Author/s:
Taher, T;Goutallier, C;Kirkland, K;Bastian, B

Title:
The (Un)Happy Moralist? Different Methods of Moral Engagement have Opposing Implications for Wellbeing

Date:
2025-08-01

Citation:
Taher, T., Goutallier, C., Kirkland, K. & Bastian, B. (2025). The (Un)Happy Moralist? Different Methods of Moral Engagement have Opposing Implications for Wellbeing. Journal of Happiness Studies, 26 (6), pp.85-. https://doi.org/10.1007/s10902-025-00918-z.

Persistent Link:
https://hdl.handle.net/11343/362174

Journal of Happiness Studies (2025) 26:85
https://doi.org/10.1007/s10902-025-00918-z

ORIGINAL PAPER

The (Un)Happy Moralist? Different Methods of Moral Engagement have Opposing Implications for Wellbeing

Tamanna Taher[1] · **Chloe Goutallier**[1] · **Kelly Kirkland**[1] · **Brock Bastian**[1]

Accepted: 30 May 2025 / Published online: 13 June 2025

Abstract
For centuries, the relationship between morality and well-being has been a focal point of philosophical debate. Recent empirical research has produced mixed results, showing both positive and negative associations between moral engagement and well-being. Our exploratory research examines two forms of moral engagement—moral identity and moral attentiveness—and their potential implications for well-being. In Study 1 (N = 149), we found that a stronger moral identity was generally associated with higher well-being, whereas greater moral attentiveness showed mixed associations, including links to increased rumination and some indicators of poorer well-being. Mediation analyses suggested that moral identity may contribute to well-being through strengthened social connectedness, while moral attentiveness may be associated with reduced well-being through rumination. In Study 2 (N = 118), a 14-day daily-diary study, moral attentiveness was associated with increased rumination at the within-person level, and some indicators of well-being showed small day-to-day fluctuations in relation to moral identity and moral attentiveness. These findings provide preliminary insights into how different forms of moral engagement may relate to well-being, emphasizing the complexity of these relationships and the importance of future research to further explore these dynamics.

Keywords Wellbeing · Moral identity · Moral attentiveness · Social connectedness · Rumination

For centuries, philosophers have considered the relationship between morality and wellbeing. While Immanuel Kant argued that happiness is unimportant in the realm of morality (Kant, 2011 [1785]), Aristotle viewed wellbeing and morality as inextricably linked (Suikkanen, 2014). More recently, there is a growing body of empirical evidence examining the relationship between morality and happiness (e.g., Hofmann et al., 2014), revealing a complex and nuanced relationship. While studies have shown that engaging with morality can lead to better wellbeing (Waytz & Hofmann, 2020), others have found cases where moral engagement appears to have the opposite effect (Oser, 2010). Given the conflicting findings, it is crucial to gain a deeper understanding of the specific forms of moral engagement

✉ Tamanna Taher
taher@student.unimelb.edu.au

[1] Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, Australia

that lead to differing outcomes for wellbeing, and the potential underlying mechanisms that explain these opposing patterns.

In the current research, we examined two different ways that people engage with their moral worlds; by either being attentive to the morality of their daily decisions (i.e., moral attentiveness) or through shaping their personal identities around moral values and virtues (i.e., moral identity). Furthermore, we explored whether these two modes may have different implications for wellbeing and posited two processes through which these relationships manifest. The current studies aimed to clarify the conflicting findings documented in past work and explore the potential mechanisms that underlie the relationship between moral engagement and wellbeing.

1 What is Moral Engagement?

People engage with morally relevant decision-making, judgment, and behaviour in their everyday lives (Hofmann et al., 2014), yet the extent to which people recognize, reflect on, or identify with moral content varies across both individuals (Krettenauer, 2022; Krettenauer & Hertz, 2015) and situations (Al Halbusi et al., 2022; Aquino et al., 2009; Bratanova et al., 2012; Culiberg & Mihelič, 2016). One way of conceptualizing moral engagement is the recognition of and reflection on the moral dimensions of day-to-day issues and decisions (Reynolds, 2008), while another is the value placed on displaying moral virtues that define one's identity (Aquino & Reed, 2002). While both can be considered forms of everyday moral engagement, how they manifest in decision-making processes or as guides to behaviour are likely to differ, with potentially distinctive downstream implications for well-being.

Moral engagement refers to the active cognitive and emotional interaction with moral content in daily life. This encompasses not only overt behaviours but also the internal processes of considering morality as central to one's identity (Moral Identity) and consistently attending to moral content (Moral Attentiveness). We acknowledge that the term "moral disengagement" has been previously conceptualized by Albert Bandura, particularly in the context of commitment to moral behaviour. Bandura's (1999) work primarily focused on the mechanisms through which people disengage morally to justify unethical behaviour. Our use of the term is broader and includes not only behavioural commitment but also cognitive and emotional engagement with moral content and decisions in daily life.

