



Perfectionism and attitudes toward cognitive enhancers (“smart drugs”)



Joachim Stoeber ^{a,*}, Sarah Hotham ^b

^a School of Psychology, University of Kent, Canterbury, United Kingdom

^b Centre for Health Services Studies, University of Kent, Canterbury, United Kingdom

ARTICLE INFO

Article history:

Received 7 July 2015

Received in revised form 15 August 2015

Accepted 5 September 2015

Available online 21 September 2015

Keywords:

Perfectionism

Attitudes

Pharmacological cognitive performance

enhancement

Smart drugs

Morality

Cheating

Social pressure

Health and safety

ABSTRACT

Perfectionism is a personality disposition characterized by exceedingly high standards of performance and pressure to be perfect which may incline students to take cognitive enhancers (“smart drugs”) to boost their academic performance. So far, however, no study has investigated the relationships of multidimensional perfectionism and attitudes toward cognitive enhancers. The present study investigated these relationships in 272 university students examining different dimensions of perfectionism. Results showed that socially prescribed perfectionism, perfectionist concerns and doubts, and perceived parental pressure to be perfect showed positive correlations with attitudes favoring the use of cognitive enhancers. In contrast, self-oriented perfectionism, perfectionist personal standards, and organization showed negative correlations. The findings suggest that perfectionism may play a role as both a risk factor for and a protective factor against using cognitive enhancers depending on what dimensions of perfectionism are regarded.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

Perfectionism is a personality disposition characterized by exceedingly high standards of performance (Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt & Flett, 1991). Students with perfectionist personal standards have higher aspirations at university: not only do they think they should get better grades in exams than students who do not have such high standards; they also value grades that are not top of the class less than other students (Bieling, Israeli, Smith, & Antony, 2003; Brown et al., 1999). Surveys show that more and more students use cognitive enhancers (or “smart drugs”) to help them focus when preparing for exams and when taking exams (Naeem, 2014). Cognitive enhancers are prescription drugs like Ritalin®, Adderall®, and Provigil® that were developed for the treatment of cognitive decline (e.g., dementia in elderly people) or cognitive disturbance in younger people (e.g., attention deficit hyperactivity disorder, ADHD), but can also be used to enhance cognitive performance (e.g., concentration, memory function) in healthy individuals. Because perfectionist students have higher academic standards than non-perfectionist students, it is conceivable that they have more positive attitudes toward cognitive enhancers and are more tempted to use them than non-perfectionist students. So far, however, no study has

investigated the relationships between perfectionism and attitudes toward cognitive enhancers. The present research represents the first such investigation.

1.1. Multidimensional perfectionism

When investigating perfectionism, it is important to take into account that perfectionism is best conceptualized as a multidimensional personality disposition. The two most influential and widely researched models of multidimensional perfectionism are Frost et al.'s (1990) and Hewitt and Flett's (1991). Frost et al.'s (1990) model differentiates six dimensions: personal standards, concern over mistakes, doubts about actions, parental expectations, parental criticism, and organization. In this, personal standards reflect perfectionists' exceedingly high standards of performance. Concern over mistakes reflects perfectionists' concern about making mistakes and the negative consequences that mistakes have for their self-evaluation, whereas doubts about actions reflect a tendency toward indecisiveness related to a fear of not doing the right thing. In contrast, parental expectations and parental criticism refer to perfectionists' perceptions that their parents expect them to be perfect and are critical if they fail to meet these expectations. Finally, organization refers to perfectionist tendencies to be organized and value order and neatness. Factor analytic studies investigating the dimensionality of Frost et al.'s model, however, consistently found fewer than six dimensions (Purdon, Antony, & Swinson, 1999; Cox, Enns, & Clara, 2002) with the majority of studies suggesting that four

* Corresponding author at: School of Psychology, University of Kent, Canterbury, Kent CT2 7NP, United Kingdom.

E-mail address: J.Stoeber@kent.ac.uk (J. Stoeber).

dimensions—combining concern over mistakes and doubts about actions to one dimension, and parental expectations and parental criticism to one dimension—best capture the dimensionality of the model (Harvey, Pallant, & Harvey, 2004; Stöber, 1998; Stumpf & Parker, 2000).

In comparison, Hewitt and Flett's (1991) model differentiates three dimensions of perfectionism: self-oriented, other-oriented, and socially prescribed. Self-oriented perfectionism reflects beliefs that striving for perfection and being perfect are personally important. In contrast, other-oriented perfectionism reflects beliefs that it is important for others to strive for perfection and be perfect. Finally, socially prescribed perfectionism reflects beliefs that striving for perfection and being perfect are important to others. Socially prescribed perfectionists believe that others expect them to be perfect, and that others will be highly critical of them if they fail to meet these expectations.

A number of studies have compared the two models of perfectionism (e.g., Frost, Heimberg, Holt, Mattia, & Neubauer, 1993). They found that concerns and doubts (concern over mistakes, doubts about actions), parental pressure (parental expectations, parental criticism), and socially prescribed perfectionism represent dimensions of perfectionism reflecting maladaptive evaluation concerns that are associated with feelings, cognitions, and behaviors indicative of psychological maladjustment (e.g., avoidant coping, negative affect). In comparison, personal standards, organization, self-oriented perfectionism, and other-oriented perfectionism represent dimensions of perfectionism reflecting positive strivings that are often associated with feelings, cognitions, and behaviors indicative of psychological adjustment (e.g., active coping, positive affect), particularly when the overlap with the maladaptive evaluative concerns dimensions of perfectionism is statistically controlled for and unique relationships are regarded (see Stoeber & Otto, 2006, for a review). Consequently, it can be expected that the different perfectionism dimensions also show different relationships with attitudes toward cognitive enhancers.

