

BRIEF REPORT

Differentiating the Role of Three Self-Compassion Components in Buffering Cognitive-Personality Vulnerability to Depression Among Chinese in Hong Kong

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Research shows that sociotropy, autonomy, and self-criticism are cognitive-personality vulnerability styles contributing significantly to the development of depression symptoms, but little is known about the factors that may protect sociotropic, autonomous, and self-critical individuals against mental health problems. The present study examined self-compassion components (i.e., self-kindness, common humanity, and mindfulness) as potential moderators to protect these individuals from developing depression. On the basis of survey data from 345 Chinese adults in Hong Kong, the relationships between cognitive-personality vulnerability styles, self-compassion components, and depression were examined. The results of the present study show that when the effect of gender and the 2 other self-compassion components were controlled, self-kindness and mindfulness could moderate the association between autonomy and depression, and the association between self-criticism and depression, while common humanity could moderate the association between self-criticism and depression. Unexpectedly, interaction between sociotropy and mindfulness was found, with the association between sociotropy and depression being stronger among individuals with high mindfulness than it was with individuals with low mindfulness. These results suggest the differentiating role of the 3 self-compassion components in buffering autonomous and self-critical individuals from depression. Applications of self-compassion and the hypothesized moderation model in future psychological interventions are discussed.

Keywords: self-compassion, sociotropy, autonomy, cognitive-personality vulnerability style, depression

Exaggerated concerns over interpersonal relationships and/or autonomous achievements lead to an increased vulnerability to depression (Blatt & Zuroff, 1992; Nietzel & Harris, 1990). Different terms have been used to refer to such cognitive-personality vulnerability styles including dominant others orientation and dominant goal orientation (Arieti & Bemporad, 1980), dependency and self-criticism (Blatt, D’Afflitti, & Quinlan, 1976), and sociotropy and autonomy (Beck, 1983). According to Beck (1983), sociotropic individuals tend to overly depend on others and have prominent fears of being abandoned to the extent that they would make great efforts to seek approval and to avoid disapproval from others. When faced with a threat or loss in interpersonal connectedness, they tend to blame themselves for disrupting social bonds and punish themselves for being socially undesirable. Autonomous individuals, on the other hand, emphasize individuality and self-reliance. They have their own set of internalized standards that are higher than the conventionally accepted norms and judge themselves harshly. When they fail to

achieve elevated goals or to maintain a sense of personal mastery over the environment, they experience feelings of worthlessness and make ruminative accusations against themselves as being inadequate and weak (Nietzel & Harris, 1990).

Although both autonomy striving and self-criticism are regarded as characteristics of autonomous individuals, recent research has suggested that they may not be a unitary construct (e.g., Bagby, Parker, Joffe, Schuller, & Gilchrist, 1998; Shahar, 2006; Shahar, Soffer, & Gilboa-Shechtman, 2008). Whereas autonomous individuals have social status as their major concern, self-critical individuals have a similar if not an equally weighted concern over their shortcomings in both the social status domain and the interpersonal relationship domain. The results of confirmatory factor analysis also confirmed that autonomy and self-criticism are two distinct factors. Together with sociotropy, there are three cognitive-personality vulnerability styles, each of which has a significant and positive association with depression (Shahar et al., 2008). Limited studies have examined the factors that protect sociotropic, autonomous, and self-critical individuals against developing depression. Self-compassion may be a potential buffer for the three cognitive-personality vulnerability styles with regard to depression.

Self-Compassion

Self-compassion has repeatedly been shown to be an important human strength. It generally refers to being caring and compas-

This article was published Online First October 22, 2012.

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sionate toward oneself at difficult times (Neff, 2003a). Its beneficial role has been well-documented. Research has repeatedly shown that it is positively associated with life satisfaction, happiness, optimism, positive affect, wisdom, personal initiative, curiosity, and exploration, and negatively associated with depression, anxiety, negative affect, rumination, and thought suppression (Neff, 2003a; Neff, Rude, & Kirkpatrick, 2007).

Neff (2003a, 2008) conceptualized self-compassion along three major dimensions: self-kindness, common humanity, and mindfulness. *Self-kindness* refers to warmth and understanding toward the self when encountering suffering, inadequacy, or failure. Neither avoiding negative feelings nor judging oneself critically, individuals with self-kindness treat themselves gently and accept the reality with sympathy and kindness. *Common humanity* is another characteristic of self-compassionate individuals. Instead of regarding their suffering and personal failure as isolated, people with a strong sense of common humanity recognize their experiences as part of the shared human experience, and they thus experience less frustration when facing negative events. The last dimension, *mindfulness*, refers to a balanced approach to one's thoughts and feelings. Mindful individuals put their situation into a larger perspective and observe their negative thoughts and feelings without overidentification.

