The Relation from Perceived Parenting to Psychological Resilience in Emerging Adults: The Mediating Role of Emotion Crafting

Mia Charlotte Barkhausen (1709038)

Faculty of Social and Behavioral Sciences, Utrecht University

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Supervisor: Jolene van der Kaap-Deeder

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Abstract

There is limited research regarding proactive, positive emotion regulation, how it emerges, and its contribution to psychological resilience. This study aimed to fill this gap by examining the relation between perceived parenting practices (i.e., warmth, autonomy support) and psychological resilience via emotion crafting awareness and action in emerging adults. In total, 124 emerging adults completed the online survey. Results indicated that maternal warmth and autonomy support was not directly, yet indirectly related to psychological resilience through emotion crafting awareness. Emotion crafting action did not significantly mediate this relation. Furthermore, paternal warmth and autonomy support did not exert a significant direct or indirect effect on resilience via awareness or action. Implications and directions for future research are outlined. These results add to the literature by showing the importance of emotion crafting awareness in the relation between perceived parenting and resilience in emerging adults.

Keywords: perceived parenting, emotion crafting, emotion regulation, psychological resilience, emerging adults

The Relation from Perceived Parenting to Psychological Resilience in Emerging Adults: The Mediating Role of Emotion Crafting

Emerging adulthood – the transitioning from adolescence to adulthood, is filled with biological, social, and psychological changes (Hunt & Eisenberg, 2010), making it a vulnerable stage in development with high clinical importance (Arnett, 2000). A key mechanism countering this vulnerability could be emotion regulation (Gatto et al., 2022), as adaptive emotion regulation is associated with increased resilience (Polizzi & Lynn, 2021). Emotion regulation is learned from a young age and is thought to be facilitated by parents (Macklem, 2008). Positive parenting practices, such as autonomy support and warmth, contribute to a child's affective well-being, and reduce negative reactions to challenges, thereby contributing to resilience (Kocayoruk, 2012; Lind et al., 2018).

Based on the (believed) independence of parents together with the emotional instability in emerging adulthood, the ability to proactively regulate one's (positive) emotions, such as described by the newly coined term 'emotion crafting' (van der Kaap-Deeder et al., 2022) could be particularly important to buffer against stressors, attenuate risk of psychopathology, and make an individual resilient. However, due to its recent introduction, there is limited understanding of emotion crafting and its relation to perceived parenting or resilience. Additionally, little attention has been devoted to resilience as the subjective account of one's ability to adapt to stress. Through investigating the relation of perceived parenting on resilience via emotion crafting, this study offers a new, positive framework of the concepts of parenting, emotion regulation, and resilience

The Benefits of Psychological Resilience in Emerging Adults

Emerging adulthood, the age from 18-25 is accompanied by unique stressors, making it a time of instability (Arnett, 2000). Emerging adults stand in between the reliance on parents and their own long-term commitments, facing more responsibility (Arnett & Mitra, 2020). Without factors contributing to resilience in this developmental stage, emerging adults are at elevated risk for psychopathology. Epidemiological studies estimated that over 40% of 18–29-year-olds in the United States meet the diagnostic criteria for a disorder any given year (Viner & Tanner, 2009).

Psychological resilience, although not conceptualized uniformly across research, is commonly defined as the ability to 'bounce back' from adversity and continue with normal or improved mental health functioning (Smith et al., 2008). Following this definition, resilience is considered a process, suggesting it can be learned at any point throughout life (Flach, 1988; Mancini & Bonanno, 2009). Resilience is associated with several positive outcomes. For one, resilience is a protective factor against numerous psychological disorders such as depression in adulthood after childhood adversity (Poole et al., 2017), or superior adjustment after military employment (Schok et al., 2010). Furthermore, it can moderate the relation between emotional exhaustion and mental health issues (García-Izquierdo et al., 2018) and is associated with lower levels of mental distress (Riehm et al., 2021).

Generally, research on resilience reveals agents that maintain mental health despite adversity (Kleber, 2019). For instance, Sleijpen et al. (2013) revealed strategies young refugees use to promote their resilience, including acting autonomously and perceiving support from peers and parents. Indeed, perceived parenting practices, such as support, care, and warmth seem to affect various outcomes beyond the childhood and well into (emerging) adulthood (Parra et al., 2019; Tani et al., 2018).

