

Running Head: Self-Deception Enhancement and Well-being

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Abstract: *Despite the prevalence of self-enhancing biases, their impact on psychological well-being remains a neglected area of research. This study explores the relationship between self-deceptive enhancement and psychological well-being, with a focus on the moderating role of friend's empathy. A total of 544 young adults (Mean age = 18.59 years) and their friends (Mean age = 18.57 years) participated in the study. Friend's empathy, both cognitive and affective, buffers this relationship, leading to better outcomes. Self-deceptive enhancement accounts for 22.2% of the variance in psychological well-being, with friend's empathy having a positive moderating effect. The main argument is that balanced self-deceptive enhancement and friend's empathy can lead to better psychological well-being, highlighting the importance of social relationships in mental health. This study contributes to theoretical development by integrating self-deceptive enhancement and empathy literatures, shedding light on the complex interplay between self-perception, social support, and mental health. The findings provide valuable insights into the adaptive functions of self-deceptive enhancement and the crucial role of empathy in promoting psychological well-being.*

Keywords: Self-Deceptive Enhancement, Friend's Empathy, Psychological well-being.

Introduction

Positive psychology, as a field of study, focuses on the conditions and processes that enable individuals to thrive and flourish (Gable & Haidt, 2005; Seligman & Csikszentmihalyi, 2014). In its early years, positive psychology also explored the positive health effects associated with optimistic biases or positive illusions (Taylor et al., 2000; Koydemir & Şimşek, 2020). For instance, individuals often engage in self-enhancing deceptions, such as exaggerating their well-being to conform to social norms (Steinel et al., 2010; Cohen & Sherman, 2014). Additionally, people may distort reality to enhance their physical appearance or status to increase their attractiveness to potential partners or employers (Steinel et al., 2010; Toma & Hancock, 2013). Self-serving deceptions may also be employed to avoid consequences or protect oneself from perceived threats (Ekman, 2009; Steinel et al., 2010; ten Brinke & Porter, 2019). However, the motivations underlying these deceptions are multifaceted and may include self-esteem maintenance, positive affect enhancement, negative affect reduction, self-concept and self-presentational concerns, and the need for social approval (Gonzalez et al., 2020; Robin & Paulhus, 2001; Brown, 1998; Tesser, 1988; Orth & Robins, 2014). These biased self-perceptions constitute the core concept of self-deceptive enhancement.

Self-deceptive enhancement, a pervasive phenomenon, involves distorting reality to enhance one's self-image, often through exaggerating positive qualities, achievements, or experiences (Gonzalez et al.,

2020). This multifaceted concept comprises various dimensions, including cognitive self-deception, characterized by biased thinking and perception (Koriat, 2017); affective self-deception, involving emotional manipulation and regulation (Paulhus & Bucko, 2012); and behavioral self-deception, encompassing actions taken to maintain a false self-image (Tackett et al., 2017). These dimensions intersect and influence one another, contributing to the complex nature of self-deceptive enhancement.

The relationship between self-deceptive enhancement and well-being has been the subject of two disparate perspectives in the literature. On one hand, some researchers argue that self-deceptive enhancement is maladaptive, as it may lead to unrealistic expectations and a lack of preparedness for real-life challenges (Gonzalez et al., 2020). This, in turn, can result in stagnation and missed opportunities for personal growth. The maladjustment of self-enhancers may be attributed to the setting of unrealistically high goals, leading to frequent failure and subsequent low well-being (Orth & Robins, 2014; Robins & Beer, 2001).