Although Neff (2003b) suggested that the three components of self-compassion (i.e., self-kindness, common humanity, and mindfulness) can mutually enhance and engender each other, they are conceptually distinct and are experienced differently. Although available studies are very limited, existing findings partly support the speculation, with self-kindness being found to have a relatively strong association with depression ($r = -0.38$), compared with the other two self-compassion components ($r = -0.18$ for common humanity and $r = -0.19$ for mindfulness; Mills, Gilbert, Bellew, McEwan, & Gale, 2007). In another study, which considered all the self-compassion components in the same regression model, self-kindness and mindfulness were the only positive self-compassion components that were associated with depression (Van Dam, Sheppard, Forsyth, & Earleywine, 2011). These findings evidenced the argument that each self-compassion component may have a different relationship with depression.

Differentiating the Moderating Roles of Three Self-Compassion Components

All three cognitive-personality vulnerability styles can lead to depression. However, the self-compassion components may differentially moderate the association between each cognitive-personality vulnerability style and depression because of the different characteristics of each of the cognitive-personality vulnerability styles. Specifically, for sociotrophic individuals who have prominent fears of being abandoned, excessive dependency needs, and extreme self-blame for straining interpersonal relations (Beck, 1983), self-kindness may serve as a self-soothing function that enables them to acknowledge their personal needs being as valid and worthy as other people's needs (Yarnell & Neff, 2012).

In contrast, being adamant about attaining self-reliance and independence, autonomous individuals tend to be adverse toward being helped. They do not voluntarily seek help and often reject help from others (Beck, 1983). Therefore, self-kindness may be a vital quality to pacify negative emotions during hardships for

autonomous individuals. In addition to self-kindness, mindfulness as a self-compassion component that allows autonomous individuals to comprehend the situation by means of a balanced approach and to reach emotional equanimity when their sense of mastery is being challenged.

As for self-critical individuals who have a strong drive to strive for perfection and a tendency to judge themselves harshly and ruminate over their inadequacy and weakness (Nietzel & Harris, 1990), self-kindness allows self-critical individuals to treat themselves gently when encountering failures, and common humanity facilitates the recognition of failures as human fallibilities and reduces the feeling of being isolated, while mindfulness allows them take a balanced and broader perspective to make sense of the situation and to generate alternative solutions instead of suppressing or being carried away by a feeling of pain or a sense of inadequacy upon failures. Thus, all three self-compassion components may buffer self-critical individuals from depression.

These arguments are supported by previous research. Empirical findings have shown that self-compassionate individuals who have a kind, caring, and understanding attitude toward the self are more likely to use compromise solutions that balance the needs of self and others than self-subordinate solutions (Yarnell & Neff, 2012). As is consistent with the notion that you need to love yourself before you can truly love others (Branden, 1994), self-compassionate individuals feel that it is authentic to express their opinions in their romantic relationships, and they also have more positive relationship behaviors, such as displaying close relatedness, being accepting, and granting partners more autonomy, even when attachment styles are controlled for (Neff & Beretvas, 2012). With the self-kindness quality that facilitates the generation of compromised solutions to benefit both parties during conflicts and foster adaptive daily interpersonal behaviors, sociotrophic individuals may experience less distress.

Moreover, possessing self-kindness and mindfulness allows individuals to take a balanced approach to their difficulties and failures, to face them without overly harsh judgments, and to provide warmth and comfort that help to ease distress. Empirical studies have found that self-compassionate individuals are more intrinsically motivated and less afraid of failure when facing difficult challenges (Neff, Hsieh, & Dejitterat, 2005) and that they reported lower levels of negative emotion when faced by a threat to their autonomy or competence (i.e., getting a poor grade on an important test or being responsible for the loss of a team athletic competition) in hypothetical situations (Leary, Tate, Adams, Allen, & Hancock, 2007). In another study, self-compassion was found to be associated with the capacity to disengage from unattainable goals and to direct attention to new and more attainable goals, and with better well-being (Neely, Schallert, Mohammed, Roberts, & Chen, 2009). Such findings provide support for the suggestion that the characteristics of self-compassion may help autonomous and self-critical individuals to better adjust to difficulties by being kind and considerate toward themselves in the face of challenges, taking a balanced and broader perspective to comprehend the events, and regulating their goals to achieve success instead of being fixated on unachievable goals.

Aims of the Study

Extending from previous studies, the present study aimed to (a) examine the relationships between cognitive-personality vulnerability styles (i.e., sociotropy, autonomy, and self-criticism), self-compassion, and depression; and (b) test the moderating roles of individual self-compassion components (i.e., self-kindness, common humanity, and mindfulness) on the associations between each cognitive-personality vulnerability style and depression, when the other two self-compassion components are controlled for. It was expected that sociotropy, autonomy, and self-criticism would be positively associated with depression, whereas all self-compassion components would be negatively associated with depression. In addition, because self-kindness, common humanity, and mindfulness have their specific theoretical implications in buffering sociotropic, autonomous, and/or self-critical individuals from experiencing depression, it is expected that self-kindness could weaken the positive association between depression and sociotropy, autonomy, and self-criticism, and that common humanity could weaken the positive association between depression and self-criticism, and that mindfulness could weaken the positive association between depression and autonomy and self-criticism.

