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Abstract

The aim of this study was to investigate the relationship between perceived emotional intelligence and the reported use of cognitive reappraisal and expressive suppression. We also investigated the possible effects of age on the aforementioned variables. The total sample consisted of 379 people (158 men, 220 women, 1 unreported). Across participants, 273 were young (20-39 years old) and 106 were middle-aged (40-65 years old). We found statistically significant positive correlations between the dimensions of perceived emotional intelligence and the reported use of cognitive reappraisal and negative primarily correlations between the dimensions of perceived emotional intelligence and the reported use of expressive suppression. Age was not only an important factor in differentiating perceived emotional intelligence and emotion regulation strategies but also in some cases a moderator of their linear relationship. Implications for counseling professionals and future research directions are included.

Keywords

Emotional intelligence, Emotion regulation strategies, Cognitive reappraisal, Expressive suppression, Age

Cover Page Footnote

None

Emotion Regulation Strategies and Perceived Emotional Intelligence: The Effects of Age

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Abstract

The aim of this study was to investigate the relationship between perceived emotional intelligence and the reported use of cognitive reappraisal and expressive suppression. We also investigated the possible effects of age on the aforementioned variables. The total sample consisted of 379 people (158 men, 220 women, 1 unreported). Across participants, 273 were young (20-39 years old) and 106 were middle-aged (40-65 years old). We found statistically significant positive correlations between the dimensions of perceived emotional intelligence and the reported use of cognitive reappraisal and negative primarily correlations between the dimensions of perceived emotional intelligence and the reported use of expressive suppression. Age was not only an important factor in differentiating perceived emotional intelligence and emotion regulation strategies but also in some cases a moderator of their linear relationship. Implications for counseling professionals and future research directions are included.

KEYWORDS:

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In daily life, situations change dynamically and evoke various emotions. The individuals' ability to respond flexibly to these changes has been proposed as an essential building block for psychological health and well-being (Blanke, 2020; Kobylińska & Kusev, 2019; St-Louis et al., 2021). In response to these situations, people use a variety of strategies to influence their emotions, a process which is called emotion regulation. Gross (2015) defined emotion regulation as a process by which individuals change their emotions, and how they experience and express them. Effective emotion regulation should be based on a variety of strategies. Emotion regulation strategies are the ways in which people try to modify their emotional experiences. There are several strategies people use to manage their emotions, such as cognitive reappraisal, positive thought, situation modification, mindfulness, and expressive suppression (Eisma & Stroebe, 2021). Different emotion regulation strategies chosen from a broad repertoire will have different effects depending on situation demands (Gross, 2015; Gross & Thompson, 2007). Strategies applied earlier in the emotion generation process (i.e., antecedent-focused strategies) seem to be more effective than those applied later (i.e., response-focused strategies; Gross, 2015; Kobylińska & Kusev, 2019). The first type of strategies (those applied earlier in the process) are effective without a particular mental cost and for this reason they are considered adaptive (e.g., cognitive reappraisal, situation modification). The second type of strategies (those applied later) include actions taken while emotional responses have already been activated, and they are considered maladaptive strategies (e.g., expressive suppression, self-blame; Gross & John, 2003). Most of the research on emotion regulation has been informed by Gross's process model (Gross, 2015), which has distinguished between cognitive reappraisal and expressive suppression. These strategies can be used in everyday life and in a laboratory context, and they are examples of the two types of strategies mentioned previously. Although there is research evidence for the unique effects of different antecedents on cognitive reappraisal and expressive suppression, there is scant evidence about the interaction effects of those antecedents on the two strategies' implementation frequency.