On the other hand, an equally prominent view posits that self-deceptive enhancement is associated with positive mental health outcomes (Koydemir & Şimşek, 2020; Holtzman & Strube, 2011; Goorin & Bonanno, 2009; Taylor & Sherman, 2008; Sedikides et al., 2007; Marshall & Brown, 2007; Taylor & Brown, 1994). According to this perspective, positive self-descriptions are linked to action orientation, mastery, and stress resistance, ultimately facilitating productive work and resilience. Self-deceptive enhancers are more likely to form and maintain satisfying relationships, exhibit increased resilience to threats, and gain popularity among their peers, resulting in enhanced social acuity. Empirical findings suggest that self-enhancement is an effective tool for promoting health and happiness, with unrealistically positive self-descriptions being positively associated with general measures of psychological well-being (Hart & Cooper, 2019; Taylor et al., 2003a, 2003b). Self-deceptive enhancement was associated with increased life satisfaction and positive emotions, but only among individuals with high levels of self-esteem (Gonzalez et al., 2020). Another study found that self-deceptive enhancement was linked to improved mental health outcomes, but only when accompanied by high levels of self-awareness (Weissman & Gorlin, 2020).

The dichotomous perspectives on self-deceptive enhancement have sparked fervent empirical and theoretical debate, yielding a contentious landscape. A pivotal point of contention revolves around the nuanced relationship between overly positive self-descriptions and psychological well-being, as the costs and benefits of self-deceptive enhancement in this context remain unclear (Dufner et al., 2019; Gonzalez et al., 2020; Hart & Cooper, 2019). In light of this ambiguity, the present study aims to investigate the effect of self-deceptive enhancement on the psychological well-being of young adults, with a dual focus on both unadjusted and socio-demographically controlled estimates. By doing so, this research seeks to contribute to the ongoing discourse and provide a more comprehensive understanding of the complex dynamics at play (Koydemir & Şimşek, 2020; Orth & Robins, 2014).

Individuals often engage in self-enhancement strategies to garner social approval and desirability, which in turn contributes to their overall well-being (Caputo, 2017). The primary objective of self-enhancers is to construct a favorable impression, achieved through the utilization of desirable self-presentation and promotional techniques, thereby increasing social approval from others. Such self-promoting behaviors share a commonality with empathetic attitudes towards others, as empathy enables individuals to understand and connect with others' emotions and perspectives (Janovic et al., 2003). Empathy is a multifaceted construct that encompasses understanding, social and moral responsibility (Halpern & Weinstein, 2004), relationship building and maintenance (Del Barrio et al., 2004), and the ability to recognize and respond to others' emotional states with compassion and concern (Oberle et al., 2010; Gleichgerricht & Decety, 2013; Riess et al., 2012). Furthermore, research has demonstrated that having empathetic friends can facilitate social adjustment, as high empathy is linked to pro-social behavior (Eisenberg, 2000; Davis, 1994; Miller & Eisenberg, 1988; Batson et al., 1987). However, as noted by Janovic et al. (2003), empathizing abilities can also be exploited to misinterpret others'

intentions, potentially fueling self-enhancing behaviors aimed at achieving desirable objectives.

Empathy plays a crucial role in moral behaviors, encompassing both affective and cognitive components (Sahin, 2012; Jolliffe & Farrington, 2006, 2011; Hoffman, 2001). It enables individuals to engage in perspective-taking, understanding, and vicariously experiencing the emotional states of others (Albiero et al., 2009; Jolliffe & Farrington, 2011; Sahin, 2012). A substantial body of empirical research underscores the significance of empathy in the socialization process, as it profoundly influences the quality of interpersonal relationships. By fostering pro-social interactions, empathy facilitates emotional connections with others, promoting awareness of their thoughts and feelings (Jolliffe & Farrington, 2006, 2011; Sahin, 2012). Moreover, empathy is a critical determinant in the development of secure and enduring friendships (Hay, 1994). Notably, individuals with high empathic tendencies often strive to alleviate the discomfort of others, driven by either altruistic motivation (e.g., a genuine desire to assist) or selfish reasons (e.g., a desire to reduce vicarious distress) (Jolliffe & Farrington, 2011, p. 34).