Method

Participants

The present study is part of a larger research study examining psychosocial determinants of mental health among community adults in Hong Kong. Participants were recruited via university mass-mailing and publicly accessible Internet platforms (i.e., forums), and included both university students and community adults. A web-based questionnaire was used. Upon informed consent, individuals completed a web-based questionnaire. Among the 454 hits consenting to participate, 1 completed only the informed consent page but did not do the questionnaire, and 105 dropped out in the middle of the questionnaire. Three hundred and forty-eight participants finished the questionnaire. Among them, 3 participants with missing data were dropped by listwise deletion. The analyses of present study were based on data from the remaining 345 participants (101 men and 244 women) of Chinese ethnicity who completed the questionnaire. The sample had a mean age of 22.77 years ($SD = 4.52$), with ranges from 18 to 42 years. The majority of participants were college students (72.8%), and nearly one fourth of the participants reported having full-time employment (24.6%).

Measures

The questionnaire was presented in Chinese. Except for the Depression Anxiety and Stress Scales, for which a Chinese version was already available (DASS21; Lovibond & Lovibond, 1995; Taouk, Lovibond, & Laube, 2001), all scales were originally developed in English. They were translated into Chinese by using the back-translation method.

Cognitive-personality vulnerability. The Personal Style Inventory II (PSI-II; Robins et al., 1994) was used to measure degrees of sociotropy, autonomy, and self-criticism. It has been used among Chinese in Hong Kong and was found to be associated

with depression and barrier of help-seeking (Luk, 2005; Wong, 2005). It consists of 48 items rated on a 6-point Likert scale ranging from (1) *strongly disagree* to (6) *strongly agree*. There are three subscales under sociotropy (i.e., concern about what others think, dependency, and pleasing others) and three subscales under autonomy (i.e., perfectionism/self-criticism, need for control, and defensive separation). In the present study, the internal consistencies of each subscale (Cronbach's alphas) ranged from 0.64 to 0.76, and the internal consistencies of three cognitive-personality vulnerability styles (i.e., sociotropy, autonomy, and self-criticism) were 0.84, 0.82, and 0.64, respectively.

Self-compassion. The Self-Compassion Scale (SCS; Neff, 2003a) was used to measure self-kindness (vs. self-judgment), common humanity (vs. isolation), and mindfulness (vs. overidentification). It has been used among Chinese in Taiwan (Neff, Pisitsungkagarn, & Hsieh, 2008) and Mainland China (Kwan, Kuang, & Hui, 2009) and has found to be associated with self-esteem, self-efficacy, life satisfaction, and depression. Given that our interest was to examine the protective factors against depression, only the subscales of positive self-compassion components were analyzed in the present study. The 13 items assessed the individuals' acts toward themselves at difficult times. Participants were asked to indicate how often they behave in the stated manner, on a 5-point scale that ranged from (1) *almost never* to (5) *almost always*. In the present study, the internal consistencies (Cronbach's alphas) of self-kindness, common humanity, and mindfulness were 0.75, 0.66, and 0.62, respectively.

Depression. The depression subscale in the Depression Anxiety and Stress Scales (DASS21; Lovibond & Lovibond, 1995; Taouk et al., 2001) was used to measure the individual's degree of depression. The DASS21 consists of seven items rated on a 4-point scale ranging from (0) *did not apply to me at all* to (3) *applied to me very much or most of the time*. The score is formed by multiplying the sum of subscale items by two. In the current study, the internal consistency (Cronbach's alpha) was 0.90. The DASS21 has been used among Chinese college students in Hong Kong and has been found to be associated with health and family psychiatric history (Wong, Cheung, Chan, Ma, & Tang, 2006).

Results

With reference to the confirmatory factor analysis (CFA) on PSI subscales conducted by Shahar et al. (2008) and CFA on SCS subscales conducted by Neff (2003a), two CFA were conducted on PSI and SCS to validate the three-factor model of cognitive-personality vulnerability and the three-positive-factor model of self-compassion. Due to sample size constraint in conducting item-level CFA on PSI and SCS, parcel-level CFA were conducted on the basis of the recommendation by Little, Cunningham, Shahar, and Widaman (2002). Item-level CFA was also conducted on the DASS-depression subscale to validate the one-factor model of depression. Descriptive statistics and correlation analyses were then conducted between the variables used in the theoretical model. To test the theoretical moderations, hierarchical linear regression analyses were conducted to examine the moderating roles of self-kindness, common humanity, and mindfulness on the associations between each cognitive-personality vulnerability style and depression.