In this study, we conceptualize Moral Identity and Moral Attentiveness as distinct forms of moral engagement. We define moral engagement as the active cognitive and emotional interaction with moral content in daily life, which includes not only overt behaviours but also internal processes. Moral Identity represents the cognitive and emotional commitment to moral values as central to one's identity, while Moral Attentiveness reflects the habitual attention to moral content in one's experiences. This broader definition allows us to capture the multifaceted nature of how individuals engage with morality. Our research aims to explore how this broad form of moral engagement, irrespective of its nature, influences well-being. By adopting this approach, we also recognize that moral engagement varies among individuals; some may find morality less central to their decisions and daily experiences. Understanding this spectrum of engagement allows us to capture a fuller picture of how moral considerations impact well-being across different contexts and individuals.

1.1 Moral Attentiveness

Moral attentiveness describes "the extent to which an individual chronically perceives and considers morality and moral elements" throughout their lived experiences (Reynolds, 2008, p. 1028) and captures the variation in the attention individuals afford to morally relevant matters they encounter in their day-to-day lives (Reynolds & Miller, 2015). In developing the construct of moral attentiveness, Reynolds (2008) drew from Fiske and Taylor's (1991) proposition that attention is governed by three key factors: (1) saliency, i.e., the contextual importance of a particular stimulus, (2) vividness, i.e., how compelling that stimulus is, and (3) the accessibility of the related cognitive framework. Fiske and Taylor (1991) differentiated between 'regular' sources of accessibility, which are temporarily available cognitive frameworks that are unlikely to influence cognition, as opposed to 'chronic' sources of accessibility, that are inclined to dominate cognition and shape the interpretation of incoming stimuli. Reynolds (2008) argued that moral concepts constitute a unique cognitive framework that can act as a source of chronic accessibility and greatly influence the appraisal of incoming information. Individuals who regularly access moral frameworks will perceive and interpret stimuli through a lens that highlights moral elements and will depend on this to make sense of their lived experiences (Reynolds, 2008). This process of moral cognition encapsulates a perceptual dimension and a reflective dimension; the former describes the process of automatically screening information using a moral perspective whereas the latter describes the process of using morality to reflect on information (Wurthmann, 2013).

Research has shown moral attentiveness to be associated with various moral behaviour, further highlighting the association between higher moral attentiveness and increased engagement with moral content and considerations. For example, those higher in moral attentiveness tend to be less likely to engage in negative workplace behaviour and tend to remain in the workplace longer, as they are more likely to be committed to the ethical values of the organization (Ames et al., 2020; Murtaza et al., 2022). Studies have also found that employees who are more morally attentive are less likely to withhold information that could help resolve problems in the workplace, even when faced with a difficult or uncivil work environment (Khan et al., 2022). Overall, while moral attentiveness focuses on an individual's awareness and attention to moral issues in specific situations, another way to engage with moral content is through the broader construct of moral identity that encompasses one's self-concept as a moral person and their commitment to moral values and behaviors.

1.2 Moral Identity

Moral identity refers to how central possessing and displaying moral virtue is to one's identity (Hardy & Carlo, 2011). Aquino and Reed's (2002) conception of moral identity involve moral schemas; networks of chronically accessible moral principles and characteristics, that may be fundamental to an individuals' identity (Lapsley & Narvaez, 2004; Shao et al., 2008). It is argued that a dynamic and reciprocal relationship exists such that the more accessible a moral schema is, the more important it is to the individual's identity and vice versa (Lapsley & Narvaez, 2004). Moral identity has two dimensions: an internalization dimension describing how readily accessible an individual's moral self-schema is, and a symbolization dimension capturing how much an individual values outwardly portraying

moral characteristics to others (Aquino et al., 2009; Boegershausen et al., 2015). These knowledge structures can be further conceptualized as representing aspects of ourselves as the driving force informing moral ideals and in turn creating and maintaining a moral identity (Aquino et al., 2009; Fiske, 2000; Hardy & Carlo, 2011; Lapsley & Narvaez, 2004; Stets & Carter, 2006). Through this understanding, moral identity has mostly been theorized as a stable characteristic that may develop in an individual over time (Blasi, 2004; Colby & Damon, 1992; Moshman, 2005), however, scholars also argue that it may be more of an active state that changes situationally (Aquino et al., 2009; Monin & Jordan, 2009; Stets & Carter, 2006).

A salient moral identity has been shown to be predictive of engagement with moral content and prosocial acts in daily life. For example, a salient moral identity is associated with increased charitable behaviour and making a positive difference in the world (Aquino & Reed, 2002; Pratt et al., 2003; Stets & Carter, 2006) and has been associated with an increased likelihood of forgiveness, felt moral obligation, and charitable behaviour towards out-group members (Reed & Aquino, 2003). Placing importance on one's moral identity has also been associated with engagement with morally charged content online, such as race-related issues (Bindra & DeCuir-Gunby, 2020) and has been linked to displays of increased empathy and openness both online and in-person (El Hazzouri et al., 2019; Morgan & Fowers, 2022).

