

Exploring the roles of human values and self-discrepancies in postnatal depression in first-time mothers

Cassandra Smith¹ | Paul H. P. Hanel^{1,2}  | Gregory R. Maio¹

¹Department of Psychology, University of Bath, Bath, UK

²Department of Psychology, University of Essex, Colchester, UK

Correspondence

Paul H. P. Hanel, Department of Psychology, University of Essex, Colchester Campus, CO4 3SQ Colchester, UK.
Email: p.hanel@essex.ac.uk

Abstract

Objectives: Postnatal depression is the most prevalent psychopathology experienced within the perinatal period and has been associated with a range of adverse outcomes for both mother and infant. In the present research, we combine two influential theories, Schwartz's theory of human values and Higgins' self-discrepancy theory (SDT), to test new hypotheses about postnatal depression.

Methods: We recruited 80 first-time mothers who had given birth within the last 6 months and who self-reported experiencing low mood or postnatal depression. Participants anonymously completed measures of postnatal depression, value importance, self-discrepancies, and subjective value fulfillment.

Results: Contrary to our hypotheses, actual-ought self-discrepancies, but not actual-ideal self-discrepancies, predicted postnatal depression. Interestingly however, self-discrepancies were negatively correlated with value fulfillment. The findings within this study diverge from the relation predicted within SDT and highlight how motherhood may represent a unique circumstance, in which the "ideal self" has evolved to become a self that one feels morally obligated to embody. Further exploratory analyses revealed that depression was predicted by

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2023 The Authors. *Journal of Clinical Psychology* published by Wiley Periodicals LLC.

the difference between value fulfillment and value importance in conservation values, but not by differences between value fulfillment and value importance regarding any of the other value types.

Discussion: We discuss potential impact on discourses around motherhood, alongside clinical implications for practitioners who work with mothers during the perinatal period.

KEYWORDS

motherhood, postnatal depression, self-discrepancy theory, value fulfillment, value importance

1 | INTRODUCTION

Although motherhood is a life stage often described as joyful, exciting, and fulfilling, for some it can be a time of difficulty characterized by increased pressure, responsibility, and expectations from others to meet a “perfectionist ideal” (Pedersen, 2016; Widding, 2015). Consequently, the perinatal period is a time associated with increased vulnerability to the onset or exacerbation of mental health disorders, with postnatal depression being the most prevalent psychopathology (Bydlowski, 2015; Kühner, 2016; Musters et al., 2008).

Due to the detrimental impact that postnatal depression can have upon both mother and infant (Avan et al., 2010; Halligan et al., 2007; Lindahl et al., 2005), studies have attempted to understand the biopsychosocial factors which contribute to the development and maintenance of postnatal depression, as well as to identify potential targets for intervention (Beck, 2001; Lee & Chung, 2007). Such research has highlighted the importance of previous mental health difficulties, body dissatisfaction, and obstetric complications during childbirth (O'Hara & Swain, 2009; Sweeney & Fingerhut, 2013), as well as underlying cognitive beliefs including the need to present oneself as perfect, endorsement of “intensive mothering” ideologies, and difficulties with expressing one's own needs (Rizzo et al., 2013; Thompson & Bendell, 2014).

Given the evidence of the contributory effect of factors across different clinical disorders (Carleton, 2016; Christian et al., 2021; Johnson et al., 2016), an important issue is whether there are additional contributory factors in postnatal depression that can be gleaned from related issues, such as general depression and anxiety. Overlooking potential factors risks missing substantial contributors that themselves may provide important tipping points into postnatal depression, and potential insights into how to treat it. To address this issue, the present research proposes to examine the relation between postnatal depression and two potentially important concepts which have previously been linked to depression, anxiety, and subjective well-being: human values and self-discrepancies.

1.2 | Human values

Values hold great personal significance: they are “guiding principles” which represent important motivational concepts and have psychological, social, and practical implications (Rokeach, 1973; Schwartz, 1992). In the past three decades, research in over 80 nations has conceptualized values using Schwartz (1992) theory of basic human values, which provides an empirically validated framework to understand values across cultures (Schwartz, 1994; Schwartz & Bilsky, 1987).

The most popular version of Schwartz's theory outlines 10 universal and motivationally distinct values, which can be further categorized into four higher order values: openness to change, conservation, self-enhancement, and self-transcendence (Schwartz, 1992). Within this theory, values are conceptualized using a circular motivation continuum, with this circular model illustrating the "conflict and congruence" present in the relations between these values. Values that are more closely located within the model share similarities in their underlying motivations, whereas those located in opposition have a conflict in their underlying motivations. For example, openness to change values reflect a motivation for novelty and freedom in behavior and are located opposite conservation values which emphasize stability and conformity. Similarly, self-transcendence values reflect a motivation to care for the interests of others and conflict with self-enhancement values, which express an interest in promoting one's own power and success. As a result, it can be difficult to simultaneously follow opposing values and conflicts can occur.

Although the structure of values has been suggested to be universal individuals can differ in the importance they place upon different values, with these value hierarchies being susceptible to change depending on life events, age, cohort effects, and gender (Bardi et al., 2009, 2014; Milfont et al., 2016; Robinson, 2013; Sortheix et al., 2019). Value change may also occur as an adaptation to becoming a parent (Bardi & Goodwin, 2011), with research suggesting that mothers place greater importance on socially-focused values that favor family and friendships, and less importance on a career than fathers and nonparents (Ferriman et al., 2009). Furthermore, the importance mothers place on conservation values has been shown to increase following the birth of a child, though this is not observed with fathers (Lönnqvist et al., 2018).

It is important to understand an individual's values hierarchy due to the potentially detrimental impact values may have upon psychological well-being. Previous research has found that people who endorse conservation values most highly exhibit lower subjective well-being and higher rates of depression and loneliness (Liu et al., 2021; Sortheix & Lönnqvist, 2014; Sortheix & Schwartz, 2017). This may be due to the social-focus and self-protection motivation which underlines conservation values and may highlight concerns about safety and one's own fit within their environment. Alternatively, greater endorsement of the growth-focussed values of self-transcendence and openness to change have been found to negatively correlate with depression (Liu et al., 2021), although these findings are not consistent (Arens et al., 2022; España et al., *in press*; Heim et al., 2019; Leite et al., 2021; Zacharopoulos et al., 2021). For example, Hanel and Wolfradt (2016) found no associations between conservation values and depression, whereas Maercker et al. (2015) found in a German sample a positive association between conformity and depression, but in a Chinese and a Russian sample a negative association. All associations were weak, typically around $r = .10$ or smaller. These variations might have occurred because of differences in the value measures or sample types. Furthermore, the perceived ability to fulfill one's values also appears to be important: for example, research by Oppenheim-Weller et al. (2018) demonstrated that subjective value fulfillment is a stronger predictor of life satisfaction than value importance. This reasoning is supported by the literature on valued living: People who are living in line with their values are less likely to experience depressive symptoms (Tunç et al., 2023).