Confirmatory Factor Analyses

Parcel-level CFA were conducted on PSI and SCS. On the basis of the domain-representative approach recommended by Little et al. (2002), three parceled indicators were built for each cognitive-personality factor and each positive self-compassion factor, with factor loading ranging from 0.54 to 0.86. Results of CFA on PSI and SCS demonstrated adequate model fit, suggesting factorial validity of the three-factor model of PSI, $\chi^2(24) = 77.42, p < .001$, CFI = 0.96, GFI = 0.95, SMRS = 0.05, RMSEA = 0.08, and the three positive factor model of SCS, $(\chi^2(24) = 82.26, p < .001$, CFI = 0.94, GFI = 0.95, SMRS = 0.05, RMSEA = 0.08. Item-level CFA on DASS-depression also yielded an adequate model fit, confirming the single factor model of the DASS-depression subscale, $\chi^2(14) = 101.65, p < .001$, CFI = 0.94, GFI = 0.92, SMRS = 0.04, RMSEA = 0.14.

Correlations and Descriptive Statistics

Table 1 presents the mean, standard deviation, and intercorrelations between all of the examined variables in the present study, and all of the predicted correlations between the variables were supported in the hypothesized directions.

Analyses of Moderator Variables on Depression

To examine the moderating effect of self-kindness, common humanity, and mindfulness on the association between the three cognitive-personality vulnerability styles and depression, analyses were conducted on the basis of the procedures recommended by Frazier, Tix, and Barron (2004). The predictor and moderator variables were standardized before computing the interaction terms to reduce multicollinearity. Nine parallel hierarchical multiple regression analyses were conducted; each examined the interaction effect between a cognitive-personality vulnerability style (i.e., sociotropy, autonomy, and self-criticism) and a moderator (i.e., self-kindness, common humanity, and mindfulness) on depression. Because women are generally much more vulnerable to the development of depression than are men (Culbertson, 1997; Hurst & Genest, 1995; Simonds & Whiffen, 2003), gender was controlled in the analyses. A dummy coded demographic covariate (i.e., gender) and standardized covariates (the other two self-compassion components that were not examined as moderator in the analysis) were entered as the first step, followed by standardized independent variable and standardized moderator as the sec-

ond step, and the interaction term as the final step. The results are presented in Table 2.

In accordance with our hypotheses, significant interaction effects were found between autonomy and self-kindness, between autonomy and mindfulness, between self-criticism and self-kindness, and between self-criticism and common humanity, and a marginal significant interaction effect was found between self-criticism and mindfulness ($p = .056$), but no significant interaction effect was found between sociotropy and self-kindness. Unexpectedly, a significant interaction effect between sociotropy and mindfulness was also found. As recommended by Aiken and West (1991), simple slope tests were then conducted to compare the effect of sociotropy, autonomy, and self-criticism on depression between individuals with high (1 *SD* above the mean) self-compassion quality and individuals with low (1 *SD* below the mean) self-compassion quality. The results showed that the association between autonomy and depression was weaker among individuals with high self-kindness ($\beta = 0.24, t = 3.73, p < .001$) and high mindfulness ($\beta = 0.26, t = 4.13, p < .001$) than it was with individuals with low self-kindness ($\beta = 0.44, t = 6.54, p < .001$) and low mindfulness ($\beta = 0.44, t = 6.34, p < .001$). Similarly, the association between self-criticism and depression was weaker among individuals with high self-kindness ($\beta = 0.20, t = 3.03, p < .01$), high common humanity ($\beta = 0.16, t = 2.46, p < .05$), and high mindfulness ($\beta = 0.20, t = 2.99, p < .01$) than it was with individuals with low self-kindness ($\beta = 0.38, t = 5.43, p < .001$), low common humanity ($\beta = 0.44, t = 6.06, p < .001$), and low mindfulness ($\beta = 0.38, t = 5.37, p < .001$). In contrast, the association between sociotropy and depression was also stronger among individuals with high mindfulness ($\beta = 0.28, t = 4.24, p < .001$) than it was with individuals with low mindfulness ($\beta = 0.08, t = 1.05, p > .05$).

