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# **Short Communication**

# Who am I? The interactive effect of early family experiences and self-esteem in predicting self-clarity



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#### ABSTRACT

Previous research suggests that inconsistencies between self-esteem and social feedback reduce feelings of coherence. The current research tested effects of discrepancies between people's self-esteem and feedback they received in the form of chronic early family experiences. In two studies, participants completed measures of global self-esteem, perceived early family experiences, and self-clarity. Early family experiences that were inconsistent with participants' current self-views (i.e., negative experiences for high self-esteem, positive experiences for low self-esteem) were associated with lower self-clarity; in contrast, consistent experiences were associated with higher self-clarity. These findings have implications for understanding the development of self-clarity and suggest novel consequences of early family experiences.

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#### 1. Introduction

Beyond the positivity or negativity of one's self-evaluations, clarity of the self is an important self-aspect. Self-clarity refers to the extent to which self-beliefs are clearly and confidently defined, internally consistent, and stable (Campbell et al., 1996). Greater self-clarity is associated with various favorable outcomes, including better psychological adjustment (Bigler, Neimeyer, & Brown, 2001; Butzer & Kuiper, 2006), lower neuroticism (Campbell et al., 1996), better academic performance (Thomas & Gadbois, 2007), and lower likelihood of reacting to failure with anger and aggression (Stucke & Sporer, 2002). Given these meaningful outcomes, identifying the antecedents of self-clarity is important. The current research tests a novel predictor of self-clarity: discrepancies between people's self-esteem and the feedback they received in the form of early family experiences.

Previous research has demonstrated that higher self-esteem is associated with higher self-clarity (Baumgardner, 1990; Campbell, Chew, & Scratchley, 1991), particularly in Western cultures (Campbell et al., 1996). Specifically, people with high self-esteem tend to have clearer, more confidently defined self-views that are more consistent and stable than those of people with low self-esteem. This self-esteem/clarity relationship has been established using both self-report measures of self-clarity (Campbell

et al., 1996) and more indirect measures (Baumgardner, 1990; Campbell et al., 1991).

In the current research, we tested whether early family experiences moderate the relationship between self-esteem and selfclarity. Our predictions stem from research on self-verification theory and the epistemic signaling system. According to self-verification theory, people experience a sense of coherence when feedback they receive is consistent with their self-views, but incoherence when feedback contradicts self-views (e.g., Swann, 1983). Drawing upon self-verification theory, Stinson et al. (2010) posited that people possess an epistemic signaling system, which responds to selfesteem consistent or inconsistent feedback with increases or decreases in epistemic certainty. Supporting this idea, people with low self-esteem experienced greater epistemic certainty-that is, greater self-clarity and self-certainty-when they received or recalled feedback conveying that they had relatively low relational value (e.g., when interacting with a confederate behaving in an equivocal and cold manner; Stinson et al., 2010). In contrast, people with high self-esteem experienced greater epistemic certainty when feedback conveyed that they had relatively high relational value (e.g., a confederate behaving in a highly accepting and warm manner). Rather than investigating responses to discrete and limited events, our research extends previous work by assessing chronic social feedback received during childhood development and testing the effects of discrepancies between this feedback and current self-esteem on trait (rather than state) self-clarity.

During childhood, relationships with caregivers represent a fundamental and pervasive form of social feedback. Being raised in a

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warm, caring environment signals to a child that he or she is a person of worth, whereas being raised in a cold, neglectful environment signals that he or she is not worthy of love and affection (Ainsworth, 1989; Bowlby, 1969). Given that consistencies between self-esteem and social feedback are associated with high self-clarity (Stinson et al., 2010), it is plausible that consistencies between people's current self-esteem and the ongoing feedback they received through early family experiences are similarly associated with self-clarity. Specifically, individuals with high self-esteem may experience greater self-clarity to the extent they were raised in a warm and caring environment, whereas individuals with low self-esteem may experience greater self-clarity to the extent they were raised in a cold and neglectful environment.

In two studies, we assessed participants' self-esteem, perceptions of early family experiences, and self-clarity to examine the moderating role of family experiences on the self-esteem/clarity relationship. We predicted an interaction, such that among people with high current self-esteem, perceptions of more negative family experiences would be associated with lower self-clarity; conversely, among people with low self-esteem, more negative family experiences would be associated with higher self-clarity.

### 2. Study 1

# 2.1. Method

#### 2.1.1. Participants

Participants were 125 undergraduates in the United States who completed the study for partial course credit.

#### 2.1.2. Measures

*Self-esteem* was assessed with the ten-item Rosenberg Self-Esteem Scale (Rosenberg, 1965; e.g., "On the whole, I am satisfied with myself"; 1 = strongly disagree, 7 = strongly agree). For all scales, total scores were generated by calculating the mean of scale items. To increase the reliability of the self-esteem measure, two assessments completed approximately one week apart ( $\alpha$ s = .87, .91; r = .95) were separately totaled and then averaged together.

