Eckardt Scholars Projects   Undergraduate scholarship

5-18-2020

Researching Anorexia Nervosa Prevalence in College Students: Establishing Correlations for Maladaptive Perfectionist Ideals Across Relationships and Sport

Antoniu Boariu
Lehigh University

Follow this and additional works at: https://preserve.lehigh.edu/undergrad-scholarship-eckardt

Part of the Psychology Commons

Literature Review for Lehigh Eckhardt Program Senior Thesis:

Researching Anorexia Nervosa Prevalence in College Students. Establishing Correlations for Maladaptive Perfectionist Ideals Across Relationships and Sport.

Department of Psychology, Lehigh University

Antoniu Boariu

Anb220@lehigh.edu

Advisor: Dr. Susan Barrett

Seb6@lehigh.edu

March 18th, 2020

SECTION 1: PSYCHOSOCIAL FACTORS AND EATING DISORDERS

In general, it has been society's perception that girls must be shaped thin and small and boys must be muscular and tall which commonly places tremendous eating habit pressures historically observed for both genders. The Social comparison theory (Corning et al. 2006) states that humans have a drive to assess how they are doing, and in order to assess performance they seek standards against which to compare themselves. When objective standards are not available, people look to their social environment and often satisfaction is driven by one's comparison against others. With respect to body comparisons, in today's era the persuasive social influences which promote the thin appearance ideal has been extensively researched as a contributor to Anorexia Nervosa (AN) in females (McLean et al. 2016). The DSM-5 classifies Anorexia Nervosa as a severe cognitive disturbance in which one's body weight or shape is perceived as too large. In turn, this perception is accompanied by many self-directed behaviors to maintain a low bodyweight such as restrictive eating and excessive exercise.

Theorists argue that high self-esteem may be the most importantly under looked factor for AN prevention and they claim that this mindset is fostered primarily through one's family environment (Collin et al. 2016). In one review of a family based therapy intervention, many sessions uncover that minimal displays of appraisal from her parents made a 23-year old anorectic daughter feel worthless and fueled her rebellious restrictive eating patterns to gain attention (Wedding & Corsini 1989). In line with Social Comparison Theory, this client desired so be the ideal daughter her parents could rely on during the time of their divorce. When this was not possible, she developed a maladaptive perfectionist attitude. The daughter avoided feeling helpless for saving her parents' marriage by focusing on her weight, which felt like something she was in control over. Across numerous empirically assessments, low self-worth is found to be

a significant maintaining factor in AN cases and a body of research has evaluated this construct in predicting later challenges in new relationships, including those observed for athletes and coaches. The present review will focus on this population, meanwhile the reader must keep in mind that Anorexia Nervosa is a very serious condition and affected individuals often choose to mask their behaviors around others, as such it must be intervened for early. AN becomes considerably more fatal as time elapses, and in the late stages Anemia can develop which is an iron deficiency in the body from harsh dieting. Outside of a family's immediate awareness, symptoms become more difficult to pinpoint and this is especially important for coaches to acknowledge when making critical comments regarding an athlete's performance. For certain sports, harsh training expectations are found to have surmounting negative physical consequences for female athletes mainly because of how over exercise impacts the menstrual cycle. Women must maintain a higher baseline of energy compared to men due to hormones which otherwise become unbalanced and lead to Amenorrhea. The loss of menstruation is often seen in tandem with Osteoporosis and Anorexia Nervosa which is defined in Sport Psychology as the Female Athlete Triade (Beals et al. 2002).

Overall, the highest coach expectations have been found in accordance with lean sport training that has been classified as weight-class (or weight-dependent), aesthetic (judged), or endurance based (Beals, 2004). Wrestling has been most extensively associated with AN for male athletes (Thompson & Sherman, 2010) because coaches often portray the mis conception that if the athletes lose weight they will be stronger and perform better in lower weight-classes. Wrestlers typically engage in weight loss strategies such as using laxatives and self-induced vomiting which is highly indicative behavior of developing a prolonged eating disorder. The unique standards of aesthetic sports such as gymnastics and ice-skating also lead athletes to

adopt overwhelming perfectionist ideals due to the competitive nature of explicit body ratings (Thompson & Sherman, 2010) by fans, coaches, and judges alike. Finally, in endurance sports such as running many athletes have shared the experience of engaging in excessive exercise even when severely injured. Males and females who scored highly on the Obligatory Exercise Questionnaire (Pasman & Thompson 1989) shared the overarching concern that gaining fat would slow them down and resultingly impact their placement in races. As seen from these accounts, in athletic contexts the nature of a sport matters significantly for athletes' attempts at regulating body size and shape. Meta analyses find that the prevalence of AN is higher in athletes from lean versus non-lean sports and a growing number of sport-related AN fatalities are documented yearly. In attempts to mitigate the prevalence of AN in athletes, Eating Disorder awareness training modules are available and should eventually be mandated for coaches to complete before proctoring any highly competitive collegiate contexts and beyond.