Parental Warmth and Autonomy Support as Sources of Psychological Resilience

Parental impact on their children has been emphasized by the self-determination theory (SDT). According to SDT, parents act as socializing agents, mobilizing, facilitating, and supporting a child's natural tendency of internalizing cultural values, attitudes, and behaviors. SDT identifies three central needs for psychological health and growth, namely competence, relatedness, and autonomy. Parents can satisfy these needs through autonomy support, warmth/relational support, and structure (Deci & Ryan, 2000). Need satisfaction can predict well-being in adolescence and college students across cultures (Church et al., 2013; Kocayörük et al., 2015), and specifically parental warmth and autonomy support were coined 'universal ingredients' to parenting due to their beneficial effects on adolescents' affective well-being (Bülow et al., 2022).

Parental warmth can be defined as the extent to which a parent is accepting, caring, and responsive to their children's emotional needs (Rothenberg et al., 2020; Sun et al., 2020). This promotes prosocial behavior (Li et al., 2022), protects against peer victimization (Zhou et al., 2021), and decreases aggression (Khaleque, 2013). Moreover, parental warmth decreases negative effects of parental overprotection and rejection (Saleem et al., 2021) and is associated with increased resilience in survivors of severe childhood sexual abuse (Lind et al., 2018).

Autonomy supportive parents encourage the child's capacity for self-initiation, through (1) providing rationale for rules and behavioral requests, (2) recognizing the child's perspective and feelings, (3) offering choices and encouraging initiative, and (4) minimizing controlling techniques (Emery et al., 2017). This promotes exploration and curiosity, positively influencing different contexts such as academic explorative and interest-focused engagement (Roth et al., 2009), intrinsic life goals (Lekes et al., 2010), and perceived competence and academic

achievement (Vasquez et al., 2016), Furthermore, parental autonomy support is related to life satisfaction and psychological health (Reed et al., 2016; Vasquez et al., 2016).

Emotion Crafting as a Mechanism

Reasonably parents, as key social figures in childhood, contribute to the ability to regulate emotions (Morris et al., 2007). Perceived parenting style can even predict emotion regulation in adolescents (Jabeen et al., 2013). Particularly maternal autonomy support is associated with more adaptive emotion regulation (Brenning et al., 2015). Generally, parental autonomy support and warmth have been linked to higher emotional intelligence, including own and others emotion awareness and regulation (Asghari & Besharat, 2011).

Emotion regulation refers to the ability to modulate or maintain one's emotional state in terms of valence, time, situation, and expression (McRae & Gross, 2020) and has been associated with increased resilience in adolescents and emerging adults (Mestre et al., 2017; Mouatsou & Koutra, 2021). Applying the theoretical framework of dual mechanisms of control on emotion regulation emphasized the distinction between emotion regulation prior to (proactive) or subsequent of (reactive) an emotional stimulus (Martins-Klein et al., 2020). The significance of proactive emotion regulation can also be seen within the framework of SDT, as it describes individuals' innate drive to shape their own lives and function proactively and autonomously (Deci & Ryan, 2000).

More recently developments highlight the importance of positive emotion regulation for resilience. Positive emotion regulation can be defined as maintaining, savoring, or enhancing positive emotions. Positive emotions allow individuals to adapt to (work) stress (Gloria et al., 2013) and positive emotion regulation supports coping and flourishing of mental health (Garland et al., 2010). Moreover, research indicates that resilient individuals use positive emotions to

recover from negative emotional experiences (Tugade & Fredrickson, 2004), whereas positive emotion suppression is associated with increased anxiety and depression symptoms (Carl et al., 2014). Therefore, proactively promoting positive emotions, as in emotion crafting, is a promising construct contributing to individual differences in resilience.

Prior research has predominantly focused on reactive (negative) emotion regulation compared to proactive (positive) emotion regulation, which is why this study investigates emotion crafting, a form of proactive positive emotion regulation. Emotion Crafting comprises two factors and can be described as anticipatory, self-initiated, proactive behavior aimed at increasing positive emotions (van der Kaap-Deeder et al., 2022). First, the individual needs to be aware of emotion-inducing contexts and notice opportunities to initiate, maintain, or increase positive emotions, called emotion crafting awareness (AW). Thereafter the individual can act upon this awareness to proactively increase the desired positive emotion, called emotion crafting action (AC). Examples include deliberately recalling a precious memory or listening to one's favorite song to induce positive emotions before a concert.