Given that values are impacted by life-changing events, such as parenthood, and that values are associated with psychological well-being, it is plausible that relationships may exist between value importance, value fulfillment, and postnatal depression. In particular, the extant evidence suggests that conservation values may have a particularly important role, due to their relationship with depression and their observed increased importance following the birth of a child.

1.3 | Self-discrepancies

When a person possesses conflicting or incompatible beliefs, they can experience psychological discomfort or distress: Higgins' (1987) self-discrepancy theory (SDT) conceptualizes how certain incompatible beliefs about the self can result in specific forms of emotional distress. Within this theory, Higgins outlines the existence of

two standpoints on the self (the “own” standpoint and that of significant others), and the existence of three domains of self: (1) the “*actual self*” consisting of the qualities one feels they truly possess, (2) the “*ideal self*” consisting of the qualities one wishes or hopes to possess, and (3) the “*ought self*” consisting of the qualities one feels obligated to possess. A person's self-guides are formed by the actual self, partnered with either the “own” or “other” standpoint forms a person's self-concept, and the ideal and ought selves, partnered with either the own or other standpoint. SDT posits that we are motivated to ensure congruence between our self-concept and our self-guides, with emotional difficulties arising when there is a discrepancy between the two (known as a self-discrepancy).

A difference between the actual self and the ideal self, also known as actual-ideal self-discrepancy, can result in a psychological situation defined by the absence of an actual or expected positive outcome. This in turn leads to the experience of dejection-related emotions, such as sadness and disappointment. Similarly, if there is a difference between the actual self and the ought self, known as an actual-ought self-discrepancy, the result can be the experience of agitation-related emotions, such as worry and fear. However, it is important to note that the existence of a self-discrepancy alone is not enough to result in emotional distress. Other factors such as the availability and accessibility of the self-discrepancy, as well as its magnitude, contribute to the level of distress experienced (Higgins et al., 1986).

Multiple studies have examined the validity of SDT, with findings demonstrating correlations between the magnitude of self-discrepancies and different emotional difficulties (Barnett et al., 2017; Higgins et al., 1985; Strauman & Higgins, 1987). However, a recent meta-analysis demonstrated mixed support for SDT (Mason et al., 2019) with some findings suggesting that both actual-ideal and actual-ought self-discrepancies are predictive of dejection-related emotions (Gürcan-Yıldırım & Gençöz, 2020; Phillips & Silvia, 2010). The variability in support for SDT may be due to methodological limitations, such as operationalisation and measurement of self-discrepancies and affective states. In addition, studies may not have considered the role of factors known to influence the emotional impact of self-discrepancies, such as accessibility and importance (Barnett et al., 2017; Boldero et al., 2011).

Nevertheless, self-discrepancies have been proposed to be a potential contributory factor in emotional difficulties experienced by mothers. Motherhood has been highlighted as a potentially vulnerable time to the influence of self-discrepancies, due to the existence of strong and conflicting societal messages about what it means to be a “good mum” (Adams, 2015). Such messages could result in high value being placed on certain characteristics, which may not match a mother's actual experience and thus result in emotional difficulties. Indeed, actual-ideal self-discrepancies in mothers have been associated with guilt, shame, and dejection-related emotions (Liss et al., 2013; Pierce et al., 1999), though the relation with postnatal depression has not been specifically explored.

1.4 | The current study

To understand the factors which may contribute to the onset or maintenance of postnatal depression, the current study examined the relationship with two concepts that have previously been associated with depression, anxiety, and subjective well-being: values and self-discrepancies. The study examined value importance and value fulfillment, as well as actual-ideal and actual-ought self-discrepancies from the “own” standpoint.

We had three hypotheses that directly arose from the preceding literature. Specifically, we predicted that mothers who endorse conservation values experience more highly more severe postnatal depression. Second, we proposed that mothers who reported higher value fulfillment in all value types would experience lower levels of postnatal depression. Third, it was hypothesized that mothers who experienced greater actual-ideal self-discrepancies would experience more severe postnatal depression, independently of any effect of actual-ought self-discrepancies on postnatal depression.

In addition to testing these hypotheses, a novel aim was to explore the relations between value importance-value fulfillment differences and self-discrepancies in postpartum mothers. Recall that values can be defined as

abstract ideals which are important to people (Maio, 2016; Schwartz, 1992), whereas value fulfillment reflects the degree to which people perceive their ability to achieve their goals (Oppenheim-Weller et al., 2018). The difference between values and value fulfillment is conceptually linked with SDT (Higgins, 1987), but SDT tends to be agnostic to the content of the discrepancy. In contrast, Schwartz (1992) value model provides some content. For instance, the values that are more fulfilled (i.e., actualized) relative to their importance (i.e., ideals) may regard openness motivation or self-transcendence motivation. By correlating these actual (i.e., fulfillment) versus ideal (i.e., importance) differences in values with actual-ideal and actual-ought self-discrepancies, we can get a better understanding about the content of the actual-ideal and actual-ought discrepancies. Additionally, our design allows us to go beyond past research by measuring the association between these actual-ideal value differences and postnatal depression. To the best of our knowledge, this has not been done before in human value research.

The survey and the data can be accessed here https://osf.io/qxs5e/?view_only=fe7e06077306446b9d61a70b4fd5549a.

2 | METHOD

2.1 | Participants

A convenience sample of 83 first-time mothers was recruited via advertisement on social media platforms between September 2020 and February 2021. Inclusion criteria specified that participants (1) were aged 18 and over, (2) had given birth to their first child within the last 6 months, (3) did not have other experience of motherhood (i.e., through being foster parents or stepparents), and (4) self-identified as experiencing low mood or postnatal depression at the time of the study. Due to the potentially distressing nature of the questionnaires, participants were excluded from the study if they were currently receiving support from secondary or specialist mental health services or if they endorsed frequent thoughts of self-harm within a measure of depression ($n = 3$). In total, 80 mothers completed the study ($M_{\text{age}} = 29$ years, $SD_{\text{age}} = 4.4$ years). Demographic information is outlined in Table 1.