1.3 The Relationship Between Moral Engagement and Wellbeing

While Kant and Aristotle disagree on whether happiness and wellbeing are related to morality, recent research suggests that it is not a matter of whether they are related, but how. On the one hand, research has found everyday moral acts are associated with higher levels of momentary happiness (Hofmann et al., 2014), that moral behavior leads to increased daily wellbeing (Waytz & Hofmann, 2020), and that while moral identity has been linked to greater wellbeing (Garcia et al., 2018), moral attentiveness has been associated with increased employee welfare (Al Halbusi, 2022; Al Halbusi et al., 2021). On the other hand, the relationship between personal moral engagement and wellbeing appears to be inconsistent. For instance, a recent meta-analysis found the relationship between prosocial behaviour and wellbeing is defined by a weak-to-moderate association (Hui et al., 2020). Furthermore, in a study conducted by Giacalone et al., (2015) paradoxical findings emerged when examining the relationship between moral identity, moral attentiveness, and subjective well-being; although moral identity was linked to increased wellbeing, moral attentiveness was found to have mixed associations with wellbeing. The study also found that the relationship between moral identity and well-being is weaker for individuals who report engaging in more frequent ethical decision-making behaviors, emphasizing the complex relationship between ethics and well-being, and underscoring the need for further research to disentangle these relationships.

2 Current Studies

Research to date suggests that the relationship between moral engagement and well-being is mixed. Understanding when and why moral engagement leads to either positive or negative well-being was the aim of the current research. Our approach was exploratory, seeking to uncover potential connections between different forms of moral

engagement and well-being without adhering to strict hypotheses, and allowing us to comprehensively investigate the nuances of these relationships.

In our study, we focused on the variables of moral identity and moral attentiveness to capture personal moral engagement. These constructs were chosen because they seem to capture personal moral engagement most prominently, as opposed to measuring moral relevance or judgment, which more directly reflect the content of one's moral concerns rather than the general tendency to engage with morality (Rhee et al., 2019). While these constructs represent different aspects of moral engagement, they are not opposing. Rather, they indicate different emphases on how individuals think about their moral choices and decisions.

Beyond examining which form of moral engagement may be related to well-being, and in which direction, we also aimed to explore potential mechanisms that may explain the differential effects of moral engagement on well-being that have been reported in previous research. First, we examined whether social connectedness may represent one pathway through which moral engagement increases well-being. It is well established that moral engagement is linked to increases in social connection. For instance, prosocial engagement in the form of volunteering has been associated with strengthened social integration, as determined by volunteers' subjective levels of occupational, social, and familial support (Piliavin & Siegl, 2007). Additionally, there is robust evidence to show that social connectedness positively contributes to well-being (e.g., Chu et al., 2010; Huang et al., 2019). We hypothesized that moral engagement might amplify well-being through an increased sense of connection with other people, given that engaging with morality involves contemplating how the consequences of our actions could impact those around us.

Secondly, we explored whether moral engagement might also trigger a ruminative process that ultimately diminishes well-being. Rumination, defined as repetitive and passive thinking about distressing situations, is well known to predict poor well-being and depression (Harrington & Loffredo, 2010; Smith & Alloy, 2009). Although less research has examined the link between moral engagement and rumination, we hypothesized that the cognitive and emotional processes involved in moral engagement, such as reflecting on fairness, justice, and the consequences of one's actions, could lead to ruminative thinking. There has been some research indicating that moral engagement can lead to ruminative processes (Eden et al., 2017). While the specific link between ruminating over moral problems and distress has not been conclusively established, it is well-documented that rumination in general is associated with feelings of distress (Nolen-Hoeksema et al., 2008). Therefore, it is plausible that ruminating over moral problems would similarly lead to distress.

To examine our key research questions, we conducted three cross-sectional studies to identify correlational evidence for our hypotheses. We report the first of these studies in our manuscript, and the other two in Supplementary Materials which replicate our findings using different samples and some variation in measures. We also conducted a daily-diary study to examine the variation in the predicted relationships over time and throughout individuals' daily experiences.

In our studies, we included a range of well-being measures to comprehensively sample the well-being space. This approach is consistent with previous research that highlights the value of considering multiple dimensions of well-being (Bastian et al., 2012; Erbas et al., 2014; Erbas et al., 2019; Haines et al., 2016). Given the exploratory nature of our research, we did not have specific predictions about the relationships between moral engagement and individual well-being measures. Instead, our aim was to take a first step in understanding any connections between these forms of moral engagement and well-being.