Present Research

Since perceived parenting practices influence emotion regulation in adolescents and adults (Morris et al., 2007) and emotion regulation is positively related to resilience (Polizzi & Lynn, 2021), emotion crafting could act as a mediator in the relation between perceived parenting and resilience. The aim of this study was to investigate a positive framework of the relation between parenting and resilience. Additionally, the mediating effect of emotion crafting was explored. Based on previous research, the following hypotheses were formulated. First, perceived parental warmth and autonomy support were expected to positively relate to resilience (i.e., Hypothesis 1) and furthermore AW (i.e., Hypothesis 2) and AC (i.e., Hypothesis 3) would

mediate these relations. Lastly, due to limited prior research, maternal and paternal parenting practices were investigated separately in an exploratory fashion.

Procedure

The study was approved by the ethical committee of the Faculty of Social and Behavioral Sciences, Utrecht University, the Netherlands. After receiving ethical approval, participants were recruited through digital advertisement on social media and the Utrecht University SONA system website. Participation took place online via the survey tool Qualtrics. Preferred language could be chosen: English or German. A validated Brief Resilience Scale version existed in German (Chmitorz et al., 2018), whereas German Perception of Parents Scale and the Emotion Crafting Scale versions were obtained through the back-translation method. First, an information letter was provided, and informed consent was requested. Thereafter, information on demographics concerning gender, student status, highest level of education, relationship status, ethnicity, and English/ German proficiency (depending on which language they chose to respond in) was collected. Thereafter, the Emotion Crafting Scale, the Perception of Parents Scale, and the Brief Resilience Scale were filled out. If applicable, participants received 0.5 SONA credits for their participation. Individuals recruited through social media were not offered a reward.

Participants

In total, 124 emerging adults (18-25 years old) with a mean age of 22.73 (*SD* = 1.50) years old filled out the survey. Participants predominantly indicated Germany as their country of origin (68.5 %), followed by the Netherlands (20.2%). The majority identified as female (65.3%), followed by male (33.1%). Most participants obtained a high school degree (46.8%) or a bachelor's degree (37.1%) and were currently students (81.5%). Additionally, most were single

(58.9%) or had a partner without being married (40.3%). Lastly, most participants (63.7%) filled out the survey in German (63.7%). All information is provided in Table 1.

Table 1

Sample Demographics

Characteristic		*N* (%)
Age	18	1 (0.8%)
	19	0 (0%)
	20	7 (5.6%)
	21	16 (12.9%)
	22	28 (22.6%)
	23	35 (28.2%)
	24	15 (12.1%)
	25	22 (17.7%)
Gender	Female	81 (65.3%)
	Male	41 (33.1%)
	Non-binary	1 (0.8%)
	Prefer not to say	1 (0.8%)
Student	Yes	101 (81.5%)
	No	23 (18.5%)
Level of Education	Less than high school degree	1 (0.8%)
	High school/ equivalent	58 (46.8%)

	Trade/technical/vocational training	7 (5.6%)
	Bachelor's degree	46 (37.1%)
	Master's degree	8 (6.5%)
	Other	4 (3.2%)
Country of Origin	Germany	85 (68.5%)
	Netherlands	25 (20.2%)
	Chile	3 (2.4%)
	Greece	2 (1.6%)
	Cuba	1 (0.8%)
	Ecuador	1 (0.8%)
	Finland	1 (0.8%)
	France	1 (0.8%)
	Poland	1 (0.8%)
	Slovakia	1 (0.8%)
	Syrian Arab Republic	1 (0.8%)
	Turkey	1 (0.8%)
	USA	1 (0.8%)
Relationship Status	Single, never married	73 (58%)
	Partner, not married	50 (40.3%)
	Married	1 (0.8%)

Measures

Perception of Parents Scale

Parental autonomy support and warmth was measured using the Perception of Parents Scale (POPS; Robbins, 1994). The 6-item warmth (e.g., 'My mother/father accepts me and likes me as I am') and the 9-item autonomy support subscale (e.g., 'My mother/father helps me to choose my own direction') were used. Participants rated their parents separately on a scale from 1 (not at all true) to 7 (very true). Adequate reliability was found by Robbins (1994), and in the current study for maternal warmth (α = .82), maternal autonomy support (α = .87), paternal warmth (α = .82), and paternal autonomy support (α = .87).