Cognitive Reappraisal and Expressive Suppression

Cognitive reappraisal is an adaptive emotion regulation strategy which leads to someone modifying their emotional responses to emotion-provoking stimuli by looking at them from a new viewpoint. In contrast, expressive suppression is a maladaptive strategy of emotion regulation in which people constrain the outward expression of their feelings (Gross, 2015; Gross & John, 2003). Most studies that addressed the topic of emotion regulation flexibility have focused on the relation of situational context and emotion regulation effectiveness, so it is suggested that personality characteristics (relatively stable individual differences) might also be important determinants of the effectiveness of using different strategies. Previous studies, in this sense, are still limited (Kobylińska & Kusev, 2019). More recently, an interesting line of research suggests a link between the selection of emotion regulation strategies and the construct of emotional intelligence (see Megías-Robles et al., 2019; Nozaki, 2018). Although it has long been thought that emotional intelligence involves skillful emotion regulation, little is known about the accurate links between emotional intelligence and emotion regulation. Emotional intelligence seems to be an important predictor of the ability to flexibly vary emotion regulation depending on the situation (Double et al., 2022; Zysberg & Raz, 2019). The present study aimed to address this gap in the literature, by examining the relationships between emotional intelligence and the use of two common emotion regulation strategies, cognitive reappraisal, and expressive suppression.

Emotional Intelligence

The term emotional intelligence was first coined and described by Mayer and Salovey in 1990. Over the past 3 decades, different ways of conceptualizing emotional intelligence have emerged, which are mainly summarized in three models: ability, trait, and mixed (Bar-On, 1997; Goleman, 1995; Petrides & Furnham, 2000). Mayer and Salovey (1997) consider emotional intelligence a form of innate intelligence made up of several capacities that influence how people understand and cope with their own emotions and those of others. In other words, emotional intelligence is the skill to understand and regulate emotions. The Wong and Law Emotional Intelligence scale used in the present study relies on this model. According to previous researchers, the ability model is the most dominant in the concept of emotional intelligence (Mayer et al., 2016; Petrides, 2010). O'Boyle et al. (2011) confirmed that tools based on the ability model are the best for measuring emotional intelligence since this model can distinguish emotional intelligence from related variables like personality and other competencies. Hence, this model was adopted for the current study with respect to the other models of emotional intelligence.

Measuring emotional intelligence seems like a promising way to explain how specific emotion regulation strategies are selected (Zysberg & Raz, 2019). Researchers have argued that individuals with a high level of emotional intelligence have certain

skills related to the evaluation and control of emotions, and that, consequently, they were able to regulate emotions in themselves and in others to achieve a variety of adaptive outcomes (Mayer et al., 2016). The main question of this study was how emotional intelligence is associated with cognitive reappraisal and expressive suppression.

Importance of Emotional Intelligence in the Selection of Cognitive Reappraisal and Expressive Suppression

The reported use of cognitive reappraisal and expressive suppression is associated with emotional intelligence (Megías-Robles et al., 2019; Nozaki, 2018; Śmieja et al., 2011). Nozaki (2018) conducted a cross-cultural study in which it was observed that, in European culture, levels of emotional intelligence were positively correlated with the reported use of cognitive reappraisal and negatively correlated with the reported use of expressive suppression. These results align with those of previous research of Cabello et al. (2013). However, all the aforementioned studies measured emotional intelligence as a personality trait rather than an ability. Śmieja et al. (2011) assessed emotional intelligence by a performance-based ability measure and found that higher levels of emotional intelligence were associated with more frequent use of cognitive reappraisal rather than expressive suppression. In a more recent study, Megías-Robles et al. (2019), found that higher emotional intelligence, operationalized as an ability, is associated with higher use of cognitive reappraisal and lower use of expressive suppression. According to researchers (Gross & John, 2003; Schutte et al., 2009; Śmieja et al., 2011), the reasons for these findings are obvious: cognitive reappraisal is an adaptive and healthy strategy of emotion regulation. The same researchers claim that because individuals with high emotional intelligence can effectively manage their emotions, they are expected to use more adaptive emotion regulation strategies.

However, some individual characteristics, such as age, can affect emotional intelligence, the use of emotion regulation strategies and the relationships between them (Fernández-Berrocal et al., 2016; Megías-Robles et al., 2019). More specifically, reported levels of emotional intelligence tend to increase with age (Bar-On, 1997; Fernández-Berrocal et al., 2016; Megías-Robles et al., 2019). In previous studies, young adults as well as the elderly reported lower levels of emotional intelligence, while middle-aged participants reported the highest levels of emotional intelligence (i.e., an inverted U relationship was observed). Researchers attributed this increase of middle-aged emotional intelligence to new life experiences associated with age and cognitive development due to education. The possible explanation for the decrease in the elderly is that a cognitive decline begins, which also leads to a lower emotional intelligence (see also Bisiacchi et al., 2008).

