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Assessing the Role of Self-Compassion, Gender Role Orientation, and Age in Emotion Regulation

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Abstract

Self-compassion has been investigated for its influence on emotion regulation, typically focusing on how trait self-compassion influences well-being through increased emotion regulation; the influence of other factors has been less thoroughly investigated. This exploratory study delved into how trait self-compassion, age, and gender role orientation jointly affect emotion regulation. We hypothesized that higher levels of trait self-compassion, and both highly masculine and highly feminine gender role orientations would be linked to fewer problems with emotion regulation, and that increased age would be linked to higher problems with it. Our sample included 112 participants who ranged in age from 19-78 years of age and were predominantly female (67%). Results indicated that both increased levels of trait self-compassion and age reduced problems with emotion regulation, while high scores in gender role orientation did not. These findings strengthen the connection between self-compassion and emotion regulation; and have implications for mental health research. Findings may also illuminate a shift in perceptions of gender-role orientations, suggesting stereotypical traits of masculinity, femininity, and androgyny may not have as much influence on emotion regulation as previously believed. Finally, there may be implications for how education levels affect emotion regulation in aging populations, but further exploration is needed.

Keywords: self-compassion, gender role orientation, emotion regulation

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Assessing the Role of Self-Compassion, Gender Role Orientation, and Age in Emotion Regulation

In a relatively new wave of research, Western psychology has begun to investigate the concept of self-compassion (Neff, 2003). Rooted in Buddhism, self-compassion has been shown to be positively linked to psychological well-being (Finlay-Jones et al., 2015). Self-compassion is comprised of three interconnected components: self-kindness, common humanity, and mindfulness (Neff, 2003). Self-kindness refers to inner dialogue, and the ability to remain supportive of oneself in difficult circumstances rather than becoming critical. Common humanity is the ability to recognize imperfection as a part of the human experience, rather than as something that differentiates us from others. Mindfulness is a judgement-free awareness of negative emotions which allows us to feel compassion for ourselves. Together, these three elements create the positive attitude of self-compassion. One suggested pathway through which self-compassion influences well-being is emotion regulation, the process of influencing one's emotional state through attention to and modification of emotions (Roemer et al., 2015). Differences in emotion regulation have previously been linked to trait self-compassion (Finlay-Jones et al., 2015), gender (Goubet & Chrysikou, 2019), and age (Nolen-Hoeksema & Aldao, 2011), a topic this study seeks to further explore and expand.

The process by which self-compassion influences emotion regulation and well-being may be better understood in the context of the broaden-and-build theory of positive emotions (Fredrickson, 2004). This theory suggests that the range of responses that are available to an individual in any situation are either limited or broadened by the state of their emotionality. When grounded in positive emotions - especially joy, interest, and contentment – one can approach situations with an open mind, and likely able to see a much broader scope of potential responses. This contrasts with the decreased scope of options that may seem available or feasible in difficult situations, which tend to evoke negative thoughts and narrowed thinking. Fredrickson (2004) suggests that positive emotionality can also help an individual build resources that are crucial to their well-being through increased positive interactions, such as social support. Broaden-and-build theory has been used to help explain why high trait self-compassion is linked to mental well-being, as the components of self-compassion engender positive emotions in all types of situations (Odou & Brinker, 2015). Those with high trait self-compassion may therefore be more proficient at using strategies to manage a range of emotional circumstances.

It is important to distinguish self-compassion from self-esteem. Self-esteem involves a value judgement of the self, which is often made in comparison to others. Self-compassion, however, emphasizes positive feelings about the self in the context of common humanity, without comparison (Neff & Dahm, 2015). One result of this difference is that people with high trait self-esteem can react more defensively in negative situations than those with high trait self-compassion (Leary et al., 2007). This defensiveness is suggested to be a strategy that those with high trait self-esteem use to elevate themselves from others and re-establish their level of self-esteem in a compromising situation, while in the same circumstance those with high trait self-compassion can both accept responsibility and be kind to themselves.

