Mediating Role of Positive and Negative Experiences in the Relationship Between Self-Competence and Regret among Adults

Yetişkinlerde Öz-Yeterlilik ile Pişmanlık İlişkisinde Olumlu ve Olumsuz Deneyimlerin Aracı Rolü

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ABSTRACT

Despite the distress of regret, regret emerges as an important figure in self-regulation and shaping one's future. Although regret has an important role in adults' lives, the literature on how this emotion is affected by self-competence and which mediating variables affect this relationship is limited. This study aimed to investigate the mediating role of negative and positive experiences in the relationship between self-competence and regret. The participants consisted of 572 individuals, including 402 females (70.3 %) and 170 males (29.7 %). The age of the participants ranged between 18 and 60 (25.34 ± 6.97). Correlation analyses revealed negatively relationship was determined between self-competence and regret, self-competence and negative experience as well. While positively correlation was found between self-competence and positive experience. The result of the analysis for the study model indicated that there was a mediating role of negative experience in the relationship between self-competence and regret. These results suggest that negative experience may be an underlying mechanism between self-competence and regret, and this experience can be exploited in therapeutic interventions.

Keywords: Self-competence, regret, positive and negative experiences, mediating role

ÖZ

Pişmanlığın yarattığı sıkıntıya rağmen, pişmanlık öz-düzenlemede ve kişinin geleceğini şekillendirmesinde önemli bir unsur olarak ortaya çıkmaktadır. Pişmanlık duygusu yetişkinlerin hayatında önemli bir paya sahip olmasına rağmen, bu duygunun öz-yeterlilik tarafından nasıl etkilendiği ve hangi aracı değişkenlerin bu ilişkiyi etkilediğine dair alanyazın sınırlıdır. Bu çalışma, öz-yeterlilik ve pişmanlık arasındaki ilişkide olumlu ve olumsuz deneyimlerin aracı rolünü araştırmayı amaçlamıştır. Katılımcılar 402 kadın (%70,3) ve 170 erkek (%29,7) olmak üzere toplam 572 kişiden oluşmaktadır. Katılımcıların yaşları 18 ile 60 arasında değişmektedir (25,34 ± 6,97). Korelasyon analizleri öz-yeterlilik ile pişmanlık ve öz-yeterlilik ile olumsuz deneyimler arasında negatif bir ilişki gözlenirken, öz-yeterlilik ile olumlu deneyimler arasında ise pozitif bir ilişki olduğunu ortaya koymuştur. Araştırma modeli için yapılan analiz sonucunda olumsuz deneyimlerin öz-yeterlilik ve pişmanlık arasındaki ilişkiye aracılık ettiği belirlenmiştir. Bu sonuçlar, olumsuz deneyimlerin öz-yeterlilik ile pişmanlık arasındaki ilişkide altta yatan bir mekanizma olabileceğini ve bu deneyimlerin terapötik görüşmelerde kullanılabileceğini önermektedir.

Anahtar sözcükler: Öz-yeterlilik, pişmanlık, olumlu ve olumsuz deneyimler, aracılık rolü

Introduction

In daily life, emotions are considered vital apparatuses that offer assistance to people who attribute modern implications to occasions and circumstances. When individuals come to the realization that their decisions were incorrect, they may experience profound adverse emotions such as regret and guilt (Pink 2022). It can act as a catalyst for behavioral change, provoking people to reevaluate their activities and look for more helpful ways forward. Despite the distress of regret, regret emerges as an important figure in self-regulation and shaping one's future (Aktu 2023), Through regret, people can pick up bits of knowledge for more beneficial decision-making, empowering them to adjust and make strides in their choices over time. As individuals age and acquire experiences, the probability of encountering regret increases and this situation drives them to address their choices and look for more advantageous ways (Zeelenberg et al. 2000). Although regret has an important role in adults' lives, the literature mediating variables affect this relationship is limited (Aktu 2023). In this respect, it is crucial to examine the effects of variables related to regret.

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Regret includes different emotions and is characterized by a sense of disappointment with past choices. Regret is regularly accompanied with by blame and pity, so it develops as an effective emotion in this context. Despite its negative implications, regret is seen as a helpful emotion that can impact human behavior emphatically. Regret can generally be characterized as a person not being fulfilled with their choices or activities (Zeelenberg et al. 2000). It is not only about negative emotions but also about the cognitive revision of reexamining distinctive choices. Alongside negative emotions, regret can be gone with feelings of blame, remorse, self-reproach, appall, and pity. Cognitive forms also go along with regret (Zeelenberg & Pieters 2007, Özdemir & Düzgüner 2020, Güller 2022, Pink 2022). On the other hand, regret experienced after taking an activity includes negative emotions and considerations. In both cases of regret, the behaviour or choice made is dealt with (Pink 2022). It gives people an opportunity to think deeply both some time recently and after encountering regret (Zeelenberg & Pieters 2007, Pink 2022).