As for emotion regulation strategies, John and Gross (2004) found that use of cognitive reappraisal and expressive suppression differs with age. In their study, cognitive reappraisal increased with age, while expressive suppression decreased. These findings align with those of more recent studies, according to which young adults did not report frequent use of cognitive reappraisal compared to middle-aged (Livingstone et al., 2018). According to Charles (2010), the ability of emotion regulation increases with age; as a result, it is possible for the middle-aged to use more adaptive strategies of emotion regulation than for young adults. The increasing life experiences associated with age seem to contribute to this.

Finally, a moderator effect of age was observed between the abilities of emotional intelligence and emotion regulation strategies. Megías-Robles et al. (2019) found that the positive relationship between emotional intelligence and cognitive reappraisal decreased with age for women. This could be because women learn and begin to use other regulation strategies as they get older (which occurs to a minor extent in men). The previous literature, though, has revealed a lack of the moderator effect of age in the relationship between emotional intelligence and emotion regulation strategies (cognitive reappraisal and expressive suppression). This study was carried out in a community sample with participants of different ages, which allows us to generalize our findings to a wider population than previous studies did, and to investigate the possible relationship between age and emotional intelligence and emotion regulation strategies.

The Present Study

Taking into consideration the importance of emotion regulation in everyday life, the present study aimed to provide empirical evidence not only for the correlation between abilities of emotional intelligence and emotion regulation strategies, but also for the possible predictive role of the dimensions of emotional intelligence for the reported use of cognitive reappraisal and expressive suppression. This could add to the literature for the predictors of the ability to flexibly vary emotion regulation depending on the situation. We also investigated the possible moderating effect of age on the aforementioned direct relationships, as there seemed to be little relevant extant research evidence related to this. Unlike previous studies, we employed a valid and reliable performance measure for assessing emotional intelligence as an ability. Based on our review of previous research, we

expected that the dimensions of emotional intelligence would be positively correlated with reported use of cognitive reappraisal (Hypothesis 1) and negatively correlated with reported use of expressive suppression (Hypothesis 2). In addition, we expected that young adults would report lower levels of emotional intelligence abilities than middle-aged participants (Hypothesis 3). Finally, we expected use of cognitive reappraisal to increase with age (Hypothesis 4a), while use of expressive suppression to decrease (Hypothesis 4b). The lack of relevant previous research prompted us to examine whether the relationships between emotional intelligence ability and emotion regulation strategies were moderated by age.

Method and Instruments

Positionality Statement

To better understand the interpretive lens on the data and discussion of this study, it is important to understand the first author's positionality. The author is a Greek-born and identifies as a highly educated, White, straight, and non-disabled woman raised in a middle-class family. She is specialized in Cognitive Psychology and Cognitive Behavioral Psychotherapy, and her areas of interest center around emotion regulation in everyday life. More specifically, the author is passionate about studying different emotion regulation strategies, adaptive and non-adaptive, and the factors that influence the selection of these strategies.

Participants

A total sample of 379 individuals (158 men, 220 women, and one unknown gender) participated in the research. Across participants, 273 were young adults (20-39 years old) and 106 were middle-aged (40-65 years old). Age groups were defined according to Erikson's (1993) stages of human development. In terms of educational level, 1.1% of the sample had completed only primary education, 8.4% secondary education, 5.5% post-secondary education, 64.4% tertiary education, and 20.6% had completed post-graduate studies. Regarding the type of employment, 21.6% were civil servants, 17.2% private employees, 11.1% self-employed, 10% unemployed, and 44.9% were students. All the participants were of Greek origin and lived in different regions of Greece.