Most of the sports mentioned above are endorsed by the Olympics which creates a highly stressful and socially evaluative platform for competitive athletes. In general, an athlete needs to resist negative media messages about body image. Sociocultural theories propose that the media makes it exponentially more difficult for those with predisposing conditions to maintain a healthy self-image. In a study that looked at adolescent media perception and daily usage, high self-esteem and strong critical thinking skills about media messages were evaluated to be proven protective factors against developing AN (McLean et al. 2016). It was determined through self-esteem scales, a media literacy questionnaire, as well as measures of depressive symptomatology and maladaptive dieting that negative body media messages can significantly maintain eating disorders. The important theme drawn from all above analyses is that body perfectionist fears contribute largely to eating disorder symptomatology. These fears are often relationally induced

in the context of a personally relevant task, likewise a person may feel most in control of their circumstance by practicing weight management. Within the context of sport, attentivity to one's own body in relation to sport-specific demands exponentially increases as social pressures become more pronounced. Resultingly, available research on perfectionism and how it leads to maladaptive body cognitions for athletes will be discussed in the following section.

SECTION 2: PERFECTIONISM AND IDENTITY

Perfectionism has received increased attention over the years as theorists make new relationships within the domain of unhealthy perfectionism and clinical psychology (Fairburn et al. 2003). In historical efforts to understand the pathways through which perfectionism becomes detrimental, there has been an ongoing debate on whether this construct should be viewed from a uni-dimensional (Shafran et al. 2002) or multi-dimensional perspective (Hewitt and Flett 2003). The idea that perfectionism can be unhealthy for psychological wellbeing was first proposed by theorist Hamacheck (1978) who defines the two predominant types of perfectionism as adaptive and maladaptive. An adaptive perfectionist aims for high personal standards while maintaining the ability to feel accepting of his/her performance in the face of a shortcoming. Meanwhile, a maladaptive perfectionist sets high standards but frequently raises these standards in the face of failure, not feeling satisfied with a current performance due to excessive self/external-criticism.

Theorists who stand behind the uni-dimensional approach adopt a literal stance of Hamachek's theory. In development of the Clinical Perfectionism Model, Shafran and colleagues propose that a neurotic perfectionist can be concretely identified (Shafran et al. 2002). The model

explains that a person's active attention to the negative aspects of failure including one's fear of poor performance is the key pathway through which maladaptive perfectionism is upheld. The theorists also claim that the focus of improvement relies on an affected individual's efforts to reframe maladaptive which is the hallmark of cognitive behavioral therapy. Empirical evidence for the success of Shafran's model can be seen from interventions for clients who suffer from perfectionist rooted disorders such as anorexia nervosa and social anxiety (Wilson & Fairburn, 2002). Still, critics advise against the use of Shafran's model alone as a diagnostic tool. In large, interpersonal factors are not included as a core focus of their model despite this component having been found to play a significant role in critical self-evaluation of body image (Thompson & Sherman 2010).

Proponents of Hewitt & Flett's multi-dimensional model (1991) take the perspective of examining all potential external and internal contributors that sustain maladaptive perfectionist thinking. Specifically, Hewitt & Flett outline the importance of assessing maladaptive perfectionists within the area of socially prescribed perfectionism, personal standards, and concerns over mistakes. Socially prescribed perfectionism is regarded as a principle preserving factor of Eating Disorders in athletic populations (Gotwals & Dunn 2009). This is because perceived pressure from coaches, parents, and fans can overwhelm one's rational decision making for personally fulfilling engagements in exercise and diet. Shafran & colleagues (2002) would argue that it is in the individual's power to feel fulfilled by setting healthy personal goals despite a coach's expectations. However, athletes tend to lose awareness of this option when they are placed in high-level competitive settings dictated by social appraisal. New empirical findings have also shown that one's personal standards and concerns over mistakes change accordingly with a relevant task at hand. For example, in a study of Division 1 intercollegiate female figure

skaters it was found that some athletes exhibited maladaptively high standards in sport however this did not translate over to other life domains such as academics or relationships (Dunn et al. 2011). To summarize, perfectionism is not a trait as clinical psychologists suggest. Rather, evidence supports that perfectionism is situationally dictated by a combination of immediate expected standards and stressors of both a social and personal importance. Hewitt & Flett's model has been extensively applied and adjusted across the domains of family, peer relationships, and sports. Therefore, implications for the ways in which this model may be used to measure maladaptive perfectionism and AN in athletes is discussed in the final section.