Discussion

Consistent with the results of previous studies, the present study found that all three cognitive-personality vulnerability styles (i.e., sociotropy, autonomy, and self-criticism) were positively associated with depression, and that all the self-compassion components (i.e., self-kindness, common humanity, and mindfulness) were negatively associated with depression. In addition, the present study was one of the first that investigated the differential moderating roles of individual self-compassion components on the associations between cognitive-personality vulnerability styles and depression. The results demonstrated that the three self-compassion

Table 1

Descriptive Statistics and Correlation Matrix of Main Study Variables of Interest (n = 345)

Variable	Range	Mean	<i>SD</i>	2	3	4	5	6	7
1. Sociotropy	62–128	98.61	12.04	.20***					
2. Autonomy	37–106	73.89	10.62		.46***	-.09	.06	-.15**	.21***
3. Self-criticism	7–24	15.39	3.34		.40***	-.18**	-.09	-.09	.39***
4. Self-kindness	6–25	13.94	3.45			-.24***	-.05	-.13*	.35***
5. Common humanity	5–20	11.83	3.16				.53***	.66***	-.33***
6. Mindfulness	4–20	11.40	2.72					.52***	-.16**
7. Depression	0–40	10.35	9.74						-.20***

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2

Hierarchical Regression Analysis Predicting Depression From Cognitive-Personality Vulnerability Style, Self-Compassion Components, and the Cognitive-Personality Vulnerability Style × Self-Compassion Components Interaction

Predictor	<i>B</i>	<i>SE B</i>	β	ΔR^2	$\Delta F(df)$
Step 1				0.05	5.66** (3, 341)
Gender	-1.40	1.13	-0.07		
Common humanity	-0.68	0.60	-0.07		
Mindfulness	-1.58	0.60	-0.16**		
Step 2				0.10	20.11*** (2, 339)
Sociotropy	1.86	0.50	0.19***		
Self-kindness	-3.40	0.68	-0.35***		
Step 3				0.01	2.97 (1, 338)
Sociotropy × Self-Kindness	0.76	0.44	0.09		
Step 1				0.11	14.56*** (3, 341)
Gender	-1.21	1.09	-0.06		
Self-kindness	-3.41	0.66	-0.35***		
Mindfulness	0.31	0.66	0.03		
Step 2				0.04	6.96** (2, 339)
Sociotropy	1.86	0.50	0.19***		
Common humanity	-0.15	0.61	-0.02		
Step 3				0.00	0.33 (1, 338)
Sociotropy × Common Humanity	-0.28	0.48	-0.03		
Step 1				0.11	14.56*** (3, 341)
Gender	-1.22	1.09	-0.06		
Self-kindness	-3.36	0.59	-0.35***		
Common humanity	0.29	0.59	0.03		
Step 2				0.04	6.95** (2, 339)
Sociotropy	1.86	0.50	0.19***		
Mindfulness	0.65	0.68	0.07		
Step 3				0.01	4.52* (1, 338)
Sociotropy × Mindfulness	0.99	0.46	0.11*		
Step 1				0.05	5.66** (3, 341)
Gender	-1.40	1.13	-0.07		
Common humanity	-0.68	0.60	-0.07		
Mindfulness	-1.58	0.60	-0.16**		
Step 2				0.18	38.22*** (2, 339)
Autonomy	3.28	0.48	0.34***		
Self-kindness	-2.83	0.66	-0.29***		
Step 3				0.01	5.04* (1, 338)
Autonomy × Self-Kindness	-0.98	0.44	-0.11*		
Step 1				0.11	14.56*** (3, 341)
Gender	-1.21	1.09	-0.06		
Self-kindness	-3.41	0.66	-0.35***		
Mindfulness	0.31	0.66	0.03		
Step 2				0.11	23.82*** (2, 339)
Autonomy	3.28	0.48	0.34***		
Common humanity	0.25	0.57	0.03		
Step 3				0.00	1.65 (1, 338)
Autonomy × Common Humanity	-0.60	0.47	-0.06		
Step 1				0.11	14.56*** (3, 341)
Gender	-1.22	1.09	-0.06		
Self-kindness	-3.36	0.59	-0.35***		
Common humanity	0.29	0.59	0.03		
Step 2				0.11	23.81*** (2, 339)
Autonomy	3.28	0.48	0.34***		
Mindfulness	0.08	0.64	0.01		
Step 3				0.01	4.35* (1, 338)
Autonomy × Mindfulness	-0.90	0.43	-0.10*		
Step 1				0.05	5.66** (3, 341)
Gender	-1.40	1.13	-0.07		
Common humanity	-0.68	0.60	-0.07		
Mindfulness	-1.58	0.60	-0.16**		
Step 2				0.14	29.89*** (2, 339)
Self-criticism	2.79	0.49	0.29***		
Self-kindness	-2.65	0.68	-0.27***		
Step 3				0.01	3.87* (1, 338)
Self-Criticism × Self-Kindness	-0.89	0.45	-0.10*		

Table 2 (continued)