2.2 | Measures

2.2.1 | Edinburgh postnatal depression scale (EPDS; Cox et al., 1987)

The EPDS is a 10-item screening scale developed to detect the presence and severity of depressive symptoms during the postnatal period within community settings. Participants were asked to rate their degree of agreement with each statement on a 4-point scale (score 0–3). Though this is not a diagnostic measure, a validation study of the EPDS suggests that this is a reliable and valid measure for indicating the presence of probable postnatal depression, with a cut off score of ≥ 13 demonstrating good sensitivity and specificity (split-half reliability = 0.88, sensitivity = 0.86, specificity = 0.78; Cox et al., 1987). Within the current study, the internal consistency was good ($\alpha = .80$).

2.2.2 | Portrait values questionnaire short version (PVQ-21; Schwartz, 2016)

The PVQ-21 is a 21-item questionnaire used to measure the values a person endorses, based on Schwartz (1992) theory of basic human values (Schwartz, Melech, et al., 2001). Previous study has suggested this to be a reliable measure of each higher-order value type (α range = .74–.81; Schwartz, 2016). Participants were presented with a series of statements about a hypothetical person who embodies each of the values and asked to rate the extent to which this person is like them, using a 6-point scale (1- *very like me* to 6 - *not like me at all*). Each value type is

TABLE 1 Demographic information.

		First-time mothers (N = 80) n (%)
Age (years)	20–24	9 (11.25)
	25–29	28 (35)
	30–34	34 (42.5)
	35–39	9 (11.25)
Ethnicity	White British	39 (48.75)
	Other White	32 (40)
	White Irish	3 (3.75)
	White and Asian	2 (2.5)
	Any other ethnic group	2 (2.5)
	Chinese	1 (1.25)
	Other mixed	1 (1.25)
Relationship status	Married	59 (73.75)
	In a relationship/cohabitating	19 (23.75)
	Divorced/separated	1 (1.25)
	Single	1 (1.25)
Employment status	Employed full-time	45 (56.25)
	Unemployed (not looking)	16 (20)
	Employed part-time	12 (15)
	Self-employed	4 (5)
	Unemployed (looking)	2 (2.5)
	Other/prefer not to say	1 (1.25)
Experience of past mental health difficulties	Yes	71 (88.75)
	No	9 (11.25)
Length of time of past mental health difficulties	Between 1 week and 6 months	9 (11.25)
	Between 6 months and 1 year	9 (11.25)
	Between 1 year and 5 years	23 (28.75)
	More than 5 years	12 (15)
	Ongoing	17 (21.25)

(Continues)

TABLE 1 (Continued)

	First-time mothers (N = 80) n (%)
Prefer not to say	1 (1.25)
Not applicable	9 (11.25)

measured with two items, except for universalism, which is measured with three items. Before analysis, ipsatisation is advised to account for individual differences in responses across the items and to better identify the value priority (Schwartz, 2012), however, recoding the values data did not produce a notable difference in the analyses and hence raw data was used. Also, ipsatisation removes meaningful variances that is associated with well-being (Borg & Bardi, 2016). Due to the reduced reliability associated with the 10 value types, the study focused on higher-order values. Higher-order values were calculated by averaging the scores for the corresponding value types. There was moderate internal consistency in responses for each higher-order value type: openness to change ($\alpha = .63$), conservation ($\alpha = .64$), self-enhancement ($\alpha = .76$), and self-transcendence ($\alpha = .67$).

2.2.3 | The integrated self-discrepancy index (ISDI; Hardin & Lakin, 2009)

The ISDI measure consists of both idiographic and nomothetic components to assess ideal and ought self-discrepancies. In the idiographic component, participants are asked to provide five qualities they ideally would like to possess and five qualities they feel they ought to possess, whereas the nomothetic component presents participants with a list of 100 randomly selected adjectives (derived from Anderson's (1968) list of 555 trait words) to support those who may have found generating qualities more difficult. Commensurate with the procedure used by Hardin and Lakin (2009), participants completed only the idiographic component: they were asked to describe the ideal and ought qualities they felt they should possess as a mother, and then rate using a 5-point Likert scale (1–5) the extent to which they felt these qualities applied to them. The nomothetic component was available for respondents to supplement or amend their qualities if necessary. Discrepancies between the actual-ideal and actual-ought selves were explored from the own standpoint, but not other. Self-discrepancy scores were calculated by averaging the ratings of the five qualities reported for the ideal and ought self-domains, with higher scores indicating larger self-discrepancies. The internal consistency observed within this study was acceptable (actual-ideal self-discrepancies $\alpha = .66$; actual-ought self-discrepancies $\alpha = .71$).

2.2.4 | The subjective values fulfillment questionnaire short version (Oppenheim-Weller et al., 2018)

The Subjective Values Fulfillment Short Version is a 10-item questionnaire designed to explore the extent to which individuals feel that a specific identity allows them to fulfill each of the 10 motivationally distinct human values (Schwartz, 1992, 2012). Participants were asked to rate their subjective value fulfillment from being a mother using a 7-point scale ranging from "preventing completely" (–3) to "enabling completely" (3). Higher-order values were calculated by averaging the scores for the corresponding value types. Due to the low number of items used to calculate the higher-order values (2–3 items) reliability was examined using mean inter-item correlation. This was acceptable for three of the higher-order values (openness to change = 0.35, self-transcendence = 0.34, and self-enhancement = 0.38) but weak for conservation (0.09).

2.3 | Procedure

The study was conducted online using the questionnaire platform Qualtrics (www.qualtrics.com) with all participants accessing the study via an anonymous link. After providing demographic information, participants completed the EPDS questionnaire. Respondents who endorsed frequent thoughts of harm (answering “yes, quite often”) on item 10 of the EPDS were directed to a debrief page, which stated that they did not meet the criteria for the study and provided information for sources of support. All other participants were presented with the remaining questionnaires in the order outlined above. The study took on average 21 min to complete, and participants who completed the study were offered the opportunity to enter a prize draw for one of three £25 Amazon vouchers. The study was approved by the local ethics committee.

3 | RESULTS

Descriptive statistics are outlined in Table 2. Although all participants reported difficulties with mood when identifying their eligibility for the study, 82.5% met the clinical cut-off score of 13 and above for probable postnatal depression ($M_{\text{depression}} = 16$, $SD_{\text{depression}} = 4.52$, range = 6–25). Self-transcendence values were most commonly endorsed within the sample, whereas self-enhancement values were the least commonly endorsed. When considering the identity of “mother,” self-transcendence values were rated as the most subjectively fulfilled values, whereas openness to change values were the least subjectively fulfilled.

TABLE 2 Descriptive statistics.