1.2. Multidimensional perfectionism and attitudes toward performance-enhancing drugs

Whereas there are no studies on perfectionism and attitudes toward cognitive enhancers, one study investigated perfectionism and use of psychostimulants (Low & Gendaszek, 2002). The study found that perfectionism was not associated with self-reported use of psychostimulants in undergraduate students. The study, however, did not differentiate between prescription (e.g., Adderall®) and non-prescription drugs (e.g., cocaine). Moreover, it only examined overall perfectionism, combining all dimensions of Frost et al.'s (1990) model into an overall perfectionism score. Because different perfectionism dimensions have shown different relationship with psychological adjustment and maladjustment (Stoeber & Otto, 2006), it is difficult to interpret Low and Gendaszek's (2002) null finding.

Furthermore, there are three studies that investigated perfectionism and positive attitudes toward performance enhancing drugs in sport or "doping" (Bahrami, Yousefi, Kaviani, & Ariapooran, 2014; Madigan, Stoeber, & Passfield, *in press*; Zucchetti, Candela, & Villosio, 2015). In all three studies, the Performance Enhancement Attitude Scale (Petróczi & Aidman, 2009) was used to measure positive attitudes toward doping. Zucchetti et al. (2015) examined a mixed sample of athletes and found perfectionism to predict positive attitudes toward doping. Unfortunately, the study used a multidimensional measure of perfectionism, but combined all dimensions to form an overall perfectionism score and thus did not investigate whether the different dimensions showed different relationships with attitudes toward doping. This was different in the other two studies. Bahrami et al. (2014) examined bodybuilders and found perfectionist personal standards and concern over mistakes to show positive correlations with positive attitudes toward doping, but not external pressure to be perfect (parental pressure, coach pressure). Madigan et al. (*in press*) examined junior athletes. They found parental pressure to be perfect to show a positive

correlation with positive attitudes toward doping whereas perfectionist strivings, perfectionist concerns, and coach pressure showed nonsignificant correlations when bivariate correlations were regarded. However, when multiple regressions were conducted controlling for the overlap between the perfectionism dimensions, perfectionist strivings showed a negative relationship with positive attitudes toward doping.

It is unclear how to explain the contradictory findings of Bahrami et al. (2014) and Madigan et al. (*in press*) because the two studies examined samples that are difficult to compare (bodybuilders, junior athletes). Moreover, only Madigan et al. (*in press*) conducted analyses investigating the unique relationships of the different perfectionism dimensions by statistically controlling for the overlap between the dimensions. Finally, it is unclear how indicative these findings are for research on perfectionism and cognitive enhancers in students because perfectionism may show different relationships in sport versus academia (Dunn, Gotwals, & Causgrove Dunn, 2005). Furthermore, doping in sport is illegal whereas taking prescription drugs as cognitive enhancers is not. Hence, the findings on perfectionism and attitudes toward doping may not generalize to attitudes toward cognitive enhancers.

1.3. The present study

Against this background, the aim of the present study was to provide a first investigation of how multidimensional perfectionism is related to attitudes toward cognitive enhancers. Following the relevant literature (Schelle, Faulmüller, Caviola, & Hewstone, 2014), we explored the relationships of the four dimensions of Frost et al.'s (1990) model of perfectionism and the three dimensions of Hewitt and Flett's (1991) model with positive attitudes, moral acceptability, perceptions of misuse, perceived pressure, and authenticity as well as health and safety concerns and pro-regulation attitudes regarding cognitive enhancers. As this was the first study on perfectionism and attitudes toward cognitive enhancers (and the contradictory findings from research on perfectionism and attitudes toward doping provided little guidance), we were cautious in making specific predictions except that we expected the dimensions of the two model of perfectionism to show different relationships with attitudes toward cognitive enhancers. Hence, the study was largely exploratory.

2. Method

2.1. Participants

A sample of 272 students (35 men, 237 women) at the University of Kent was recruited via the School of Psychology's Research Participation Scheme. Mean age of students was 20.2 years ($SD = 4.2$). Students volunteered to participate for a £50 raffle (~US \$77) or extra course credit. Participants completed all measures online using the School's Qualtrics® platform, which required to respond to all questions to prevent missing data.

2.2. Measures

2.2.1. Multidimensional perfectionism

To measure the four dimensions of Frost et al.'s (1990) model, we used the 35-item Frost Multidimensional Perfectionism Scale (FMPS; Frost et al., 1990) capturing personal standards (e.g., "I have extremely high goals"), concern over mistakes ("If I fail at work/school, I am a failure as a person"), doubts about actions ("I usually have doubts about the simple everyday things that I do"), parental expectations ("My parents wanted me to be the best at everything"), parental criticism ("As a child, I was punished for doing things less than perfect"), and organization ("Organization is very important to me"). Participants were asked to what degree they agreed with each statement and responded on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Following Stumpf

Download English Version:

<https://daneshyari.com/en/article/889915>

Download Persian Version:

<https://daneshyari.com/article/889915>

[Daneshyari.com](https://daneshyari.com)