Empirical evidence suggests that heightened empathy is associated with more supportive relationships (Smith & Rose, 2011), enhanced conflict resolution skills (Van Lissa et al., 2016), and improved relationship quality (Boele et al., 2019). Moreover, empathy has been identified as a potent mitigating factor against negative consequences (Halpern & Weinstein, 2004). However, it is also acknowledged that empathy is not always a uniformly positive force in interpersonal relationships (Wispe, 1986). Notably, the complex interplay between empathy and deception in social contexts remains underexplored (Bubandt & Willerslev, 2015). Despite the significance of peer influence during adolescence and early adulthood, the empirical literature has neglected the role of friends' empathy in shaping individuals' psychological makeup.

This study hypothesizes that self-deceptive enhancement will be positively associated with psychological well-being, indicating that individuals who engage in self-deceptive enhancement tend to experience higher levels of psychological well-being. Additionally, this study proposes that friend's empathy will moderate the relationship between self-deceptive enhancement and psychological well-being. Specifically, it is expected that high empathy will buffer the negative effects of self-deceptive enhancement, suggesting that having empathetic friends can mitigate the potential drawbacks of self-deceptive enhancement and promote healthier psychological well-being.

This study is guided by the Social Cognitive Theory (SCT) (Bandura, 1986) and the Empathy-Altruism Hypothesis (Batson et al., 1987). SCT posits that individuals learn and adapt through observing others, self-regulation, and reinforcement, suggesting that self-deceptive enhancement can be a coping mechanism to maintain self-esteem and social approval. The Empathy-Altruism Hypothesis proposes that empathy can motivate prosocial behavior and mitigate the negative effects of self-deceptive enhancement. Building on these theoretical frameworks, this study aims to address the existing gap in research by examining the moderating effect of friends' empathy on the relationship between self-deceptive enhancement and psychological well-being. By controlling for demographic factors, this study seeks to clarify the precise role of self-deceptive enhancement in explaining psychological well-being. Moreover, the inclusion of friends' empathy addresses a critical gap in research on self-deceptive enhancement and psychological well-being, providing a more comprehensive understanding of their interplay. Given their shared underlying mechanisms for desirable outcomes, yet distinct existence, this study hypothesizes a positive moderating effect of friends' empathy on the relationship between self-deceptive enhancement and psychological well-being.

Method

Participants

This study employed a multi-respondent design, comprising 544 young adults (Mean age = 18.59, SD = 2.10; 46% males) and their 544 nominated best friends (Mean age = 18.57, SD = 2.19; 47% males).

Participants were recruited from various public and private colleges and universities. Friends were selected based on participants' nominations as close friends.

Self-deceptive Enhancement

Self-deceptive enhancement was measured by Self-deceptive Enhancement subscale of the adapted version of Paulhus' Comprehensive Inventory of Desirable Responding scale (Aftab & Malik, 2020). The subscale consists of 12 items inventory. An example item is "Every day I come up with creative, ingenious ideas." On a seven-point likert scale (1 = strongly disagree; 7 = strongly agree), participants indicated their agreement with each item. Higher scores show high tendency of participants to evaluate themselves as overly positive. Previous studies showed alpha coefficients ranging from 0.62 to 0.90 (Tonkovic, Galic & Jerneic, 2011; Stober, Dette, & Musch, 2002; Paulhus, 1988) suggesting substantial evidences of internal consistency.

Basic Empathy Scale

The Basic Empathy scale (Jolliffe & Farrington, 2006) is a 20-item measure that uses a 5-point Likert type response option ranging from 1 "Strongly Disagree" to 5 "Strongly Agree". The 9 items estimate cognitive empathy (example, I can understand my friend's happiness when she/he does well at something), and the remaining 11 items estimate affective empathy (example, after being with a friend who is sad about something, I usually feel sad). The scale consist seven reverse scored items. High score indicates higher level of cognitive and affective empathy. The reliability of the cognitive empathy subscale ranges from $\alpha = .70$ to $\alpha = .79$ and the reliability of the affective empathy subscale ranges from $\alpha = .60$ to $\alpha = .85$ (Van Langen et al., 2014; Kahn, 2014; Jolliffe & Farrington, 2006).