Procedure

The survey was conducted through a Google Form posted to various social media platforms targeting the general population, such as students, workers, and the unemployed, who lived in different parts of Greece and had different family and educational status, to be able to generalize the results. Participants were asked to answer a demographic survey and two online questionnaires. Knowing that the participants were diverse helped with the applicability of the results. All participants were informed about the purpose of the study, the profile of the sample, and confidentiality procedures. Participation was voluntary and there were no incentives. The study adhered to research practices of the American Psychological Association and with the European Union Regulation on sensitive personal data (<https://gdpr.eu/tag/gdpr/>), in force from 25 May 2018 and applicable in Greece according to law 4624/2019 (Issue A 137/29.08.2019).

Instruments

Demographic Questionnaire

Before completing the basic questionnaires, participants were asked to answer some demographic questions (gender, age, race, educational level, and type of employment).

Measure of Emotional Intelligence

Emotional intelligence was assessed with a translated version of the Wong and Law Emotional Intelligence Scale (WLEIS) developed by Wong and Law (2002, translated and adapted in Greek by Kafetsios & Zampetakis, 2008). This self-report questionnaire consists of 16 items, with four items to measure each subscale. The first subscale concerns the appraisal and expression of emotion in oneself (e.g., "I really understand what I feel"). The second subscale measures the appraisal and recognition of emotion in others (e.g., "I always know my friends' emotions from their behavior"). The third subscale measures the use of emotion to facilitate activities and performance (e.g., "I always tell myself I am a competent person"). The fourth subscale concerns

the regulation of emotion in oneself and others (e.g., “I have good control of my own emotions”). Respondents use 7- point Likert-type ratings with options ranging from “*strongly disagree*” to “*strongly agree*”. Higher scores on each subscale indicate greater ability of an individual on each dimension of emotional intelligence. Exploratory factor analysis in the present sample showed the following: Use of emotion with eigen value 5.39 accounted for 33.67% of the variance. Others’ emotion appraisal with eigen value 1.84 accounted for 11.52% of the variance. Self-emotion appraisal with eigen value 1.57 accounted for 9.83% of the variance and regulation of emotion with eigen value 1.25 accounted for 7.83% of the variance. The alpha coefficient for use of emotion was $\alpha = .81$; for others’ emotion appraisal, $\alpha = .79$; for self-emotion appraisal, $\alpha = .78$; and for regulation of emotion, $\alpha = .74$.

Measure of Emotion Regulation

In the present study a translated version of Emotion Regulation Questionnaire (Gross & John, 2003) was used to measure emotion regulation (translated and adapted in Greek by Mavrantza, 2011). It is a 10-item self-report measure of two emotion regulation strategies: cognitive reappraisal and expressive suppression. Six items assess individuals’ use of cognitive reappraisal (e.g., “I control my emotions by changing the way I think about the situation I am in”) and four items assess individuals’ use of expressive suppression (e.g., “When I am feeling negative emotions, I make sure not to express them”). Respondents make 7-point Likert-type ratings with options ranging from “*strongly disagree*” to “*strongly agree*”. Higher scores on each subscale indicate greater use of the emotion regulation strategy measured by the subscale. Exploratory factor analysis in the present sample showed the following: cognitive reappraisal (eigen-value 3.45) accounted for 34.52% of the variance and expressive suppression (eigen-value 2.32) accounted for 23.21% of the variance. The alpha coefficient for cognitive reappraisal was $\alpha = .84$ and for expressive suppression $\alpha = .76$.

Results

Preliminary Analyses, Descriptive Statistics, and Intercorrelations

First, complex variables were constructed, based on the factors highlighted by the factor analyses. Means, standard deviations, skewness, and kurtosis values are presented in Table 1. Measures of skewness and kurtosis were applied to determine whether parametric analyses could be applied on the data. All the values of skewness and kurtosis were below 2 and considered to be normally distributed (Kline, 2011).

Table 1

Descriptive Analysis of Cultural Demographic Information

Variables	M	SD	Skewness	Kurtosis
<i>Emotion Regulation Strategies</i>				
Cognitive Reappraisal	4.80	1.17	-.44	.06
Expressive Suppression	3.50	1.34	.23	-.63
<i>Total Emotional Intelligence</i>				
Self-Emotion Appraisal	5.44	1.00	-.85	1.07
Others’ Emotion Appraisal	5.33	1.05	-.91	1.05
Use of Emotion	5.18	1.14	-.62	.14
Regulation of Emotion	4.52	1.15	-.37	.05

A series of correlation analyses was initially performed using the Pearson correlation coefficient to investigate the bilateral relationships between the variables under consideration. Table 2 displays the correlations between the four dimensions of emotional intelligence (self-emotion appraisal, others' emotion appraisal, use of emotion, regulation of emotion) and the two emotion regulation strategies examined, namely cognitive reappraisal and expressive suppression.