	Mean	Standard deviation
EPDS		
Overall score	16	4.52
ISDI		
Actual-ideal self-discrepancy	2.72	0.69
Actual-ought self-discrepancy	2.50	0.77
Value importance		
Higher-order values		
Openness to change	3.95	0.74
Conservation	4.11	0.09
Self-enhancement	3.59	1.05
Self-transcendence	5.15	0.63
Subjective value fulfillment (short version)		
Higher-order values		
Openness to change	-0.33	1.21
Conservation	0.87	0.82
Self-enhancement	-0.21	1.18
Self-transcendence	1.49	1.08

Abbreviations: EPDS, Edinburgh postnatal depression scale; ISDI, the integrated self-discrepancy index.

Contrary to our hypotheses, no significant correlations were observed between any of the higher-order values ratings for either importance nor fulfillment and postnatal depression scores (Table 3). Further, actual-ideal self-discrepancies were not demonstrated to significantly correlate with postnatal depression scores, however, a significant relationship was demonstrated with actual-ought self-discrepancies. The results indicated that greater actual-ought self-discrepancies were associated with higher postnatal depression. Interestingly, actual-ideal and actual-ought discrepancies correlated negatively with almost all fulfillment value types.

To test whether any of the demographic variables had an impact, we first created three binary variables because group sizes varied strongly (see Table 1 for frequencies): Relationship status (0: married, 1: other), employment status (0: full time employed, 1: other), and ethnicity binary (0: British white, 1: other). Only age correlated with depression, $r(78) = -.34, p = .002$, indicating that older first-time mothers felt less depressed. None of the four demographic variables age, relationship status, employment status, and ethnicity correlated significantly with any of the other variables reported in Table 3.

To examine the hypothesis that greater actual-ideal self-discrepancies are associated with higher postnatal depression scores, independent of any effect of actual-ought self-discrepancies, a multiple linear regression analysis was conducted following Higgins (1987), because of shared variance between actual-ideal and actual-ought discrepancies. Actual-ideal and actual-ought self-discrepancies were entered as simultaneous predictors of postnatal depression score. Consistent with the correlational analysis, the results indicated that actual-ought self-discrepancy scores, $B = 2.09, \beta = .35, p = .002, 95\% \text{ CI: } B[0.78-3.41]$, but not actual-ideal self-discrepancy scores, $B = -0.25, \beta = -.038, p = .732, 95\% \text{ CI: } B[-1.70 \text{ to } 1.20]$, were predictive of postnatal depression scores, $F(2, 77) = 5.21, p = .008, R = .35, R^2 = .12, \text{ adjusted } R^2 = .10$. That is, mothers who reported higher actual-ought self-discrepancies exhibited higher postnatal depression scores after controlling for the influence of actual-ideal self-discrepancies. The actual-ought self-discrepancy scores remained a significant predictor after additionally controlling for the four demographic variables, $B = 1.74, \beta = .29, p = .008, 95\% \text{ CI: } B [0.46-3.02]$.

Further, we explored whether the actual-ideal value differences correlated with depression as well as with the actual-ideal and actual-ought self-discrepancies. We computed four actual-ideal value difference scores, one for

TABLE 3 Intercorrelations between measures.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Postnatal depression scores	—										
2. Actual-ideal self-discrepancy	.06	—									
3. Actual-ought self-discrepancy	.34**	.28*	—								
Value importance											
4. Openness to change	.04	-.04	-.21	—							
5. Conservation	.19	-.32**	-.15	-.10	—						
6. Self-enhancement	.14	-.05	-.05	.05	.31**	—					
7. Self-transcendence	.02	-.25*	-.17	.18	.28*	-.02	—				
Subjective value fulfillment											
8. Openness to change	.01	-.36**	-.23*	.20	.05	.28*	.17	—			
9. Conservation	-.19	-.32**	-.22	-.01	.24*	-.11	.11	.17	—		
10. Self-enhancement	-.07	-.27*	-.30**	.04	.23*	.26*	.08	.41***	.31***	—	
11. Self-transcendence	.06	-.29**	-.25*	.08	.07	.11	.21	.48***	.43***	.21	—

* $p < .05$; ** $p < .01$; *** $p < .001$.

each higher order value type, by subtracting the value importance score from the value fulfillment score. We standardized all scores and added 10 to the standardized scores before computing the difference because importance and fulfillment were measured on different scales. We added 10 to ensure all scores were positive, because through the standardization we also obtained some negative scores which would have biased our calculations (e.g., 3 - [-3]); note that adding any other positive number >4 would have resulted in the same findings). Only the actual-ideal conservation difference correlated negatively with depression, $r(78) = -.31, p = .005$, indicating that when value fulfillment was higher than value importance, depression scores were lower. Interestingly, actual-ideal conservation differences correlated positively with actual-ideal self-enhancement difference, $r(78) = .32, p = .003$, and with actual-ideal self-transcendence difference, $r(78) = .34, p = .002$, which provide further validity to the actual-ideal value difference measure.

Finally, we explored whether the three-item anxiety subscale ($\alpha = .76$) of the EPDS was more strongly correlated with conservation. However, the correlations between importance and fulfillment of conservation values were both nonsignificant, $r_s < |.03|, p_s > .82$.

4 | DISCUSSION

Postnatal depression is one of the most common psychopathologies experienced by mothers in the perinatal period and is associated with a range of negative implications for both mother and infant. Hence, it is important to understand the factors that may contribute to its development and maintenance to identify areas for intervention. This study expands upon the current literature by examining the relationship between postnatal depression and two theoretically relevant concepts: human values and self-discrepancies. Contrary to our hypotheses, neither value importance nor subjective value fulfillment were significantly correlated with postnatal depression. Furthermore, actual-ought self-discrepancies, but not actual-ideal self-discrepancies, significantly predicted postnatal depression scores in first-time mothers.

Although previous research has suggested a potential relationship between value importance, value fulfillment, and psychological well-being (Liu et al., 2021; Oppenheim-Weller et al., 2018; Sortheix & Schwartz, 2017), findings have been inconsistent with some studies demonstrating weak or no relationships between values and depression (Hanel & Wolfradt, 2016; Zacharopoulos et al., 2021). In particular, the current study proposed that conservation values would positively relate to postnatal depression scores, as conservation values are socially-focused, underpinned by the motivation for self-protection and suggest a need to engage in cooperative behaviors to promote a sense of safety and connection, which was theorized to be of importance when entering motherhood due to the need to care for and promote the safety of a new infant. Within the current study, no correlation was observed between conservation values and postnatal depression scores, although a positive correlation was observed between the importance of conservation values and the subjective fulfillment of conservation values. This finding suggests that mothers who placed greater importance on conservation values within our sample typically felt able to meet them.