Perceptions of early family experiences were measured using the 11-item Risky Families Questionnaire (Taylor, Lerner, Sage, Lehman, & Seeman, 2004; e.g., "How often would you say you were neglected while you were growing up, that is, left to fend by yourself?"; "How often did a parent or other adult in the household make you feel that you were loved, supported, and cared for?" [reverse scored]; 1 = not at all, 5 = very often/very much;  $\alpha = .87$ ). Participants responded based on their family life between the ages of 5 and 15. Higher scores reflect more negative early family experiences (i.e., cold, unsupportive and neglectful), whereas lower scores reflect more positive early family experiences (i.e., warm, caring and nurturing).

*Self-clarity* was assessed with the 12-item Self-Concept Clarity Scale (Campbell et al., 1996; e.g., "In general, I have a clear sense of who I am and what I am"; 1 = strongly disagree, 7 = strongly agree;  $\alpha$  = .91).

#### 2.1.3. Procedures

Participants completed the first self-esteem assessment approximately one week prior to the remaining measures. All measures were completed online and were embedded within a series of unrelated questionnaires.

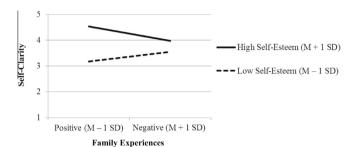
# 2.2. Results and discussion

We used hierarchical regression analyses to test predictions in both studies. At Step 1, we entered continuous, standardized scores for self-esteem and perceived early family experiences; at Step 2,

**Table 1**Correlations and descriptive statistics (Study 1).

	1	2	3
1. Self-esteem	- 27**		
2. Self-clarity	.37** 60**	- 20*	
3. Negative early family experiences		20*	1.07
M	5.28	3.94	1.97
SD	1.00	.98	.70

<sup>\*</sup> p < .05.
\*\* p < .001.



**Fig. 1.** Interaction between self-esteem and early family experiences predicting self-clarity (Study 1). Higher scores reflect greater self-clarity.

we entered the self-esteem  $\times$  early family experiences interaction. To probe the two-way interaction, we tested simple effects using  $\pm 1$  SD from the mean to represent high and low levels of the predictor variables.

Table 1 presents zero-order correlations and descriptive statistics. Replicating previous work (Baumgardner, 1990; Campbell et al., 1991), Step 1 of the regression revealed a significant effect of self-esteem (B = .373, t(122) = 3.63, Cohen's  $f^2 = .108$ ,  $sr^2 = .094$ , p < .001), such that higher self-esteem was associated with higher self-clarity. The relationship between early family experiences and self-clarity did not reach significance (B = .022, t(122) = .22,  $f^2 < .001$ ,  $sr^2 < .001$ , p = .83). Consistent with predictions, there was a significant self-esteem × early family experiences interaction in Step 2  $(B = -.233, t(121) = -2.97, f^2 = .073, sr^2 = .059,$ p = .004; see Fig. 1). Among participants with high self-esteem, more negative family experiences were associated with marginally lower self-clarity (B = -.281, t(121) = -1.97,  $f^2 = .032$ ,  $sr^2 = .026$ , p = .051). Conversely, among participants with low self-esteem, more negative family experiences tended to be associated with higher self-clarity, although this effect did not reach significance  $(B = .185, t(121) = 1.63, f^2 = .022, sr^2 = .018, p = .106).$ 

# 3. Study 2

In Study 2, we attempted to directly replicate the observed interaction from Study 1 in a second sample.

# 3.1. Method

#### 3.1.1. Participants and power analysis

Participants were 145 undergraduates in the United States who completed the study for partial course credit. Based on the observed effect size for the interaction in Study 1 ( $f^2$  = .073), a sample of 145 should have provided power of .90 (Cohen, 1988).

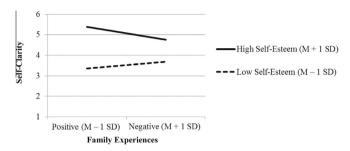
# 3.1.2. Measures and procedures

Participants completed the same measures of self-esteem ( $\alpha$ s = .92, .93; r = .96), perceptions of early family experiences

**Table 2**Correlations and descriptive statistics (Study 2).

	1	2	3
1. Self-esteem	_		
2. Self-clarity	.68**	-	
3. Negative early family experiences	41**	28**	-
M	5.52	4.40	1.89
SD	1.07	1.12	.78

<sup>\*\*</sup> p < .001.



**Fig. 2.** Interaction between self-esteem and early family experiences predicting self-clarity (Study 2). Higher scores reflect greater self-clarity.

