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# The Mediating Role of Emotion Crafting in the Relation Between Adult Attachment Styles and Flourishing

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## **Preface**

My bachelor's thesis is centered on the mediating role of emotion crafting in the relation between adult attachment styles and flourishing. Furthermore, it represents the culmination of several months of research, writing, and analysis. I was compelled to select this project because of its enthralling nature and its potential to offer practical applications in both therapy and daily life. I hope that my work will contribute to the existing body of knowledge and provide a valuable base for further research.

Throughout the research process, I have assumed an active role in various aspects, including the formulation of research questions and hypotheses, conducting comprehensive literature searches, analyzing data, interpreting results, and coherently presenting findings. Additionally, I collaborated with my fellow bachelor group students in recruiting participants and translating the questionnaires into Norwegian.

Although it was a fulfilling endeavor, undertaking this research project has been challenging. It required substantial effort and dedication to navigate through the complexities inherent in research. Moreover, because research on emotion crafting is sparse, and the absence of any prior research in the specific domain I investigated, I had to rely heavily on theoretical frameworks to guide my research. This required me to spend a considerable amount of time reading and analyzing relevant literature and research to develop a comprehensive understanding of the topic and formulate my hypotheses. Despite such obstacles, I preserved and overcame them with the guidance and support of my supervisor, Jolene van der Kaap-Deeder, to whom I am greatly indebted. In particular, she offered suggestions for improvement, provided guidance on research methodology, prepared the data for us, and helped me to navigate challenges with data analysis and research questions. I would also like to express my gratitude to my friends and family, who provided encouragement and support throughout the process.

## Abstract

Despite extensive evidence for the mediating role of emotion regulation in the relation between adult attachment styles (AAS) and psychological well-being (PWB), research has predominantly focused on the regulation of negative emotions as they arise. Hence, knowledge about proactive regulation of positive emotions (i.e., emotion crafting) within this context is sparse. By combining theoretically and empirically derived knowledge, the present study investigated whether AAS (i.e., secure and insecure attachment) are associated with flourishing, and whether emotion crafting (EC) plays a mediating role in this relation. A sample of 155 young adults (71.6% female, 25.2% male, 2.6% non-binary, 0.6% gender not disclosed) ranging in age from 18-25 years ( $M_{age} = 22.23$  years,  $SD = 1.91$ ) completed an online questionnaire that consisted of Revised Adult Attachment Scale (RAAS), Emotion Crafting Scale (ECS), and Flourishing Scale. Results indicated that secure attachment style related to higher scores on flourishing, compared to insecure attachment style. Additionally, EC partially mediated the relation between AAS and flourishing, in that secure attachment style related to higher levels of flourishing through higher scores on EC, compared to insecure attachment style. In addition to underscoring the significance of proactively pursuing positive affect for one's psychological well-being, these findings have implications for the development of clinical interventions targeting emotion regulation strategies among insecurely attached young adults.

*Keywords:* Adult attachment styles, Attachment Theory, Emotion regulation, Emotion crafting, Flourishing, Broaden-and-build Theory, Self-Determination Theory

Previous research have demonstrated that emotion regulation plays a key mediating role in the relation between adult attachment styles (AAS) and psychological well-being (PWB) (e.g., Karreman & Vingerhoets, 2012; Mortazavizadeh & Forstmeier, 2018). However, most studies focused solely on the regulation of negative emotions (Goodall, 2015), thus emphasizing only one component of our emotional lives. Furthermore, most research on emotion regulation has exclusively focused on reactive emotion regulation, referring to emotion regulation strategies people employ after the onset of emotional situations. This leaves individuals' proactive role in shaping their emotional experiences unaddressed (van der Kaap-Deeder et al., 2023).

Accounting for these shortcomings, van der Kaap-Deeder et al. (2023) coined the concept of emotion crafting (EC), which highlights an individual's proactive and deliberate role of "pursuing positive emotions through their actions" (p. 4). Despite evidence linking EC and PWB (e.g., van der Kaap-Deeder et al., 2023), little is known about how EC relates to AAS. Based upon Attachment Theory (Ainsworth et al., 2015; Bowlby, 1969/1982) and Broaden-and-Build Theory (Tugade & Fredrickson, 2007), the present study aimed to extend knowledge on the associations between AAS (i.e., secure and insecure attachment) and PWB (i.e., flourishing), by examining the possible mediating role of EC among young adults.

### **Adult Attachment Styles and Psychological Well-Being**

Research and theorizing (e.g., Bowlby's Attachment Theory; 1969/1982, 1973) has indicated important differences in individual's attachment styles in adulthood, referring to how an individual tend to interact and behave in interpersonal relationships based on their perceptions of themselves and others. A broad distinction has been made between secure and insecure attachment styles (Sheinbaum et al., 2015). Secure attachment refers to having positive internalized perceptions of the self and others, being comfortable with intimate and close interpersonal relationships, as well as a belief that one can depend on others to be

available and responsive to their needs (Collins, 1996; Ferraro & Taylor, 2021; Read et al., 2018). On the contrary, insecure attachment involves internalized perceptions of others as untrustworthy and unreliable, or the self as worthless and incompetent (Read et al., 2018). According to the four-category model of adult attachment proposed by Bartholomew (1990), insecure attachment can be divided into three AAS: preoccupied, fearful, and dismissing. Preoccupied attached adults have a desire for closeness from significant others, but experience an excessive fear of interpersonal rejection and abandonment. As a result, they become uncertain whether they can depend on others, and strive to seek personal validation through gaining approval from others (Bartholomew, 1997; Ferraro & Taylor, 2021; Pietromonaco & Lindsey, 2019). In contrast, individuals showing either fearful or dismissing attachment avoid close interpersonal contact, particularly during stressful situations (Bartholomew, 1997). However, unlike fearful attached adults, who consciously desire interpersonal contact, but avoid it due to their fear of rejection, dismissive attached adults maintain a sense of self-worth by defensively denying their need or desire close relationships, leading to an extreme self-reliance and withdrawal from others (Bartholomew, 1990; Bartholomew, 1997; Mikulincer & Shaver, 2009).

