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The Moderating Effects of Age on the Relationships of Self-Compassion, Self-Esteem, and Mental Health

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Abstract: This study investigated the interactive effects of self-compassion, self-esteem, and age on mental health. Numerous previous studies have found that self-compassion has a significant positive association with well-being but most of these studies were conducted with young adults represented by college students. This study extended the previous findings by comparing its distinctive functions in different age groups. A total of 1,813 adults whose age ranged from twenties to fifties (M = 39.28 years, SD = 11.27) completed a questionnaire measuring self-compassion, self-esteem, subjective well-being, and depression. The results of hierarchical regression analysis indicated that the positive relationship between self-compassion and subjective well-being was rendered stronger with older adults. In addition, self-compassion moderated the relationship between self-esteem and depression regardless of age. These results imply that self-compassion may be complimentary to self-esteem in improving mental health, especially for older adults.

Key words: age, self-compassion, self-esteem, depression, subjective well-being.

Self-compassion is considered as a complimentary self-concept to self-esteem, which is associated with one's mental health. It refers to mild caring attitudes toward oneself, characterized by accepting pains or inadequacies with mindfulness instead of avoiding or denying them (Neff, 2003a). The construct of self-compassion is rooted in the Buddhist philosophy, which is characterized by a non-defensive, non-judgmental approach, and the acceptance of sufferings with loving-kindness (Gilbert & Irons, 2005). Self-compassion consists of three factors: (a) self-kindness—treating oneself with care and understanding instead of evaluating or judging; (b) common humanity—recognizing pain and imperfection as a general experience of human beings rather than feeling isolated by them; and (c) mindfulness—observing one's experiences in a balanced way, rather than avoiding, ignoring, or exaggerating them (Neff, 2011).

Self-compassion has a close relationship with emotional regulation toward adverse events. Self-compassion helps people to be emotionally resilient when faced with not only experimentally induced negative emotions but also with distress from real life situations (Brion, Leary, & Drabkin, 2014; Jativa & Cerezo, 2014; Leary, Tate, Adams, Allen, & Hancock, 2007; Sbarra, Smith, & Mehl, 2012). The ability to recover

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from emotional fluctuations provided by self-compassion helps people to be more adaptive and mentally healthy (Terry & Leary, 2011; Yarnell & Neff, 2013). Moreover, studies reported that self-compassion attenuates various types of psychopathology, such as depression, mixed anxiety-depressive disorder, eating disorder, or post-traumatic stress disorder, serving as a protective factor (Kelly, Vimalakanthan, & Miller, 2014; Odou & Brinker, 2014; Thompson & Waltz, 2008; Van Dam, Sheppard, Forsyth, & Earleywine, 2011). The buffer effect of self-compassion can be attributed to self-compassionate cognitive strategies represented by positive cognitive restructuring (Allen & Leary, 2010), which contributes to a higher level of subjective well-being (Neff, Rude, & Kirkpatrick, 2007). The adaptive values of self-compassion are well documented in the literature with Korean samples. Studies have shown that self-compassion is closely related to mental health (Chong & Kim, 2014; Lee & Seo, 2014; Park & Lee, 2013) and serves as a buffer for stressful life events (Cho, 2011; Kim & Hong, 2015; Lee & Sung, 2011; Park & Kim, 2013).

The distinctive features of self-compassion have been documented by various studies. Self-compassion is similar to self-esteem in reflecting positive feelings toward oneself (Leary et al., 2007; Neff, 2003b), but they are differentiated in that self-compassion is based on awareness and acceptance of self-relevant experience whereas self-esteem is grounded on positive or negative evaluation on it (Neff & Vonk, 2009). These differences lead to distinctive emotional processing cognitively (Gilbert & Irons, 2005; Leary et al., 2007) and physiologically (Gilbert et al., 2008; Longe et al., 2010; Rockcliff, Gilbert, McEwan, Lightman, & Glover, 2008), so that their influences result in dissimilar effects on mental health (Bluth & Blanton, 2015; Ko, 2014; Park & Lee, 2013; Neff & Vonk, 2009).

Despite abundant evidences, generalizing the findings from previous studies is limited since the majority of participants in previous research were comprised of college students (Gilbert et al., 2008; Ko, 2014; Leary et al., 2007; Longe et al., 2010; Park & Lee, 2013) and adolescents (Bluth & Blanton, 2015; Neff & McGehee, 2010). Previous studies have reported a positive correlation between self-compassion and age (Neff & Vonk, 2009; Potter, Yar, Francis, & Schuster, 2014; Przezdziecki et al., 2013; Wren et al., 2012). However, it is still unclear whether the role of self-compassion on mental health would be similar or different across various age groups.