( $\alpha$  = .89), and self-clarity ( $\alpha$  = .88) using the same procedures as in Study 1.

#### 3.2. Results and discussion

Table 2 presents zero-order correlations and descriptive statistics. As in Study 1, Step 1 of the regression revealed a significant effect of self-esteem (B = .755, t(142) = 9.94,  $f^2 = .696$ ,  $sr^2 = .378$ , p < .001), such that higher self-esteem was associated with higher self-clarity, with no significant relationship between early family experiences and self-clarity (B = -.006, t(142) = -.08,  $f^2 < .001$ ,  $sr^2$  < .001, p = .94). Consistent with predictions and replicating Study 1, there was a significant self-esteem × early family experiences interaction in Step 2 (B = -.243, t(141) = -4.12,  $f^2 = .120$ ,  $sr^2$  = .058, p < .001; see Fig. 2). Among participants with high selfesteem, more negative family experiences were associated with significantly lower self-clarity (B = -.317, t(141) = -3.03,  $f^2 = .065$ ,  $sr^2$  = .032, p = .003). Conversely, among participants with low self-esteem, more negative family experiences were associated with significantly higher self-clarity (B = .169, t(141) = 2.02,  $f^2 = .029$ ,  $sr^2 = .014$ , p = .046).

Although both simple effects reached statistical significance in Study 2, this was not the case in Study 1. A meta-analysis across Studies 1 and 2 revealed the simple effect of early family experiences was significant among participants with high self-esteem (mean weighted r = .215, z = 3.548, p < .001) and low self-esteem (mean weighted r = .158, z = 2.587, p = .009).

# 4. Alternative models

Given the correlational nature of the current studies, we cannot determine the causal relationship between self-esteem, early family experiences and self-clarity. Although we conceptualize self-esteem and early family experiences as interacting to influence self-clarity, alternative causal directions may be plausible. For example, self-clarity and early family experiences could predict self-esteem. When we tested this interaction, it approached significance in Study 1 (p = .093) but not Study 2 (p = .348). Because we measured retrospective perceptions of early family experiences, self-esteem and self-clarity could predict them (e.g., self-clarity

may promote perceptions consistent with current self-views). This interaction was not significant in Study 1 (p = .379). In Study 2, the interaction approached significance (p = .063), but the simple effects of self-clarity within high and low self-esteem were not significant (ps > .210). These results suggest the alternative explanations are less compelling than our hypothesized explanation.

#### 5. General discussion

The current studies demonstrated that the relationship between self-esteem and self-clarity is moderated by people's perceptions of early family experiences. As hypothesized, chronic social feedback in the form of early family experiences predicted relatively high self-clarity when consistent with participants' current self-views (positive experiences for high self-esteem, negative experiences for low self-esteem), but relatively low self-clarity when inconsistent with current self-views (negative experiences for high self-esteem, positive experiences for low self-esteem). These findings support previous theoretical and empirical work maintaining that inconsistencies between self-esteem and social feedback disrupt feelings of coherence (Stinson et al., 2010; Swann, 1983); however, the current research is the first to extend these ideas to chronic social feedback received during childhood development.

Although our hypotheses focused on the interaction between self-esteem and early family experiences, zero-order correlations also indicated that negative early family experiences were associated with lower self-esteem. This finding is consistent with attachment theory suggestions that early childhood experiences shape self-views into adulthood (Ainsworth, 1989; Bowlby, 1969). Although early experiences influence self-views, it is possible to develop self-views that diverge from the feedback people receive from others in their environment (Kenny & DePaulo, 1993). As the current research suggests, for those who manage to have positive self-views despite negative early family experiences, high self-esteem may come at the cost of lower self-clarity.

These findings have value for researchers interested in identifying the consequences of negative early family experiences. Greater family risk (i.e., more negative early family experiences) increases children's vulnerability to a wide array of mental and physical health issues across the lifespan (see Repetti, Taylor, & Seeman, 2002 for review). For example, children raised in risky families often lack important social skills needed to cope with conflict in a socially acceptable manner, and experience long-lasting disturbances in physiological and neuroendocrine system regulation (Repetti et al., 2002). The current research is the first to extend this line of work to understanding the ways in which risky families may influence aspects of the self-concept.

The correlational nature of our data leaves open alternative possibilities. Measured variables could interact in different combinations than what we hypothesized, but testing alternative models failed to support their viability. In addition, although we conceptualize early family experiences as chronic social feedback, trait self-esteem may also reflect chronic or more recent feedback from one's environment. Regardless of whether self-esteem is long-standing or a symptom of recent events, we argue that early family experiences function as an important frame of reference to which current self-esteem levels may be compared. Interpreting our findings in terms of discrepancy between distant and recent experience is also consistent with hypotheses.