Considering attachment processes are central to regulating behavior and emotions, they are related to a wide range of mental health outcomes (see Zhang et al., 2022 for a review). Focusing on PWB, which involves optimal psychological functioning and experience (Tang et al., 2019), research has indeed found PWB to positively relate to secure attachment (e.g., Marrero-Quevedo et al., 2019), and negatively to insecure attachment (e.g., Carr et al., 2013; Mortazavizadeh & Forstmeier, 2018). More specifically, securely attached individuals have a tendency to experience more positive affect, stability, autonomy, life satisfaction, and balance in social relationships, whereas insecurely attached individuals tend to experience



dysfunctional relationships, difficulty in emotion regulation, greater perception of stress and a higher risk of psychopathology (see La Guardia et al., 2000 for a review).

### **The Mediating Role of Emotion Regulation**

Because a sense of balance in one's emotions is a crucial element of PWB, active engagement in self-control processes, such as emotion regulation, will have a significant impact on mental health (Hu et al., 2014). Emotion regulation refers to an individual's ability to manage their emotional responses through a variety of strategies (Gross, 1998). Adaptive emotion regulation strategies have been shown to relate to adaptive behavior, greater social adjustment and overall well-being, whereas maladaptive emotion regulation strategies are related to maladjustment, psychological problems, and may even contribute to psychopathology (Hu et al., 2014; Roth et al., 2019).

Furthermore, the style of adult attachment has been consistently demonstrated to be one of the key factors determining how an individual expresses and regulate their emotions (Ferraro & Taylor, 2021; see Shaver & Mikulincer, 2014 for a review). Thus, Attachment Theory can be seen as a theory of emotion regulation, explaining how different attachment styles guide individuals' responses to emotionally challenging situations (Kobak & Sceery, 1988). Evidence indicates secure attachment to be related to adaptive emotion regulation strategies, whereas insecure attachment is associated with maladaptive emotion regulation (see Shaver & Mikulincer, 2014 for a review). Because of their positive internalized perceptions of others and themselves, secure individuals tend to acknowledge their distress and gain more confidence in seeking support as a distress regulation strategy, resulting in the ability to effectively and constructively regulate negative emotions without any socioemotional side effects (Kobak & Sceery, 1988; Mikulincer et al., 2003; Read et al., 2018). Additionally, they are less likely to be affected by stress and can experience positive emotions over extended periods (Mikulincer & Shaver, 2009). On the other hand, insecure

attachment is considered to predispose individuals to employ maladaptive emotion regulation strategies, causing persistent attachment-related distress (Read et al., 2018). In broad terms, both preoccupied and fearful attached individuals tend to intensify their negative emotions and elevate their distress and helplessness, with the purpose of eliciting support from others and seeking excessive reassurance (Mikulincer et al., 2003; Mortazavizadeh & Forstmeier, 2018). On the contrary, dismissive attached individuals tend to avoid feelings of vulnerability and negative emotions, such as anxiety, sadness, and fear, by suppressing them (Ferraro & Taylor, 2021; Fraley & Shaver, 1997; Liu & Ma, 2019).

Moreover, numerous studies have found emotion regulation to play a mediating role in the association between AAS and mental health (e.g., Esbjørn et al., 2012; Karreman & Vingerhoets, 2012; Marques et al., 2018; Pascuzzo et al., 2015). For instance, whereas adaptive emotion regulation mediated the link between secure attachment and well-being (Karreman & Vingerhoets, 2012), maladaptive emotion regulation mediated the association between insecure attachment and several mental disorders, including depression and anxiety (Marganska et al., 2013; Nielsen et al., 2017). Hence, it has been suggested that chronically relying on maladaptive emotion regulation strategies may increase the risk of developing mental disorders (Wei et al., 2005). Although emotion regulation has been demonstrated to mediate the relation between attachment styles and PWB, the majority of this research has exclusively examined the reactive regulation of negative emotions, thereby neglecting the plausible significance of both proactive emotion regulation and regulation of positive emotions (Ferraro & Taylor, 2021; Tugade & Fredrickson, 2007).

### **Emotion Crafting: Proactive Regulation of Positive Emotions**

According to Quoidbach et al. (2015), the regulation of positive and negative emotions are partly independent processes, highlighting the need to conduct separate research on positive emotion regulation. There has been extensive research on the link between positive

emotions and well-being, indicating how increased positive affect both contribute to a person's immediate and long-term happiness and to lower levels of ill-being (see van der Kaap-Deeder et al., 2023, for a review). A theoretical framework applicable to these results is the Broaden-and-build Theory of Positive Emotions. This theory emphasizes that positive and negative emotions exhibit distinct and complementary functions, with positive affect having the ability to repair or undo the consequences of negative emotions (Tugade & Fredrickson, 2007). According to Fredrickson (1998), negative emotions restrict people's thought-action repertoires, whereas positive emotions broaden them. Persistent exposure to positive emotions can result in the building of important personal resources, including resilience to adverse and distressing circumstances. Resilience, referring to the ability an individual has to moderate the negative impacts of stressors and adapt positively to them, can in turn enhance one's well-being (Karreman & Vingerhoets, 2012; Tugade & Fredrickson, 2007).