From a hypothetical point of view, regret develops in connection with behavioral results (Pink 2022). Closed-door regret involves a circumstance where there's no plausibility of taking an activity or changing the result. Open-door regret, on the other hand, alludes to a circumstance where there's the opportunity to require activity and modify the result. Buchanan et al. (2016) uncovered that regret has cognitive and affective dimensions. Whereas affective regret covers the passionate involvement of an unforeseen occasion, cognitive regret incorporates negative assessments of that occasion. In this respect, regret shows both cognitive and affective components. The cognitive component includes addressing contemplation and choices, whereas the full-of-feeling component envelops self-blame, pity, and emotions of blame. The involvement of regret leads both to the rise of negative emotions and to thinking about other choices (Buchanan et al. 2016).

A review of the literature on common regret shows that regret is associated with depression (Kraines et al. 2017), stress (Perdomo 2021), self-expectation (Roese & Summerville 2005), decision avoidance (Lauriola et al. 2019), satisfaction with life (Bozkurt 2017, Aktu 2023), and forced choice (Goldstein-Greenwood et al. 2020, Matarazzo et al. 2021). Regretful experiences can be stressful because they involve the negative effects and turmoil of the past. When individuals experience deep feelings of regret, depression can increase and life satisfaction can decrease (Kraines et al. 2017, Perdomo 2021). The importance of examining these relationships by using cultural features has been emphasized for the confirmation of regret (Breugelmans et al. 2014).

One of the variables considered together with regret in this study is self-competence. Self-competence is defined as the general quality that includes knowledge, skills, and abilities in a particular field. The concept of self-competence is closely related to self-efficacy. Self-efficacy refers to an individual's belief in his/her ability (Tafarodi & Swann Jr. 2001). However, self-competence is related to capability. Self-competence is a positive attitude towards oneself. Self-competence involves individuals seeing themselves as competent, sufficient, and successful in achieving their goals. Self-competence is the appreciative experience of being a causative agent of oneself, a purposeful being capable of producing desired results through the exercise of one's will. In sum, self-competence is the evaluative imprint of a general sense of self-efficacy on one's identity (Tafarodi & Swann Jr 2001, Doğan 2011).

Negative and positive experiences are another variable that may be associated with regret. Negative experiences cover individuals' affect in negative enthusiastic states such as fear, outrage, trouble, blame, disgrace, and scorn, while positive experiences include joy, intrigued, and beliefs reflecting individual affect in positive states like carefulness (Watson 2002, Diener 2010, Şenol-Durak & Durak 2019, Mahmoud et al. 2021). Positive experiences reflect a person's feelings such as excitement, development, and liveliness. In general, a positive experience is a state of feeling comfortable and having positive emotions in life. A negative experience is difficulty in doing daily tasks, disorganization, anger, and anxiety. Seligman (2002) states that negative experiences are more influential than positive experiences since negative experiences are more critical than positive experiences. Negative experiences are related to neuroticism and positive experiences are about extraverted personality characteristics. (Watson 2002, Şenol-Durak & Durak 2019). Positive experiences strengthen the resources in a person that allow them to negotiate with the conditions caused by negative experiences (Fredrickson et al. 2000, Diener 2010, Mahmoud et al. 2021). From this point of view, it can be stated that negative and positive experiences are related to regret.

This study aimed to investigate the mediating role of negative and positive experiences in the relationship between self-competence and regret. In the literature, it is seen that self-critical thinking and regret (Allaert et al. 2023), negative experience and regret (El Zein & Bahrami 2020), regret and self-efficacy (Boemker 2019), positive experience and self-efficacy (Veronese et al. 2019) variables have been examined. However, there is no study in which regret is examined together with self-competence, negative and positive experience variables. As a result of the literature review, it was hypothesized that negative and positive experiences may play a mediating