As college students, participants in our studies were likely in a relatively narrow young-adult age range (demographic information was not assessed, but this was true of the larger pool from which participants were drawn). This presents an advantage for assessing retrospective reports of childhood experience, in that

such experience was not only relatively recent, but also equivalently recent across participants. However, the nature of our samples presents disadvantages for generalizability. Future research should investigate the extent to which current findings generalize to older individuals. People tend to seek self-verifying information about themselves (e.g., Swann, 1983); thus, it is possible that as people age, they may develop more clear self-images despite potentially incongruent early family experiences. Indeed, recent work has shown that self-esteem-which is positively correlated with self-clarity-increases up to 50 to 60 years of age (Orth & Robins, 2014). Alternatively, in the face of repeated information that is incongruent with early family experiences, people could potentially develop even foggier self-concepts over time. Although we observed meaningful variability in early family experiences, a community sample could yield even greater diversity in experience and thereby further test the generalizability of these results.

Many meaningful outcomes are associated with self-clarity, making the investigation of its antecedents particularly important. Our findings suggest a role for early family experience as a source of pervasive social feedback, which in combination with self-esteem may influence self-clarity. This highlights a novel lasting consequence of early family experience, although a consequence that functions not in isolation but instead depends on one's current self-views.

#### References

- Ainsworth, M. S. (1989). Attachments beyond infancy. *American Psychologist*, 44, 709–716. http://dx.doi.org/10.1037/0003-066X.44.4.709.
- Baumgardner, A. H. (1990). To know oneself is to like oneself: Self-certainty and self-affect. Journal of Personality and Social Psychology, 58, 1062–1072. http:// dx.doi.org/10.1037/0022-3514.58.6.1062.
- Bigler, M., Neimeyer, G. J., & Brown, E. (2001). The divided self revisited: Effects of self-concept clarity and self-concept differentiation on psychological adjustment. *Journal of Social and Clinical Psychology*, 20, 396–415. http:// dx.doi.org/10.1521/jscp.20.3.396.22302.

- Bowlby, J. (1969). Attachment and loss. Attachment (Vol. I). New York, NY: Wiley. Butzer, B., & Kuiper, N. A. (2006). Relationships between the frequency of social comparisons and self-concept clarity, intolerance of uncertainty, anxiety, and depression. Personality and Individual Differences, 41, 167–176. http://dx.doi.org/ 10.1016/j.paid.2005.12.017.
- Campbell, J. D., Chew, B., & Scratchley, L. S. (1991). Cognitive and emotional reactions to daily events: The effects of self-esteem and self-complexity. *Journal* of Personality, 59, 473–505. http://dx.doi.org/10.1111/j.1467-6494.1991. tb00257.x.
- Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology*, 70, 141–156. http:// dx.doi.org/10.1037/0022-3514.70.1.141.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum.
- Kenny, D. A., & DePaulo, B. M. (1993). Do people know how others view them? An empirical and theoretical account. *Psychological Bulletin*, 114, 145–161. http://dx.doi.org/10.1037/0033-2909.114.1.145.
- Orth, U., & Robins, R. W. (2014). The development of self-esteem. *Current Directions in Psychological Science*, 23, 381–387. http://dx.doi.org/10.1177/0963721 414547414.
- Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin*, 128, 330–366. http://dx.doi.org/10.1037/0033-2909.128.2.330.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton
- Stinson, D., Logel, C., Holmes, J. G., Wood, J. V., Forest, A. L., Gaucher, D., et al. (2010). The regulatory function of self-esteem: Testing the epistemic and acceptance signaling systems. *Journal of Personality and Social Psychology*, 99, 993–1013. http://dx.doi.org/10.1037/a0020310.
- Stucke, T. S., & Sporer, S. L. (2002). When a grandiose self-image is threatened: Narcissism and self-concept clarity as predictors of negative emotions and aggression following ego-threat. *Journal of Personality*, 70, 509–532. http://dx.doi.org/10.1111/1467-6494.05015.
- Swann, W. B. Jr., (1983). Self-verification: Bringing social reality into harmony with the self. In J. Suls & A. G. Greenwald (Eds.). Psychological perspectives on the self (Vol. 2, pp. 33–66). Hillsdale, NJ: Erlbaum.
- Taylor, S. E., Lerner, J. S., Sage, R. M., Lehman, B. J., & Seeman, T. E. (2004). Early environment, emotions, responses to stress, and health. *Journal of Personality*, 72, 1365–1393. http://dx.doi.org/10.1111/j.1467-6494.2004.00300.x.
- Thomas, C. R., & Gadbois, S. A. (2007). Academic self-handicapping: The role of selfclarity and students' learning strategies. *British Journal of Educational Psychology*, 77, 101–119. http://dx.doi.org/10.1348/000709905X79644.