Our main approach to this research project was exploratory and was approved by the Human Research Ethics Committee of The University of Melbourne (HREC Project no. 27777) prior to its initiation. We report all manipulations, measures, and exclusions in these studies. None of the studies in this manuscript were pre-registered. All data, code, and codebooks can be found on the Open Science Framework: https://osf.io/6qevj/?view_only=8b6598f2c5704e718d7e4052ac7048d7.

3 Study 1

In Study 1, we conducted an online survey to explore potential links between our two focal constructs—moral engagement and well-being—as well as our process variables. The survey aimed to investigate whether there might be relationships between moral identity, moral attentiveness, and well-being, and to explore whether social connectedness and rumination could play a role in these relationships. Rather than seeking to confirm specific hypotheses, this study was exploratory in nature, aiming to gather initial evidence on how these constructs might be interconnected. We were particularly interested in examining whether moral identity and moral attentiveness could influence well-being and whether social connectedness and rumination might mediate these potential relationships. This approach allowed us to identify patterns and generate insights that could inform future research, while remaining open to a range of possible outcomes.

4 Methods

4.1 Participants

One hundred and sixty-seven undergraduate psychology students at a large Australian university participated in exchange for course credit. Twenty participants were excluded for not meeting the time or response requirements (i.e., in fewer than 370 s or having answered less than 70% of the survey). The final sample consisted of 149 participants, with 45 male, 102 female, and 2 non-binary participants, aged 17–37 ($M = 19.33$, $SD = 2.49$). Two participants did not disclose their age. The majority of participants were born in Australia (42.29%) or China (32.65%) and were not closely affiliated with any religion (63.27%). The sample had a political left leaning on social issues ($M = 2.53$, $SD = 1.49$) and centrist views on economic issues ($M = 3.15$, $SD = 1.30$). A sensitivity G-power analysis indicated that the final sample size of 149 participants was large enough to detect a small-to-medium correlation ($r = 0.23$) according to Cohen's thresholds (Cohen, 1988), given a power of 0.80 (Faul et al., 2009), This threshold aligns with the effect sizes reported by Giacalone et al. (2015).

4.2 Materials

The following measures were utilized for Study 1 (see supplementary material for full question sets and descriptive statistics). Questionnaires were presented in a random order to control for order effects.

Moral Attentiveness. Moral attentiveness was assessed using Reynolds' (2008) 12-item instrument designed to measure the extent to which individuals consistently

perceive and reflect on moral content in their daily lives. Respondents rated each item on a 7-point Likert scale (e.g., "In a typical day, I face several ethical dilemmas."; 1 = *strongly disagree*, 7 = *strongly agree;* α = 0.90).

Moral Identity. Moral identity was evaluated using Aquino and Reed's (2002) 10-item Self-Importance of Moral Identity Scale, referred to from here onwards as moral identity (AR). This scale was designed to capture both the internalization and symbolization aspects of moral identity. Respondents were presented with a list of virtues for which they would have to individually rate items on a 7-point Likert scale (e.g., "I strongly desire to have this characteristic."; 1 = *strongly disagree*, 7 = *strongly agree;* α = 0.82).

Psychological Wellbeing. The Psychological Wellbeing Scale was utilized to measure wellbeing. It assesses six domains of positive functioning: autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life, and self-acceptance (Ryff, 1989). Items such as "I enjoy personal and mutual conversations with family members and friends" were rated on a 7-point Likert scale (1 = *strongly agree,* 7 = *strongly disagree;* α = 0.88).

Meaning. The presence of meaning subscale from the Meaning in Life Questionnaire was used to measure the extent to which individuals perceive their lives to be meaningful and have a sense of purpose (Steger et al., 2006). Respondents rated each item on a 7- point Likert scale (e.g., "My life has a clear sense of purpose."; 1 = *absolutely untrue*, 7 = *absolutely true;* α = 0.84).

Happiness. The Subjective Happiness Scale is a 4-item measure designed to assess individuals' overall self-evaluated happiness (Lyubomirsky & Lepper, 1999). Responses were provided on a 7-point Likert scale with each item having different anchor points (α = 0.83). The responses to the first item "In general, I consider myself" ranged from *not a very happy person* (1) to a *very happy person* (7). The second item asked respondents to compare their level of happiness to their peers' from *less happy* (1) to *more happy* (7). The third and fourth items describe happy and unhappy people, respectively, and ask respondents to rate the extent to which each description characterizes them from *not at all* (1) to *a great deal* (7).

Satisfaction With Life. The 5-item Satisfaction with Life Scale was designed to measure individuals' global judgments of their contentment with their lives (Diener et al., 1985). Respondents answered items such as "In most ways my life is close to my ideal" on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree;* α = 0.84).

Emotion Frequency and Intensity. To measure the frequency and intensity of emotions, two scales developed by Bastian and colleagues (2012) were used. The first 8-item scale asks how often respondents have felt positive emotions (happy, relaxed, calm, joyful*;* α = 0.81) and negative emotions (anxious, depressed, stressed, sad*;* α = 0.81) over the past two-week period from *none of the time* (1) to *all of the time* (9). The second 8-item scale asks how intense the experience of positive (α = 0.82) and negative emotions (α = 0.77) were from *very mild* (1) to *very intense* (9).