role in the relationship between regret and self-competence. Therefore, the research findings were considered useful for understanding the relationship between regret and other variables and to help professionals develop and implement psychoeducational and treatment programs to protect individual regret. The predicted model of the study is shown in Figure 1.
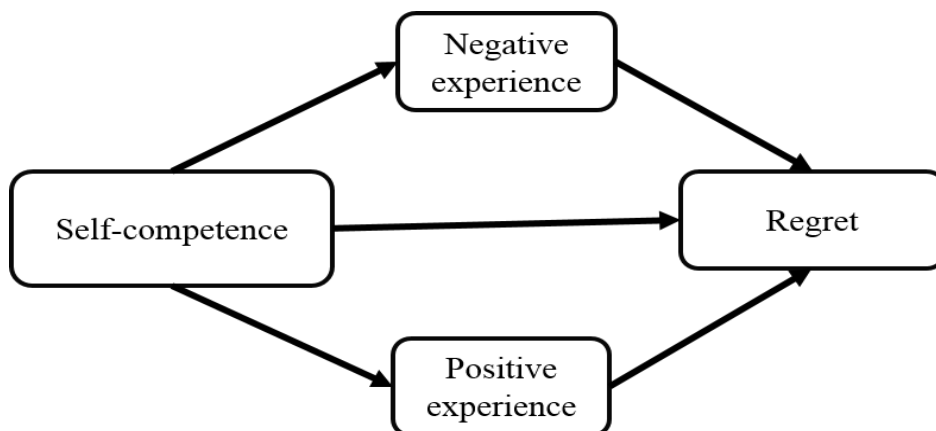

Figure.1. Predicted model

Method

Sample

The sample of this study were 572 adult individuals. In this study, a power analysis was used in determining the sample size. The study population was determined to be 424 using the G-power program, taking an effect size of 0.15, $\alpha = 0.05$, power $(1-\beta) = 0.90$ with a 95% confidence level. To fulfil the criteria required for power analysis, data were collected from 572 adults (Cohen 2016). The inclusion criteria are as follows: Being an adult over 18 years of age, having completed an informed consent form, and having experienced a major regret at least once in their life. Participants who did not complete the scales completely, did not participate voluntarily in the study, and had no regret experience were excluded from the study. Accordingly, 720 participants were reached and data were collected from 614 participants in line with the inclusion-exclusion criteria. However, 42 data had to be excluded from the data set as a result of the normality analysis performed on the raw data. The data were collected from 20 key adult volunteers using snowball sampling method. The study was conducted after obtaining informed consent form from the participants. Snowball or chain sampling involves contacting one person in the population and then contacting another person through that person and so on (Creswell 2017). The data were collected from adults living in Diyarbakır, Siirt, Mardin and Şanlıurfa provinces who voluntarily agreed to participate in the study.

Of the participants, 170 (29.7%) were males and 402 (70.3%) were females. The age of the participants ranged between 18 and 60 (M=25.38, SD=7.05). 363 of the participant (63.5%) were 18-30 ages, 190 (33.2%) were 31-45 ages, and 19 (3.3%) were 46-65 ages. Of the participants, 48 (8.4%) were primary school graduates, 148 (25.9%) were high school graduates, 325 (56.8%) had an university degree, and 51 (8.9%) a postgraduate degree. 409 of partipants (71.5%) were single, 5 (0.9%) were widowed or divorced, and 158 (27.6) married. Additionally, a total of 137 (24%) participants had a low socio-economic status, 364 (63.6%) were medium status, and 71 (12.4%) were high status.

Procedure

Ethical permission was obtained from Siirt University Ethics Committee (15/6/2023-4978) before conducting preliminary interviews with 45 participants, during which a sociodemographic form and scales prepared by the researcher were administered. The 20 key participants who volunteered to participate in the study completed the scales. The adults recommended by the key participants were contacted for the application of the scales. Data were collected face-to-face until the second and third chain. In the following stages, data were collected through key participants from adults living in different settlements (Diyarbakır and Şanlıurfa) and included in the chain (Creswell 2017). Accordinly, the scales were applied by the researcher to participants in Siirt province, while key participants helped the application process to participants in Diyarbakır and Şanlıurfa provinces. Data collection took 10-20 minutes. The data collection process lasted 45 days. Personally identifiable information

was not requested from the participants during data collection. This study was conducted in accordance with the principles outlined in the Declaration of Helsinki.

Measures

Demographic Form

A form was used to collect participant demographic information. Participants were asked about their gender, age, educational level, marital status, and socio-economic status in terms of personel information.