Predictor	<i>B</i>	<i>SE B</i>	β	ΔR^2	$\Delta F(df)$
Step 1				0.11	14.56*** (3, 341)
Gender	-1.21	1.09	-0.06		
Self-kindness	-3.41	0.66	-0.35***		
Mindfulness	0.31	0.66	0.03		
Step 2				0.08	16.06*** (2, 339)
Self-criticism	2.79	0.49	0.29***		
Common humanity	-0.07	0.59	-0.01		
Step 3				0.02	8.60** (1, 338)
Self-Criticism \times Common Humanity	-1.37	0.47	-0.14**		
Step 1				0.11	14.56*** (3, 341)
Gender	-1.22	1.09	-0.06		
Self-kindness	-3.36	0.59	-0.35***		
Common humanity	0.29	0.59	0.03		
Step 2				0.08	16.06*** (2, 339)
Self-criticism	2.79	0.49	0.29***		
Mindfulness	0.21	0.66	0.02		
Step 3				0.01	3.66 (1, 338)
Self-Criticism \times Mindfulness	-0.89	0.46	-0.10		

* $p < .05$. ** $p < .01$. *** $p < .001$.

components could differentially moderate the association between each cognitive-personality vulnerability style and depression.

Previous studies found that self-compassionate individuals are less fearful of failures, and they react less negatively to autonomous and competence threats (Leary et al., 2007; Neff et al., 2005). Therefore, the self-kindness quality of self-compassionate individuals, which allows such individuals to provide warmth and comfort to the self instead of being overly harsh in judgment, may allay their distress upon facing difficulties and failures. In line with this suggestion, the present study found that self-kindness could moderate the association between autonomy and depression, and the association between self-criticism and depression. Individuals with higher levels of self-kindness reported a weaker association between autonomy and depression and a weaker association between self-criticism and depression than their counterparts who have lower levels of self-kindness.

Recent research also found that self-compassion is associated with the capacity to disengage from unattainable goals and to direct attention to new and more attainable goals, and with well-being (Neely et al., 2009). These associations thereby suggested that the mindful characteristic of self-compassionate individuals may facilitate their ability to cope with failures and unattainable goals by taking a balanced and broad perspective of the circumstances, instead of overidentifying with the failures and fixating on unachievable goals. Consistent with this suggestion, the present study found that mindfulness could moderate the association between autonomy and depression, and marginally moderate the association between self-criticism and depression. Individuals who have higher levels of mindfulness reported a weaker association between autonomy and depression and a weaker association between self-criticism and depression than their counterparts who have lower levels of mindfulness. In addition, the present study also found that common humanity could moderate the association between self-criticism and depression, with individuals who have a greater sense of common humanity reporting a weaker association between self-criticism and depression than counterparts who have a low sense of common humanity. Recognizing failures as

human fallibilities helps to minimize the distress resulting from losing the sense of control and mastery in life.

Inconsistent with our hypothesis, self-kindness could not moderate the effect of sociotropy on depression, yet it was significantly associated with depression when sociotropy and the two other self-compassion components were controlled for. It may be possible that sociotropic individuals who are yearning for interpersonal connectedness would prefer other-kindness over self-kindness. Although self-kindness was not shown to have a stronger buffering effect among sociotropic individuals, it is beneficial to individuals regardless of their levels of sociotropy. Unexpectedly, mindfulness was found to moderate the effect of sociotropy on depression, with individuals having low levels of mindfulness reporting a weaker association between sociotropy and depression than their counterparts who have higher levels of mindfulness. Sociotropic individuals often neglect their personal feelings when pursuing others' approval, and having high levels of mindfulness may further exacerbate their distress by making them become more aware of their excessive need for interpersonal connectedness. Given that this finding is contradictory to the salutary role of mindfulness on mental health in previous studies, future research needs to investigate this moderating relationship.

Implications

The results of the present study suggest that promoting self-kindness and mindfulness may be advantageous for people with high levels of autonomy and self-criticism, and that promoting common humanity may be advantageous for people with high levels of self-criticism. Autonomous individuals who deny the importance of interpersonal relationships and who derive a sense of self-worth and significance from achievement are vulnerable to the impact of failure or goal frustration. Cultivating self-compassion allows individuals to treat themselves gently when encountering failures. Instead of taking failings and difficulties too personally and having exaggerated self-criticism (*self-kindness*), they interpret their setbacks by using a balanced approach, both in

positive and negative ways, without overidentifying their own emotions and thoughts (*mindfulness*), and thus experience less frustration and distress. Similarly, for self-critical individuals who have a tendency to strive for perfection and ruminate over their inadequacies and weaknesses (Nietzel & Harris, 1990), cultivating self-compassion allows them to provide comfort to the self when encountering failures (*self-kindness*), to appreciate failures as a shared part of the human experience (*common humanity*), to take a broad perspective to make sense of a situation, and to generate alternative solutions instead of suppressing or being carried away by the negative emotions upon failures (*mindfulness*).