Depression. The Centre for Epidemiological Studies Depression Scale is composed of 20- items and designed to measure depressive symptomatology in the general population (Radloff, 1977). Respondents were asked to indicate how often over the past week they experienced symptoms such as disrupted sleep, poor mood and low appetite on a 4-point Likert scale (0 = *rarely or none of the time*, 3 = *most or almost all the time;* α = 0.90) e.g., "I felt that I could not shake off the blues even with help from my family or friends".

Social Connectedness. Social connectedness was assessed using the revised Social Connectedness Scale (SCS-R20; Lee et al., 2001). Respondents rated items on a 7-point Likert

scale (e.g., "I feel comfortable in the presence of strangers"; 1 = *strongly disagree*, 7 = *strongly agree;* $\alpha = 0.94$).

Rumination. Rumination was measured using the 22-item ruminative response scale developed by Nolen-Hoeksema and Morrow (1991). Respondents rated items on a 4-point Likert scale (e.g., "How often do you 'Think, why do I always react this way?'"; 1 = *almost never*, 4 = *almost always;* $\alpha = 0.94$).

5 Results

Participants who provided incomplete responses were excluded to ensure data quality. The response time requirement of 370 s was set based on preliminary testing to prevent rushed responses. Demographic variables were controlled for to account for their potential influence on moral engagement, and VIF calculations confirmed no multicollinearity in our regression models. In our analysis, we collapsed the subscales of moral identity (internalization and symbolization) and moral attentiveness (perception and reflection) into single composite scores. This decision was based on the moderate to high correlations observed between the subscales (moral identity: $r = 0.37$, $p < 0.001$; moral attentiveness: $r = 0.49$, $p < 0.001$; see Supplementary Materials).

5.1 Correlational Analyses

Two-tailed Pearson correlations were conducted to examine the direction and strength of associations between moral identity, moral attentiveness, a range of wellbeing measures and process variables, as seen in Table 1. The correlations between the key variables in Study 1 are presented in Table 1. Moral identity was positively correlated with several indicators of well-being. Specifically, moral identity was significantly and positively associated with psychological well-being, meaning in life, satisfaction with life, happiness, and social connectedness. These findings suggest that individuals with a stronger moral identity tend to experience higher levels of well-being across multiple dimensions.

Conversely, moral attentiveness showed weaker and more mixed associations with well-being. While moral attentiveness was positively correlated with moral identity, it was non-significantly related to PWB, meaning, SWL, or happiness. Interestingly, moral attentiveness was positively associated with the intensity of negative emotions (NE) and rumination, indicating that individuals who are more morally attentive may be more prone to experiencing negative emotional states and engage in ruminative thinking.

The associations between well-being indicators and emotional experiences were consistent with previous literature. PWB was positively correlated with meaning, SWL, and happiness and was negatively correlated with both the intensity and frequency of NE, as well as depression and rumination. These patterns suggest that higher psychological well-being is associated with more positive emotions, greater life satisfaction, and less frequent and intense negative emotions.

Social connectedness emerged as a robust predictor of well-being, demonstrating significant positive correlations with PWB, meaning, SWL, happiness, and frequency of positive emotions (PE). Furthermore, social connectedness was negatively correlated with the intensity and frequency of NE, depression, and rumination. These results underscore the clear link between the quality of social relationships and psychological well-being. The

Table 1 Correlation matrix for study 1 variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Moral Attentiveness												
2. Moral Identity	0.22**											
3. PWB	−0.03	0.40***										
4. Meaning	−0.05	0.31***	0.61***									
5. SWL	−0.06	0.22**	0.53***	0.52***								
6. Happiness	−0.11	0.21*	0.60***	0.50***	0.52***							
7. Intensity of PE	−0.08	−0.02	0.32***	0.15	0.27**	0.45***						
8. Frequency of PE	−0.08	0.06	0.43***	0.22**	0.42***	0.57***	0.67***					
9. Intensity of NE	0.21*	< 0.01	−0.41***	−0.27**	−0.37***	−0.45***	−0.15	−0.38***				
10. Frequency of NE	0.13	0.03	−0.45***	−0.25**	−0.34***	−0.52***	−0.26**	−0.44***	0.71***			
11. Depression	0.18*	−0.07	−0.62***	−0.40***	−0.49***	−0.66***	−0.42***	−0.58***	0.65***	0.73***		
12. Social Connectedness	−0.08	0.35***	0.73***	0.44***	0.44***	0.59***	0.28**	0.38***	−0.34***	−0.34***	−0.56***	
13. Rumination	0.21*	0.14	−0.44***	−0.24**	−0.38***	−0.44***	−0.19*	−0.32***	0.510	0.56***	0.69***	−0.41***

N = 149. PWB = Psychological wellbeing, SWL = Satisfaction with life, PE = Positive emotions, NE = Negative emotions

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

effect sizes of the correlations ranged from small to medium according to Cohen's (1988) thresholds.