Regret Elements Scale (RES)

Aktu (2023) conducted the Turkish reliability and validity study of the Regret Elements Scale (RES) developed by Buchanan and colleagues (2016). The scale consists of two dimensions and 10 items. The sub-dimensions of the scale are named affective and cognitive regret. The scale is based on a 7-point Likert-type self-report. Scale items take a value between 1 (Strongly disagree) and 7 (Strongly agree). Scores between 10 and 70 can be obtained from the scale. Goodness of fit values for the scale were found to be acceptable (x2/ df= 2.09, RMSEA= .04, SRMR= .07, GFI= .92, NFI= .91, CFI= .94). The internal consistency coefficient of the scale was .92, and the test-retest reliability coefficient was .75.

Self-Competence Subscale

Doğan (2011) conducted the Turkish adaptation study of the self-esteem (self-liking/self-competence) developed by Tafarodi and Swann Jr (2001). In this study, the 8-item self-competence sub-scale was used. The scale is based on a 5-point Likert-type self-report. Self-competence sub-dimnension's 3, 4, 6 and 8 items are reverse scored. Scores between 8 and 40 can be obtained from the sub-scale. Goodness of fit values for the scale were found to be acceptable (x2/ df= 2.64, RMSEA= .04, RMR= .04, GFI= .94, AGFI= .91, NFI= .94, CFI= .97, RFI= .94, IFI= .97). The internal consistency coefficient of the sub-scale was reported .74, and the test-retest reliability coefficient was .72.

Positive and Negative Experiences Scale

The scale was developed by Diener and colleagues (2010). Turkish adaptation study of the scale was conducted by Telef (2015). The scale has 12 items; 6 negative and 6 positive items, including positive and negative experiences. The scale is based on a 5-point Likert-type self-report. Scale items take a value between 1 (Never) and 5 (Always). Scores between 6 and 30 are obtained from the scale. Goodness of fit values for the scale were found to be acceptable (x2/ df=3.47, RMSEA= .07, SRMR= .04, GFI= .93, NFI= .96, RFI= .95, CFI= .97, IFI= .97. The test-retest reliability coefficients for the sub-dimensions of the scale was .85 and .86.

Statistical Analysis

In the study, the data were first analyzed values of skewness and kurtosis for assumption of normality. The 42 participants's responses that did not meet the normality criteria (± 1.5) were excluded from the analysis (Tabachnick & Fidell 2019) and the analysis studies were carried out on the remaining 572. The Pearson correlation test was calculated to analyze the relationships among regret, self-competence, negative experiences, and positive experiences scores. The main model was formed with self-competence as a predictor variable, regret as a predicted variable, and negative and positive experiences as mediator variables. The mediating role of both experiences was simultaneously calculated. The model was tested by the bootstrapping method (Preacher & Hayes 2008). Accordingly, IBM SPSS 25 package program and Process Macro 4.2 version were applied to analyze the data. In addition, Model 4, 10,000 bootstap resampling and 95 % confience interval (CI) criteria were used in the analysis. p values < .05 were considered significant in statistics. In order for the mediation to be interpreted as meaningful, the criterion that confidence intervals (CI) do not include zero was taken into consideration (Hayes 2018).

Results

Information on the descriptive characteristics of the study participants is shown in Table 1. As seen in Table 1, descriptive statistics indicate that all variables are within the range of normal values.

Pearson correlation values were analyzed to find associations between study variables. The Pearson correlation values of the variables are shown in Table 2. As seen in Table 2, correlations are observed between all variables.

A negative and significant relationship between regret and self-competence (r = -.31, p < .01), between regret and positive experience (r = -.22, p < .01). Moreover, a negative and significant relationship was determined between negative experience and self-competence (r = -.30, p < .01), and between negative experience and positive experience (r = -.52, p < .01). However, a positive and significant correlation was obtained between regret and negative experience (r = .25, p < .01), between self-competence and positive experience (r = .34, p < .01)..