Additionally, whilst some studies have systematically examined the regulation of positive emotions in the context of attachment and well-being (e.g., Goodall, 2015; Karreman & Vingerhoets, 2012; Vahedi et al., 2016), none of them have considered *proactive* regulation of positive emotions. As stated in Gross' process model of emotion regulation (1998), emotion regulation can occur both before (i.e., antecedent-focused emotion regulation) and after (i.e., response-focused emotion regulation) the emotion is generated. Correspondingly, Martins-Klein et al. (2020) recently distinguished between proactive and reactive emotion regulation; the former involving cognitive preparation prior to the onset of an emotional stimulus and the latter entailing cognitive reaction to emotional-eliciting events as they encounter. In other words, the majority of research on emotion regulation has solely focused on one-half of the emotion regulation process. Consequently, this fails to indicate how individuals also are capable of planning their own positive emotional experiences in advance and not merely reacting to them (van der Kaap-Deeder et al., 2023).

Recently, van der Kaap-Deeder et al. (2023) coined the term “emotion crafting” (EC) to highlight the role of the proactive regulation of positive emotions. EC refers to one’s ability to be aware of activities, situations, and/or people that might initiate, maintain, or increase one’s positive emotions, in addition to one’s ability to deliberately act upon this awareness to proactively increase those positive emotions. Hence, EC consists of an awareness component and an action component (van der Kaap-Deeder et al., 2023). For instance, EC involves proactively seeking out and spending time with friends, whether it is for a night out or going for a hike, knowing that these relationships and activities would cultivate positive emotions.

The proactive approach taken by EC underlines people's agency to consciously and autonomously affect and contribute to their self-development, adaptation, and life circumstances (Bandura, 2006; van der Kaap-Deeder et al., 2023). Bandura (2006) argued that humans have the capacity to create their experiences rather than just passively experiencing and reacting to them. In the same vein, Self-Determination Theory (SDT), although using the term “autonomy”, asserts that an individual’s agency, which is considered a fundamental psychological need, is a determinant of their overall well-being (Leotti et al., 2010; Ryan & Deci, 2006). Indeed, van der Kaap-Deeder et al. (2023) found that active engagement in EC was positively related to eudaimonic well-being, life satisfaction, and vitality, and negatively to ill-being, via increased positive affect. However, this only applied to the action component of EC, and not awareness, illustrating that even though awareness is essential for recognizing and pursuing positive emotion-inducing contexts, it is on its own not sufficient to foster positive emotions.

Although there is a close relation between EC and well-being, no studies have been conducted on the relation between AAS and EC. However, according to Mikulincer and Shaver’s (2003) model for attachment-system functioning in adulthood, secure attachment functions as a foundation for the so-called broaden-and-build cycle of positive emotions. This

cycle increases an individual's resources for sustaining emotional stability, maximizes personal adjustment, encourages close and completely interdependent relationships, and broadens their capacities and viewpoints (Mikulincer & Shaver, 2003). Consequently, securely attached individuals tend to maintain their composure during distressing events and have extended periods of positive affect, both of which are beneficial to well-being (Mikulincer & Shaver, 2009). As such, given that these beneficial outcomes (i.e., positive affect and resilience) amongst securely attached individuals resemble those of EC, it is intriguing to investigate whether EC contributes to the relation between AAS and PWB.

### **The Present Research**

The purpose of this study was to examine the mediating role of EC in the relation between AAS and PWB among young adults. In this study, the focus was on flourishing as an indicator of PWB, as flourishing involves both hedonic and eudaimonic well-being, which is seen as the comprehensive and ultimate end-state of human psychology (Schotanus-Dijkstra et al., 2016a). First, in line with numerous studies on adult attachment and well-being (see La Guardia et al., 2000 for a review), it was expected that individuals with secure attachment would report a higher level of flourishing than those with an insecure attachment (**Hypothesis 1**). Second, given the theoretical and empirically validated positive associations between (a) secure attachment style, well-being, and adaptive emotion regulation, (b) insecure attachment style, ill-being, and maladaptive emotion regulation, and (c) EC and PWB, it was assumed that EC would mediate the relation between AAS and PWB. More specifically, individuals with secure attachment would relate to greater flourishing, via higher scores on EC, compared to individuals with insecure attachment (**Hypothesis 2**).

## Method

### Participants

A total of 162 individuals participated in this research, but due to the employed methodological approach to assess attachment, 155 were retained in the analyses and are described here (see also the “Measures”-section). The sample consisted of 111 (71.6%) women, 39 (25.2%) men, and 4 (2.6%) non-binary. One person (0.6%) did not want to disclose their gender. All participants were between the ages of 18 to 25 years ( $M_{age} = 22.23$  years,  $SD = 1.91$ ). The majority of the participants had Norwegian nationality (95.5%). A detailed overview of the sample characteristics is provided in Table 1.