From a viewpoint of developmental psychology, every human being has to acquire certain skills or abilities in specific developmental stages, known as the developmental tasks (McCormick, Kuo, & Masten, 2011), and failure in achieving these assignments can trigger psychological maladjustment since these skills and abilities are necessary to successfully adapt to the surroundings in a particular developmental stage (Schulenberg, Bryant, & O'Malley, 2004). According to Havighurst (1972), the major developmental tasks in early adulthood, ranging from twenties to thirties, include exploring one's career opportunities, establishing intimacy with others, and starting one's own family, whereas middle adulthood, reaching from the forties to the fifties, is charged with assignments composed mainly of being satisfied with occupational accomplishments and adjusting to diverse developmental changes, such as physical changes and transformed family relations. The unique tasks in each developmental stage make different psychological strategies needed in order to achieve psychological adjustment in each stage. While younger adults are required to accommodate the environment to satisfy their developmental needs, such as seeking new opportunities in work and relationships, middle-aged adults need to adjust to the given conditions of life, such as changes in physical health, career, and family, which are inevitable experiences in one's developmental course.

Self-compassionate attitudes may be more crucial for the mental health of middle-aged adults than that of younger adults because healthy acceptance, which is facilitated by self-compassion, appears to be a more salient task for middle-aged adults, considering the afore-

mentioned developmental differences (Neff, 2003a). The previous findings also support this proposition indirectly. In Ryff's study (1989), which explored the components of well-being for middle-aged adults, participants replied that self-acceptance was one of three conditions of happiness for mid-adulthood. In addition, middle-aged adults who blamed themselves less and distantiated themselves from distressful events recovered equanimity quickly and reported greater subjective well-being (Lawton, 1989; Lawton, Kleban, Rajagopal, & Dean, 1992; Ong, Bergeman, Bisconti, & Wallace, 2006). A few studies examining the role of self-compassion in the elderly group reported that it could reduce the undesirable aspects of aging. For example, the self-compassionate elderly expressed more positive thoughts about aging than those who had lower self-compassion, even though both groups experienced similar age-related events (Allen & Leary, 2014). Regarding physical changes in senescence, the elderly with greater self-compassion were less reluctant to utilize assistance (Allen, Goldwasser, & Leary, 2012), in contrast to the elderly with high self-esteem who tended to deny their diminishing physical functions (Sneed & Whitbourne, 2001).

Furthermore, cultural features may also play a role in the interactive effect of self-compassion and age. Neff, Pisitsungkagarn, and Hsieh (2008) found that the relational strengths between self-compassion and well-being varied even within Asian cultures, reporting a stronger correlation in Taiwan characterized by Confucian values (Zhang, 2003) than in Thailand influenced more by Buddhism (Tulananda & Roopnarine, 2001). This result indicates that specific cultural values may determine the value of self-compassion. Traditionally, Korea is a paradigmatic Confucian society, in which Confucian values are pervasive beyond religious conviction (Baker, 2011; Koh, 1996), like Taiwan. However, Korea has experienced rapid transformations in various societal aspects, resulting in generational differences in the level of endorsement of traditional cultural values. Hyun (2001) has reported that younger adults supported traditional Confucian values less than older adults did. Such differences in cultural values across age groups in Korea may lead to variations in the importance of self-compassion on mental health. Several qualitative studies with the Koreans indirectly support the notion that self-compassionate attitudes, such as self-acceptance, are more valued by older adults than younger ones (Ahn, 2013; Chong & Jo, 2013; Jeon, 2010).

Therefore, this study aimed to explore how the relationships of self-compassion and self-esteem with mental health would be moderated by age. In particular, we used two distinctive factors as indicators of mental health. Keyes (2005) has proposed two dimensions of mental health, one reflecting the absence of mental illness and the other indicated by well-being. Based on this, we employed subjective well-being and depression as two indicators of mental health. The hypotheses of this study were: (a) the relationships between self-esteem and mental health would be stronger under the conditions of greater self-compassion; (b) the relationships between self-compassion and mental health would be stronger with the older adults; (c) the relationships between self-esteem and mental health would not be moderated by age; and (d) the interaction effect between self-esteem and self-compassion on mental health would be greater with older adults.

Method

Participants

Participants were 1,813 Korean adults (925 males and 888 females) recruited by an online survey company. Six hundred thirteen (33.8%) were aged in their twenties and 400 (22.1%) were in their thirties, forties and fifties, respectively, with an age range from 22 to 61 years (*Mean* = 39.28, *SD* = 11.27). In regards to marital status, 956 were married (52.8%), 834 (46.0%) were never-married, and 23 (1.3%) were divorced (1.3%). Approximately half of the participants responded that they had graduated from a college or university (1,027, 56.6%), followed by the responses that they were

attending a graduate school or had a graduate degree (340, 18.8%), attending a college or university (247, 13.6%), had graduated from high school (190, 10.5%), and had graduated from middle school (9, 0.56%). Their occupational composition was 1,500 employees (82.7%) and 313 college students (17.3%).

Measures

Self-esteem. Self-esteem was measured using the Korean version of Rosenberg Self-esteem Scale (Jeon, 1974), which was originally developed by Rosenberg (1965). This measure consists of 10 items and uses a four-point scale. Half of the items are positive, like "On the whole, I am satisfied with myself," and the rest are negative ones that are reversely scored, such as "I feel I do not have much to be proud of." Scores range from 10 to 40 and a higher score indicates greater self-esteem. The Korean version demonstrated adequate internal consistency (.84) and split-halves reliability (.55) in the Korean validation study (Jeon, 1974). The internal consistency for this sample was .81.