Emotion Crafting Scale

Emotion crafting, as proactive positive emotion regulation, was assessed using the Emotion Crafting Scale (ECS; van der Kaap-Deeder et al., 2022). The ECS comprises 12 items with two subscales, the four-item AW (e.g., 'I know well which activities make me feel good') and the eight-item AC (e.g., 'I seek out situations which make me feel good'.) subscale. Items were rated from 1 (strongly disagree) to 5 (strongly agree). Good reliability of the subscales AW (α = .83) and AC (α = .85) were found by van der Kaap-Deeder et al. (2022), and in the current study for AW (α = .77) and AC (α = .71).

Psychological Resilience Scale

Psychological resilience was measured using the 6-item Brief Resilience Scale (BRS; Smith et al., 2003). Items (e.g., 'I tend to bounce back quickly after hard times') were rated on a scale from 1 (strongly disagree) to 5 (strongly agree). Smith et al., (2008) found a good reliability (α = .8-.9) and so did the current study (α = .86).

Plan of Statistical Analyses

To test whether emotion crafting mediates the relation between perceived parenting (i.e., warmth and autonomy support) and resilience, IBM Statistics software version 27 and the extension Process v4.3 by Andrew F. Hayes (2017) were used to conduct the statistical analyses. Data was scanned for outliers and participants outside the target age range were removed. Subsequently, a multivariate analysis of variance (MANCOVA) was run to establish whether the background variables (i.e., age, gender, education, country of origin, and relationship status) related to the outcomes (i.e., AW, AC, and resilience). In total, four mediation analyses were employed to examine the relation from maternal warmth, maternal autonomy support, paternal warmth, and paternal autonomy support (i.e., independent variables) to resilience (i.e., dependent variable) through AW and AC (i.e., mediators).

Results

Preliminary Analyses

Descriptive statistics and correlations are presented in Table 2. For further analysis, 'non-binary' and 'prefer not to indicate' responses were filtered out due to this group being too small to run a statistical analysis. Additionally, participants indicating 'other' as their education level were filtered out to create a continuous variable. AW positively correlated with maternal warmth, maternal autonomy support, and resilience. Furthermore, maternal warmth and autonomy support positively correlated with resilience. Paternal warmth positively correlated with AC and paternal autonomy support with resilience.

Next, the relation between background variables (i.e., age, gender, education, nationality, relationship status, user language, and student status) and the outcome variables (i.e., AW, AC, and resilience) were assessed using a multivariate analysis of variance (MANCOVA). Results showed that education level related significantly to the outcome variables (F (1, 98) = 6.10, p =

.02). Follow-up ANOVA revealed between-group differences of resilience based on education level (F (4, 95) = 2.6, p = .04) and education level showed a positively correlation to resilience (r (103) = .23, p = .02), meaning that a higher education level was associated with higher resilience. No significant effects on study variables were found for age, gender, country of origin, relationship status, user language, and being a student or not (F (1, 98) ranged between 0.10 and 0.31, p > .05). Therefore, only education level was controlled for in the main analyses.

Table 2

Mean, Standard Deviation, and Correlations among the Study Variables

	M	*SD*	1.	2.	3.	4.	5.	6.
1. WM	6.19	0.84	-					
2. MA	5.68	0.94	.78**	-				
3. PW	5.88	1.03	.49**	.40**	-			
4. PA	5.18	1.17	.30**	.39**	.63**	-		
5. AW	4.20	0.60	.24**	.30**	.12	.11	-	
6. AC	3.80	0.51	.13	.15	.20*	-.07	.38**	-
7. R	3.27	0.80	.19*	.17*	.15	.21*	.38**	.12

Note. MW= Maternal Warmth; MA = Maternal Autonomy Support; PW = Paternal Warmth; PA = Paternal Autonomy Support; AW= Emotion Crafting Awareness; AC = Emotion Crafting Action; R = Psychological Resilience

*p < .05; **p < .01.

Primary Analyses

To examine the mediating role of AW and AC in the relation between perceived parenting and resilience, mediation analyses were conducted. The indirect effect of perceived parenting on resilience via AW and AC was tested using bootstrap technique with 5000 samples and a 95% confidence interval. Based on the preliminary analyses, education was included as a covariate.