Table 2

Correlations Between Dimensions of Emotional Intelligence, Cognitive Reappraisal, and Expressive Suppression

Variables	Self-emotion Appraisal	Others' Emotion Appraisal	Use of Emotion	Regulation of Emotion	Cognitive Reappraisal	Expressive Suppression
Self-emotion Appraisal	-					
Others' Emotion Appraisal	.43**	-				
Use of Emotion	.44**	.33**	-			
Regulation of Emotion	.46**	.26**	.40**	-		
Cognitive Reappraisal	.28**	.22**	.35**	.33**	-	
Expressive Suppression	-.08	-.16**	-.13*	.14**	-.03	-

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

Regression Analyses

To examine the possible predictive value of dimensions of emotional intelligence for the two emotion regulation strategies (cognitive reappraisal and expressive suppression), linear regression analyses were performed using SPSS (statistical software version 25). Initially, we examined the predictive role of the four dimensions of emotional intelligence for cognitive reappraisal. All dimensions of emotional intelligence were significant predictors of cognitive reappraisal. More specifically, self-emotion appraisal was a positive predictor of emotion regulation, $F(1, 372) = 32.583, p < .001, R^2 = .078, \beta = .33$. Others' emotion appraisal was also a positive predictor of cognitive reappraisal, $F(1, 373) = 18.088, p < .001, R^2 = .044, \beta = .24$ as were use and regulation of emotion, $F(1, 371), p < .001, R^2 = .117, \beta = .35$ and $F(1, 373) = 45.483, p < .001, R^2 = .107, \beta = .34$, respectively). Three dimensions of emotional intelligence (others' emotion appraisal, use of emotion, and regulation of emotion) were significant predictors of expressive suppression. Specifically, others' emotion appraisal and use of emotion negatively predicted expressive suppression, $F(1, 375) = 9.763, p < .01, R^2 = .023, \beta = -.20$ and $F(1, 373) = 6.419, p < .05, R^2 = .014, \beta = -.15$, respectively). In contrast, regulation of emotion was found to be a positive predictor of the suppression of emotion expression, $F(1, 375) = 6.899, p < .01, R^2 = .015, \beta = .16$. The self-emotion appraisal dimension did not predict the reported use of expressive suppression.

We next investigated (via one-way ANOVA) whether age (independent variable) played a significant role in reported emotional intelligence and the two emotion regulation strategies (cognitive reappraisal and expressive suppression; dependent variables): The sample was separated in two groups (20-39 and 40-65 years old) to be done the analyses. Reported emotional intelligence increased with age. More specifically, there was a statistically significant predominance of the middle-aged group (40-65 years) compared to the group of young adults in "self-emotion appraisal", $F(1, 375) = 9.005, p < .01, \text{partial } \eta^2 = .023$; in "others'

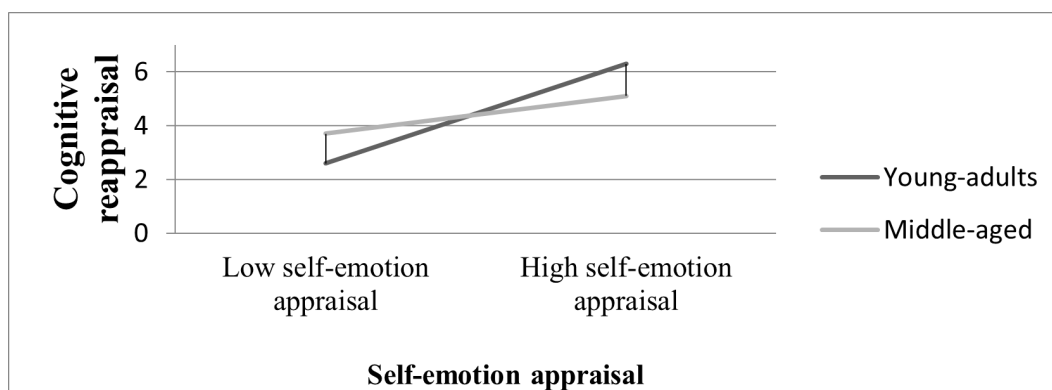
emotion appraisal”, $F(1, 376) = 4.530, p < .05$, partial $\eta^2 = .012$; in “use of emotion”, $F(1, 374) = 4.033, p < .05$, partial $\eta^2 = .011$; and in “regulation of emotion”, $F(1, 376) = 8.599, p < .01$, partial $\eta^2 = .022$.