5.2 Multiple Regression Analyses

Multiple regression analyses were conducted to examine the predictive value of moral attentiveness and moral identity on various well-being outcomes, while controlling for demographic variables (age, gender, and conservatism) as well as the alternative moral engagement predictor, as seen in Table 2. These models included both moral engagement variables (moral attentiveness and moral identity) as simultaneous predictors, allowing us to examine their unique contributions to well-being outcomes. The results indicated that moral attentiveness was a significant negative predictor of psychological well-being (PWB) and happiness. However, moral attentiveness was non-significantly associated with meaning in life, satisfaction with life (SWL), or the intensity and frequency of positive emotions (PE) (Table 3).

Moral identity, on the other hand, emerged as a robust positive predictor across several well-being indicators. Specifically, moral identity was positively associated with PWB, meaning in life, SWL, and happiness. Interestingly, moral identity was not associated with the intensity or frequency of PE.

Among the control variables, age was a significant positive predictor of PWB, though it was unrelated to other well-being outcomes. Economic conservatism was a positive predictor of happiness but did not predict other outcomes. Social conservatism and gender were not associated with any of the well-being measures. The overall models explained a moderate amount of variance in PWB and meaning, with smaller amounts of variance explained in other well-being outcomes.

Multiple regression analyses were also conducted to assess the influence of moral attentiveness and moral identity on depression, negative emotions (NE), social connectedness, and rumination, controlling for demographic variables. The results showed that moral attentiveness was a significant positive predictor of depression, the intensity of NE, and rumination. Moreover, moral attentiveness was a significant negative predictor of social connectedness. However, it was unrelated to the frequency of NE.

In contrast, moral identity was a significant positive predictor of social connectedness, suggesting that individuals with stronger moral identities tend to experience greater social connectedness. Moral identity, however, was not associated with depression, the intensity or frequency of NE, or rumination.

Regarding the control variables, female gender was a significant positive predictor of the intensity and frequency of NE, while other demographic variables were not associated with the wellbeing variables. The models explained modest amounts of variance, particularly for social connectedness and negative emotions.

However, given that the study analyses were not preregistered, and the bivariate correlations provided a more direct examination of the relationships, the regression analyses should be interpreted cautiously. The inclusion of demographic variables and the alternative form of moral engagement in the multivariate models allowed us to examine the unique contributions of each predictor while accounting for shared variance. These models provide a more nuanced and conservative understanding of the relationships between moral engagement and well-being. Importantly, the results of the multivariate analyses were largely consistent with the bivariate findings, lending support to the robustness of these associations.

Table 2 Multiple regressions predicting wellbeing with moral engagement, controlling for demographic variables in study 1

	PWB		Meaning		SWL		Happiness		Intensity of PE		Frequency of PE	
Variable	*β*	*95% CI*	*β*	*95% CI*	*β*	*95% CI*	*β*	*95% CI*	*β*	*95% CI*	*β*	*95% CI*
(Intercept)	0.00	−0.15, 0.15	0.00	−0.16, 0.16	0.00	−0.16, 0.16	0.00	−0.16, 0.16	0.00	−0.17, 0.17	0.00	−0.17, 0.17
Moral engagement												
Moral attentiveness	−0.17*	−0.33, −0.02	−0.13	−0.29, 0.04	−0.11	−0.28, 0.06	−0.18*	−0.34, −0.02	−0.06	−0.24, 0.11	−0.07	−0.25, 0.10
Moral identity	0.48***	0.32, 0.64	0.37***	0.20, 0.54	0.20*	0.02, 0.37	0.29**	0.12, 0.46	0.00	−0.18, 0.18	0.10	−0.09, 0.28
Control variables												
Age	0.16*	0.00, 0.31	0.07	−0.09, 0.23	−0.09	−0.25, 0.08	−0.05	−0.22, 0.11	−0.02	−0.19, 0.15	−0.03	−0.20, 0.15
Female gender[a]	0.02	−0.14, 0.19	0.02	−0.16, 0.20	0.12	−0.06, 0.30	−0.08	−0.26, 0.09	0.03	−0.16, 0.21	−0.09	−0.27, 0.10
Conservatism (econ)	0.10	−0.09, 0.30	0.06	−0.15, 0.26	0.00	−0.21, 0.21	0.22*	0.01, 0.42	0.16	−0.05, 0.38	0.07	−0.15, 0.29
Conservatism (social)	−0.02	−0.22, 0.18	0.12	−0.09, 0.33	0.02	−0.19, 0.25	−0.05	−0.27, 0.16	−0.05	−0.28, 0.18	−0.04	−0.27, 0.18
R^2 adjusted		0.18		0.10		0.04		0.07		0.06		0.02