SECTION 3: A METHOD OF MEASURING MALADAPTIVE PERFECTIONISM & ANOREXIA NERVOSA

Few empirical studies have been designed to assess how perfectionists react under induced circumstances of high expectations (Besser et al. 2008). Henceforth, theorists have made headway in measuring how socially expected standards interplay with how perfectionists re-evaluate their own standards (Lo & Abbott, 2013). In review of Lo & Abbot's study, participants are asked to complete two sets of anagram tasks with each set comprising of the same ratio of easy to impossible anagrams. Upon completion of the first set, a confederate shares a mock average of anagrams typically solved by others: "4 out of 12 (low expectation) or 9 out of 12 (high expectation)". The second task begins directly after and Lo & Abbott propose that maladaptive participants can be identifiable through their greater persistence on impossible anagrams compared to adaptive perfectionists following the condition where they are told the average is high. To establish construct validity of perfectionist type classifications, participants were additionally asked to complete the Almost Perfect Scale-Revised (APS-R) (Mobley et al.

1996). The APS-R is a 23-item validated scale which contains 2 subscales pertinent to the

current study. The first subscale evaluates high standards a person places towards daily activities

and the second subscale assesses traits of distress under high expected standards. In a following

statistical analysis, the theorists compared time spent on the second set of impossible anagrams

to questionnaire responses. In conclusion, they found that longer reaction times recorded on

impossible anagrams mirrored maladaptive perfectionist responses on the APS-R. Such a

correlation supports Hewitt & Flett's theory that direct manipulation of expected standards can

activate maladaptive perfectionist tendencies.

In replication of Lo & Abbot's study, a variation of Hewitt & Flett's Multidimensional

model of perfectionism may be adapted to measure expected standards in sport related contexts.

In the experiment, college athletes and non-athletes may be asked to first complete the Sport-

MPS-2 (Gotwals & Dunn (2009) adapted from Hewitt & Flett (1991)) which, in place of the

APS-R, would work to establish a valid measure of participants' perfectionist mentalities for

sport. As a supplement, the Sport Identity scale (Yukhymenko-Lescroart 2014) may also be

provided to make a proper distinction between "true" athletes from situational athletes.

Following the administration of both questionnaires, participants may be randomized into a

control or prime group and given instructions to complete an object identification task. Control

groups would be given a neutral prompt with an example instruction such as: "please input the

number of people with yellow hats you see in the auditorium, research has found that participants

with faster reaction times in this task have better performances on school exams". On the other

hand, primed groups would be presented with a sport related prompt such as: "please input the

number of soccer balls you see on the field, research has found that participants who had faster

reaction times in this task have better reflexes in real athletic competition". Following the

prime/neutral task, both groups would be timed for a separate sport-themed item searching task which is not possible to complete. In turn, persisting times on finding the object in the second task would be compared between athletes and non-athletes across control and prime groups for any significant statistical differences. Such a study would aim to support the hypothesis that sport-relevant pressures activate maladaptive cognitions in athletes but the same does not hold true for non-athletes. Moreover, athletes who exhibit maladaptive perfectionist standards are more likely to present with Eating Disorder symptoms than those who exhibit adaptive perfectionist standards. To affirm this second hypothesis, the Eating Attitude Test (Garner et al. 1982) would be administered at the end of the second task for a holistic review of all Anorexia Nervosa symptomatology correlated with maladaptive perfectionist cognitions.

Works Cited

Beals, K. A. (2002). Body dissatisfaction and disordered eating among triathletes [Abstract]. Proceedings of the Southwest American College of Sports Medicine. ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/lehighlibrary-ebooks/detail.action?docID=646553.

Besser, A., Flett, G. L., Hewitt, P. L., & Guez, J. (2008). Perfectionism, and cognitions, affect, self-esteem, and physiological reactions in a performance situation. Journal of Rational-Emotive & Cognitive-Behavior Therapy, 26(3), 206–228. https://doi-org.ezproxy.lib.lehigh.edu/10.1007/s10942-007-0067-0

Collin, P., Karatzias, T., Power, K., Howard, R., Grierson, D., & Yellowlees, A. (2016). Multi-dimensional self-esteem and magnitude of change in the treatment of anorexia nervosa. Psychiatry Research, 237, 175–181. https://doi-org.ezproxy.lib.lehigh.edu/10.1016/j.psychres.2016.01.046

Corning, A. F., Krumm, A. J., & Smitham, L. A. (2006). Differential social comparison processes in women with and without eating disorder symptoms. Journal of Counseling Psychology, 53(3), 338–349. https://doi-org.ezproxy.lib.lehigh.edu/10.1037/0022-0167.53.3.338

Dunn, J. G. H., Craft, J. M., Dunn, J. C., & Gotwals, J. K. (2011). Comparing a domain-specific and global measure of perfectionism in competitive female figure skaters. Journal of Sport Behavior, 34(1), 25–46.