Perceived Maternal Parenting

The direct effects of perceived maternal parenting on resilience showed that the effect of both perceived maternal warmth and autonomy support on resilience was not significant. Perceived maternal warmth and autonomy support were significantly related to AW, whereas no significant relation was found from perceived maternal warmth and autonomy support to AC. Furthermore, relation between the mediators and outcome showed that AW on resilience was significant, whereas AC on resilience was not significant.

Perceived maternal warmth and autonomy support had a significant indirect effect on resilience via AW, whereas perceived maternal warmth and autonomy support did not have a significant indirect effect on resilience via AC. Additionally, education level was a significant predictor for resilience in analyses of maternal warmth (B = .13 p = .05), and maternal autonomy support (B = .13 p = .04) via AW and AC.

Altogether these results did not support hypothesis one for perceived maternal parenting. Support was found for hypothesis two, whereas hypothesis three was not supported. Results are displayed in Table 3.

Table 3

Mediation Analyses of Maternal Parenting Practices

Effect	Path	Coefficient	*p*	*SE*	*LL*	*UL*
Total effect of MW on R	c	.14	.12	.09	-.36	.32
Total effect of MA on R	c	.12	.14	.08	-.04	.27
Direct and Indirect Effect of Perceived Maternal Warmth						
Direct effect of MW on AW	a1	0.16	.02*	.07	.03	.29
Direct effect of AW on R	b1	.47	<.01**	.13	.22	.72
Indirect effect of MW on R via AW	a1*b1	0.07	(sig)	.04	<.01	.19
Direct effect of MW on AC	a2	0.07	.25	.06	-.05	.18
Direct effect of AC on R	b2	.10	.53	.15	-.21	.40
Indirect effect of MW on R via AC	a2*b2	<.01	(ns)	.01	-.05	.01
Direct effect of MW on R	c’	.07	.44	.09	-.10	.24
Direct and Indirect Effect of Perceived Maternal Autonomy Support						
Direct effect of MA of AW	a1	.19	<.01**	.06	.07	.30
Direct effect of AW on R	b1	.51	<.01**	.14	.24	.79
Indirect effect of MA on R via AW	a1*b1	.09	(sig)	.04	.02	.18
Direct effect of MA of AC	a2	.08	.11	.05	-.02	.18
Direct effect of AC on R	b2	-.11	.47	.15	-.41	.19
Indirect effect of MA on R via AC	a2*b2	<.01	(ns)	.01	-.02	.04
Direct effect of MA on R	c’	.03	.73	.08	-.12	.18

Note. MW= Maternal Warmth; MA = Maternal Autonomy Support; AW= Emotion Crafting Awareness; AC = Emotion Crafting Action; R = Psychological Resilience.

* $p < .05$; ** $p < .01$; (sig) = significant; (ns) = not significant.

Perceived Paternal Parenting

Regarding the direct effects of perceived paternal parenting on resilience, no significant relation was found of paternal warmth or autonomy support on resilience. Paternal warmth and autonomy support did not show a significant effect on AW or AC. Furthermore, relation between emotion crafting and resilience depicted that AW had a significant effect on resilience, whereas no significant relation was found from AC to resilience.

Perceived paternal warmth and autonomy support did not have an indirect effect on resilience via AW or AC. Again, education level was a significant predictor in the analyses of paternal warmth and autonomy support ($B = .14$ $p = .04$) on resilience via AW, and in the analyses of paternal warmth and autonomy support ($B = .17$ $p = .02$) via AC. Therefore, no support was found for hypothesis one, two, or three regarding perceived paternal parenting. Results are displayed in Table 4.

Table 4

Mediation Analyses of Paternal Parenting Practices

Effect	Path	Coefficient	*p*	*SE*	*LL*	*UL*
Total effect of PW on R	c	.07	.38	.08	-.08	.22
Total effect of PA on R	c	.12	.08	.07	<-.01	.25
Direct and Indirect Effect of Perceived Paternal Warmth						
Direct effect of PW on AW	a1	.06	.32	.06	-.06	.17