Finally, we examined the effects of age on the reported use of cognitive reappraisal and expressive suppression as strategies of emotion regulation. There was a statistically significant effect of age only on the reported use of cognitive reappraisal $F(1, 373) = 9.775, p < .01$, partial $\eta^2 = .026$. More specifically, the middle-aged group reported reappraising more than the group of young adults did, although this effect was quite small.

The Moderating Role of Age

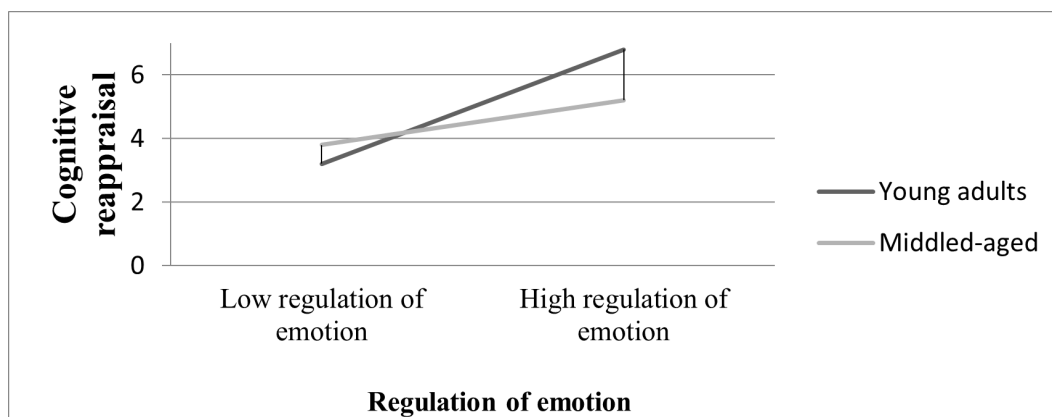
We also examined whether age constituted a moderator of the relationship between each of the four dimensions of emotional intelligence and cognitive reappraisal. Four analyses were performed, and the values of the predictor variables (dimensions of emotional intelligence) and the moderator (age) were converted to Z scores to avoid multicollinearity. The results showed that age was a significant moderator of the relationship between two dimensions of emotional intelligence (self-emotion appraisal and regulation of emotion) and cognitive reappraisal among participants in our sample. More specifically, a significant interaction was found between self-emotion appraisal and age ($\beta = .143, p < .05$). This suggests that age moderates the relationship between self-emotion appraisal and cognitive reappraisal. Reported use of cognitive reappraisal increased to a greater extent for young adults who reported a high degree of self-emotion appraisal (Figure 1).

Figure 1. The Moderating Role of Age in the Relationship Between Self-Emotion Appraisal and Cognitive Reappraisal



In addition, age was a significant moderator of the positive relationship between regulation of emotion and cognitive reappraisal ($\beta = .109, p < .05$). The reported use of cognitive reappraisal increases to a greater extent for young adults who report high levels of regulation of emotion (Figure 2).