Cultivating self-compassion may serve as a supplementary function to current treatments. Existing interventions that foster self-compassion, such as Compassionate Mind Training (Gilbert & Procter, 2006), Mindfulness-Based Cognitive Therapy (Segal, Williams, & Teasdale, 2002), and Mindfulness-Based Stress Reduction program (Kabat-Zinn, 1990), were also found to strengthen individuals' resilience against mental health problems. However, these treatments focus mainly on mindfulness, with less emphasis being placed on self-kindness and common humanity. Practitioners should consider integrating self-kindness and common humanity training into current self-compassion induction interventions to enhance the treatment effect in alleviating psychological distress among autonomous and self-critical individuals.

Limitations and Conclusion

Some methodological limitations should be borne in mind. The present study was correlational and was conducted with a non-clinical and nonrepresentative sample, which mainly included university students and self-selected volunteers from the community. As there is no way of knowing how many people actually read the mass mail and invitation posted on online forums, we cannot estimate the actual response rate and hence the representativeness of the sample. This limits the generalizability of its findings and the direct implications for psychological interventions. Future research needs to replicate the proposed moderation models in a clinical population and to consider replicating the current study in a longitudinal research design.

Furthermore, future research needs to replicate the present study in other cultural groups to examine its cross-cultural generalizability. A recent study showed cross-cultural differences in the levels of self-compassion across Thailand, Taiwan, and the United States (Neff et al., 2008). Thais were found to have significantly higher self-compassion scores (as measured by SCS) than Americans, who have significantly higher self-compassion scores than Taiwanese. Although both Taiwan and Thailand are considered as collectivistic cultures, the findings suggested the impact of culture on the salience of self-compassion is not limited to general collectivistic-individualistic cultural differences but also to specific cultural features.

Although CFA results in the present study showed adequate model fit of PSI, SCS, and DASS-depression subscale in the present sample, no other validation studies of the PSI and SCS among Chinese are available. The findings on the validity of the measurements of cognitive-personality vulnerability styles and self-compassion for Chinese should be interpreted with caution. Moreover, the present study examined only sociotropy, autonomy, and self-criticism as the risk factors for depression. Future study

may consider investigating other risk factors (e.g., rumination) to further examine the functional role of self-compassion components in psychological interventions. Despite these limitations, this study established a conceptual framework to illustrate how the self-compassion components could moderate the association between autonomy and self-criticism with depression.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Arieti, S., & Bemporad, J. R. (1980). The psychological organization of depression. *The American Journal of Psychiatry*, *137*, 1360–1365.
- Bagby, R. M., Parker, J. D. A., Joffe, R. T., Schuller, D., & Gilchrist, E. (1998). Confirmatory factor analysis of the Revised Personal Style Inventory (PSI). *Assessment*, *5*, 31–43. doi:10.1177/107319119800500106
- Beck, A. T. (1983). Cognitive therapy of depression: New perspectives. In P. J. Clayton & J. E. Barrett (Eds.), *Treatment of depression: Old controversies and new approaches* (pp. 265–290). New York, NY: Raven.
- Blatt, S. J., D'Afflitti, J. P., & Quinlan, D. M. (1976). Experiences of depression in normal young adults. *Journal of Abnormal Psychology*, *85*, 383–389. doi:10.1037/0021-843X.85.4.383
- Blatt, S. J., & Zuroff, D. C. (1992). Interpersonal relatedness and self-definition: Two prototypes for depression. *Clinical Psychology Review*, *12*, 527–562. doi:10.1016/0272-7358(92)90070-O
- Branden, N. (1994). *The six pillars of self-esteem*. New York, NY: Bantam Books.
- Culbertson, F. M. (1997). Depression and gender: An international review. *American Psychologist*, *52*, 25–31. doi:10.1037/0003-066X.52.1.25
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology. *Journal of Counseling Psychology*, *51*, 115–134. doi:10.1037/0022-0167.51.1.115
- Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy*, *13*, 353–379. doi:10.1002/cpp.507
- Hurst, S. A., & Genest, M. (1995). Cognitive-behavioral therapy with a feminist orientation: A perspective for therapy with depressed women. *Canadian Psychology/Psychologie canadienne*, *36*, 236–257. doi:10.1037/0708-5591.36.3.236
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain and illness*. New York, NY: Delacorte.
- Kwan, V. S. Y., Kuang, L. L., & Hui, N. H. H. (2009). Identifying the sources of self-esteem: The mixed medley of benevolence, merit, and bias. *Self and Identity*, *8*, 176–195. doi:10.1080/15298860802504874
- Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology*, *92*, 887–904. doi:10.1037/0022-3514.92.5.887
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, *9*, 151–173. doi:10.1207/S15328007SEM0902_1
- Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the Depression Anxiety Stress Scales*. Sydney, Australia: Psychology Foundation.
- Luk, M. C. (2005). *Personality variables in predicting adolescents' help-seeking attitude and intention from professionals*. Retrieved from <http://www.psy.cuhk.edu.hk/thesisdb/abstract/2005udgd/Kam%20Yee%20Wong.pdf>