**Table 1**

*Descriptives of the Sample Characteristics*

Characteristic	No.	Percentage
Highest completed educational level		
PhD	0	0.0%
Master's degree	12	7.7%
Bachelor's degree	34	21.9%
Trade/technical/vocational training	11	7.1%
High school or equivalent	88	56.8%
Not completed high school	6	3.9%
Another type of education	4	2.6%
Marital status		
Widow(er)	0	0.0%
Separated/divorced	0	0.0%
Married	1	0.6%

**Table 1 Continued**

Characteristic	No.	Percentage
Partner, not married	68	43.9%
Single, never married	86	55.5%
Do you have a job?		
No	43	27.7%
Yes, part-time	88	56.8%
Yes, full-time	24	15.5%
Are you currently a student?		
No	35	22.6%
Yes	120	77.4%

**Procedure**

The recruitment of participants involved reaching out to social networks, both personally and through social media. The target was Norwegian-proficient young adults in the age range between 18 and 25, who were invited to complete an online survey. At the start of the survey, participants received information regarding the purpose of the research, their anonymity, rights and privacy, that participation was voluntary, and that they could withdraw their participation at any time. Additionally, informed consent from all participants was obtained before the survey began. Participants did not receive any compensation for their participation. The data collection started February 23 and was terminated March 21 in 2023. Given that a part of the recruitment took place through social media, it was difficult to monitor the number of people asked to participate. Thus, a response rate was not calculated. As an exclusion criteria, participants who did not fit into one of the AAS were excluded from

this analyses, resulting in a loss of 7 participants (4.3%). In order to ensure compliance with regulations concerning personal data, Sikt evaluated the research and approved its conduct.

## **Measures**

**Revised Adult Attachment Scale.** The participants' attachment styles in adult relationships were measured with the Revised Adult Attachment Scale (RAAS) developed by Collins (1996), which was translated into Norwegian. This scale consists of 18 items divided into three subscales, whereby each consists of six items. The Close subscale measures an individual's comfort with intimacy and closeness with others (e.g., "I don't worry about people getting too close to me"). The Anxiety subscale assesses the extent to which a person experiences fear and concern about being abandoned and rejected by others (e.g., "I often worry that other people won't want to stay with me"). The Depend subscale measures the degree to which an individual is comfortable depending on others to be available for support when needed (e.g., "I know that people will be there when I need them") (Collins, 1996).

The participants were asked to respond to each item in terms of how they generally feel about their important close relationships by using a 5-point Likert scale, ranging from 1 (*Not at all characteristic of me*) to 5 (*Very characteristic of me*). Mean scores were calculated for each subscale to classify each participant into one of the four attachment styles postulated by Bartholomew (1990). A high score (i.e., above the midpoint) on the Close and Depend subscales and a low score (i.e., below the midpoint) on the Anxiety subscale accords with secure attachment. Fearful attachment equals a high score on the Anxiety subscale, and low scores on the Close and Depend subscales. Preoccupied attachment relates to a high score on all three subscales, whereas dismissing attachment refers to low scores on all three subscales (Collins, 1996). Participants who scored at the midpoint of the subscales were excluded from this research, as it is impossible to classify them into one of the attachment styles categories. Additionally, those who did not fit any of the attachment styles, were excluded. For analyses



purposes, the three insecure attachments (i.e., preoccupied, dismissing, and fearful) got merged together to create one category (i.e., “insecure attachment”). Thus, participants either got categorized as having secure ( $n = 86$ ) or insecure attachment style ( $n = 69$ ).

Several studies within diverse cultures have shown adequate psychometric properties in terms of internal consistency, test-retest reliability, and validity of the RAAS (e.g., Ahmad & Hassan, 2014; Fernández & Dufey, 2015; Teixeira et al., 2019; Vahedi et al., 2016). In the present research, the internal consistency for the Close, Depend, and Anxiety subscales showed a Cronbach’s alpha value of .82, .79, and .87, respectively.

**Emotion Crafting Scale.** To measure participants’ EC, a Norwegian-translated version of the Emotion Crafting Scale (ECS; van der Kaap-Deeder et al., 2023) was employed. The 12-item scale contains two subscales: (a) the Awareness subscale measuring the extent to which a person is aware of contexts (i.e., people, situations, activities) that induce positive emotions, and (b) the Action subscale, which assesses the degree to which a person actively seeks out such contexts to pursue and increase their positive emotions. The Awareness subscale consists of four items (e.g., “I am aware of which activities make me feel good”), whereas the Action subscale consists of eight items (e.g., “I seek out people who I feel good around”). Each item was rated on a 5-point Likert scale, ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*).

van der Kaap-Deeder et al. (2023) found the ECS to have an adequate validity, in that the two subscales were positively and moderately related to three established ER measures (i.e., discriminant validity) and predicted positive outcomes (i.e., predictive validity). The present study employed the overall EC score ( $\alpha = .82$ ), thereby averaging across all items. Both subscales had adequate internal consistency with a Cronbach’s alpha value of .83 (Awareness) and .73 (Action).

**Flourishing Scale.** The Flourishing Scale (Diener et al., 2009) was employed to measure participants' self-perceived psychological well-being. This scale consists of eight items that address important aspects of social-psychological functioning, such as positive relationships, feelings of self-respect, and a sense of meaning and purpose in life (e.g., "I am optimistic about my future"). Using a 7-point Likert scale, the participants were instructed to rate each item from 1 (*Strongly disagree*) to 7 (*Strongly agree*).

Research have shown strong association between this scale and other psychological well-being measures, indicating suitable validity (Schotanus-Dijkstra et al., 2016b). Diener et al. (2009) also reported Cronbach's alpha and test-retest reliability coefficients of .87 and .71, respectively. In the present study, the Flourishing Scale had a Cronbach's alpha value of .88.

### **Statistical Analyses**

All statistical analyses were preformed using IBM SPSS Statistics (Version 28). Firstly, descriptive statistics and bivariate correlations among the measured variables were estimated. Then, to control for any significant covariates, a one-way MANCOVA was used to examine the relation between the background variables (i.e., age, gender, nationality, education, marital status, job, and student) and the outcome and mediator variables. Regarding the primary analysis, Hypothesis 1 was examined by conducting a one-way ANCOVA. In this instance, the AAS were the independent variable (X), whereas flourishing constituted the dependent variable (Y). Thereafter, Hypothesis 2 were examined by conducting a mediation analysis with PROCESS (version 4.2), where EC was added as the mediator (M). To deal with potential non-normal sampling distributions of the effects, a bootstrapping method was employed to bias correct 95% confidence interval (CI) around the effects from 5000 bootstrap re-samples. The indirect effect were only accepted as statistically significant if its bias corrected 95% CI excluded zero. Otherwise, a significance level of  $p = .05$  was used.