Researchers have suggested that increased adaptive emotion regulation is the mechanism that connects self-compassion to mental well-being (Inwood et al., 2018). Leary et al. (2007) conducted a set of five experiments in which participants were exposed to either real (self-reported from their own lives) or hypothetical negative experiences. In all experiments, self-compassion was found to buffer participants from several adverse effects, including moderating negative emotions and allowing participants to separate the events from their sense of self. Emotion regulation was also found to mediate the relationship between trait self-compassion and the level of stress experienced by clinical psychologists (Finlay-Jones et al., 2015). Higher levels of trait self-compassion were correlated with the use of more effective emotion regulation strategies, which reduced the symptoms of stress experienced by the clinicians.

Researchers have also investigated self-reported gender differences in trait self-compassion, although much less thoroughly than other aspects. Yarnell et al. (2015) sought to address this gap in the literature and conducted a meta-analysis by gathering and analyzing mean gender data from 88 existing studies on self-compassion for gendered differences. Their results suggest that males have slightly (but significantly) higher levels of trait self-compassion than females. The study also found both ethnicity and age to be moderating variables. When the sample contained a higher number of ethnic minorities, there was a larger difference seen in levels of trait self-compassion between males and females. When the age of the sample increased, gender differences in trait self-compassion decreased. The authors give two possible explanations for the moderating effects of ethnicity on gender differences in trait self-compassion. Firstly, what appears to be the effects of ethnicity may actually be the impact of being in a minority group. Most of the studies included in the analysis were conducted in Western countries, and the

impact of being in a minority group may have reduced self-compassion and increased self-criticism. Secondly, the result may reflect cultural differences in traditional gender roles. The concept of gender role orientation was further examined by Yarnell et al. (2019) in a study of self-compassion and gender which used scales to measure masculinity and femininity traits. While self-reported gender is an identification individuals report about themselves, gender role orientation reflects the degree to which people possess masculine, feminine, or androgynous characteristics. The results of this study suggested that a masculine gender role orientation is more predictive of high levels of trait self-compassion than self-reported gender.

Yarnell et al. (2015) additionally offered potential explanations for why increased age moderates the relationship between gender and self-compassion. The moderating effect of age reducing the gendered self-compassion gap might be in part due to the fact that gender roles naturally tend to have more overlap as couples get older, and the understanding of common humanity grows. Alternatively, the effect could have nothing to do with relationship development, but rather reflect aspects of the birth cohort that different age groups are a part of, or historical effects. When Yarnell et al. (2015) added the variables of ethnicity and age to their analysis simultaneously, the findings on age were no longer significant. The distribution of ethnic minorities by age demographic might contribute to that finding. While this study is not about investigating the differences in self-compassion among different ethnic groups, it is difficult to not mention the ethnic composition due to the diversities of the countries included in Yarnell et al.'s (2015) meta-analysis.

Yarnell et al. (2019) suggest several reasons for the influence of gender role orientation on levels of trait self-compassion, which they illustrate through the dynamic and interdependent Chinese concept of yin and yang. They suggest that self-compassion is composed of both feminine (yin) and masculine (yang) qualities, which precludes it from being a solely male or female trait. The nurturing qualities which are typically associated with females may both encourage self-compassion through the practice of such attitudes and diminish the needs of the self in order to care for others. Similarly, the stereotypically masculine quality of stoicism may prevent self-compassionate thinking. However, assertiveness, typically seen as more acceptable in males, may encourage more advocation for one's needs, fostering an attitude of self-care, in contrast to diminishing the self in order to care for others. Thus, socialization of masculine and feminine qualities may actually be more influential on the level of trait-self compassion one

possesses than biological (or self-reported) gender. Researchers conducting studies of gendered differences in emotion regulation, discussed next, have made their observations based on self-reported gender. Given the effects of socialization on what is perceived by each gender to be acceptable emotion, further investigation is needed into differences based on traits of masculinity and femininity.

In an investigation into self-reported gender differences in emotion regulation, Goubet and Chrysikou (2019) found that women tend to use a larger number of emotion regulation strategies than men and exhibit more flexibility in changing the strategy they utilize as needed. The broader scope of strategies that women report, however, include both adaptive and maladaptive strategies (Nolen-Hoeksema & Aldao, 2011), which have differing effects on mental well-being. In particular, women are found to be more likely to engage in rumination – pervasive negative thinking – which can lead to increased instances of anxiety and depression (Zlomke & Hahn, 2010).