Psychological Well-being

The Ryff's (1989) Psychological Well-being scale consists of 42 item with six-point rating scale (1 = strongly disagree, to 6 = strongly agree). Sample items include "I think it is important to have new experiences that challenge how you think about yourself and the world." The scale consists of six subscales and the composite scale score represent overall psychological well-being. For the present study, the composite score is used. Higher score indicating higher level of psychological well-being. Previous studies showed evidences of good internal consistency with alpha coefficients score ranging from .81 to .88 (Fattahi, 2016; Shahidi, French, Shojae, & Zenin, 2019; Sharma & Sharma, 2018).

Procedure

Participants and their friends were approached, and the study's purpose was explained, ensuring voluntary participation and confidentiality. Informed consent was obtained before distributing the questionnaires. Participants received Booklet-A, containing measures of self-deceptive enhancement and Psychological Well-being, while their friends received Booklet-B, containing measures of Basic Empathy and Religious Orientation. Returned questionnaires were screened for outliers and incomplete responses, resulting in the exclusion of cases with incomplete data. Data were analyzed using SPSS 21, employing descriptive and inferential statistics to examine relationships between variables.

Results

To see the relationship pattern between the study variables, Pearson bivariate correlation analyses were used. In order to test the predictive role of self-deceptive enhancement in psychological well-being, two-step hierarchical multiple linear regression analysis was conducted using socio-demographic characteristic (age gender, education) as control variables in the first step. Finally, moderation analysis was carried out to test moderating role of friend's cognitive and affective empathy for the relationship between self-deceptive enhancement and psychological well-being.

The results of bivariate correlations (table 1) showed a positive relationship ($r = .48$, $p < .01$) between both (affective & cognitive) components of friend's empathy and both these are also positively

associated with self-deceptive enhancement ($r = .19, r = .18$ respectively; $p < .01$) and psychological well-being ($r = .27, r = .21$, respectively; $p < .01$). Further, Self-deceptive enhancement is also positively associated with psychological well-being ($r = .50, p < .01$).

Participant gender is positively correlated with self-deception enhancement, friend's cognitive and affective empathy, and psychological well-being ($r = .10, r = .23, r = .2, r = .17$ respectively; $p < .01$). It showed that self-deceptive enhancement and psychological well-being are more in females and females are also receiving more cognitive and affective empathy from friends. This was also confirmed by, the *t-test* indicating that self-deceptive enhancement and psychological functioning is high in females ($M = 51.84; M = 97.68$) as compared to males ($M = 49.8; M = 92.48$) participants.

Further, participants' age is negatively correlated with self-deceptive enhancement and psychological well-being ($r = -.12, r = -.21$, respectively; $p < .01$). It indicated that self-deceptive enhancement and psychological well-being decreases with age. Gender of the friend is also positively correlated with their self-reported cognitive and affective empathy ($r = .24, r = .28, r = .20$, respectively; $p < .01$) and the psychological well-being of young adults ($r = .20, p < .01$). It showed that female friends are more empathic toward participant and have more role in their psychological well-being compared to male friend. Friend's age is negatively associated with self-deceptive enhancement and psychological well-being ($r = -.15, r = -.22$, respectively; $p < .01$). It indicated that self-deceptive enhancement and psychological well-being decreases for participants having older friend.

Multiple linear regression analysis (table 2) was used to test predictive role of self-deceptive enhancement in explaining psychological well-being. In the first model, gender, age and education accounted 8.3% variance in psychological well-being. In the second model self-deceptive enhancement was added as predictor which positively predicted psychological well-being ($B = .72, p < .01$) and explained 20.6% additional variance in psychological well-being.

Moderating role of friends reported empathy toward participants was tested using the PROCESS macro (2018). The results (table 3) showed that after controlling for the age, gender and education, the effect of self-deceptive enhancement on psychological well-being is positively moderated by both cognitive empathy ($B\text{-Interaction} = .03, p < .01$) and affective empathy ($B\text{-Interaction} = -.02, p > .01$). These moderations added 3.1% explained variance resulting in a total of 32% explained variance in the psychological well-being among young adults.