Interestingly, the actual-ideal conservation difference correlated negatively with depression, indicating that when value fulfillment was higher than value importance, depression scores were lower. This is in line with Higgins' SDT: If people fulfill their conservation values relative to the importance (i.e., if the actual-ideal conservation difference is positive), depression scores are lower. Our finding also advances SDT because it suggests that differences or discrepancies in conservation but not in openness, self-enhancement, or self-transcendence are most relevant for understanding depression in first-time mothers. This finding is exploratory and needs to be replicated in future studies and in other samples: Conservation values tend to increase with parenthood (Lönnqvist et al., 2018), and therefore our findings might only replicate among people with higher conservation values.

As theorized in Adams' (2015) paper, motherhood represents a life-period in which there may be increased vulnerability to the impact of self-discrepancies. Strong societal messages exist regarding what it means to

“be a good mum,” with expectations for mothers to be omnibenevolent and able to successfully balance the competing demands of their personal, social, and professional lives whilst simultaneously anticipating their child's every need (Brown et al., 1997; Prikhidko & Swank, 2018; Widding, 2015). Furthermore, motherhood is a situation that one cannot easily escape, which may in turn increase the accessibility and availability of self-discrepancies. For example, if a mother believes that she should always be loving and affectionate toward her baby but finds herself feeling angry or resentful when they are unable to settle in the middle of the night, this may increase her awareness of the discrepancy between who she “actually” is and how she believes she “should” be, with this awareness being activated on multiple occasions, consequently resulting in emotional distress.

Of interest, value fulfillment value types were negatively correlated with actual-ideal and actual-ought discrepancies, which has not been demonstrated before. This pattern provides a better understanding of the new concept of value fulfillment, as it suggests that value fulfillment is partly achieved when actual-ideal and actual-ought discrepancies are reduced. While researchers postulated that value fulfillment is associated with actual-ought discrepancies, since value fulfillment is associated with participation in group activities (Oppenheim-Weller & Kurman, 2017), the link to actual-ideal discrepancies is new.

4.1 | Limitations

The EPDS (Cox et al., 1987) was used as a measure of postnatal depression within the current study, however, this is not a diagnostic tool and thus it is important to interpret the findings in consideration of this. The EPDS is a screening scale used to assess the possible presence and severity of postnatal depression, but a diagnostic interview would be best placed to establish the presence of postnatal depression within the sample. Including a diagnostic interview was outside the scope of this research, but may be beneficial for future study.

Furthermore, due to the potentially distressing nature of the questionnaires used and the anonymous nature of the study, participants who were receiving support from specialist mental health services or endorsing frequent thoughts of self-harm were excluded, which may limit our study's generalizability. Consequently, the study may not have captured the full range of severity of postnatal depression and its association with values and self-discrepancies, which may have implications for the conclusions that can be made (i.e., the variance that values could explain in postnatal depression was truncated, increasing the chances of null findings).

It is also important to note that this study was conducted during the COVID-19 pandemic. Data collection began in September 2020 and inclusion required participants to have given birth to their first child within the last 6 months. COVID-19 was classified as a pandemic by the World Health Organisation in March 2020 (World Health Organisation, 2020), and consequently all mothers who participated in this study would have been pregnant or given birth during the pandemic. Although a recent meta-analysis examining the prevalence of postnatal depression during the COVID-19 pandemic found that this had not significantly increased (Hessami et al., 2020), this analysis consisted of studies conducted up to July 2020 and may not fully reflect the impact of the ongoing restrictions which may contribute to postnatal depression. Indeed, Lebel et al. (2020) have found that the loss of social support during the COVID-19 pandemic has correlated with increased postnatal depression, and it may be that the ongoing pandemic has contradicted the expectations held by new mothers about the kinds of mothers they will be and may have resulted in new mothers feeling unable to meet their self-guides. For example, mothers who believe it is important to support their child's social development but are unable to socialize them with other children may feel they are not being a “good mother,” and consequently feel disappointed. Hence, the pandemic may have impacted the magnitude of self-discrepancies or moderated their role in our participants, and this adds to the aforementioned limitations as another reason to replicate and extend our hypothesis tests.

4.2 | Future research

The current study suggests a potential relationship between self-discrepancies and postnatal depression and proposes the potential influence of societal beliefs influencing these discrepancies. It may be of interest to explore further. It has previously been suggested that mothers who place greater importance on “intensive mothering beliefs” experience more severe levels of postnatal depression (Rizzo et al., 2013) and it would be of interest to understand how this relates to actual-ideal and actual-ought self-discrepancies.

Although no relationship was observed between values and postnatal depression, this is an under-researched area that may be of interest for future study. For example, it may be of interest to expand upon the research of Lönnqvist et al. (2018) to examine the change in value importance experienced by new mothers: this study demonstrated that the value hierarchy of new mothers shifts to place greater importance on conservation values following the birth of their child, and with previous research suggesting that the importance of conservation values is positively correlated with depression (Liu et al., 2021), it may be that the magnitude of shift in conservation value importance is predictive of postnatal depression. As the current study occurred only in the postnatal period, it is unable to conclude whether the change in value importance, rather than the value importance per se, is associated with postnatal depression. If a greater shift in conservation values was found to relate to postnatal depression in future research, this might indicate that such mothers feel particularly unsafe or insecure in their new role and may benefit from further clinical support to address or prevent postnatal depression.

4.3 | Implications for clinical practice

It appears that actual-ought self-discrepancies may be a useful area to target for intervention to prevent or address postnatal depression. As part of routine practice, it may be beneficial to explore with new mothers' their expectations of themselves and motherhood, and whether they feel they are “living up” to these expectations. Changes in the magnitude of self-discrepancy, and in turn changes in depression, have been observed within research (Hazzard et al., 2020; Watson et al., 2014), with Watson et al. (2014) study suggesting that decreases in actual-ought self-discrepancies can occur by supporting movement of the actual self toward the ought self and vice versa. This suggests that self-discrepancies are adaptable to change and can result in meaningful implications for psychological well-being, and thus could be useful to address when working clinically with new mothers. Psychological approaches such as Acceptance and Commitment Therapy (Hayes et al., 1999) may be helpful in moving the actual self toward the ought self by drawing on techniques such as valued living, which supports an individual to understand what is important to them and how they can embody this in their daily lives (Gloster et al., 2017; Harris, 2019). Alternatively, cognitive approaches may be useful to challenge potentially unhelpful or unrealistic beliefs about the ought self, such as “I should always be calm and loving” or “I should never lose my temper,” to help move the ought self closer to the actual self. This also may be an area where further research would be beneficial to understand which intervention techniques are most effective at supporting change within self-discrepancies.