Self-compassion. Self-compassion was assessed with the Korean version of Self-compassion Scale (K-SCS) (Kim, Yi, Cho, Chai, & Lee, 2008), originally developed by Neff (2003b). The K-SCS is comprised of 26 items that measure three aspects of self-compassion and their opposites: (a) self-kindness (5 items) vs. self-judgment (5 items); (b) common humanity (4 items) vs. isolation (4 items); and (c) mindfulness (4 items) vs. over-identification (4 items). The participants were asked to rate how much their responses toward hardships were similar with each item on a five-point scale, for example "I try to be loving towards myself when I'm feeling emotional pain." The higher score implies greater self-compassion. Neff (2003b) reported the internal consistency at .91, and Kim et al. reported .87 (2008). In this study, the internal consistency was .84.

Subjective well-being. Mental health was indicated by two distinctive constructs, subjective well-being and depression. First, subjective well-being was assessed by Concise Measure of Subjective Well-Being (COMOSWB) developed by Suh and Koo (2011) through the national sample survey. It is nine-item self-report questionnaire using a seven-point scale ranging from 1 to 7. The COMOSWB consists of three subscales: (a) life satisfaction (e.g., "I am satisfied with the relational aspect of my life"); (b) positive emotion (e.g., "joyful"); and (c) negative emotion (e.g., "helpless"). Suh and Koo (2011) reported the correlations between life satisfaction and positive affect at .70, life satisfaction and negative affect at –.41, and positive affect and negative affect at –.42 in an online survey sample ($p < .01$). In case of another sample collected by an individual interview survey, correlations were .59, –.32, and –.36 ($p < .01$). They also reported the internal consistency between .82 and .89 for three subscales. The internal consistency of the full scale after reversely coding the items of negative emotion was .88 for the online survey sample and .86 for the individual interview sample.

In this sample, the correlations were .67 between life satisfaction and positive emotion, –.40 between life satisfaction and negative emotion, and –.36 between positive emotion and negative emotion ($p < .01$). The internal consistency of the full scale was .88. As the correlations of three subscales and the internal consistency supported the unidimensionality, the total score was used by subtracting negative emotion score from the sum of life satisfaction score and positive emotion score, as recommended by Suh and Koo (2011).

Depression. Depression was another indicator of mental health and it was measured by the Korean version of Center for Epidemiologic Studies Depression Scale (CES-D) (Chon, Choi, & Yang, 2001), originally developed by Radloff (1977). This scale was designed to measure depression symptoms of the community sample. It includes 20 items using a four-point scale, measuring depressive affect, somatic symptoms and bluntness, positive affect (reversely coded), and interpersonal difficulties. Participants were instructed to rate the fre-

Table 1 *Means, SD,* and Correlations

	Self-esteem	Self-compassion	Age	Subjective Well-being	Depression	Sex	Income
Self-esteem	–						
Self-compassion	.68**	–					
Age	.12**	.18**	–				
Subjective Well-being	.65**	.61**	.11**	–			
Depression	–.63**	–.61**	–.18**	–.67**	–		
Sex	–.09**	–.12**	–.08**	–.13**	.10**	–	
Income	.20**	.16**	.29**	.19**	–.20**	–.05*	–
Mean	29.01	82.88	39.28	16.06	36.63	.49	6.12
SD	4.62	12.17	11.27	8.37	10.50	.50	2.58

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

quency of feelings during the last week (e.g., "I was bothered by things that usually don't bother me" and "People were unfriendly"). The internal consistency of the Korean version of CES-D was .91 in Chon et al.'s (2001) study and .92 in this study.

Procedures

The participants were recruited from an online panel registered in a private survey company. Sampling was conducted to include a similar size of participants by sex and age groups. Prior to the participation, the participants were given the research descriptions and provided consent. After providing consent, participants completed questionnaires online.

Statistical Analysis

The interactive effects among self-esteem, self-compassion, and age were examined by two independent regression analyses, one with subjective well-being as a dependent variable, the other with depression. In addition, age and income were included as control variables in these analyses. The moderating effects were analyzed through hierarchical regression analyses and the variables were standardized to avoid multicollinearity problems (Dawson, 2014). Two control variables, sex and income, were entered into the regression analysis first. Subsequently, the predictors were entered into the regression in the following three steps: (a) standardized self-esteem, self-compassion, and age; (b) three two-way interaction terms; and (c) the three-way interaction term. In order to understand the meanings of significant interaction effects, the regression lines were drawn by calculating the values of the dependent variable at the ± 1 *SD* of the predictors and simple slope tests were conducted to examine whether each slope was significantly different from 0 (Dawson, 2014).

Results

The correlation analyses were conducted prior to hierarchical regression analyses (Table 1). Subjective well-being was positively correlated with self-esteem, self-compassion, and age, while depression was negatively associated with them. Self-compassion was strongly associated with self-esteem ($r = .68$, $p < .01$). Age had significant but weak correlations with self-esteem ($r = .12$, $p < .01$) and self-compassion ($r = .18$, $p < .01$).