## Results

### Preliminary Analyses

Descriptive statistics and bivariate correlations between the study variables are presented in Table 2. Correlations showed that secure (versus insecure) attachment related positively to both flourishing and EC. Furthermore, a significant positive correlation was found between flourishing and EC.

Additionally, a one-way MANCOVA was conducted to examine the relation of the different background variables (i.e., age, gender, nationality, education, marital status, job, and student) with the study variables. Due to some response categories containing too few or no people, marital status and gender were recategorized to contain fewer groups: i.e., “Single” and “Partner (Partner, not married + married)” for marital status, and “Female” and “Male” for gender. Results showed only a significant effect of job; Wilks’ Lambda,  $F(4,246) = 2.44$ ,  $p = .048$ . Given this result, the effect of job was controlled for in the main analyses.<sup>1</sup>

**Table 2**

*Descriptives of and Correlations Between the Study Variables (N = 155)*

Variable	<i>M</i>	<i>SD</i>	1	2
1. AAS <sup>a</sup>	0.55	0.50	-	
2. EC	4.13	0.51	.25**	-
3. Flourishing	5.70	0.83	.42***	.59***

*Note.* AAS = Adult Attachment Styles, EC = Emotion Crafting.

<sup>a</sup> AAS: insecure attachment was coded as 0, and secure attachment as 1.

\*\*  $p < .01$ ; \*\*\*  $p < .001$ .

<sup>1</sup> This effect was not significant in the univariate analyses. Nonetheless, the main analyses controlled for job, to provide a conservative examination of the hypotheses.

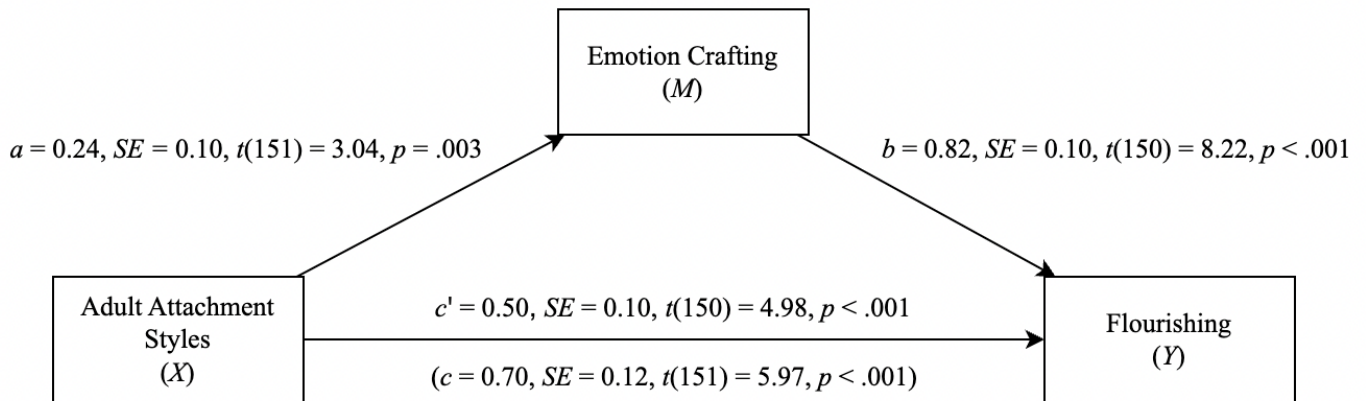
## Primary Analyses

In line with the first hypothesis involving the relation between AAS and flourishing, a one-way ANCOVA was conducted to compare the effect of the two different AAS on flourishing whilst controlling for job. The results revealed a significant difference in flourishing between the two AAS,  $F(1,151) = 18.57, p < .001$ . Comparing the estimated marginal means showed that secure attachment is associated with greater flourishing ( $M = 6.02, SD = 0.08$ ) than insecure attachment ( $M = 5.32, SD = 0.09$ ), with a difference of  $\Delta M = 0.70, p < .001$ .

Subsequently, in line with Hypothesis 2, a mediation analysis with PROCESS was performed to assess the mediating role of EC in the relation between AAS and flourishing while controlling for job. The results indicated that AAS was indirectly related to flourishing through its relation with EC. Moreover, the direct effect of AAS on flourishing was still significant after taking into account the indirect effect through EC, indicating that this was a partial mediation. In other words, AAS related to flourishing both indirectly (through EC) and still also directly. As displayed in Figure 1 and Table 3, individuals with secure attachment significantly reported greater EC than insecurely attached individuals, and higher reported scores on EC were subsequently related to greater flourishing. Finally, both full-time and part-time job (compared to no job) related positively to flourishing,  $b = 0.50, SE = 0.15, p = .001$ , and  $b = 0.45, SE = 0.11, p < .001$ , respectively. However, neither of them was significantly related to EC.

**Figure 1**

*Simple Mediation Diagram Displaying the Mediating Effect of EC in the Relation Between AAS and Flourishing*



*Note.* EC = Emotion Crafting, AAS = Adult Attachment Styles, SE = Standard error. Adult Attachment Styles: insecure attachment was coded as 0, and secure attachment as 1. a, b, c' and c are path coefficients representing unstandardized regression weights, and are displayed with corresponding standard errors (*SE*), *t*-statistics and *p*-values. The job covariate got controlled for.

