Contradicting effects of self-insight: Self-insight can conditionally contribute to increased depressive symptoms☆

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ABSTRACT

Past research has suggested that self-insight functions as a genuine factor to enhance psychological adjustment. However, because most of the previous studies had used a cross-sectional design, a prospective study was warranted to establish the temporal and causal relationship between self-insight and depressive symptoms. Another important issue was that there seems to be a moderator that influences the adaptive function of self-insight. Stein and Grant (2014) suggested that positive self-evaluation mediates the association between self-insight and well-being. This result could imply that self-insight does not lead to well-being with negative self-evaluation. In this study, therefore, we conducted a longitudinal questionnaire survey to examine the prospective effect of self-insight on future depressive symptoms with self-complexity as a putative moderator. A complete dataset of 93 Japanese undergraduates was analyzed. The prospective analysis showed a significant moderating role of negative self-complexity in the associations among self-insight, depressive symptoms, and stress; people with high self-insight and low negative self-complexity were less likely to be influenced by stressors, whereas those with high self-insight and high negative self-complexity showed significant increases in depressive symptoms after stressful experiences. These findings implicate that the adaptive effect of self-insight can be conditional depending on the extent of negative self-complexity.

1. Introduction

Self-insight is defined as the clarity of understanding of one's thoughts, feelings, and behaviors (Grant, Franklin, & Langford, 2002). High self-insight is considered as an important factor related to psychological adjustment (Grant et al., 2002), as evident from its significant association with life satisfaction, subjective happiness, and psychological well-being (Harrington & Loffredo, 2011; Lyke, 2009). In addition, self-insight is associated with decreased psychological problems such as depressive and anxiety symptoms (Grant et al., 2002; Silvia & Phillips, 2011), social anxiety (Harrington & Loffredo, 2011), and psychological vulnerability such as maladaptive cognitive bias (Akın, Demirci, & Yıldız, 2015). Therefore, self-insight is indicated as a factor that forms the basis of protective mechanisms that shield the individual from stressors and maintain (and enhance) psychological adjustment (Beardslee, 1989). Beardslee (1989) found that resilient individuals who can effectively cope with stressors tend to have a clear sense of self-understanding (i.e., high self-insight). Furthermore, self-

insight is suggested to be a central antecedent of effective stress coping strategies such as cognitive reappraisal (Haga, Kraft, & Corby, 2009), cognitive flexibility (Chung, Su, & Su, 2012), and mindfulness (Harrington, Loffredo, & Perz, 2014). Together, these findings suggest that self-insight is a genuine core factor that improves psychological adjustment, and indeed, the enhancement of self-insight is often considered as one of the main goals in clinical practice and psychological treatment for depression (Hollon, Thase, & Markowitz, 2002; Lyke, 2009; Stein & Grant, 2014).

However, there are still unresolved issues that should be addressed to establish the (adaptive) functions of self-insight. First, although researchers have argued that self-insight improves psychological adjustment by reducing the impact of stressors (e.g., Eng & Pai, 2015), to the best of our knowledge, there is no direct evidence to support this stress-buffering effect of self-insight. Further, as most of the extant studies used a cross-sectional design to assess the association between self-insight and psychological adjustment (e.g., Grant et al., 2002; Silvia & Phillips, 2011), prospective research is required to examine the

temporal and functional dynamics of self-insight as an adaptive trait factor.

Second, although most of the previous research has consistently suggested that self-insight has beneficial outcomes, it is still possible that "understanding the self" does not always have an adaptive function, particularly when people possess negative self-knowledge. Stein and Grant (2014) suggested that positive self-evaluation mediates the association between self-insight and well-being. This result, in turn, could imply that self-insight does not lead to well-being with less positive and more negative self-knowledge. As described above, self-insight is defined as clarity of self-understanding, which is independent from the positive/negative evaluation of the self. Since positive self-knowledge is known to be an adaptive factor to enhance adaptive stress coping (Lo, 2002; Morgan & Janoff-Bulmann, 1994), a synergic effect might occur between self-insight and positive self-knowledge (Stein & Grant, 2014). Meanwhile, it is possible that negative self-knowledge, a maladaptive factor that is associated with poor adjustment with stressful events (Morgan & Janoff-Bulman, 1994; Stein & Grant, 2014), could diminish or negate the benefits of self-insight.