The results of hierarchical regression analysis, which examined the interactive effects of self-compassion, self-esteem, and age on subjective well-being after controlling for the effects of sex and income, are displayed at Table 2. Model 2, with standardized self-esteem, self-compassion, and age as predictors after controlling for the effects of sex and income, accounted for about 43% of the variance in subjective well-being ($\Delta F_{3, 1807} = 505.69$, $p < .01$). Model 3, with the two-way interaction terms added, explained an additional 0.5% ($\Delta F_{3, 1804} = 5.34$, $p < .01$). However, no additional

Table 2 Hierarchical Regression Analysis Results for the Interaction Between Self-esteem and Self-compassion on Subjective Well-being

Step	Predictor	*B*	*SE B*	*β*	*Tolerance*	*VIF*	R^2	ΔR^2
1	Sex	−1.03	.19	−.12***	.998	1.002	.051***	
	Income	1.53	.19	.18***	.998	1.002		
2	Sex	−.47	.14	−.05**	.982	1.018	.484***	.433***
	Income	.44	.15	.05**	.890	1.123		
	Self-esteem	3.61	.19	.43***	.531	1.884		
	Self-compassion	2.56	.20	.31***	.528	1.895		
	Age	−.12	.15	−.02	.897	1.115		
3	Sex	−.49	.14	−.06**	.978	1.023	.488***	.005**
	Income	.43	.15	.05**	.889	1.125		
	Self-esteem	3.58	.20	.43***	.508	1.969		
	Self-compassion	2.65	.20	.32***	.519	1.928		
	Age	−.15	.15	−.02	.890	1.123		
	Self-esteem × Age	−.24	.19	−.03	.543	1.840		
	Self-compassion × Age	.70	.19	.08***	.549	1.820		
	Self-esteem × Self-compassion	−.01	.11	−.00	.911	1.098		
4	Sex	−.49	.14	−.06**	.977	1.024	.489***	.000
	Income	.42	.15	.05**	.889	1.125		
	Self-esteem	3.67	.20	.43***	.506	1.976		
	Self-compassion	2.63	.20	.31***	.513	1.950		
	Age	−.20	.16	−.02	.738	1.354		
	Self-esteem × Age	−23	.19	−.03	.538	1.858		
	Self-compassion × Age	.69	.19	.08***	.547	1.828		
	Self-esteem × Self-compassion	.02	.12	.00	.818	1.223		
	Self-esteem × Self-compassion × Age	.09	.11	.02	.668	1.498		

Note. All variables were standardized.
**$p < .01$. ***$p < .001$.

explanation was found in model 4 ($\Delta F_{1, 1803} = .62$, $p > .05$). Thus, model 3 was considered the final model and regression coefficients were interpreted based on it. Both self-esteem ($\beta = .43$, $p < .01$) and self-compassion ($\beta = .32$, $p < .01$) were positively related to subjective well-being, whereas age had no main effect. The interaction effect was significant only between self-compassion and age ($\beta = .08$, $p < .01$).

In order to interpret the significant interaction, regression lines were drawn (Figure 1). Self-compassion was positively associated with subjective well-being in both older ($b = 3.35$, $p < .01$) and younger adults ($b = 1.95$, $p < .01$). In addition, the association was stronger in older adults, reflecting that the role of self-compassion in predicting subjective well-being would be stronger with older individuals.

The interaction effects of self-compassion, self-esteem, and age on depression were investigated with the same procedure. As presented in Table 3, the analysis showed that model 2, after controlling for the effects of sex and income, explained approximately 42% of the

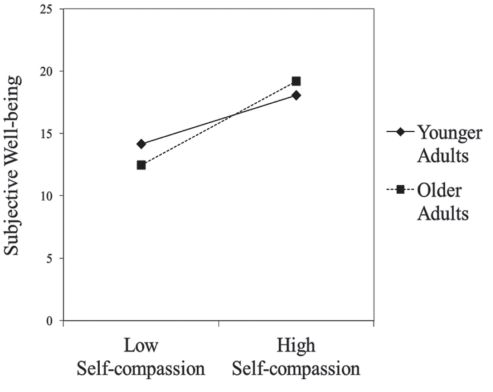

Figure 1 Interactive effect of self-compassion and age on subjective well-being.

Table 3 Hierarchical Regression Analysis Results for the Interaction Between Self-esteem and Self-compassion on Depression

Step	Predictor	*B*	*SE B*	*β*	*Tolerance*	*VIF*	R^2	ΔR^2
1	Sex	.93	.24	.09***	.998	1.002	.046***	
	Income	–2.02	.24	–.19***	.998	1.002		
2	Sex	.17	.18	.02	.982	1.018	.470***	.423***
	Income	–.48	.19	–.05*	.890	1.123		
	Self-esteem	–4.14	.25	–.39***	.531	1.884		
	Self-compassion	–3.42	.25	–.33***	.528	1.895		
	Age	–.61	.19	–.06**	.897	1.115		
3	Sex	.16	.18	.02	.978	1.023	.472***	.003*
	Income	–.49	.19	–.05*	.889	1.125		
	Self-esteem	–4.00	.25	–.38***	.508	1.969		
	Self-compassion	–3.50	.25	–.33***	.519	1.928		
	Age	–.57	.19	–.06**	.890	1.123		
	Self-esteem × Age	.30	.24	.03	.543	1.840		
	Self-compassion × Age	–.44	.24	–.04	.549	1.820		
	Self-esteem × Self-compassion	.35	.14	.05*	.911	1.098		
4	Sex	.16	.18	.02	.977	1.024	.473***	.000
	Income	–.49	.19	–.05*	.889	1.125		
	Self-esteem	–4.00	.25	–.38***	.506	1.976		
	Self-compassion	–3.52	.25	–.34***	.513	1.950		
	Age	–.64	.21	–.06**	.738	1.354		
	Self-esteem × Age	.32	.24	.03	.538	1.858		
	Self-compassion × Age	–.45	.24	–.04	.547	1.828		
	Self-esteem × Self-compassion	.38	.15	.05*	.818	1.223		
	Self-esteem × Self-compassion × Age	.10	.14	.02	.668	1.498		

