture, given the ED group's average and high hostility. Thus, is this other-forgiveness in the ED group a trait that is an enduring personality characteristic that influences behaviour, cognition and affect; or is it a state that is situational-specific and transitory (Carr, 2004) and does not form part of an integrated sense of identity and PWB?

The above-mentioned contradictory findings regarding forgiveness and associated personality traits and PWB might possibly be theoretically explained in terms of differences in self-forgiveness, although not measured *per se.* Self-forgiveness, a component of identity, entails self-love and respect in the face of failures and harm to oneself and others (Hall & Fincham, 2005); compassion and goodwill towards oneself (Enright, 1996); and clearing the mind of self-hatred and contempt (Hall & Fincham, 2005). In fact, self-forgiveness was negatively correlated to all facets of neuroticism on the NEO PI-R, except for hostility, when compared to other-forgiveness Ross *et al.,*

2004). These findings were corroborated by Hall and Fincham (2005). Self-forgiveness was also found to be positively correlated to self-acceptance and self-compassion and optimal levels of PWB (Neff, 2003). Furthermore, self-forgiveness is a primary mechanism to overcome negative emotions arising from intrapersonal conflict (Kamat, Jones & Row, 2006). If this holds true, one could at least theoretically conclude that the ED group is less self-forgiving than the LBD group, given their practically significant higher standing on neuroticism, depression and vulnerability; and practically significant lower standing on key domains of PWB, namely autonomy and self-acceptance. The work of Ross *et al.* (2004) supports such a conclusion. Consequently, the LBD theoretically shows higher levels of self-forgiveness and compassion as indicated by the results on their NEO PI-R and SPWB. Self-compassion was also found to be positively correlated to mindfulness and self-regulation (Neff, 2003; Neff, Heish & Dejitterat, 2005), both which has been associated with higher levels of PWB and protective factors against ED (Brown & Ryan, 2003).

The question remaining is what moves the ED group to forgive others so easily, whilst the LBD group does not seem to feel the need so intensely? Theoretically speaking, it seems possible that the LBD group internalizes their strengths, i.e. self-compassion and acceptance. Concurrently, their standing on personality traits and domains of PWB such as rationality, competence and autonomy helps them to externalize and realistically interpret emotional distress caused by interpersonal wrongdoing. They would thus, due to their rationality, self-forgiveness and compassion, not experience excessive guilt or shame (Ross *et al.*, 2004). Hence, they would not need to forgive

others as easily to protect a fragile sense of self or to generate positive emotions resulting from forgiveness. In this regard their tendency to fantasise more than the ED group possibly reflects their ability to generate positive emotional experiences from within. They thus do not rely so heavily on environmental feedback to provide positive emotional experiences as the ED group. This is in line with the broaden-and-build theory of Fredrickson (2001, 2003) and the findings of Fredrickson and Joiner (2002). In addition, this group might not feel pressured to forgive others as easily as the ED group because they are more autonomous, thus not as prone to give in to social pressures to act or think in certain ways, thus to "do the right thing". This also explains their low levels of BD and DT according to Pelletier *et al.* (2004). They also feel more competent and less vulnerable than the ED group, thus they feel efficient in dealing with potentially difficult situations. The LBD group is thus clearly more self-determined than the ED group according to the self-determination theory (Ryan & Deci, 2001). They would thus rather strive toward intrinsic goals that would lead to eudaimonic well-being and inner peace.

In contrast, the ED group seems to utilize their strengths on an interpersonal but not intrapersonal level. They seem to externalize their strengths, whilst internalising their psychological distress, sense of failure and ineffectiveness, which concludes itself in depression and low levels of self-acceptance, compassion and forgiveness. Furthermore, their standing on neuroticism predispose them to irrationally personalise experienced guilt and shame (Ross *et al.*, 2004); to be very susceptible to psychological distress; and thus more prone to avoid conflict and utilise avoidance coping strategies (Costa &

McCrae, 1995; Polivy & Herman, 2002). It is thus possible that they easily forgive to avoid painful negative emotions and intrapersonal conflict or judgment, and generate positive emotions through forgiving easily. Since this tendency is driven by extrinsic motivational drives, i.e. to feel good, the derived positive emotions at best lead to hedonic well-being, which is not lasting in the long run. Nevertheless, their ability to forgive others, and the compassion theoretically inherent to it, could become a pathway to also develop self-acceptance and self-forgiveness. Although studies in this regard are still pending, this notion offers promise (Hall & Fincham, 2005).

Finally, the HBD group appears to be a middle group, considering that they did not differ significantly from the former two groups, except for significantly higher autonomy and fantasy in comparison with the ED group. Thus, they cannot be considered less psychologically healthy than the LBD group, or more flourishing than the ED group. They do display certain key personality traits such as autonomy that are associated with self-determination that could protect them. However, they also display risk factors such as high BD and DT and moderate levels of self-acceptance, which theoretically speaking reflects inadequate levels of self-forgiveness and compassion. Evidently they do not optimize the protective nature of their strengths inherent to their personality traits, and they appear to simultaneously subscribe to intrinsic and extrinsic motivational drives, which inherently are conflicting in nature (Ryan & Deci, 2000, 2001). This would coin them as a high-risk group (Keyes, 2002), and they should be an important target group for secondary prevention efforts.