The extent to which individuals possess detailed and elaborated negative and positive self-knowledge has been studied as self-complexity (SC) (Linville, 1985, 1987). SC is defined by (1) the number of self-aspects that form one's self-knowledge and (2) how well one can differentiate among one's own self-aspects (Linville, 1985, 1987). Individuals with higher SC can recognize themselves from a greater number of self-aspects (e.g., company employee, wife, gamer, swimmer) while maintaining a greater distinction among those aspects (e.g., extroversive as a company employee, kind as a wife). Linville (1985, 1987) originally suggested that increased SC might help reduce the adverse effects of stress and decrease depressive symptoms regardless of the valence of SC. However, subsequent research has suggested that SC can be classified into positive and negative types (Morgan & Janoff-Bulman, 1994). Positive self-complexity (P-SC) is characterized by detailed knowledge about the attractiveness of one's personality, and negative self-complexity (N-SC) reflects detailed knowledge about one's undesirable personality traits. Empirical research has consistently shown that P-SC and N-SC have distinctive associations with psychological adjustment, in opposite directions. Specifically, P-SC is associated with decreased depressive symptoms and high levels of self-esteem, whereas N-SC is associated with increased depressive symptoms and low levels of self-esteem (Gara et al., 1993; Woolfolk et al., 1999; Woolfolk, Novalany, Gara, Allen, & Polino, 1995). Given these distinctive associations, it is expected that P-SC would enhance the adaptive effect of self-insight, whereas N-SC would diminish it.

In summary, the present study examined the prospective effect of self-insight on depressive symptoms with positive and negative self-complexity as putative moderators that influence the adaptiveness (or stress-buffering effect) of self-insight. We conducted a longitudinal survey on Japanese undergraduates, at an interval of 4 weeks. For replication purposes, we first tested the cross-sectional (negative) association between self-insight and depressive symptoms. Next, we examined the prospective effect of self-insight on follow-up depressive symptoms, particularly after stressful experiences. We specifically hypothesized that the effect of self-insight would be moderated by N-SC, i.e., high levels of self-insight would not be associated with increased depressive symptoms even after stressful experiences if people have low levels of N-SC (i.e., stress-buffering effect); however, self-insight would be associated with increased depressive symptoms after stressful experiences for people with high levels of N-SC. Furthermore, given that self-insight with positive self-evaluation leads to psychological adjustment (Stein & Grant, 2014), self-insight would buffer the effect of stressful experiences on depressive symptoms, particularly when people have high levels of P-SC.

2. Method

2.1. Participants and procedure

We administered a questionnaire survey in a psychology class for undergraduate students in a Japanese university. The undergraduates in the class answered packets of questionnaires twice, at an interval of four weeks. All students voluntarily participated in the survey. All participants provided written informed consent at the beginning of the study. For the first assessment (Time 1), 183 participants (men = 149, women = 30, and unknown = 4; mean age = 19.35 years, $SD = 0.79$ years) completed questionnaires on P-SC, N-SC, depressive symptoms, and self-insight. For the second assessment (Time 2), 124 participants (men = 97, women = 26, and unknown = 1; mean age = 19.37 years, $SD = 0.81$ years) completed the same depression measure and reported the stressful events that they had experienced between the first and second assessments. The data of 93 participants who completed both assessments were analyzed (men = 71, women = 20, and unknown = 1; mean age = 19.35 years, $SD = 0.79$ years).

2.2. Measures

2.2.1. Trait sorting task (Linville, 1985, 1987)

The trait-sorting task was used to measure P-SC and N-SC. This task was administered only at Time 1. In this task, participants were first asked to write down their self-aspects (e.g., student, friend, daughter, gamer). Subsequently, participants were presented with a list of adjectives and were asked to indicate which adjectives represented each of their self-aspects. This list of 40 adjectives comprised 19 positive (e.g., kind, stable, curious) and 21 negative adjectives (e.g., passive, mean, selfish).[3] This list (Japanese-adapted version) was developed by Hayashi and Horiuchi (1997). Participants were instructed that they can choose as many adjectives as they wanted, and that the same adjectives can be chosen for multiple self-aspects. The P-SC and N-SC scores were calculated using Linville's (1987) H index formula, as follows:

$$H = log_2 \, n - \left(\sum_i \, n_i \, log_2 \, n_i \right) \big/ n$$

where n is the total number of adjectives (i.e., 19 for P-SC, 21 for N-SC), and n_i is the number of selected adjectives in a particular combination of self-aspects; e.g., if two adjectives fall in two self-aspects A and B, $n_{i \, = \, AB}$ is 2. The H-index decreases if adjectives are assigned to two or more self-aspects; therefore, the H-index is an index of category diversity, reflecting the number of adjectives people used to describe themselves, which is negated by the redundancy of the adjectives used for multiple self-aspects.

2.2.2. Center for Epidemiological Studies Depression (CES-D; Radloff, 1977)

The Japanese version of the scale was used to measure the levels of depressive symptoms (Shima, Kano, Kitamura, & Asai, 1985). This scale was administered at both Times 1 and 2. The CES-D consists of 20 items describing typical depressive symptoms such as "I felt everything I did was an effort." Participants rated how many days they experienced each symptom over the last week, by using a 4-point scale (0 = *not at all or < 1 day* and 3 = *> 5 days*). The CES-D indicated good internal consistency in the current data (α = 0.86 at Time 1, and α = 0.89 at Time 2).

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[3] Although Hayashi and Horiuchi's (1997) adjective list consists of 20 positive and 20 negative adjectives, our preliminary investigation suggested that one of their positive adjectives (i.e., assertive) was recognized as negative rather than positive by the current Japanese students. Therefore, we treated this adjective as a negative one in the present study.