5 | CONCLUSION

To support the understanding of the factors which can contribute to postnatal depression, the current study examined the potential relationship of human values and self-discrepancies in postnatal depression of first-time mothers. Neither value importance nor fulfillment were significantly correlated with postnatal depression scores, however, contrary to hypothesis it was found that actual-ought self-discrepancies, but not actual-ideal self-discrepancies, significantly predicted postnatal depression scores. This differs from the relationship proposed within

SDT and may reflect the impact strong societal messages have upon self-discrepancies and their emotional outcomes. The findings of this study suggest the potential benefit of exploring a mother's self-guides in clinical practice, with intervention techniques available should these be found to be problematic.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available on OSF at https://osf.io/qxs5e/?view_only=fe7e06077306446b9d61a70b4fd5549a.

ORCID

Paul H. P. Hanel  <http://orcid.org/0000-0002-3225-1395>

PEER REVIEW

The peer review history for this article is available at <https://www.webofscience.com/api/gateway/wos/peer-review/10.1002/jclp.23603>.

REFERENCES

- Adams, M. (2015). Motherhood: A discrepancy theory. *Research and Theory for Nursing Practice*, 29(2), 143–157. <https://doi.org/10.1891/1541-6577.29.2.143>
- Anderson, N. (1968). Likeable ratings of 555 personality-trait words. *Journal of Social Psychology*, 9, 272–279.
- Arens, E. A., Christoffel, M., & Stangier, U. (2022). Value priorities and value conflicts in patients with mental disorders compared to a general population sample. *Scientific Reports*, 12(1), 3974. <https://doi.org/10.1038/s41598-022-07758-4>
- Avan, B., Richter, L. M., Ramchandani, P. G., Norris, S. A., & Stein, A. (2010). Maternal postnatal depression and children's growth and behaviour during the early years of life: Exploring the interaction between physical and mental health. *Archives of Disease in Childhood*, 95(9), 690–695. <https://doi.org/10.1136/adc.2009.164848>
- Bardi, A., Buchanan, K. E., Goodwin, R., Slabu, L., & Robinson, M. (2014). Value stability and change during self-chosen life transitions: Self-selection versus socialization effects. *Journal of Personality and Social Psychology*, 106, 131–147. <https://doi.org/10.1037/a0034818>
- Bardi, A., & Goodwin, R. (2011). The dual route to value change: Individual processes and cultural moderators. *Journal of Cross-Cultural Psychology*, 42(2), 271–287. <https://doi.org/10.1177/0022022110396916>
- Bardi, A., Lee, J. A., Hofmann-Towfigh, N., & Soutar, G. (2009). The structure of intraindividual value change. *Journal of Personality and Social Psychology*, 97(5), 913–929. <https://doi.org/10.1037/a0016617>
- Barnett, M. D., Moore, J. M., & Harp, A. R. (2017). Who we are and how we feel: Self-discrepancy theory and specific affective states. *Personality and Individual Differences*, 111, 232–237. <https://doi.org/10.1016/j.paid.2017.02.024>
- Beck, C. T. (2001). Predictors of postpartum depression: An update. *Nursing Research*, 50(5), 275–285. <https://doi.org/10.1097/00006199-200109000-0004>
- Boldero, J. M., Moretti, M. M., Bell, R. C., & Francis, J. J. (2005). Self-discrepancies and negative affect: A primer on when to look for specificity, and how to find it. *Australian Journal of Psychology*, 57(3), 139–147. <https://doi.org/10.1080/00049530500048730>
- Borg, I., & Bardi, A. (2016). Should ratings of the importance of personal values be centered. *Journal of Research in Personality*, 63, 95–101. <https://doi.org/10.1016/j.jrp.2016.05.011>
- Brown, S., Small, R., & Lumley, J. (1997). Being a 'good mother'. *Journal of Reproductive and Infant Psychology*, 15(2), 185–200. <https://doi.org/10.1080/02646839708404542>
- Bydlowski, S. (2015). Les troubles psychiques du post-partum: dépistage et prévention après la naissance: Recommandations. *Journal de gynécologie, obstétrique et biologie de la reproduction*, 44(10), 1152–1156. <https://doi.org/10.1016/j.jgyn.2015.09.016>
- Carleton, R. N. (2016). Into the unknown: A review and synthesis of contemporary models involving uncertainty. *Journal of Anxiety Disorders*, 39, 30–43. <https://doi.org/10.1016/j.janxdis.2016.02.007>
- Christian, C., Bridges-Curry, Z., Hunt, R. A., Ortiz, A. M. L., Drake, J. E., & Levinson, C. A. (2021). Latent profile analysis of impulsivity and perfectionism dimensions and associations with psychiatric symptoms. *Journal of Affective Disorders*, 283, 293–301. <https://doi.org/10.1016/j.jad.2021.01.076>
- Cox, J., Holden, J., & Sagovsky, R. (1987). Detection of postnatal depression: Development of the 10-item edinburgh postnatal depression scale. *The British Journal of Psychiatry*, 150(6), 782–786.