Note. All variables were standardized.
*$p < .05$. **$p < .01$. ***$p < .001$.

variance of depression ($\Delta F_{3,\ 1807} = 480.98$, $p < .001$). Model 3, with two-way interaction terms, was shown to add an extra 0.3% explanation ($\Delta F_{3,\ 1804} = 3.05$, $p < .05$), yet the three-way interaction term entered in model 4 did not increase the amount of explanation significantly ($\Delta F_{1,\ 1803} = .49, p > .05$). Model 3, the final model, showed that self-esteem ($\beta = –.38$, $p < .01$), self-compassion ($\beta = –.33, p < .01$), and age ($\beta = –.06$, $p < .01$) were negatively associated with depression. The interaction effect was only significant between self-compassion and self-esteem ($\beta = .05, p < .05$).

The modality of the significant interaction effect was depicted as regression lines as discussed earlier (Figure 2). Self-esteem was negatively related with depression in those with both the higher ($b = –3.65$, $p < .01$) and the lower ($b = –4.34$, $p < .01$) levels of self-compassion, but the relationship was weaker in the higher level of the self-compassion group. It implied that the negative relationship between self-esteem and depression was buffered by self-compassion.

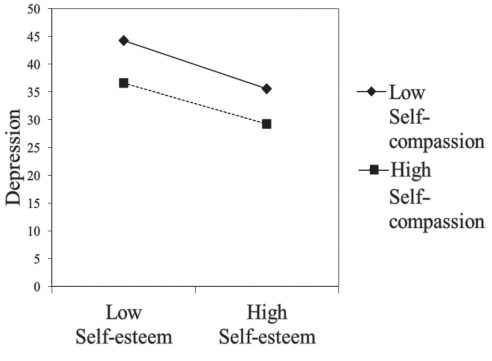

Figure 2 Interactive effect of self-esteem and self-compassion on depression.

Discussion

This study primarily aimed to identify the interactive effects of self-compassion, self-esteem, and age on mental health. We confirmed that both self-esteem and self-compassion are strong predictors of mental health as suggested by the previous studies (Neff, 2003a; Neff & Vonk, 2009; Park & Lee, 2013). More importantly, we found two significant interaction effects, the interaction between self-compassion and age on subjective well-being and the interaction between self-esteem and self-compassion on depression.

First of all, the effect of self-compassion on subjective well-being was shown to be more beneficial to middle-aged adults than those who were in their early adulthood. The desirable effects of self-compassion for mental health in the elderly were reported by previous studies as well (Allen et al., 2012; Allen & Leary, 2014). The current finding provides further evidence that self-compassion played a more important role in leading a psychologically prosperous life for middle-aged adults, compared with younger adults. This difference may stem from the distinctive developmental characteristics by various age groups suggested by lifespan development (Schulenberg et al., 2004). Since life satisfaction among middle-aged adults often relies on unchangeable conditions in health, career, and relationships (Havighurst, 1972), the ability to accept such conditions as they are might be more required for middle-aged adults than younger adults. Moreover, the moderating effect of age may stem from the cultural context. Previous literature has shown that the relationship between self-compassion and psychological adjustment was stronger in a society with strong Confucian values (Neff et al., 2008). Considering the generational differences in cultural values in Korea (Hyun, 2001), self-compassion may have greater values for middle-aged adults who endorse Confucian values more than younger adults.

However, the interaction effect between self-compassion and age was not observed on depression. It may imply that subjective well-being, rather than depression, may be more susceptible to the interaction effect of self-compassion and age. Such difference between subjective well-being and depression may be because they represent distinctive aspects of mental health (Keyes & Lopez, 2002). Our findings suggest that the greater benefit of self-compassion in middle-aged adults may be more relevant to the positive dimension of mental health, such as subjective well-being, than the negative one, for example depression.

Alternative explanation for the differential results between subjective well-being and depression may be associated with the characteristics of the scales. CES-D, the depression measure, is dominantly represented by chronic and non-affective symptoms, such as interpersonal relations or physical symptoms (Radloff, 1977), whereas COMOSWB, the measure of subjective well-being, is mainly comprised of emotional aspects (Suh & Koo, 2011). Many preceding studies have identified that self-compassion functions as an emotional buffer by regulating emotions (Allen & Leary, 2010; Brion et al., 2014; Jativa & Cerezo, 2014; Leary et al., 2007; Sbarra et al., 2012). Thus, it is possible that the interaction effect between self-compassion and age is greater for affective aspects of mental health. However, this finding on the difference between subjective well-being and depression should be interpreted with caution, and needs to be substantiated with further evidence.