**Table 3***Mediation Analysis Summary with EC Mediating the Relation Between AAS and Flourishing, Controlling for Job (N = 155)*

Type	Effect	<i>b</i> ( <i>SE</i> )	Bias-corrected CI (95%)	
			Lower	Upper
a-path	AAS <sup>a</sup> → EC	0.24 (0.08)**	0.08	0.40
b-path	EC → flourishing	0.82 (0.10)***	0.63	1.02
c'-path (Direct effect)	AAS → flourishing	0.50 (0.10)***	0.30	0.70
c-path (Total effect)	AAS → flourishing	0.70 (0.12)***	0.47	0.93
ab-path (Indirect effect)	AAS → EC → flourishing	0.20 (0.07)	0.07	0.34

*Note.* AAS = Adult Attachment Styles, EC = Emotion Crafting, CI = Confidence Interval. The coefficients shown are unstandardized path coefficients (*b*) with standard errors (*SE*) reported between brackets. The a-path is the effect of AAS on EC; the b-path is the effect of EC on flourishing while controlling for AAS; the c'-path is the direct effect of AAS on flourishing while controlling for EC; the c-path is the total effect of AAS on flourishing; and the ab-path is the indirect effect of AAS on flourishing through EC. The 95% bias-corrected confidence interval is based on 5000 bootstrap samples, and the effect is regarded as significant when the interval does not contain zero.

<sup>a</sup> AAS: insecure attachment was coded as 0, and secure attachment as 1.

\*\*  $p < .01$ ; \*\*\*  $p < .001$ .

## Discussion

Although research indicates that emotion regulation serves as a mechanism through which AAS affects PWB, prior studies in this domain have predominantly centered on regulating negative emotions as they occur (e.g., Marganska et al., 2013; Mortazavizadeh & Forstmeier, 2018). Consequently, the significance of regulating positive emotions and adopting a proactive approach to emotion regulation has been neglected. To address this gap, the present research aimed to determine the direct effect of AAS on flourishing (i.e., an overall indicator of PWB), as well as examine whether attempts to proactively pursue and increase positive affective experiences (i.e., EC) mediated the relation between AAS and flourishing among young adults aged 18-25 years.

The results of the present study indicate that individuals with a secure attachment style tend to report higher levels of flourishing compared to those with an insecure attachment style, and that this relation is partially mediated by EC. This implies that securely versus insecurely attached individuals may be more likely to engage in emotion crafting strategies that promote positive affect, which in turn contributes to their flourishing and higher PWB. Thus, the results provide support for both hypotheses, in that securely attached adults scored higher on flourishing than insecurely attached adults (Hypothesis 1), and that EC mediated the relation between AAS and flourishing (Hypothesis 2). This study adds evidence to the body of literature regarding the relation between AAS and PWB, indicating that the mechanisms underlying this relation also involve proactive regulation of positive emotions.

The findings from the current study are consistent with previous research and theorizing. First, the results supporting Hypothesis 1 align with the theoretical predictions of Attachment Theory, which suggest that a feeling of security in one's relationships is crucial for psychological and social well-being, personal adjustment, and both physical and mental health. Nonetheless, if the perceived sense of security is weakened due to unresponsive,

inconsistent, or unsupportive attachment figures, the probability of experiencing emotional difficulties and struggling to adapt later in life rises (Bowlby, 1969/1982). Indeed, a well-established link between AAS and PWB exists in the research, supporting Bowlby's claim. For instance, a positive association between secure attachment and various indicators of well-being, including greater levels of happiness, life satisfaction, and overall psychological health, has consistently been empirically demonstrated (e.g., La Guardia et al., 2000). Insecure attachment style, however, has been associated with a wide variety of mental disorders, highlighting its general pathogenic nature (Mikulincer & Shaver, 2012).

Second, consistent with the results supporting Hypothesis 2 in the present research, numerous studies suggest that adaptive emotion regulation mediates the relation between secure attachment and PWB, whereas maladaptive emotion regulation mediates the relation between insecure attachment and psychopathology (see Iwanski et al., 2021 for a review). This accords with the Attachment Theory's claim that individuals differ in their effectiveness and the preferential use of various emotion regulation strategies (Bowlby, 1969/1982). For instance, previous research has demonstrated that securely attached individuals are more likely to effectively use adaptive antecedent-focused (i.e., proactive) emotion regulation strategies, particularly cognitive reappraisal, resulting in lower and stable emotion reactivity in stressful social situations (Vrtička & Vuilleumier, 2012). Moreover, Karreman and Vingerhoets (2012) found that reappraisal partially mediated the relation between secure attachment and well-being.

On the contrary, individuals with insecure attachment styles are more likely to use maladaptive response-focused (i.e., reactive) emotion regulation strategies, such as rumination and suppression (Schiffrin, 2014; Vrtička & Vuilleumier, 2012). For instance, individuals with a preoccupied or fearful attachment style tend to ruminate on negative emotions and dampen positive affect, while those with dismissive attachment tend to suppress



negative emotions and have a diminished focus on positive affect (Mikulincer et al., 2003; Verhees et al., 2021). Such ineffective emotion regulation can hinder their capacity to effectively up-regulate positive emotions, leading to intense negative emotions, stress, or helplessness. Empirical evidence indicates that this in turn contributes to the development of psychopathological symptoms, including depression and anxiety, in the long term (see Iwanski et al., 2021 for a review). Hence, this could potentially explain why insecure attachment related negatively to both flourishing and EC in the current study compared to secure attachment.