- España, R. A., Brandes, C. M., Shields, A., Bates, C. M., Smack, A. J., & Tackett, J. L. (in press). Personal values and psychopathology in a diverse youth sample. *Journal of Psychopathology and Behavioral Assessment*. <https://doi.org/10.31234/osf.io/zfs6k>
- Ferriman, K., Lubinski, D., & Benbow, C. P. (2009). Work preferences, life values, and personal views of top math/science graduate students and the profoundly gifted: Developmental changes and gender differences during emerging adulthood and parenthood. *Journal of Personality and Social Psychology*, 97(3), 517–532. <https://doi.org/10.1037/a0016030>
- Gloster, A. T., Klotsche, J., Ciarrochi, J., Eifert, G., Sonntag, R., Wittchen, H. U., & Hoyer, J. (2017). Increasing valued behaviors precedes reduction in suffering: Findings from a randomized controlled trial using ACT. *Behaviour Research and Therapy*, 91, 64–71. <https://doi.org/10.1016/j.brat.2017.01.013>
- Gürcan-Yıldırım, D., & Gençöz, T. (2020). The association of self-discrepancy with depression and anxiety: Moderator roles of emotion regulation and resilience. *Current Psychology*. <https://doi.org/10.1007/s12144-020-00701-8>
- Halligan, S. L., Murray, L., Martins, C., & Cooper, P. J. (2007). Maternal depression and psychiatric outcomes in adolescent offspring: A 13-year longitudinal study. *Journal of Affective Disorders*, 97(1–3), 145–154. <https://doi.org/10.1016/j.jad.2006.06.010>
- Hanel, P. H. P., & Wolfardt, U. (2016). The 'dark side' of personal values: Relations to clinical constructs and their implications. *Personality and Individual Differences*, 97, 140–145. <https://doi.org/10.1016/j.paid.2016.03.045>
- Hardin, E. E., & Lakin, J. L. (2009). The integrated self-discrepancy index: A reliable and valid measure of self-discrepancies. *Journal of Personality Assessment*, 91(3), 245–253. <https://doi.org/10.1080/00223890902794291>
- Harris, R. (2019). *ACT made simple: An easy-to-read primer on acceptance and commitment therapy* (2nd ed.). New Harbinger Publications.
- Hayes, S., Strosahl, K., & Wilson, K. (1999). *Acceptance and commitment therapy: An experiential approach to behaviour change*. Guilford Press.
- Hazzard, V. M., Peterson, C. B., Crosby, R. D., Schaefer, L. M., Smith, K. E., Engel, S. G., Crow, S. J., & Wonderlich, S. A. (2020). Predictors of treatment response durability in psychotherapy for binge-eating disorder: Examining the roles of self-discrepancy, self-directed style, and emotion dysregulation. *International Journal of Eating Disorders*, 53(12), 1918–1927. <https://doi.org/10.1002/eat.23389>
- Heim, E., Maercker, A., & Boer, D. (2019). Value orientations and mental health: A theoretical review. *Transcultural Psychiatry*, 56(3), 449–470. <https://doi.org/10.1177/1363461519832472>
- Hessami, K., Romanelli, C., Chiurazzi, M., & Cozzolino, M. (2022). COVID-19 pandemic and maternal mental health: A systematic review and meta-analysis. *The Journal of Maternal-fetal & Neonatal Medicine: The Official Journal of the European Association of Perinatal Medicine, the Federation of Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstetricians*, 35, 4014–4021. <https://doi.org/10.1080/14767058.2020.1843155>
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319–340. <https://doi.org/10.1037/0033-295X.94.3.319>
- Higgins, E. T., Bond, R. N., Klein, R., & Strauman, T. (1986). Self-discrepancies and emotional vulnerability: How magnitude, accessibility, and type of discrepancy influence affect. *Journal of Personality and Social Psychology*, 51(1), 5–15. <https://doi.org/10.1037/0022-3514.51.1.5>
- Higgins, E. T., Klein, R., & Strauman, T. (1985). Self-concept discrepancy theory: A psychological model for distinguishing among different aspects of depression and anxiety. *Social Cognition*, 3, 51–76. <https://doi.org/10.1521/soco.1985.3.1.51>
- Johnson, D. P., Rhee, S. H., Friedman, N. P., Corley, R. P., Munn-Chernoff, M. A., Hewitt, J. K., & Whisman, M. A. (2016). A twin study examining rumination as a transdiagnostic correlate of psychopathology. *Clinical Psychological Science*, 4(6), 971–987. <https://doi.org/10.1177/2167702616638825>
- Kühner, C. (2016). [Mental disorders in pregnancy and postpartum: Prevalence, course, and clinical diagnostics]. *Der Nervenarzt*, 87(9), 926–936. <https://doi.org/10.1007/s00115-016-0175-0>
- Lebel, C., MacKinnon, A., Bagshawe, M., Tomfohr-Madsen, L., & Giesbrecht, G. (2020). Elevated depression and anxiety symptoms among pregnant individuals during the COVID-19 pandemic. *Journal of Affective Disorders*, 277, 5–13. <https://doi.org/10.1016/j.jad.2020.07.126>
- Lee, D. T., & Chung, T. K. (2007). Postnatal depression: an update. *Best Practice & Research Clinical Obstetrics & Gynaecology*, 21(2), 183–191. <https://doi.org/10.1016/j.bpobgyn.2006.10.003>
- Leite, Â., Ramires, A., Vidal, D. G., Sousa, H. F. P. E., Sousa, H. F. P., Dinis, M. A. P., & Fidalgo, A. (2021). Hierarchical cluster analysis of human value priorities and associations with subjective well-being, subjective general health, social life, and depression across Europe. *Social Sciences*, 10(2), 74. <https://doi.org/10.3390/socsci10020074>
- Lindahl, V., Pearson, J. L., & Colpe, L. (2005). Prevalence of suicidality during pregnancy and the postpartum. *Archives of Women's Mental Health*, 8(2), 77–87. <https://doi.org/10.1007/s00737-005-0080-1>

