Self-handicapping and pain catastrophizing

Ahmet Uysal *, Qian Lu

Department of Psychology, 126 Heyne Building, University of Houston, Houston, TX 77204-5022, USA

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ABSTRACT

The present study investigated whether dispositional self-handicapping (tendency to create or claim obstacles to performance in order to protect the self from negative attributions) predicts pain catastrophizing and self-reported pain. Based on the idea that exaggerated claims of pain provides a potential and an easy way to self-handicap, it was hypothesized that trait self-handicapping would be related to pain catastrophizing, which in turn, would be associated with higher levels of self-reported pain. A sample of undergraduate students ($N = 251$) completed measures of self-handicapping, pain catastrophizing, and self-reported pain. It was found that self-handicapping was moderately associated with pain catastrophizing, accounting for 20% of the variance in pain catastrophizing. Furthermore, mediation analyses suggested that pain catastrophizing fully mediated the association between self-handicapping and pain.

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1. Introduction

Self-handicapping is a defensive strategy in which people create or claim obstacles before a performance in order to manipulate attributions after the performance (Jones & Berglas, 1978; Rhodewalt, 1990). Self-handicappers aim to protect or enhance the self based on attribution principles of discounting and augmentation (Kelley, 1972). That is, if a self-handicapper is unsuccessful, the handicap accounts for the failure and the internal attributions to self are discounted (e.g., "I didn't do well because of my headache, not because of my lack of ability"). On the other hand, if a self-handicapper is successful, the ability attributions are augmented because the self-handicapper displayed a good performance in spite of the handicap (e.g., "I did well in spite of my headache, I must be very capable"). Research has shown that people can self-handicap behaviorally by engaging in actual behaviors that would impede a performance (e.g., a student partying all night before an important exam) or by claiming handicaps (e.g., an executive officer claiming to be under the weather before an important business meeting) (Arkin & Baumgardner, 1985). On the other hand, trait self-handicapping as measured by the self-handicapping scale (Rhodewalt, 1990) is a personality construct that reflects habitual or chronic self-handicapping in case of a self-evaluative threat.

Research has revealed various characteristics of self-handicappers. Self-handicappers are uncertain about their abilities and have self-doubts (Berglas & Jones, 1978; Oleson, Poehlmann, Yost, Lynch, & Arkin, 2000). They have a history of non-contingent success; they are uncertain about being able to repeat their past successes, and display low self-esteem (Rhodewalt, 1990). They also tend to have fixed entity beliefs about competence (Rhodewalt, 1994), believing that abilities can be demonstrated but not improved. Furthermore, self-handicappers have higher scores on neuroticism (Ross, Canada, & Rausch, 2002) and lower scores on perfectionism (Pulford, Johnson, & Awaida, 2005).

Recently, a set of longitudinal studies have shown that trait self-handicapping is associated with lower health and well-being, higher negative mood, more symptoms, and self-reported use of various substances (Zuckerman & Tsai, 2005). Furthermore, the findings also suggested that self-handicapping and maladjustment reinforce each other over time. Similarly, in another study trait self-handicapping was found to be associated with lower life satisfaction (Christopher, Lasane, Troisi, & Park, 2007).

1.1. Self-handicapping and pain

Although past studies examined the association between self-handicapping and general health, we are not aware of any studies that investigated associations between trait self-handicapping and pain. Only in one experimental study participants were given the opportunity to self-handicap by rating how painful the cold-pressor task was (Mayerson & Rhodewalt, 1988). In the study participants were told that they would be taking two verbal intelligence tests under different conditions. After the first test, half of the participants were given performance contingent success feedback (control condition) and the other half was given performance non-contingent success feedback (self-handicapping condition). Non-contingent success feedback induces self-doubt which promotes self-handicapping. Results showed

* Corresponding author. Tel.: +1 713 743 8500.
E-mail address: auysal@uh.edu (A. Uysal).

that participants in the self-handicapping condition reported higher levels of pain before taking a verbal intelligence test than did participants in the control condition. Furthermore, they also attributed greater performance impairment to the pain than did the control condition participants. Although the study of Mayerson and Rhodewalt (1988) clearly demonstrated that individuals can report or exaggerate pain as a self-handicapping strategy, the study did not examine the association between trait self-handicapping and general pain.

We propose that exaggerating pain provides a viable self-handicapping strategy that would be commonly endorsed by self-handicappers. Pain is part of our lives, everybody suffers from pain now and then, which makes claims or exaggeration of pain an easily accessible strategy. Furthermore, pain is subjective and unobservable to others, which also makes it a convincing and a safer way to self-handicap.