Regarding the interaction effects between self-esteem and self-compassion on mental health, the interaction effect was not significant for subjective well-being and only marginally significant for depression, especially considering a large sample used in this study. These weak or non-existent interaction effects may be attributed to the high correlation between the moderator and the predictor. As self-compassion and self-esteem are closely associated with each other, the moderation effects may not be difficult to find. Previous studies also reported similar results (Ko, 2014; Park & Lee, 2013). The insignificant three-way interaction can be ascribed to this as well.

This study has several limitations. First, the results of this study were grounded on cross-

sectional data, so they should not be interpreted as causal relationships. In addition, the age cohort effect, not the age effect itself, might have affected the findings of this study. Thus, future studies need to use longitudinal data to clarify the relationships of self-compassion, self-esteem, and age. Moreover, the reason why the interaction effects of self-compassion and age were found only in subjective well-being is still unclear. The small effect size of the interaction effects posits additional concerns. Further research may be needed to confirm the current findings using more diverse measures for mental health. Finally, the generalization of these findings to other groups, such as clinical samples or individuals from other cultures, is limited, as this study was conducted with a Korean community sample.

In spite of these limitations, this study has enhanced the scientific understanding on self-compassion by integrating the developmental differences with the previous findings. The positive role of self-compassion has been documented, yet the majority of the studies have focused on young adults, limiting the generalizability to other age groups. We found that the positive relationship between self-compassion and mental health can be better understood when considering age differences.

More importantly, this study extended the humanistic psychological view on mental health. Self-compassion centers on self-acceptance (Barnard & Curry, 2011; Neff, 2003a), which is a necessary condition for optimal functioning in humanistic psychology (Sheldon & Kasser, 2001) and a key dimension of psychological well-being (Ryff, 2014; Ryff & Keyes, 1995). This study has not only confirmed the benefits of non-judgmental awareness and acceptance toward oneself but has also highlighted the compatibility of the lifespan developmental approach with humanistic psychology.

Finally, the results of the current study provide therapists or practitioners working for the welfare of middle-aged individuals with useful information. Previous literature has reported that self-compassion is a great therapeutic strength because it can be developed and enhanced (Ko, 2014; Leary et al., 2007), while self-esteem is resistant to change and hard to cultivate (Baumeister, Campbell, Krueger, & Vohs, 2003; Swann, 1996). Considering the greater benefits of self-compassion in older adults, it may be an important task for therapists to implement tasks designed to increase one's self-compassion, such as a mindful self-compassion program (Neff & Germer, 2013), compassion-focused therapy (Gilbert, 2010), mindfulness-based therapy (Birnie, Speca, & Carlson, 2010; Kuyken et al., 2010; Shapiro, Astin, Bishop, & Cordova, 2005), and other self-compassion interventions (Arch et al., 2014; Smeets, Neff, Alberts, & Peters, 2014).

References

Ahn, H. J. (2013). *The meaning of "aging" and "aging well" for the Korean elderly: A critical approach to the concept of successful aging*. Unpublished master's thesis, Chung-Ang University, Seoul. (In Korean with English abstract.)

Allen, A. B., Goldwasser, E. R., & Leary, M. R. (2012). Self-compassion and well-being among older adults. *Self and Identity*, *11*, 428–453.

Allen, A. B., & Leary, M. R. (2010). Self-compassion, stress, and coping. *Social and Personality Psychology Compass*, *4*, 107–118.

Allen, A. B., & Leary, M. R. (2014). Self-compassionate responses to aging. *Gerontologist*, *54*, 190–200.

Arch, J. J., Brown, K. W., Dean, D. J., Landy, L. N., Brown, K. D., & Laudenslager, M. L. (2014). Self-compassion training modulates alpha-amylase, heart rate variability, and subjective responses to social evaluative threat in women. *Psychoneuroendocrinology*, *42*, 49–58.

Baker, D. (2011). The transformation of Confucianism in contemporary Korea. *Keimyoung Korean Studies Journal*, *44*, 425–455.

Barnard, L. K., & Curry, J. F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of General Psychology*, *15*, 289–303.

Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, *4*, 1–44.

Birnie, K., Speca, M., & Carlson, L. E. (2010). Exploring self-compassion and empathy in the context

of mindfulness-based stress reduction (MBSR). *Stress and Health*, *26*, 359–371.

Bluth, K., & Blanton, P. W. (2015). The influence of self-compassion on emotional well-being among early and older adolescent males and females. *Journal of Positive Psychology*, *10*, 219–230.

Brion, J. M., Leary, M. R., & Drabkin, A. S. (2014). Self-compassion and reactions to serious illness: The case of HIV. *Journal of Health Psychology*, *19*, 218–229.

Cho, Y. (2011). The effects of self-compassion, life stress, and decentering on psychological health: A mediated moderation model. *Korean Journal of Clinical Psychology*, *30*, 767–787. (In Korean with English abstract.)

Chon, K. K., Choi, S. C., & Yang, B. C. (2001). Integrated Adaptation of CES-D in Korea. *Korean Journal of Health Psychology*, *6*, 59–76. (In Korean with English abstract.)