Direct effect of AW on R	b1	.51	<.01**	.13	.24	.78
Indirect effect of PW on R via AW	a1*b1	.03	(ns)	.03	-.02	.10
Direct effect of PW on AC	a2	.08	.11	.05	-.02	.18
Direct effect of AC on R	b2	-.11	.48	.16	-.42	.20
Indirect effect of PW on R via AC	a2*b2	< .01	(ns)	.02	-.02	.06
Direct effect of PW on R	c’	.05	.52	.07	-.10	.19
Direct and Indirect Effect of Perceived Paternal Autonomy Support						
Direct effect of PA on AW	a1	.06	.24	.05	-.04	.16
Direct effect of AW on R	b1	.50	<.01**	.12	.23	.72
Indirect effect of PA on R via AW	a1*b1	.03	(ns)	.03	-.02	.09
Direct effect of PA on R	c’	.09	.18	.06	-.04	.21
Direct effect of PA on AC	a2	-.04	.38	.04	-.13	.05
Direct effect of AC on R	b2	.15	.31	.15	-.15	.45
Indirect effect of PA on R via AC	a2*b2	-.01	(ns)	.01	-.03	.01

Note. PW = Paternal Warmth; PA = Paternal Autonomy Support; AW= Emotion Crafting Awareness; AC = Emotion Crafting Action; R = Psychological Resilience.

* $p < .05$; ** $p < .01$; (sig) = significant; (ns) = not significant.

Discussion

This study aimed to give insight into the relation of perceived parenting practices on resilience and how this is mediated by AW and AC. Prior research predominantly focused on reactive negative emotion regulation and resilience research has previously measured resilience-related factors rather than the perceived ability to 'bounce back' from adversity. It was hypothesized that parental warmth and autonomy support were positively related to resilience and that this relation was mediated by AW and AC.

Perceived Parenting Practices and Psychological Resilience

Regarding hypothesis one, neither maternal nor paternal autonomy support or warmth showed a direct relation to resilience. This is not in line with previous research (Lee et al., 2010; Lind et al., 2018). These differences in findings may be due to incongruent conceptualization of resilience across research. For example, Lind et al. (2018), interpreted resilience as the absence of psychopathology despite adversity, whereas this study used a subjective measure of the individual's ability to bounce back from stress. Furthermore, previous research specifically assessed individuals who experienced severe childhood sexual abuse (Lind et al., 2018) and maltreated individuals (Lee et al., 2019), whereas potential adversities experienced by participants in this study remain unknown, leading to possible differences in samples.

Other possible factors reflect the complexity of the relation from parent practices to resilience. Perceived positive parenting can be moderated by personality characteristics, indicating that many, yet not all (adolescents) benefit from them to enhance resilience (Kaniušonytė & Laursen, 2022). Additionally, perceived parenting contributing to resilience may be more important in early childhood, as children are more dependent on parents (Vanderbilt-Adriance & Shaw, 2008) and parenting practices could influence children in older age groups through indirect factors. Additionally, most college students report significantly more

(perceived) support from their friends than their parents (Moilanen & Raffaelli, 2010), potentially causing other relationships to affect resilience more strongly in emerging adults.

The Mediating Effect of Emotion Crafting Awareness

Hypothesis two was partially supported. While AW mediated maternal warmth and autonomy support on resilience, this was not the case for paternal warmth or autonomy support. The finding that only maternal warmth and autonomy support was related to AW is in line with previous research, as minimal or no effect of paternal parenting was found in student samples, for example demonstrated in the meta-analysis on alexithymia by Thorberg et al. (2011). Furthermore, positive relationship to one's mother, not father predicted resilience (Kennison & Spooner, 2020). Through the framework of attachment theory, children seek attachment by consistently directing their behavior to one primary caregiver (Bowlby, 1969/1982). This is the parent the child spends most time with, traditionally the mother (Pancsofar & Vernon-Feagans, 2006). Mothers also seem to display more elaborated emotion talk than fathers during toddlerhood (van der Pol et al., 2015), and only maternal emotion talk predicted emotion understanding (Aznar & Tenenbaum, 2013). Therefore, (only) maternal parenting practices may significantly contribute to AW because they are the primary caregiver, and/or they engage in more elaborate emotion talk.

The positive effect of emotional awareness on resilience is consistent with previous research. For example, a study by Armstrong et al. (2011) demonstrated that certain emotional intelligence domains, such as emotional self-awareness, were associated with less distress after negative life events and were positively associated with resilience, and in Weissman et al. (2020) low emotional awareness was associated with psychopathology symptoms.