Figure 2. The Moderating Role of Age in the Relationship Between Regulation of Emotion and Cognitive Reappraisal



Discussion

The main aim of this study was to gain a deeper understanding of the use of two emotion regulation strategies, cognitive reappraisal, and expressive suppression by examining the effect of emotional intelligence as an ability and age. We initially examined the possible correlational relationship between the dimensions of emotional intelligence and the two emotion regulation strategies examined. All the dimensions of emotional intelligence (self-emotion appraisal, others' emotion appraisal, use of emotion and regulation of emotion) were positively correlated with the reported use of cognitive reappraisal, confirming Hypothesis 1. We also found that others' emotion appraisal and use of emotion were negatively correlated with the reported use of expressive suppression. These findings agree with those of previous studies, in which emotional intelligence was considered as an ability (Megías-Robles et al., 2019; Śmieja et al., 2011). However, our results revealed that one dimension, regulation of emotion, was positively associated with the reported use of expressive suppression. Therefore, Hypothesis 2 was only partially confirmed. Since individuals with high emotional intelligence can effectively manage their emotions, they are expected to use more adaptive than maladaptive emotion regulation strategies (Schutte et al., 2009; Śmieja et al., 2011).

In the next step, we examined the predictive role of the four dimensions of emotional intelligence for cognitive reappraisal. All dimensions of emotional intelligence were significant predictors of cognitive reappraisal. Further, all the dimensions except self-emotion appraisal were found to be significant predictors of expressive suppression. Specifically, others' emotion appraisal and use of emotion negatively predicted expressive suppression. In contrast, regulation of emotion positively predicted suppression of emotion expression. This finding is worth nothing, as it does not align with the previous research (e.g., Śmieja et al., 2011). This might be because expressive suppression sometimes is considered as an adaptive strategy. Possibly, for our participants, expressive suppression functions positively in some cases, such as when suppressing is the best or only option of emotional regulation (e.g., when there is not enough time to reappraise). Future research could show the systematicity of this finding and shed more light on this issue.

Our study was carried out in a community sample with participants of different ages, which allowed us to investigate the possible relationship between age and the aforementioned variables. The results showed that reported emotional intelligence increased with age. There was a statistically significant predominance of the middle-aged group (40-65 years) compared to the group of young adults (20-39) in the four dimensions of emotional intelligence confirming Hypothesis 3. These findings align with those of previous studies (e.g., Fernández-Berrocal et al., 2016; Megías-Robles et al., 2019). Previous researchers have attributed this increase to new life experiences gained with age and cognitive development due to further education (Bar-On, 1997; Bisiacchi et al., 2008; Megías-Robles et al., 2019).

Based on the findings of previous researchers (John & Gross, 2004; Livingstone et al., 2018), we hypothesized that the use of cognitive reappraisal would increase with age (Hypothesis 4a), while the use of expressive suppression would decrease (Hypothesis 4b). The results showed a statistically significant effect of age only on the reported use of cognitive reappraisal, confirming Hypothesis 4a. More specifically, the middle-aged group reported reappraising more than the group of young adults did, although this effect was quite small. One explanation could be that emotion regulation abilities increase with age; as a result, it is possible for the middle-aged to use more adaptive strategies of emotion regulation compared to young adults. Increasing life experiences with the passage of age seem to contribute to this (Charles, 2010). However, we found no statistically significant effect of age on the reported use of expressive suppression. Therefore, Hypothesis 4b was rejected. The lack of relationship between age and the reported use of expressive suppression could be aligned with a previous study showing age-related maintenance of the reported suppression of emotion expression (Shiota & Levenson, 2009).

Further, we examined whether the relationship between the dimensions of emotional intelligence and emotion regulation strategies could be moderated by the factor of age. However, relevant previous research was scant. We could not examine whether age was a moderator of the linear relationship between the dimensions of emotional intelligence and expressive suppression, because the results of our research did not allow us to implement factorial design. Age was a significant moderator of the relationship between two dimensions of emotional intelligence (self-emotion appraisal and regulation of emotion) and cognitive reappraisal. More specifically, reported use of cognitive reappraisal increased to a greater extent for young adults who reported a high degree of self-emotion appraisal. In addition, the results revealed that the reported use of cognitive reappraisal increases to a greater extent for young adults who report high levels of regulation of emotion. The reasons behind these results are an open question for future researchers. One explanation could be associated with our sample characteristics and the effects of gender. Most of our participants were young women, and this should be taken into consideration. There is some evidence showing that levels of emotional intelligence and the reported use of emotion regulation strategies differ by gender (Megías-Robles et al., 2019; Śmieja et al., 2011).