$N = 147$. β = standardised beta, *CI* = confidence interval, PWB = psychological wellbeing, SWL = satisfaction with life, PE = positive emotions, Conservatism (economic) = conservatism on economic issues, Conservatism (social) = conservatism on social issues

[a]Given only 1.34% of the sample identified as non-binary, it was not possible to use non-binary gender as a predictor due to insufficient power. The gender variable therefore only includes the dichotomy of male and female-identifying participants

*$p < 0.05$. **$p < 0.01$. *** $p < 0.001$

Table 3 Multiple regressions predicting depression, negative affect and process variables with moral engagement, controlling demographic variables in study 1

	Depression		Intensity of NE		Frequency of NE		Social connectedness		Rumination	
Variable	*β*	*95% CI*	*β*	*95% CI*	*β*	*95% CI*	*β*	*95% CI*	*β*	*95% CI*
(Intercept)	0.00	−0.16, 0.16	0.00	−0.16, 0.16	0.00	−0.16, 0.16	0.00	−0.15, 0.15	0.00	−0.16, 0.16
Moral engagement										
Moral attentiveness	0.20*	0.03, 0.37	0.22*	0.05, 0.39	0.11	−0.05, 0.28	−0.21**	−0.37, −0.05	0.20*	0.03, 0.37
Moral identity	−0.16	−0.34, 0.02	−0.11	−0.29, 0.06	−0.08	−0.25, 0.09	0.41***	0.25, 0.58	0.08	−0.10, 0.25
Control variables										
Age	−0.09	−0.25, 0.08	−0.06	−0.23, 0.10	−0.03	−0.20, 0.13	−0.02	−0.18, 0.14	−0.08	−0.25, 0.09
Female gender[a]	0.09	−0.09, 0.27	0.18*	0.00, 0.36	0.27**	0.09, 0.44	0.04	−0.13, 0.21	0.04	−0.15, 0.23
Conservatism (econ)	−0.16	−0.37, 0.05	−0.12	−0.33, 0.09	−0.11	−0.32, 0.10	0.17	−0.03, 0.37	−0.18	−0.39, 0.04
Conservatism (social)	0.07	−0.15, 0.30	0.03	−0.18, 0.25	0.04	−0.18, 0.25	−0.05	−0.26, 0.15	0.13	−0.09, 0.35
R^2 adjusted		0.03		0.06		0.06		0.15		0.04

$N = 149$. β = standardised beta, *CI* = confidence interval, NE = negative emotions, Conservatism (economic) = conservatism on economic issues, Conservatism (social) = conservatism on social issues

[a] Given only 1.34% of the sample identified as non-binary, it was not possible to use non-binary gender as a predictor due to insufficient power. The gender variable therefore only includes the dichotomy of male and female-identifying participants

*$p < 0.05$. **$p < 0.01$. *** $p < 0.001$

5.3 Mediation Analyses

Additionally, given direct and differential relationships were found between moral attentiveness, moral identity, and wellbeing, mediation analyses were conducted to test whether social connectedness helped to explain the positive association between moral identity and wellbeing, and rumination helped to explain the negative relationship between moral attentiveness and wellbeing. Both positive and negative effects on wellbeing were examined for each mediator variable (see Supplementary Materials). Analyses revealed an indirect effect of moral identity on increased wellbeing via increased social connectedness for the following outcomes: psychological wellbeing (direct effect: $b = 0.13$ (0.05); indirect effect: $b = 0.19$, 95%CI [0.11, 0.27]), satisfaction with life (direct effect: $b = 0.11$ (0.11); indirect effect: $b = 0.20$, 95%CI [0.10, 0.33]), happiness (direct effect: $b = 0.01$ (0.09); indirect effect: $b = 0.27$, 95%CI [0.16, 0.40]), and meaning (direct effect: $b = 0.24$ (0.10); indirect effect: $b = 0.17$, 95%CI [0.08, 0.29]). Similarly, moral attentiveness had an indirect effect on depression (direct effect: $b = 0.01$ (0.03); indirect effect: $b = 0.08$, 95%CI [0.02, 0.14]), and the intensity of negative emotions (direct effect: $b = 0.17$ (0.13); indirect effect: $b = 0.18$, 95%CI [0.05, 0.32]), through increased rumination.[1]

6 Discussion

The findings from Study 1 offer nuanced insights into how distinct dimensions of moral engagement—moral identity and moral attentiveness—relate to various aspects of well-being. Our analyses revealed consistent and robust associations between moral identity and positive well-being outcomes, while the effects of moral attentiveness were more mixed and predominantly associated with negative emotional experiences.