The Mediating Effect of Emotion Crafting Action

Hypothesis three, emotion crafting action mediating the relation from perceived paternal warmth and autonomy support was not supported. Neither was it significantly related to parenting practices, nor to resilience. The finding that perceived parental warmth nor autonomy support was not significantly related to AC stand in contrast to previous research (Jabeen et al., 2013; Morris et al., 2007). However, AC as a novel approach to emotion regulation has not been investigated in relation to perceived parenting practices, which makes it difficult to draw a direct comparison to previous findings. One can only speculate why this relation was not significant as further research is needed to draw conclusive inference. One possibility is that AC is dependent on the (social) environment, which may in emerging adults rely more on friends or partners, rather than on parents. Furthermore, other parenting factors, besides warmth and autonomy support may be closer related to AC in emerging adults.

The finding that not AC but AW was significantly related to resilience contrasts with other research on emotion regulation, where it was found that both emotion awareness and emotion regulation, as emotional intelligence was associated with resilience (Armstrong et al., 2011). Nevertheless, similar results have been reported before, for instance by Lee et al. (2019) where emotion awareness and not an action component (cognitive adaptive regulation) significantly moderated the relation between childhood maltreatment and resilience. This could be due to several reasons. For one, it could be that both positive and negative emotion regulation are crucial to significantly contribute to resilience. Next, it is possible that actions to increase positive emotions described by the AC measure are not taken deliberately/consciously, rather resilient individuals undertake such actions more routinely without the (conscious) goal to increase positive emotion. When faced with adversity such individuals would routinely continue given actions while less resilient individuals may solely focus on strategies reducing negative

emotions. Additionally, questions of the AC subscale are posed in a general, not situation-specific way. While the awareness of what makes one feel good can be helpful in any situation, proactively increasing positive emotions may not be appropriate in all situations and can sometimes be sign of maladaptive functioning (Villanueva et al., 2021). The ability to flexibly use different types of emotion regulation depending on the context may thus be more predictive of resilience than solely engaging in AC.

Limitations

This study had important strengths, including usage of robust measures, and providing a positive framework for the relation between maternal parenting practices, resilience, and emotion crafting awareness. Nevertheless, several limitations exist. Firstly, a cross-sectional design was employed, meaning that no causal conclusions can be drawn. Secondly, the sample was rather selective as participants were predominantly German, relatively young and the majority identified as female, thereby limiting generalizability of the findings. Thirdly, the study had a relatively small sample size, limiting the strength of the drawn conclusions. Finally, although it is suggested that perceived parenting practices have more predictive power for well-being in adolescents than parent reports (Bülow et al., 2022), when using one informant it remains unclear how much the perception of parent is colored by other variables, for instance their emotion regulation.

Implications for Practice and Suggestions for Future Research

These findings have important implication for practice. For one, given that perceived maternal parenting practices showed a positive indirect association to resilience, offering information about the importance of providing warmth and autonomy support, specifically in its relation to AW for parents should be considered. Next, given that AW positively related to

resilience, interventions for young adults aiming to increase resilience should aim at teaching how to AW.

Future research should consider several factors. Firstly, it has been suggested that different psychological processes underlie resilience across (adult) age groups (Gooding et al., 2012). Thus, longitudinal designs should be considered to compare differences of parental impact in distinct developmental stages and establish causal links between the study variables. Secondly, differences in culture can be observed in parenting (Bornstein, 2013), emotion regulation (Ma et al., 2018), and assumed responsibility among emerging adults (Nelson et al., 2004). Such cultural differences should be examined to gain more knowledge and to generalize current findings. Thirdly, including mother and father reports, as well as observations of parenting may specifically be helpful in explaining the relation between study variables through multiple perspectives. Finally, research to date predominantly focuses on general measures of resilience and emotion regulation, which are concepts that may benefit from a more context-specific perspective.

Conclusion

In conclusion, this study is a useful steppingstone to advance knowledge on factors contributing to psychological resilience, specifically regarding proactive regulation of positive emotions. Results depicted that emotion crafting awareness mediated the relation from perceived maternal warmth and autonomy support to resilience. The different findings emotion crafting awareness and action highlights the independent importance of these factors in contributing to specific constructs, such as resilience, and urges research to continue investigating their (independent) effects.

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