Discussion

The aim of the study was to examine the relationship between self-deceptive enhancement and psychological well-being, controlling for socio-demographic variables (gender, age, & education). Main contribution of the present study lies in testing the role of friend's empathy as a buffering factor that encourages self-deceptive enhancement and may reflect in psychological well-being of young adults. Results supported previous findings suggesting that self-deceptive enhancement is an important contributor and it enhances individual's psychological well-being (Taylor & Brown, 1988; Taylor, Lerner, Sherman, Sage, & McDowell, 2003a, 2003b; Otter & Egan, 2007; Kwan, Kuang, & Zhao, 2008). However, in contradiction to previous findings, results of the study showed that demographic variables account for a substantial amount of variance in well-being measures (Caputo, 2017; Inglehart, 2002; Inglehart & Klingemann, 2000).

Further, the study examined the pattern of relationships between self-deceptive enhancement, psychological well-being, and friends reported empathy (cognitive & affective). The result of the study shows a positive relationship between self-deceptive enhancement and psychological well-being that is consistent with previous findings (Holtzman & Strube, 2011; Goorin & Bonanno, 2009; Taylor & Sherman, 2008; Sedikides et al., 2007; Marshall & Brown, 2007; Taylor, et al., 2003a, 2003b). Additionally, as we hypothesized, the cognitive and affective empathy reported by friends of the participants toward friends were also positively with self-deceptive enhancement and psychological

well-being.

Results of the moderation analysis supported the assumptions of the study suggesting that friend's empathy play an important role in influencing the relationship between self-deceptive enhancement and psychological well-being. As friend's cognitive and affective empathy increased the effect of self-deceptive enhancement on the psychological well-being of participants. This suggests that the friend's appreciation is considered as an indicator of valid impression presentation both at cognitive and emotional level for the use of self-deceptive enhancement. Therefore, empathy does have buffering effect on the relationships between self-deceptive enhancement and psychological well-being. The study results are supported by the earlier literature showing that empathic engagement leads to improvement in other's satisfaction (Del Canale et al., 2012) and health and well-being (Hojat et al., 2015; West et al., 2006; Kim, Kaplowitz, & Johnston, 2004).

The present research has important implications for mental health and adjustment. From the theoretical point of view, present study will enrich the preceding literature as the findings of the present study address gaps in literature and provide considerable new information to understand importance friend's empathy for the relationship between self-deceptive enhancement and psychological well-being. The findings of this study have profound implications for the development of effective mental health interventions. By shedding light on the critical role of empathetic friendships in amplifying the positive effects of self-deceptive enhancement on psychological well-being, our research suggests that empathy-based interventions may hold the key to unlocking improved mental health outcomes. Moreover, our results underscore the vital importance of cultivating and maintaining robust social support networks, particularly in populations where social isolation and loneliness are prevalent. By harnessing the synergistic effects of self-deceptive enhancement and friend's empathy, mental health professionals can craft targeted interventions that genuinely promote psychological flourishing. Ultimately, this study contributes meaningfully to the positive psychology canon, emphasizing the transformative power of empathy and self-deceptive enhancement in fostering psychological well-being, and highlighting the need to prioritize empathy in our interpersonal connections.

The multi-informant data is the strength of the study, however, limitations of the study also need to be taken into account. Firstly, the cross-sectional design of the study does not allow for the establishment of causality between the variables, and therefore, the findings require reconfirmation using a longitudinal design. Secondly, the study only focused on young adults, and future research should extend the investigation to other age groups, including older and younger populations. Additionally, the study relied on self-reported measures, which may be subject to biases and limitations. Furthermore, the study did not control for other potential variables that may influence the relationship between self-deceptive enhancement, friend's empathy, and psychological well-being. Finally, the study's findings may not be generalizable to other cultural contexts, and future research should aim to replicate the study in diverse cultural settings.

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