Table 1. Descriptive statistics			
	M±SD	Skewness	Kurtosis
1. Regret	24.81±9.32	.768	.020
2. Self-competence	26.81±3.93	.327	1.316
3. Positive Experience	19.68±4.53	.245	.831
4. Negative Experience	16.28±4.41	-.190	.458

M: Mean; SD: Standart Deviation

Table 2. Correlations between variables				
	1	2	3	4
1. Regret				
2. Self-competence	-.31*			
3. Positive Experience	-.22*	.34*		
4. Negative Experience	.25*	-.30*	-.52*	

*p< .01

Mediation Analyses

Correlation between the study variables was significant. After this phase, the mediating role of positive and negative experiences in the relationship between self-competence and regret was tested. The research model is presented in Figure 2.
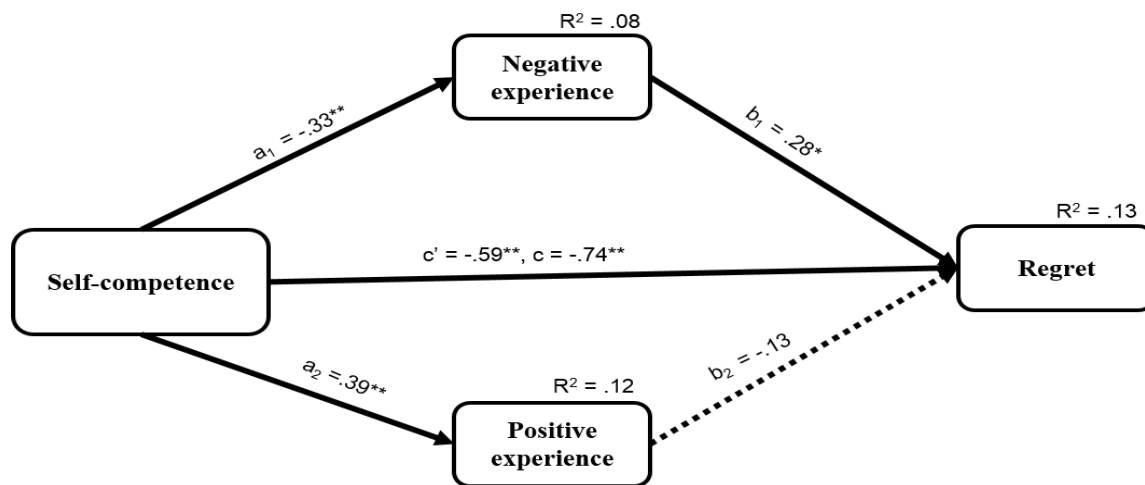

Figure 2. Mediation model of the relationships between the research variables
*p < .001, **p < .005

Fig. 2 has shown the effects of the independent variable on the dependent variables. When the direct effects in the study model were investigated, the coefficient values in the regret (β = -.59, p <. 001), negative experience (β = -.33, p <. 001) and positive experience (β = .39, p <. 001) were found to be significant. In addition, the direct effects of negative experience on regret were significant (β = .28, p <. 005). Moreover, the total effect of self-competence on regret was determined to be significant (β = -.74, p <. 001). As a result of the model, it was found that variables explained 13% of the regret variance and the model was significant (R^2 = .13, $F_{(3, 568)}$ = 27.44; p< .001).

Bootstrapping analysis was conducted to determine if the predictive coefficients obtained in the research model were significant. The mediation model with Model 4, 95% confidence intervals and 10,000 resampling paths was tested for this analysis. The results show the bootstrapping analysis in Table 3.

As seen in Table 3, the direct pathway from self-competence to regret was significant (β = -.59, p <. 001). The pathway from self-competence to negative experience (β = -.33, p <. 001) and the pathway from self-competence

to positive experience (β = .39, p <. 001) was found to be significant. The pathway from negative experience to regret was significant (β = .28, p <. 005). The self-competence was found to have a significant effect on regret mediated through negative experience (β = -.09, SE = .04, 95% CI = -.19/-.01). Since the lower and upper bound were not zero, the result was significant. On the other hand, the self-competence was not found to have a significant effect on regret through positive experience (β = -.05, SE = .05, 95% CI = -.15/.05). Since the lower and upper bound was zero, the result was not significant.

Table 3. Bootstrappping analysis results of the model				
Pathway	β	SE	Lower bound	Upper bound
Direct effect				
Self-competence→Regret	-.59	.10	-.79	-.39
Self-competence→Positive experience	.39	.04	.30	.48
Self-competence→Negative experience	-.33	.04	-.42	-.24
Negative experience→Regret	.28	.09	.09	.47
Positive experience→Regret	-.13	.09	-.32	.05
Indirect effect				
Self-competence→Negative experience→Regret	-.09	.04	-.19	-.01
Self-competence→Positive experience→Regret	-.05	.05	-.15	.05