- Mills, A., Gilbert, P., Bellew, R., McEwan, K., & Gale, C. (2007). Paranoid beliefs and self-criticism in students. *Clinical Psychology & Psychotherapy*, *14*, 358–364. doi:10.1002/cpp.537
- Neely, M. E., Schallert, D. L., Mohammed, S. S., Roberts, R. M., & Chen, Y. J. (2009). Self-kindness when facing stress: The role of self-compassion, goal regulation, and support in college students' well-being. *Motivation and Emotion*, *33*, 88–97. doi:10.1007/s11031-008-9119-8
- Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity*, *2*, 223–250. doi:10.1080/15298860309027
- Neff, K. D. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*, 85–101. doi:10.1080/15298860309032
- Neff, K. D. (2008). Self-compassion: Moving beyond the pitfalls of a separate self-concept. In J. Bauer & H. A. Wayment (Eds.), *Transcending self-interest: Psychological explorations of the quiet ego* (pp. 95–105). Washington, DC: American Psychological Association. doi:10.1037/11771-009
- Neff, K. D., & Beretvas, S. N. (2012). The role of self-compassion in romantic relationships. *Self and Identity*. Advance online publication. doi:10.1080/15298868.2011.639548
- Neff, K. D., Hsieh, Y.-P., & Dejitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, *4*, 263–287. doi:10.1080/13576500444000317
- Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y. P. (2008). Self-compassion and self-construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology*, *39*, 267–285. doi:10.1177/0022022108314544
- Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality*, *41*, 908–916. doi:10.1016/j.jrp.2006.08.002
- Nietzel, M. T., & Harris, M. J. (1990). Relationship of dependency and achievement/autonomy to depression. *Clinical Psychology Review*, *10*, 279–297. doi:10.1016/0272-7358(90)90063-G
- Robins, C. J., Ladd, J., Welkowitz, J., Blaney, P. H., Diaz, R., & Kutcher, G. (1994). The Personal Style Inventory: Preliminary validation studies of new measures of sociotropy and autonomy. *Journal of Psychopathology and Behavioral Assessment*, *16*, 277–300. doi:10.1007/BF02239408
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York, NY: Guilford Press.
- Shahar, G. (2006). An investigation of the perfectionism/self-criticism dimension of the Personal Styles Inventory. *Cognitive Therapy and Research*, *30*, 185–200. doi:10.1007/s10608-006-9032-y
- Shahar, G., Soffer, N., & Gilboa-Shechtman, E. (2008). Sociotropy, autonomy, and self-criticism are three distinguishable dimensions of cognitive-personality vulnerability. *Journal of Cognitive Psychotherapy*, *22*, 219–227. doi:10.1891/0889-8391.22.3.219
- Simonds, V. M., & Whiffen, V. E. (2003). Are gender differences in depression explained by gender differences in co-morbid anxiety? *Journal of Affective Disorders*, *77*, 197–202. doi:10.1016/S0165-0327(02)00113-1
- Taouk, M., Lovibond, P. F., & Laube, R. (2001). Psychometric properties of a Chinese version of the short Depression Anxiety Stress Scales (DASS21). *Report for the New South Wales Transcultural Mental Health Centre*. Sydney, Australia: New South Wales Transcultural Mental Health Centre, Cumberland Hospital.
- Van Dam, N. T., Sheppard, S. C., Forsyth, J. P., & Earleywine, M. (2011). Self-compassion is a better predictor than mindfulness of symptom severity and quality of life in mixed anxiety and depression. *Journal of Anxiety Disorders*, *25*, 123–130. doi:10.1016/j.janxdis.2010.08.011
- Wong, J. G. W. S., Cheung, E. P. T., Chan, K. K. C., Ma, K. K. M., & Tang, S. W. (2006). Web-based survey of depression, anxiety and stress in first-year tertiary education students in Hong Kong. *Australian and New Zealand Journal of Psychiatry*, *40*, 777–782. doi:10.1080/j.1440-1614.2006.01883.x
- Wong, K. Y. (2005). *Correlation of cognitive style and self-stigma: The impact on the vulnerability to depression among mainland Chinese new arrival women*. Retrieved from <http://www.psy.cuhk.edu.hk/thesisdb/abstract/2005udgd/Luk%20Mei%20Ching.pdf>
- Yarnell, L. M., & Neff, K. D. (2012). Self-compassion, interpersonal conflict resolutions, and well-being. *Self and Identity*. Advance online publication. doi:10.1080/15298868.2011.649545

Received January 11, 2012

Revision received September 3, 2012

Accepted September 3, 2012 ■