Furthermore, the present research found that secure attachment style is positively associated with another adaptive proactive emotion regulation strategy, namely EC. Whereas reappraisal involves converting negative emotional experiences into non-emotional ones (Benita et al., 2020), EC involves proactively pursuing positive emotions (van der Kaap-Deeder et al., 2023). In other words, the present research not only supports but also expands the previous knowledge in this field.

As a potential explanation, this greater inclination towards EC among securely attached individuals could be attributed to the fact that these individuals have more cognitive and emotional resources to allocate toward other activities beyond their attachment relationships, compared to insecurely attached individuals. Individuals with a secure attachment style tend to have positive internalized perceptions of others and expect them to be supportive in times of need (Read et al., 2018). In addition, they tend to experience healthier social relationships, characterized by higher levels of trust, closeness, and satisfaction, and lower levels of negative emotions, than those with an insecure attachment style (see Towler & Stuhlmacher, 2013 for a review). According to Mikulincer and Shaver (2020), these characteristics provide individuals with a significant advantage when facing adversity, as well as when navigating non-attachment-related activities. They suggest that secure attachment can

promote emotional strength and composure, allowing individuals to remain calm and resilient in the face of stress or difficulty. Of significant importance in this regard, they also argue that secure attachment may contribute to the building of individuals' inner resources of maintaining their PWB even in situations where attachment figures are unavailable or support is hindered. More specifically, these security-based characteristics aid the broadening of an individual's perspectives and capacities, enabling securely attached individuals to autonomously dedicate more cognitive and emotional resources toward other aspects of their lives (Mikulincer and Shaver, 2003, 2020). This is in line with the model of attachment system functioning proposed by Mikulincer and Shaver (2003), which emphasizes the significance of secure attachment for the broaden-and-build cycle of positive emotion.

In contrast, individuals with a preoccupied or fearful attachment style tend to constantly expend a lot of mental energy on attachment-related worries, whereas dismissing attached individuals allocate this energy toward attachment-related defenses, due to their hyperactivation and deactivation strategies, respectively (Mikulincer and Shaver, 2019, 2020). Consequently, this can limit their ability to engage effectively and autonomously in other activities than attachment-related ones.

Because securely attached individuals are not constantly occupied by such attachment-related distress, they may be more likely to have a sense of agency and control over their lives, allowing them to pursue their own goals and interests. This results in more effective functioning in other activities beyond their attachment relationships, especially autonomy-promoting activities, such as interpersonal exchanges, exploration, and learning (Mikulincer & Shaver, 2003, 2020). Indeed, numerous studies have demonstrated that securely attached individuals thrive more in non-attachment-related activities and achieve better outcomes overall than insecurely attached individuals (see Mikulincer and Shaver, 2020 for a review). This aligns with SDT, which asserts that a sense of autonomy is a fundamental psychological

need and thus an imperative for one's overall well-being (Ryan & Deci, 2006). This is also a tenet of the proactive approach taken by EC, emphasizing the importance of individuals taking responsibility for their own emotional well-being (van der Kaap-Deeder et al., 2023).

In other words, securely attached individuals may experience greater autonomy and confidence in the potential positive outcomes of engaging in non-attachment-related activities. Thus, they may also be more aware of activities or situations that could increase their positive emotions (e.g., mountain climbing, spending time with friends), even in the absence of distress. As a result, securely attached individuals may be more inclined than their insecure counterparts to act upon this awareness and proactively seek out these activities, potentially accounting for their comparatively higher scores on EC in the present study.

Furthermore, empirical evidence suggests that individuals with a secure attachment style are less susceptible to developing and experiencing symptoms of mental disorders such as depression, PTSD, and anxiety (Mikulincer and Shaver, 2012). The current study's finding that EC partially mediated the relationship between AAS and flourishing could potentially offer an explanation for this. By proactively pursuing positive emotions, individuals with secure attachment styles may be able to mitigate the adverse impact of negative emotions on their overall well-being. This is consistent with the Broaden-and-Build Theory, which posits that the detrimental effects of negative affectivity can be counterbalanced by positive emotions, in that they broaden (instead of narrowing) an individual's attention, cognition, and actions. This enables them to see a wider range of possibilities and opportunities in their environment (Tugade & Fredrickson, 2007). As a result of cultivating and experiencing positive emotions, this broadening can build a variety of durable personal recourses, including coping skills, social support, and psychological resilience to negative circumstances, which ultimately lead to greater overall well-being (Fredrickson & Branigan, 2005; Tugade & Fredrickson, 2007). Although the characteristics of secure attachment, such as having healthy

social relationships, on their own could contribute to this positive affect and well-being, it is reasonable to assume that secure attachment also fosters an inclination toward EC behaviors given a greater sense of autonomy and awareness of beneficial situations, which in turn leads to positive affect and more optimal outcomes.

On the contrary, the negative association between insecure attachment and flourishing, through lower scoring on EC compared to secure attachment, may be due to the use of maladaptive emotion regulation strategies. Consequently, this may impede the ability of positive affect to mitigate the adverse consequences of the negative affect experienced by insecurely attached individuals (Schiffirin, 2014).

As the present study only found partial mediation through EC, it is worth considering other potential mechanisms that may be at play. While AAS may have a direct relationship with flourishing, the involvement of other potential mechanisms besides EC seems more plausible given evidence from previous research. For instance, Marrero-Quevedo et al. (2019) found that personality traits and self-esteem partially mediate the relation between AAS and PWB. La Guardia et al. (2000) also reported a partial mediation through need satisfaction, suggesting that a part of the reason that secure attachment style contributes to higher PWB is because it provides an arena in which individuals can fulfill their fundamental psychological needs. Moreover, empirical evidence indicates that reappraisal and resilience partially mediate the relation between secure attachment style and well-being (Karreman & Vingerhoets, 2012). Therefore, it is important to acknowledge that the relation between AAS and flourishing is likely complex and multifaceted.