Fairburn, C. G., Cooper, Z., & Shafran, R. (2003). Cognitive behaviour therapy for eating disorders: A "transdiagnostic" theory and treatment. Behaviour Research and Therapy, 41(5), 509–528. https://doi-org.ezproxy.lib.lehigh.edu/10.1016/S0005-7967(02)00088-8

Garner, D. M., Olmsted, M. P., Bohr, Y., & Garfinkel, P. E. (1982). The Eating Attitudes Test: Psychometric features and clinical correlates. Psychological Medicine, 12(4), 871–878. https://doi-org.ezproxy.lib.lehigh.edu/10.1017/S0033291700049163

Gotwals, J. K., & Dunn, J. G. H. (2009). A multi-method multi-analytic approach to establishing internal construct validity evidence: The Sport Multidimensional Perfectionism Scale 2. Measurement in Physical Education and Exercise Science, 13(2), 71–92. https://doi-org.ezproxy.lib.lehigh.edu/10.1080/10913670902812663

Hamachek, d. e. (1978) . Psychodynamics of normal and neurotic perfectionism. psychology, 15, 27–33

Hewitt, P. L., Flett, G. L., Besser, A., Sherry, S. B., & McGee, B. (2003). Perfectionism is multidimensional: A reply to Shafran, Cooper and Fairburn (2002). Behaviour Research and Therapy, 41(10), 1221–1236. https://doi-org.ezproxy.lib.lehigh.edu/10.1016/S0005-7967(03)00021-4

Works Cited cont.

Hewitt, P. L., Flett, G. L., Turnbull-Donovan, W., & Mikail, S. F. (1991). The Multidimensional Perfectionism Scale: Reliability, validity, and psychometric properties in psychiatric samples. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 3(3), 464–468. https://doi-org.ezproxy.lib.lehigh.edu/10.1037/1040-3590.3.3.464

Lo, A., & Abbott, M. J. (2013). The impact of manipulating expected standards of performance for adaptive, maladaptive, and non-perfectionists. Cognitive Therapy and Research, 37(4), 762–778. https://doi-org.ezproxy.lib.lehigh.edu/10.1007/s10608-013-9528-1

McLean, S. A., Paxton, S. J., & Wertheim, E. H. (2016). The measurement of media literacy in eating disorder risk factor research: Psychometric properties of six measures. Journal of Eating Disorders, 4. Retrieved from http://search.ebscohost.com.ezproxy.lib.lehigh.edu/login.aspx?direct=true&db=psyh&AN=2016-55437-001&site=ehost-live

Mobley, M., Slaney, R. B., & Rice, K. G. (2005). Cultural validity of the Almost Perfect Scale--Revised for African American college students. Journal of Counseling Psychology, 52(4), 629–639. https://doi-org.ezproxy.lib.lehigh.edu/10.1037/0022-0167.52.4.629

Pasman, L., & Thompson, J. K. (1988). Body image and eating disturbance in obligatory runners, obligatory weightlifters, and sedentary individuals. International Journal of Eating Disorders, 7(6), 759–769. https://doi-org.ezproxy.lib.lehigh.edu/10.1002/1098-108X(198811)7:6<759::AID-EAT2260070605>3.0.CO;2-G

Shafran, R., Cooper, Z., & Fairburn, C. G. (2002). Clinical perfectionism: A cognitive-behavioural analysis. Behaviour Research and Therapy, 40(7), 773–791. https://doi-org.ezproxy.lib.lehigh.edu/10.1016/S0005-7967(01)00059-6

Thompson, R. A., & Sherman, R. T. (2010). Eating disorders in sport. Routledge/Taylor & Francis Group.

Wedding, D., & Corsini, R. J. (1989). Case studies in psychotherapy (D. Wedding & R. J. Corsini (Eds.)). F E Peacock Publishers.

Wilson, G. T., & Fairburn, C. G. (2002). Treatments for eating disorders. In P. E. Nathan & J. M. Gorman (Eds.), A guide to treatments that work., 2nd ed. (pp. 559–592). Oxford University Press.

Yukhymenko-Lescroart, M. A. (2014). Students and athletes? Development of the Academic and Athletic Identity Scale (AAIS). Sport, Exercise, and Performance Psychology, 3(2), 89–101. https://doi-org.ezproxy.lib.lehigh.edu/10.1037/spy0000009.supp