CONCLUSION

Differences between groups can mainly be explained in terms of other- and self-forgiveness theory, self-determination theory, and motivational drives. The LBD group clearly presents with higher overall levels of PWB than the ED group, thus their strengths and personality traits do buffer them against BD and DT. Those with LBD and HBD to some extent seem to internalise their strengths and apply it to their own lives as well, hence better standing on key dimensions of PWB. Primary preventive programmes should optimize their inherent strengths whilst seeking to develop growth areas. The HBD group should learn during secondary prevention programmes to utilise their autonomy to reduce irrational subscription to thinness ideals and values, and facilitate optimal levels of self-acceptance, self-compassion and forgiveness, and self-determination.

Conversely, the ED group seems to externalise their strengths to the benefit of others and do not seem to benefit optimally from their inherent strengths, due to a lack of self-forgiveness, self-compassion, self-determination and extrinsic motivational drives. The findings pertaining to forgiveness is new, unique and of crucial importance for further research, since the domain of self-forgiveness and compassion has recently been theoretically identified as especially relevant to individuals with eating disorders (Hall & Fincham, 2005; Ross *et al.,* 2004; Worhington, Mazzeo & Kliewer, 2002). Forgiveness is a reflection of spirituality, which was found to protect against ED (Smith, Hardman, Richards and Fischer, 2003), and its presence could add to a broader conceptualisation of PWB than is often the case.

Further research is needed to determine: what the motivational drive inherent in the tendency to forgive others in those with ED are; whether LBD, HBD and ED groups differ significantly regarding levels of self-forgiveness and self-compassion; and whether positive interventions that promote self-forgiveness and compassion would be more effective in reducing BD and DT than those who do not specifically advocate it.

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TABLE 1

EDI-2 SCORES FOR THE LBD AND HBD GROUPS

EDI-2	Means		Standard deviation		p-values
Subscale	LBD (n=10)	HBD (n=11)	LBD (n=10)	HBD (n=11)	HBD : LBD (n=21)
Drive for Thinness	13,82	30,20	2,80	4,59	0,0001 (d=0,94)
Body Dissatisfaction	27,82	41,30	8,78	5,93	

LBD: Low Body Dissatisfaction group; HBD: High Body Dissatisfaction group

TABLE 2

DIFFERENCES BETWEEN GROUPS REGARDING PERSONAL STRENGTHS AS MEASURED ON THE VIA-IS

VIA-IS Subscale	Means			Standard deviation			p-value			
	LBD n = 10	HBD n = 11	ED n = 10	LBD n= 10	HBD n = 11	ED n = 10	HBD: LBD	HBD: ED	LBD: ED	d-values
Forgiveness	34,7	37,2	40,6	3,80	5,21	4,62	0,717	0,493	**0,036***	**1,2**

LBD: Low Body Dissatisfaction group; HBD: High Body Dissatisfaction group; ED: Eating Disorder group. $p < 0,05$; Cohen's effect size: $d = 0,2$ small effect size; $d = 0,5$ medium effect size; $d > 0,8$ large effect size

TABLE 3

DIFFERENCES BETWEEN GROUPS REGARDING PERSONALITY TRAITS

AS MEASURED ON THE NEO-PI-R

NEO PI-R domains	Means			Standard deviation			p-values			
	LBD n = 10	HBD n = 11	ED n = 10	LBD n = 10	HBD n = 11	ED n = 10	HBD : LBD	HBD : ED	LBD : ED	d-value
N	95,7	105,6	119,6	18,2	25,0	15,2	0,536	0,609	**0,032* d=1,3**	**1,3**
N3	16,2	20,0	24,1	4,96	7,72	5,51	0,331	0,769	**0,022* d=1,4**	**1,4**
N6	12,1	14,0	20,5	4,41	4,36	6,40	1,000	0,101	**0,011* d=1,3**	**1,3**
E	103,4	115,9	109,8	29,0	24,9	23,8	1,000	1,000	1,000	
E5	16,0	20,0	21,5	3,50	4,67	4,62	0,086	1,000	**0,018* d=1,2**	**1,2**
O	119,0	121,5	114,7	17,9	24,6	13,0	1,000	1,000	1,000	
O1	21,7	23,5	15,4	5,08	5,18	3,95	1,000	**0,003* d=1,6**	**0,040* d=1,2**	**1,6 1,2**
A	114,9	123,1	119,0	19,1	23,1	24,6	1,000	1,000	1,000	
C	111,8	122,1	109,9	28,2	23,9	19,7	1,000	0,660	1,000	

Subscales: N = Neuroticism; **N3 = Depression; N6 = Vulnerability,** E = Extraversion; **E5 = Excitement-seeking;** O = Openness; **O1 = Fantasy;** A = Agreeableness; C = Conscientiousness; **p-value < 0,05; Cohen's effect sizes: d = 0,2 small effect size; d = 0,5 medium effect size; d > 0,8 large effect size**

TABLE 4

DIFFERENCES BETWEEN GROUPS REGARDING PSYCHOLOGICAL WELL-BEING

NEO-PI-R Subscales	Means			Standard deviation			p-values			
	LBD n = 10	HBD n = 11	ED n = 10	LBD n = 10	HBD n = 11	ED n = 10	HBD: LBD	HBD: ED	LBD:ED	d-value
Autonomy	61,1	57,3	46,6	14,8	9,7	5,8	1,000	**0,032* d=1,10**	**0,015 d=0,97**	**1,10 0,97**
Self-acceptance	65,9	55,2	43,8	8,0	13,0	13,6	0,145	0,391	**0,002 d=1,6**	**1,6**

p-values < 0,05; Cohen's effect sizes: d = 0,2 small effect size; d = 0,5 medium effect size; d > 0,8 large effect size.