### **Strengths and Limitations**

The present research examined the relation between AAS and flourishing, and the mediating role of EC among young adults aged 18-25 years. This is a relevant and important area of study, as this age range is marked by both opportunities and challenges for emotional

development. While their abilities to regulate emotions and set long-term goals increase rapidly, young adults also tend to experience emotional instability and insecurity regarding developmental tasks and roles (Zimmermann & Iwanski, 2014). Hence, effective emotion regulation skills are crucial for coping with such challenges, rendering research on EC during this period valuable. Additionally, the sample size of 155 participants, which is adequate for statistical analyses, and the high validity and reliability of the measures used, can be considered strengths of the study.

Nevertheless, certain limitations of the present research should be taken into account when interpreting the results. First, the cross-sectional nature of the study made it impossible to determine the direction of causality between the study variables, although the proposed mediation model was grounded on theoretical and empirical frameworks. An alternative interpretation of the results is that flourishing mediates the relation between AAS and EC, in that securely attached individuals score higher on flourishing, which in turn may make them more likely to rely on adaptive emotion regulation strategies, such as EC, than insecurely attached individuals. Second, all study variables were measured using a self-report instrument, on which participants' responses might have been influenced by social desirability, potentially leading to different results from those obtained through interviews or observer-rated measures. However, given that the survey was conducted anonymously, the impact of response bias may have been decreased. Moreover, it has been suggested that individuals with a dismissing attachment style might be unaware of their mental health issues due to their deactivating strategies (e.g., suppression) (Mortazavizadeh & Forstmeier, 2018). This lack of awareness may have led them to over-report their levels of flourishing, potentially skewing the accuracy of the results from the present study. Third, the method for categorizing the participants into one adult attachment style led to the exclusion of participants who did not fit into any of them. This loss of data could be prevented by

measuring adult attachment dimensionally instead of typologically, which is based on the notion that individuals have a score on each attachment style or dimension, and that they vary in degree rather than in type (La Guardia et al., 2000; Read et al., 2018). Finally, the sample in the study might not be representative of the general population of young adults aged 18 – 25 years, as the sample was composed mostly of women. Furthermore, given empirical evidence highlighting cross-cultural variations in emotion regulation (e.g., Matsumoto et al., 2008), as well as how positive emotions are perceived (Miyamoto & Ryff, 2011), the dominance of Norwegian participants in the present study limits the generalization of the results.

### **Implications for Practice and Further Research**

The innovative findings of the study have several significant practical and clinical implications. As EC was found to be a mechanism through which insecure attachment style acts as a vulnerability factor for lower levels of flourishing, interventions aimed at promoting adaptive strategies for the regulation of positive emotions would potentially benefit the PWB of insecurely attached young adults. This may be more effective than focusing on more intensive interventions aimed at challenging individuals' insecure attachment style, as emotion regulation is a more proximal factor of influence on individuals' adjustment. For instance, behavioral activation (BA) interventions could be employed, as these emphasize the meaningful relation between activity and mood. As a component of cognitive behavioral therapy, BA aims at using behaviors to “activate” positive emotions (Villines, 2021). Although many different BA techniques exist, they all involve activity monitoring and scheduling, where the goal is to increase contact with available sources of response-contingent positive reinforcement in the environment (Kanter et al., 2010). Stated differently, the goal of BA interventions is to promote clients' EC behaviors. Such interventions may thus serve as a compensatory strategy that helps insecurely attached individuals shift their attention

to positive emotional experiences and seek them out, countering the adverse effects of their negative emotions.

In light of the cross-sectional nature of the present study, further research is needed to replicate these results through experimental and longitudinal research that enable the determination of the direction of the relation between the study variables (see Walker et al., 2019). It would also be intriguing to investigate in greater depth how these relations are established, especially between AAS and EC, as well as the potential benefits of interventions aimed at improving EC behaviors, particularly for those with an insecure attachment style. Additionally, although the current study focused on the overall EC score, EC consists of two components: awareness and action (van der Kaap-Deeder et al., 2023). Thus, it would be interesting to examine how AAS relate to each component and investigate if any of these components drive the mediation more than the other, or if both contribute to it. Moreover, further research is needed to examine how the different insecure attachment styles (e.g., preoccupied, fearful, and dismissing) uniquely relate to EC, as this could have important practical and clinical implications. Finally, additional studies are required to replicate this study in other cultures to test its generalizability.

## **Conclusion**

This study provides evidence that individuals with a secure attachment style tend to exhibit greater levels of flourishing compared to those with an insecure attachment style, which is consistent with previous research. Moreover, the present research sheds light on the mediating role of EC through which AAS partially affects flourishing. These findings suggest that securely attached individuals are more likely to engage in the proactive cultivation of positive emotions, resulting in higher levels of flourishing, compared to their insecurely attached counterparts. Thus, the research expands on the existing literature in this area, which has primarily focused on the regulation of negative emotions as they occur (i.e., reactive

regulation of negative emotions). Overall, this study highlights the importance of EC in regard to PWB, particularly for individuals with an insecure attachment style. Nonetheless, further research should investigate how diverse types of insecure attachment styles are uniquely related to EC and its two components, especially for clinical purposes. Finally, additional studies are needed to establish the causal direction of the relation between AAS, EC, and flourishing.



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