Chong, Y. S., & Jo, S. A. (2013). Source of meaning in life and efforts for meaning on happiness in Korean college students and middle-aged. *Korean Journal of Psychology: General*, *32*, 507–531. (In Korean with English abstract.)

Chong, Y. S., & Kim, S. B. (2014). Relationship among self-esteem, self-compassion, coping strategies, and college life adjustment in freshmen. *Korean Journal of Developmental Psychology*, *27*, 117–140. (In Korean with English abstract.)

Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of Business and Psychology*, *29*, 1–19.

Gilbert, P. (2010). *Compassion focused therapy: Distinctive features*. New York: Routledge.

Gilbert, P., & Irons, C. (2005). Focused therapies and compassionate mind training for shame and self-attacking. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 263–325). London: Routledge.

Gilbert, P., McEwan, K., Mitra, R., Franks, L., Richter, A., & Rockliff, H. (2008). Feeling safe and content: A specific affect regulation system? Relationship to depression, anxiety, stress, and self-criticism. *Journal of Positive Psychology*, *3*, 182–191.

Havighurst, R. J. (1972). *Developmental tasks and education*. New York: McKay.

Hyun, K. J. (2001). Sociocultural change and traditional values: Confucian values among Koreans and Korean Americans. *International Journal of Intercultural Relations*, *25*, 203–229.

Jativa, R., & Cerezo, M. (2014). The mediating role of self-compassion in the relationship between victimization and psychological maladjustment in a sample of adolescents. *Child Abuse & Neglect*, *38*, 1180–1190.

Jeon, B. J. (1974). 자아개념 측정 가능성에 관한 연구 [Self-esteem: A test of its measurability]. *Yonsei Nonchong*, *11*, 107–130. (In Korean, translated by the author of this article.)

Jeon, K. S. (2010). *Well-being of middle-aged Koreans: Development of scales related to happiness and meaning of life, and comparisons between groups*. Unpublished doctoral dissertation, Chung-ang University, Seoul, Korea. (In Korean with English abstract.)

Kelly, A. C., Vimalakanthan, K., & Miller, K. E. (2014). Self-compassion moderates the relationship between body mass index and both eating disorder pathology and body image flexibility. *Body Image*, *11*, 446–453.

Keyes, C. L. M. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology*, *73*, 539–548.

Keyes, C. L. M., & Lopez, S. J. (2002). Toward a science of mental health: Positive directions in diagnosis and intervention. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 45–62). New York: Oxford University Press.

Kim, K. E., Yi, G. D., Cho, Y. R., Chai, S. H., & Lee, W. K. (2008). The validation study of the Korean version of the Self-Compassion Scale. *Korean Journal of Health Psychology*, *13*, 1023–1044. (In Korean with English abstract.)

Kim, M. S., & Hong, H. Y. (2015). The moderating effect of self-compassion on the relationship between trauma related emotions and forgiveness. *Korean Journal of Counseling*, *16*, 77–96. (In Korean with English abstract.)

Ko, E. J. (2014). *Analysis on the emotional effect of self-compassion and self-esteem in the occurrence of negative life events*. Unpublished doctoral dissertation, Korea University, Seoul. (In Korean with English abstract.)

Koh, B. I. (1996). Confucianism in contemporary Korea. In W. M. Tu (Ed.), *Confucian traditions in East Asian modernity: Moral education and economic culture in Japan and the four mini-dragons* (pp. 191–201). Cambridge, MA: Harvard University Press.

Kuyken, W., Watkins, E., Holden, E., White, K., Taylor, R. S., Byford, S., & Dalgleish, T. (2010). How does mindfulness-based cognitive therapy work? *Behavior Research and Therapy*, *48*, 1105–1112.

Lawton, M. P. (1989). Environmental proactivity and affect in older people. In S. Spacapan & S. Oskamp (Eds.), *The social psychology of aging* (pp. 135–163). Thousand Oaks, CA: Sage.

Lawton, M. P., Kleban, M. H., Rajagopal, D., & Dean, J. (1992). The dimensions of affective experience

in three age groups. *Psychology and Aging*, *7*, 171–184.

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.

Lee, E. J., & Seo, Y. S. (2014). The relations between insecure adult attachment (attachment anxiety, attachment avoidance) and interpersonal problems and psychological distress: Mediating effects of self-compassion and optimism. *Korean Journal of Counseling and Psychotherapy*, *26*, 413–439. (In Korean with English abstract.)

Lee, S. H., & Sung, S. Y. (2011). The buffering effect of self-compassion on anger thought and expression. *Korean Journal of Counseling and Psychotherapy*, *23*, 93–112. (In Korean with English abstract.)

Longe, O., Maratos, F. A., Gilbert, P., Evans, G., Volker, F., Rockliff, H., & Rippon, G. (2010). Having a word with yourself: Neural correlates of self-criticism and self-reassurance. *Neuroimage*, *49*, 1849–1856.

McCormick, C. M., Kuo, S. I. C., & Masten, A. S. (2011). Developmental tasks across the lifespan. In K. L. Fingerman, C. A. Berg, J. Smith, & T. C. Antonucci (Eds.), *The handbook of lifespan development* (pp. 117–140). New York: Springer.

Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*, 85–101.

Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity*, *2*, 223–250.

Neff, K. D. (2011). Self-compassion, self-esteem, and well-being. *Social and Personality Compass*, *5*, 1–12.

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, *69*, 28–44.

Neff, K. D., & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity*, *9*, 225–240.

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.

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.

Neff, K. D., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of Personality*, *77*, 23–50.

Odou, N., & Brinker, J. (2014). Exploring the relationship between rumination, self-compassion, and mood. *Self and Identity*, *13*, 449–459.

Ong, A. D., Bergeman, C. S., Bisconti, T. L., & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of Personality and Social Psychology*, *91*, 730–749.

Park, S. R., & Lee, H. J. (2013). The relationships of self-esteem, self-compassion, psychological maladjustment, and well-being. *Korean Journal of Clinical Psychology*, *32*, 123–139. (In Korean with English abstract.)

Park, S. Y., & Kim, K. M. (2013). The relationship among perceived stress, bullying, and depression of soldiers: Moderating effects of self-compassion. *Korean Journal of Counseling*, *14*, 3691–3707. (In Korean with English abstract.)

Potter, R., Yar, K., Francis, A. J., & Schuster, S. (2014). Self-compassion mediates the relationship between parental criticism and social anxiety. *International Journal of Psychology and Psychological Therapy*, *14*, 33–43.

Przezdziecki, A., Sherman, K. A., Baillie, A., Taylor, A., Foley, E., & Stalgis-Bilinski, K. (2013). My changed body: Breast cancer, body image, distress and self-compassion. *Psycho-Oncology*, *22*, 1872–1879.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385–401.

Rockcliff, H., Gilbert, P., McEwan, K., Lightman, S., & Glover, D. (2008). A pilot exploration of heart rate variability and salivary cortisol responses to compassion-focused imagery. *Clinical Neuropsychiatry*, *5*, 132–139.

Rosenberg, M. (1965). *Society and adolescent self-image*. Princeton, NJ: Princeton University Press.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*, 1069–1081.

Ryff, C. D. (2014). Psychological well-being revisited: Advances in science and practice. *Psychotherapy and Psychosomatics*, *83*, 10–28.

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, *69*, 719–727.

Sbarra, D. A., Smith, H. L., & Mehl, M. R. (2012). When leaving your ex, love yourself: Observational ratings of self-compassion predict the

course of emotional recovery following marital separation. *Psychological Science*, *23*, 261–269.
Schulenberg, J. E., Bryant, A. L., & O'Malley, P. M. (2004). Taking hold of some kind of life: How developmental tasks relate to trajectories of well-being during the transition to adulthood. *Development and Psychopathology*, *16*, 1119–1140.
Shapiro, S. L., Astin, J. A., Bishop, S. R., & Cordova, M. (2005). Mindfulness-based stress reduction for health care professionals: Results from a randomized trial. *International Journal of Stress Management*, *12*, 164–176.
Sheldon, K. M., & Kasser, T. (2001). Goals, congruence, and positive well-being: New empirical support for humanistic theories. *Journal of Humanistic Psychology*, *41*, 30–50.
Smeets, E., Neff, K., Alberts, H., & Peters, M. (2014). Meeting suffering with kindness: Effects of a brief self-compassion intervention for female college students. *Journal of Clinical Psychology*, *70*, 794–807.
Sneed, J. R., & Whitbourne, S. K. (2001). Identity processing styles and the need for self-esteem in middle-aged and older adults. *International Journal of Aging & Human Development*, *52*, 311–321.
Suh, E. M., & Koo, J. (2011). A Concise Measure of Subjective Well-Being (COMOSWB): Scale Development and Validation. *Korean Journal of Social and Personality Psychology*, *25*, 96–114. (In Korean with English abstract.)
Swann, W. B. (1996). *Self-traps: The elusive quest for higher self-esteem*. New York: W. H. Freeman.
Terry, M. L., & Leary, M. R. (2011). Self-compassion, self-regulation, and health. *Self and Identity*, *10*, 352–362.
Thompson, B. L., & Waltz, J. (2008). Self-compassion and PTSD symptom severity. *Journal of Traumatic Stress*, *21*, 556–558.
Tulananda, O., & Roopnarine, J. L. (2001). Mothers' and fathers' interactions with preschoolers in the home in Northern Thailand: Relationships to teachers' assessments of children's social skills. *Journal of Family Psychology*, *15*, 676–687.
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.
Wren, A. A., Somers, T. J., Wright, M. A., Goetz, M. C., Leary, M. R., Fras, A. M., & Keefe, F. J. (2012). Self-compassion in patients with persistent musculoskeletal pain: Relationship of self-compassion to adjustment to persistent pain. *Journal of Pain and Symptom Management*, *43*, 759–770.
Yarnell, L. M., & Neff, K. D. (2013). Self-compassion, interpersonal conflict resolutions, and well-being. *Self and Identity*, *12*, 146–159.
Zhang, W. B. (2003). *Taiwan's modernization: Americanization and modernizing Confucian manifestations*. Singapore: World Scientific Printers.

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