Aging also seems to affect the use of emotion regulation strategies. Nolen-Hoeksema and Aldao (2011) report several differences between the age groups of 25-35, 45-55, and 65-75. They found that older participants, aged 65-75 years old, reported seeking less emotional support from others, potentially due to the effort involved or tightened circles of support over time. Rumination, a maladaptive emotion regulation strategy, was less frequently used by their oldest age bracket, but emotional suppression was highest for this group. Men in the oldest age group also had the lowest reported levels of active coping and acceptance. These changes in emotion regulation likely relate to the realities that come with aging, such as illness.

Purpose of the Present Study

Research investigating the influence of gender role orientation, rather than self-reported gender, on both self-compassion and emotion regulation is limited. This study explored how gender role orientation, age, and trait self-compassion jointly contribute to emotion regulation. We hypothesized that those with high trait self-compassion would have fewer problems with emotion regulation. We also hypothesized that both highly masculine and highly feminine gender role orientations would have fewer problems with emotion regulation. Finally, we expected that increased age would be linked to higher problems with emotion regulation.

Method

Participants

Convenience sampling was used to recruit participants. The study was made available online through Qualtrics and recruitment took place through the Kwantlen Polytechnic University (KPU) online Research Pool System (RPS), and through social media platforms such as Reddit and Facebook. KPU students who participated through the RPS were eligible to receive a 0.5-credit bonus mark for their participation. No other incentives were offered for participation. A total of 138 individuals participated in the study; some participant data was removed prior to analysis due to incomplete responses or completion of the survey in under two minutes. The latter reason for data exclusion was to maintain integrity of the results by eliminating data likely to contain inattentive responses. After data clean-up, the final sample size was 112 participants. Ages ranged from 19-78 years old (M = 31.36; SD = 12.50), 67% of participants were female (n = 75), 30% were male (n = 34), 2% were non-binary (n = 2), and 1% chose not to disclose their gender identity (n = 1). The sample was 63% Caucasian (n = 70), 15% South Asian (n = 17), 13% Asian (n = 15), 3% Latino or Hispanic (n = 3), 2% Pacific Islander (n = 2), 1% African American or African Canadian (n = 1), 2% identified as two or more ethnicities (n = 2), 1% preferred not to answer the question (n = 1), and 1% selected other (n = 1). Education levels for our sample were moderately diverse, 1% had completed some high school (n = 1), 45% completed high school (n = 50), 14% completed trade school (n = 16), 30% held a bachelor's degree (n = 33), 6% held a master's degree (n = 7), 1% held a PH.D. (n = 1) and 4% preferred not to answer the question (n = 4).

Materials

Demographics

Participants answered five demographic questions: gender – what gender do you identify as; age – what is your age; ethnicity – what is your ethnicity; education – what is the highest degree or level of education you have completed; and marital status – what is your marital status.

Self-Compassion Scale

Participants completed the Self-Compassion Scale – Short Form (SCS-SF; Raes et al., 2011), which is used to measure trait self-compassion in adults. The scale consists of two subscales - self-care and self-disparagement - each containing six items. Participants indicated their agreement with all 12 statements on a 5-item Likert scale, ranging from 1 (*almost never*) to

5 (*almost always*). An example item is "I try to see my failings as part of the human condition." The self-disparagement subscale was reverse scored at analysis and the mean scores of each subscale were used to compute a total self-compassion score. Possible scores ranged from 12-60, with higher scores indicating higher self-compassion. The Cronbach's alpha obtained for the measure in this study was .83.