1.2. Pain catastrophizing

Pain catastrophizing is defined as "an exaggerated negative mental set brought to bear during actual or anticipated painful experience" (Sullivan et al., 2001). It involves magnification and rumination of pain, and feelings of helplessness (Sullivan, Bishop, & Pivik, 1995). Many studies have shown that pain catastrophizing is detrimental to various emotional and physical outcomes such as intense pain experience and heightened emotional distress (Sullivan et al., 2001). Furthermore, catastrophizers with chronic pain display higher levels of disability (Martin et al., 1996), increased pain medication usage (Jacobson & Butler, 1996), longer hospitalization (Gil et al., 1993), longer recovery after surgery (Kendell, Saxby, Farrow, & Naisby, 2001).

Pain catastrophizing is thought to have a communal function such that pain catastrophizers seek to solicit social support and empathic reactions from close others (Sullivan et al., 2001). Catastrophizers are also more likely to feel entitled to pain related support, which ironically elicits negative responses from close others (Cano, Leong, Heller, & Lutz, 2009). Whereas harmful to pain management, we think that pain catastrophizing allows potential failures (e.g., work or academic performance) to be attributed to pain rather than to self (e.g., "I didn't do well because of this awful pain"). That is, pain catastrophizing may also have a self-protection function as a self-handicapping strategy.

1.3. The present study

Based on the idea that pain catastrophizing provides a potential way to self-handicap, we hypothesized that self-handicappers would be more likely to catastrophize pain. Moreover, catastrophizing, in turn, would predict higher levels of self-reported pain. In other words, it was expected that there would be an association between self-handicapping and self-reported level of pain, which would be mediated by pain catastrophizing. We tested this model in a cross-sectional study.

2. Method

2.1. Participants and procedure

Participants were recruited from undergraduate students in the participant pool of University of Houston. The study was approved by the IRB of the university prior to recruitment. Those who were interested and agreed to participate completed an online survey and received extra course credit in return. A total of 255 students participated in the study. Four participants who had extreme outlier scores, with a cutoff point of four standard deviations, were

dropped. Normality assumptions were reasonably met. None of the items had more than 2% missing responses, and for those participants with missing responses, mean scores of the scales were calculated by dropping the missing items. Thus 251 participants were included in the analyses. Mean age was 21.85 (SD = 5.30), the sample consisted mostly of females (78%), and it was ethnically diverse (24.7% Asian, 18.7% African, 25.1% Caucasian, 26.7% Hispanic, and 4.4% other).

2.2. Measures

2.2.1. Self-handicapping

Self-handicapping was measured by the short version of the self-handicapping scale (Rhodewalt, 1990). The scale consists of 14 items (e.g., "I would do a lot better if I tried harder") rated on a one (disagree very much) to six (agree very much) scale. Higher scores indicate higher self-handicapping. The scale is widely used, and research has shown that it is internally consistent and has good predictive validity (Rhodewalt, 1990; Strube, 1986). In this study internal reliability was .80.

2.2.2. Pain catastrophizing

Pain catastrophizing was measured by the pain catastrophizing scale (PCS; Sullivan et al., 1995). The scale consists of 13 items that measure catastrophic thinking about pain. It has three subscales, rumination (e.g., "I keep thinking about how badly I want the pain to stop"), helplessness (e.g., "It's terrible and I think it's never going to get any better"), and magnification (e.g., "I become afraid that the pain may get worse"). Participants rate the items on a one (not at all) to five (all the time) scale. The scale has been shown to be reliable and valid in various studies (Osman et al., 2000; Sullivan et al., 1995). In this study internal reliability was .96.

2.2.3. Self-reported pain

General level of pain was measured by the short form of McGill pain questionnaire (SF MPQ; Dworkin et al., 2009; Melzack, 1987). The revised version of SF MPQ consists of 22 items and measures the intensity of different kinds of pain and related symptoms (e.g., throbbing pain, hot-burning pain) over the previous week. Participants rate items on a 0 (none) to 10 (worst possible) scale considering how they felt during the past week. SF MPQ is shown to be valid and reliable (Grafton, Foster, & Wright, 2005). In this study internal reliability was .92.

3. Results

3.1. Preliminary analyses

Initially the data were examined for demographic differences in the variables. Results showed that females reported slightly more pain (M = 1.72, SD = 1.48) than males (M = 1.16, SD = 1.31; t (247) = −2.48, p < .05). Furthermore age had a positive correlation with pain (r = .17, p < .01) and a negative correlation with self-handicapping (r = −.23, p < .001). Also, nineteen participants reported a chronic pain condition. Ethnicity had no effect on any of the variables. Both age and gender were controlled in further regression analyses.

Table 1 provides the means and partial correlations (controlling for age and gender) for each of the measures, including the subscales of pain catastrophizing. These analyses revealed that self-handicapping has a positive moderate correlation with pain catastrophizing and all of its subscales, and a positive correlation with self-reported pain. Also, catastrophizing moderately correlated with level of pain as expected.