- Liss, M., Schiffrin, H. H., & Rizzo, K. M. (2013). Maternal guilt and shame: The role of self-discrepancy and fear of negative evaluation. *Journal of child and family studies*, 22(8), 1112–1119. <https://doi.org/10.1007/s10826-012-9673-2>
- Liu, P., Wang, X., Li, D., Zhang, R., Li, H., & Han, J. (2021). The benefits of self-transcendence: Examining the role of values on mental health among adolescents across regions in China. *Frontiers in Psychology*, 12, e630420. <https://doi.org/10.3389/fpsyg.2021.630420>
- Lönnqvist, J. E., Leikas, S., & Verkasalo, M. (2018). Value change in men and women entering parenthood: New mothers' value priorities shift towards conservation values. *Personality and Individual Differences*, 120, 47–51. <https://doi.org/10.1016/j.paid.2017.08.019>
- Maercker, A., Chi Zhang, X., Gao, Z., Kochetkov, Y., Lu, S., Sang, Z., Yang, S., Schneider, S., & Margraf, J. (2015). Personal value orientations as mediated predictors of mental health: A three-culture study of Chinese, Russian, and German university students. *International Journal of Clinical and Health Psychology*, 15(1), 8–17. <https://doi.org/10.1016/j.ijchp.2014.06.001>
- Maio, G. R. (2016). *The psychology of human values*. Taylor & Francis.
- Mason, T. B., Smith, K. E., Engwall, A., Lass, A., Mead, M., Sorby, M., Bjorlie, K., Strauman, T. J., & Wonderlich, S. (2019). Self-discrepancy theory as a transdiagnostic framework: A meta-analysis of self-discrepancy and psychopathology. *Psychological Bulletin*, 145(4), 372–389. <https://doi.org/10.1037/bul0000186>
- Milfont, T. L., Milojev, P., & Sibley, C. G. (2016). Values stability and change in adulthood: A 3-year longitudinal study of rank-order stability and mean-level differences. *Personality and Social Psychology Bulletin*, 42(5), 572–588. <https://doi.org/10.1177/0146167216639245>
- Musters, C., McDonald, E., & Jones, I. (2008). Management of postnatal depression. *BMJ*, 337, a736. <https://doi.org/10.1136/bmj.a736>
- O'hara, M. W., & Swain, A. M. (2009). Rates and risk of postpartum depression—A meta-analysis. *International Review of Psychiatry*, 8(1), 37–54. <https://doi.org/10.3109/0954026909037816>
- Oppenheim-Weller, S., & Kurman, J. (2017). Value fulfillment and bicultural identity integration. *Journal of Cross-Cultural Psychology*, 48(3), 267–286. <https://doi.org/10.1177/0022022116684207>
- Oppenheim-Weller, S., Roccas, S., & Kurman, J. (2018). Subjective value fulfillment: A new way to study personal values and their consequences. *Journal of Research in Personality*, 76, 38–49. <https://doi.org/10.1016/j.jrp.2018.07.006>
- Pedersen, S. (2016). The good, the bad and the 'good enough' mother on the UK parenting forum Mumsnet. *Women's Studies International Forum*, 59, 32–38. <https://doi.org/10.1016/j.wsif.2016.09.004>
- Phillips, A. G., & Silvia, P. J. (2010). Individual differences in self-discrepancies and emotional experience: Do distinct discrepancies predict distinct emotions. *Personality and Individual Differences*, 49(2), 148–151. <https://doi.org/10.1016/j.paid.2010.03.010>
- Pierce, K. M., Strauman, T. J., & Van Dell, D. L. (1999). Self-discrepancy, negative life events, and social support in relation to dejection in mothers of infants. *Journal of Social and Clinical Psychology*, 18(4), 490–501. <https://doi.org/10.1521/jscp.1999.18.4.490>
- Prikhidko, A., & Swank, J. M. (2018). Motherhood experiences and expectations: A qualitative exploration of mothers of toddlers. *The Family Journal*, 26(3), 278–284. <https://doi.org/10.1177/1066480718795116>
- Rizzo, K. M., Schiffrin, H. H., & Liss, M. (2013). Insight into the parenthood paradox: Mental health outcomes of intensive mothering. *Journal of Child and Family Studies*, 22(5), 614–620. <https://doi.org/10.1007/s10826-012-9615-z>
- Robinson, O. C. (2013). Values and adult age: Findings from two cohorts of the European Social Survey. *European Journal of Ageing*, 10, 11–23. <https://doi.org/10.1007/s10433-012-0247-3>
- Rokeach, M. (1973). *The nature of human values*. Free Press.
- Schwartz, S. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (25, pp. 1–65). Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60281-6](https://doi.org/10.1016/S0065-2601(08)60281-6)
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50(4), 19–45. <https://doi.org/10.1111/j.1540-4560.1994.tb01196.x>
- Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture*, 2(1). <https://doi.org/10.9707/2307-0919.1116>
- Schwartz, S. (2016). Basic individual values: Sources and consequences. In T. Brosch, & D. Sander (Eds.), *Handbook of value: Perspectives from economics, neuroscience, philosophy, psychology and sociology* (pp. 63–84). Oxford University Press.
- Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53(3), 550–562. <https://doi.org/10.1037/0022-3514.53.3.550>
- Schwartz, S. H., Melech, G., Lehmann, A., Burgess, S., Harris, M., & Owens, V. (2001). Extending the cross-cultural validity of the theory of basic human values with a different method of measurement. *Journal of Cross-Cultural Psychology*, 32(5), 519–542. <https://doi.org/10.1177/0022022101032005001>

- Sortheix, F. M., & Lönnqvist, J. E. (2014). Personal value priorities and life satisfaction in Europe: The moderating role of socioeconomic development. *Journal of Cross-Cultural Psychology*, 45(2), 282–299. <https://doi.org/10.1177/0022022113504621>
- Sortheix, F. M., & Schwartz, S. H. (2017). Values that underlie and undermine well-being: Variability across countries. *European Journal of Personality*, 31(2), 187–201. <https://doi.org/10.1002/per.2096>
- Sortheix, F. M., Parker, P. D., Lechner, C. M., & Schwartz, S. H. (2019). Changes in young Europeans' values during the global financial crisis. *Social Psychological and Personality Science*, 10(1), 15–25. <https://doi.org/10.1177/1948550617732610>
- Strauman, T. J., & Higgins, E. T. (1987). Automatic activation of self-discrepancies and emotional syndromes: When cognitive structures influence affect. *Journal of Personality and Social Psychology*, 53(6), 1004–1014. <https://doi.org/10.1037//0022-3514.53.6.1004>
- Sweeney, A. C., & Fingerhut, R. (2013). Examining relationships between body dissatisfaction, maladaptive perfectionism, and postpartum depression symptoms. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 42(5), 551–561. <https://doi.org/10.1111/1552-6909.12236>
- Thompson, K. D., & Bendell, D. (2014). Depressive cognitions, maternal attitudes and postnatal depression. *Journal of Reproductive and Infant Psychology*, 32(1), 70–82. <https://doi.org/10.1080/02646838.2013.858312>
- Tunç, H., Morris, P. G., Kyranides, M. N., McArdle, A., McConachie, D., & Williams, J. (2023). The relationships between valued living and depression and anxiety: A systematic review, meta-analysis, and meta-regression. *Journal of Contextual Behavioral Science*, 28, 102–126. <https://doi.org/10.1016/j.jcbs.2023.02.004>
- Watson, N., Bryan, B. C., & Thrash, T. M. (2014). Change in self-discrepancy, anxiety, and depression in individual therapy. *Psychotherapy*, 51(4), 525–534. <https://doi.org/10.1037/a0035242>
- Widding, U. (2015). Parenting ideals and (un-)troubled parent positions. *Pedagogy, Culture & Society*, 23(1), 45–64. <https://doi.org/10.1080/14681366.2014.919955>
- World Health Organisation. (March 11, 2020). *Rolling updates on coronavirus disease (COVID-19)*. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen>
- Zacharopoulos, G., Hanel, P. H. P., Wolfрад, U., Maio, G. R., & Linden, D. E. J. (2021). The relations between pathological personality traits and human values. *Personality and Individual Differences*, 179, e110766. <https://doi.org/10.1016/j.paid.2021.110766>

How to cite this article: Smith, C., Hanel, P. H. P., & Maio, G. R. (2024). Exploring the roles of human values and self-discrepancies in postnatal depression in first-time mothers. *Journal of Clinical Psychology*, 80, 170–185. <https://doi.org/10.1002/jclp.23603>