Personal Attributes Questionnaire

Participants completed the Personal Attributes Questionnaire (PAQ; Spence et al., 1978), which measures gender-role orientation – to what degree people possess masculine, feminine, or androgynous characteristics. The 24-item measure consists of three subscales, measuring masculine, feminine, and androgynous traits respectively. Participants responded on a 5-point matrix table, indicating where they fell between extremes on each set of statements. For example, participants placed themselves between the statements "Not very aggressive" to "Very aggressive" or "Not at all kind" to "Very kind." Higher scores on the respective subscales indicated higher levels of masculine, feminine, or androgynous gender role orientation. Cronbach's alpha originally obtained for the subscale of masculinity was .70. While this indicated adequate internal consistency, upon investigation, item 10 (*not at all competitive* to *very competitive*) did not fit with the other masculinity scale items and the decision was made to remove the item. This increased the internal reliability of the scale, with the new Cronbach's alpha being .72. Internal consistency obtained for the subscale of femininity was also in the acceptable range (.72). However, internal consistency was below the desired range for androgyny (.64) in this study; there were several items in this scale that did not fit, the decision was made to keep the measure intact. Range of scores for the femininity and androgyny subscales spanned 8-40, and for masculinity 7-35.

Difficulties in Emotion Regulation Scale

The Difficulties in Emotion Regulation Scale-Short Form (DERS-SF; Kaufman et al., 2015) was used to evaluate emotion regulation in participants. The 18-question measure uses a 5-item Likert scale, ranging from 1 (*almost never*) to 5 (*almost always*). The measure includes six subscales – rejection of emotional responses, lack of emotion regulation coping skills, lack of emotional understanding, lack of goal setting, lack of managing impulsive behaviors, and lack of emotional awareness. An example of a question is "I pay attention to how I feel," and participants self-report their agreement or disagreement with each statement. Each subscale of

the DERS-SF contains three items. The lack of emotional awareness subscale is reverse scored, and a total score is calculated by first summing the subscales and then calculating a total score for the measure. Possible scores ranged from 18-90, with higher scores indicating more problems with emotion regulation. Cronbach's alpha obtained for this study was .87.

Procedure

The study was conducted anonymously and online using Qualtrics. Participants first viewed an electronic consent form and access was only granted to the survey if consent was given. Participants first completed a demographic's questionnaire, followed by completing the three scales indicated above. These scales were presented in a randomized order, to counter any response fatigue effects participants may experience. After completion of all three scales, participants were debriefed on the intentions and hypotheses of the research and were thanked for their participation.

Results

A forced entry multiple linear regression analysis was conducted to explore the relationship between emotion regulation and several predictors. The predictor variables were self-compassion, age, and gender role orientation: masculinity, femininity, and androgyny. All Cook's Distances were below 1.0 indicating that no single observation had undue influence on the model. Mahalanobis Distance detected 3 outliers, which were subsequently removed from the analysis as they negatively affected the model. Assumptions of independence, linearity, homoscedasticity, and multicollinearity were met. The assumption of normality of the distribution was questioned by the slightly positively skewed non-normal distribution; however, Islam and Tiku (2005) suggest that a multiple linear regression analysis is robust to violations of normality, so data remained unchanged.

Means, standard deviations, and correlations among the variables can be seen in Table 1. The analysis revealed a significant model of emotion regulation, $F(5, 106) = 13.44$, $p < .001$. Overall, the predictors of self-compassion, age, masculinity, femininity, and androgyny accounted for 39% of the variance in emotion regulation, a large effect size. Both self-compassion and age were found to be significant predictors of emotion regulation (see Table 2). None of the gender role orientations – masculine, feminine, or androgynous – were found to be significant predictors of emotion regulation.

Discussion

The goal of this study was to explore how gender role orientation, age, and self-compassion contributed to an individual's ability to effectively regulate emotions. Study results indicated that only our first hypothesis, that high trait self-compassion significantly predicted lower problems with emotion regulation, was supported. These results further strengthen the connection between trait self-compassion and emotion regulation in the literature. Although self-compassion is a relatively new area of research in the field of psychology (Neff, 2003), many studies have found support for this relationship (Finlay-Jones et al., 2015; Inwood & Ferrari, 2018; Leary et al., 2007), and our findings support these results. The ability to regulate emotions is linked to well-being, while difficulties with such regulation are associated with psychopathology and poorer mental health (Inwood & Ferrari, 2018). Strengthening the body of literature connecting self-compassion with effective emotion regulation can help to direct future treatment approaches in mental health and well-being by targeting self-compassion as an avenue to impact emotion regulation strategies. More investigation is needed to confirm causal links between the two, and to identify more directly the mechanisms through which they operate.