Implications for Counseling Professionals

The reported findings have implications for mental health professionals, particularly licensed counseling professionals. Given the predictive nature of the dimensions of emotional intelligence on the use of emotion regulation strategies, counseling professionals have an opportunity to enhance their clients' emotion regulation by increasing ability of emotional intelligence (Peña-Sarrionandia et al., 2015). More specifically, considering emotional intelligence as an ability allows counselors to improve it. For this to happen, individuals must be personally motivated, practice what they learn, receive feedback, and strengthen their new skills (Serrat, 2017). According to the research findings, the higher a person's emotional intelligence is, the more likely they are to use adaptive rather than maladaptive emotion regulation strategies. Therefore, enhancing individuals' ability to recognize their own emotions, and the emotions of others, and to use these emotions, could improve their ability to manage emotions effectively. Thus, counselors should help their clients learn to manage their emotions effectively.

We found that emotional intelligence increased with age and that middle-aged participants in our study used more adaptive strategies of emotion regulation compared to young adults. Hence, counselors should consider the age of the individual undergoing treatment. By looking at what their clients have experienced so far in their lives, counseling professionals can more easily find ways to strengthen their emotional intelligence and thus their ability to regulate their emotions. For instance, they could help young adults select and use more adaptive emotion regulation strategies by using either affect-oriented methods or structured skill training methods. In addition, they could address younger and older adults' suppression of emotional experience and expression via psychoeducation (Iwakabe et al., 2023). Overall, the findings of the present study suggest that counseling interventions targeting emotional regulation skills should take into account individuals' emotional intelligence and age.

Limitations and Further Directions

Despite the aforementioned promising findings, there are some limitations of this study. First, only self-report questionnaires were used, which means measurements were subjective. In future research, more objective measurements could be made based on the observation of behaviors. Further, we did not take into consideration the possible gender or racial differences in emotional intelligence and the selection of emotion regulation strategies. In future research, the possible effect of these demographic variables could be considered. For instance, there are researchers (e.g., Berrocal et al., 2012; Van Rooy et al., 2005), who argue that women focus on emotion more than men. This possibly makes them more adept at recognizing and evaluating the emotions of others. In addition, in the present research a large part of the sample (almost half) were university students, and the educational level of the participants was high. Another limitation of this study could be the smaller number of participants in the middle-aged group, so findings might not be as representative as for the young-adult group. In fact, emotional intelligence and the use of emotion regulation strategies are complex phenomena that include many factors, such as personality, individual characteristics, target emotion and situation-specific characteristics. Future research should take into consideration all the above factors as well as broader contextual factors. The correlation of the individual dimensions of emotional intelligence and emotion regulation strategies, as well as the influence of individual characteristics on them, could be investigated using an experimental design, which would allow researchers to control these elements with the use of neuro-imaging methods. Qualitative studies using in-depth interviews with participants having different profiles (e.g., more frequent use of adaptive or maladaptive emotion regulation strategies) could uncover part of the interaction among the aforementioned factors. Moreover, long-term research could be done, starting from the young adulthood until old age, to capture the dynamic interaction among personal and situational factors.

Conclusion

The findings of the present study contribute to a deeper insight into the possible antecedents of the selection of emotion regulation strategies (cognitive reappraisal and expressive suppression). Although much research remains to be done to clarify the relationship between emotional intelligence and emotion regulation, our findings suggest that emotional intelligence is a helpful construct for understanding individual differences in emotion regulation. We hope this article will help to promote research on individual differences in emotion regulation processes. We consider that future counseling intervention programs for the enhancement of emotion regulation should take into consideration the abilities of emotional intelligence. Boosting participants' emotional intelligence skills, such as recognizing and managing emotions, could give them a high sense of efficacy in emotion regulation and control of the selection of more adaptive strategies. According to previous research evidence (Blanke, 2020;

Kobylińska & Kusev, 2019; St-Louis et al., 2021), adaptive emotion regulation strategies is an essential building block for psychological health and well-being.

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