β: Unstandardized Coefficient, SE: Standart Error

Discussion

The focus of this study is to investigate the mediating role of negative and positive experiences in the relationship between self-competence and regret. According to the results of the correlation analyses, a negative and significant relationship was determined between self-competence and regret, between self-competence and negative experience, and between negative experience and positive experience. It is possible to find studies supporting these findings in the literature. When the literature is examined, it is seen that there is a negative relationship between regret and satisfaction with life (Bozkurt 2017, Aktu 2023), collective behavior (El Zein & Bahrami 2020), and self-efficacy (Boemker 2019). According to Watson (2002), there is a negative relationship between negative experience and extraversion. Accordingly, it can be said that as the level of self-competence increases, the level of regret and the level of negative experience decreases. Furthermore, it can be stated that as the level of regret increases, the level of positive experience decreases. Adults with low self-competence may focus more on negative experiences and regret (Koşan 2020). Because low self-competence can lead to negative affects.

According to another result obtained from the study, a positive and significant relationship was found between self-competence and positive experience, and between negative experience and regret. These findings seem to be consistent with the results in the literature. There is a positive relationship between self-competence and psychological well-being and happiness (Doğan et al. 2013), positive experience (Veronese et al. 2019), self-esteem (Tafarodi & Swann Jr 2001, Doğan 2011) in the literature. There is a positive relationship between regret and self-blame (Buchanan et al. 2016), between regret and depression (Kraines et al. 2017, Belen 2021), between regret and stress (Belen 2021, Perdomo 2021), and between regret and forced choice (Goldstein-Greenwood et al. 2020, Matarazzo et al. 2021). There is a positive relationship between negative experience and nevroticism (Watson 2002). In this respect, it can be said that as the level of self-competence increases, the level of positive experience also increases. It is also seen that as the level of negative experience increases, the level of regret increases. Adults with high self-competence perception are likely to have more positive experiences. Because adults with high self-competence can be expected to focus more on the positive aspects of life. This situation may naturally contribute to less regret that emerges in the form of guilt and self-questioning.

The results of the model showed that it had a mediating role of negative experience in the relationship between self-competence and regret. Eliminating negative experiences from the self-competence will contribute to reducing regret. Research results parallel to these findings is found in the literature. In a study conducted by Righetti and Visserman (2018), regret of past sacrifice was found to mediate the relationship between self-esteem and life satisfaction. Allaert and colleagues (2023) revealed the mediating effect of attention toward acquired gains in the relationship between self-critical rumination and regret. In another study, regret was determined to mediate the relationship between maximizing and subjective well-being (Peng et al. 2018). In addition to these results, regret was reported to mediate the relationship between negative experience and negative behavioral intention (Lee et al. 2023). The relationship between regret and self-competence has been revealed by various research results.

When the results of the study are evaluated in general, it is concluded that self-competence, regret, negative and positive experiences are related to each other. As a result of the mediation analysis conducted to better understand the mechanism of this relationship, it was determined that negative experience mediates the relationship between self-competence and regret. According to the model, self-competence has effects on regret. A part of this effect is realized through negative experiences. Based on these findings, it is understood that negative experience is an important variable in managing and coping with regret among adults.

Overall, this study reveals the mediating effect of negative experiences in the relationship between regret and self-competence. In addition to the strengths of the study, it also has some limitations. Accordingly, various suggestions can be made. This study was conducted with a cross-sectional design. The results of this study do not fully represent the causal relationships between the variables. Participants were selected through snowball sampling. In order to obtain valid results in the future, it is recommended to use probability sampling methods and to select participants with low levels of regret. Most of the participants in this study were women in early adulthood. More research is needed before we can say that the scale is suitable for all adults based on the average age of the results. The data in the study were collected by using self-report scales. This may have created bias for participants to give socially acceptable responses. It is predicted that longitudinal and experimental studies will contribute to the literature in terms of obtaining more comprehensive information. In the study, the concept of regret was treated as a single dimension. In future research, using different data collection tools to address these variables with different dimensions may provide comprehensive findings.

Conclusion

The present study revealed that negative experiences had a mediating role in the relationship between the self-competence and regret. To the best of our knowledge, this study is a pioneer in the field as it is the first study in Turkey to examine these variables together. These results suggest that negative experience may be an underlying mechanism between self-efficacy and regret and that this experience can be utilised in therapeutic interventions. In this context, increasing self-competence and reducing the perception of negative experiences among adults may be a useful strategy to reduce the experience of regret that negatively affects an individual's life. It can be said that the results obtained in this study can contribute to the development and implementation of mental health intervention programmes by professionals to increase the well-being of individuals with regret..

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