We did not find support for our second hypothesis, that both highly masculine and highly feminine gender role orientations would lead to fewer problems with emotion regulation. There are several possible reasons for this lack of significant results. Firstly, the Personal Attributes Questionnaire (PAQ) by Spence et al. (1978), is fairly old. It may be that more modernized views of acceptable gender roles in society affected participant responding differently to how participants would have responded in the late 1970's when the scale was developed, and societal views of gender roles were more conservative. This explanation is supported by the low to moderate scale reliability that we had for each of the subscales of the PAQ. Future research using gender role orientation as a predictor rather than self-reported gender should aim to investigate this measure thoroughly for relevance or consider an alternative scale for measuring gender role orientation. Given that gender differences, both self-reported and as measured on a scale of orientation, have been found to be significantly related to emotion regulation previously (Yarnell et al., 2019), this area should be further investigated.

Our third hypothesis was that as age increased there would be negative implications for emotion regulation. While study results indicate that age was a significant predictor of emotion regulation, the direction of this relationship is opposite to that which was expected. Research by

Nolen-Hoeksema and Aldao (2011) suggests that several emotion regulation strategies are negatively affected in people between the ages of 65-75 years old. Conversely, our results suggest that increased age was correlated with a reduction in emotion regulation problems. This difference in findings may be due to the small number of participants we had in this age range. After final data cleaning, our sample contained only three participants above the age of 65, and only 10 over the age of 50. This number may not be sufficient to detect or represent general trends. For comparison, Nolen-Hoeksema and Aldao (2011) had a sample that contained 297 participants between the ages of 65-75. Additionally, their research also found that rumination, a problematic emotion regulation strategy, did decrease with age, possibly explaining our results. Other reasons for this unexpected finding could relate to the education of our sample; combined, our 10 oldest participants held three bachelor's degrees, two master's degrees and a Ph.D. Perhaps they represent a more highly educated sample than is typical of that age group and education serves as a factor that is protective of emotion regulation. Research by Belo et al. (2020) suggests that increased level of education can positively impact psychological well-being and the life changes that come with aging. Further investigation would be required to establish this connection in the context of emotion regulation.

Limitations

One limitation of this study is that it was conducted completely online, which may have increased mindless responding to the questionnaires. Being fully online may also have restricted the potential subject pool of older adults, allowing us to only reach a certain subset of older adults who use such online platforms (Kelfve et al., 2020). Differential recruitment strategies should be considered for reaching a larger number of older adults for further investigation on this topic. Additionally, we had relatively few respondents above the age of 50, which potentially influenced our analysis of age as a predictor of emotion regulation. Low reliability for our measure of gender role orientation also limits the ability to draw conclusions about whether or not gender role orientation impacts emotion regulation. Future studies should aim to acquire a sample that has more robust representation of older adults and consider using an alternative measure of gender role orientation. Education should also be explored as a potential moderating variable between age and emotion regulation.

Tables

Table 1

Means, Standard Deviations, and Intercorrelations for Emotion Regulation and Predictor Variables

Variable	*M*	*SD*	1	2	3	4	5
Emotion Regulation	41.28	11.08	-.56	-.12	-.32	.29	-.41
1. Self-Compassion	36.81	8.66	-	.09	.54	-.43	.30
2. Femininity	31.91	4.18		-	-.15	.44	-.10
3. Masculinity	23.99	4.29			-	-.48	.19
4. Androgyny	26.00	4.66				-	-.27
5. Age	31.36	12.50					-

Table 2

Multiple Regression Analysis Summary for Age, Self-Compassion, and Gender Role Orientation Predicting Overall Emotion Regulation with 95% Confidence Intervals

						95% Confidence Interval for B	
Variable	*B*	*SE B*	β	*t*	*p*	Lower Bound	Upper Bound
Self-Compassion	-0.52	0.13	-.41	-4.04	<.001	-.78	-.27
Femininity	-0.40	0.24	-.15	-1.64	-.103	-.87	.08
Masculinity	-0.06	0.25	-.02	-0.23	.818	-.55	.43
Androgyny	0.23	0.25	.10	0.92	.361	-.26	.71
Age	-0.24	0.07	-.27	-3.32	.001	-.38	-.10

Note. R^2 = .39

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