The positive relationships between moral identity and well-being align with prior research emphasizing the beneficial role of a strong moral self-concept (Cloninger, 2013). A well-developed moral identity may provide individuals with a sense of purpose and direction, contributing to greater life satisfaction and psychological flourishing. Furthermore, the strong association between moral identity and social connectedness suggests that identifying with moral values may facilitate stronger interpersonal relationships and a sense of belonging. Individuals who prioritize fairness, honesty, and kindness are likely to engage in positive social interactions, which in turn may bolster their sense of social integration and overall well-being (Piliavin & Siegl, 2007). These associations were evident in both bivariate correlations and in multiple regression analyses that controlled for moral

[1] We conducted two additional replication studies (Studies 1b and 1c), which are reported in the Supplementary Materials for clarity and concision. Study 1b, conducted with a more demographically diverse MTurk sample, broadly replicated the findings of Study 1: moral identity was positively associated with multiple indicators of well-being and social connectedness, while moral attentiveness was associated with increased rumination and showed mixed associations with well-being. Study 1c further extended these findings using more comprehensive well-being measures and an additional measure of moral identity (Black & Reynolds, 2016). The results similarly supported our main findings—moral identity was positively associated with well-being and social connectedness, while moral attentiveness was linked to increased rumination and reduced well-being. While a few differences in effect strength and significance were observed across the replication studies, the overall patterns were consistent with our initial findings and helped to strengthen the robustness of our conclusions. Full details of these studies, including correlation tables, regression results, and mediation models can be found in the Supplementary Materials.

attentiveness and demographic variables. Given the modest shared variance between moral identity and moral attentiveness, we interpret these effects based on models that control for the alternate form of moral engagement, which we believe offer a more precise estimate of each construct's unique contribution.

The lack of significant associations between moral attentiveness and positive well-being measures, coupled with its links to negative emotions and rumination, presents a more complex picture. These findings persisted in models controlling for moral identity and demographics, further supporting the unique contribution of moral attentiveness to these outcomes. One possible explanation is that heightened moral attentiveness may lead individuals to become more aware of moral violations and injustices in their environment, which could elicit negative emotional responses and promote ruminative thought patterns (Eden et al., 2017; Haidt & Kesebir, 2010; Nolen-Hoeksema et al., 2008; Reynolds, 2008). This increased sensitivity to moral issues may, therefore, have emotional costs, potentially diminishing aspects of well-being. Additionally, the negative association between moral attentiveness and social connectedness may reflect the potential for moral scrutiny to create interpersonal tensions or feelings of alienation, particularly if one's moral concerns are not shared or appreciated by others (Wright & Baril, 2011).

It is important to note that while moral identity and moral attentiveness were positively correlated with each other, their associations with well-being outcomes diverged markedly. This suggests that while both constructs pertain to moral engagement, they may operate through different psychological mechanisms and have distinct associations with individual well-being. Moral identity may function as an integrative aspect of the self that fosters positive outcomes, whereas moral attentiveness may involve cognitive and emotional processes that can be associated with both beneficial and detrimental effects, depending on context and individual differences. These findings contribute to the ongoing discourse on the multifaceted nature of morality and its links with well-being. Our results support this nuanced understanding by demonstrating that different forms of moral engagement can have divergent associations with well-being, underscoring the importance of distinguishing between various moral constructs in psychological research.

Additionally, while the mediation analyses provided preliminary insights into potential mechanisms linking moral engagement to well-being, these findings should be interpreted cautiously due to the study's cross-sectional nature. Research employing longitudinal designs could more effectively assess mediation processes and elucidate the pathways through which moral identity and moral attentiveness are linked to well-being over time.

7 Study 2

In Study 2, we adopted a daily diary design, utilizing personal smartphones and the SEMA application (Koval et al., 2019), to further explore the patterns observed in Study 1. The primary goal was to use experience sampling methodology (ESM) and cross-lagged analyses to investigate the relationships between moral engagement and well-being in more detail, particularly how these relationships might vary over time. Rather than aiming to confirm specific hypotheses, we sought to explore the temporal dynamics between moral identity, moral attentiveness, and well-being, examining how these variables interact on a day-to-day basis. By capturing data in real-time, we aimed to provide a more nuanced understanding of these relationships and explore the possibility of temporal ordering, which might offer insights into potential causal pathways. Specifically, given the findings

of Study 1, we were interested in whether moral identity might be associated with well-being through social connectedness, and whether moral attentiveness might be linked to well-being through rumination but approached these as exploratory questions rather than fixed predictions. This exploratory approach allowed us to remain open to unexpected patterns and alternative explanations, enhancing our understanding of the complex interplay between moral engagement and well-being in everyday life.

8 Method

8.1 Participants

In total, 122 psychology students from a large Australian university participated for course credit. Three participants were removed from the final sample for not completing the study. Due to a technical error, 52 participants continued receiving daily surveys, even after their study period was completed. In these cases, only their first 14 surveys were considered for analysis. Our final sample had 118 participants (78.2% female, 18.5% male, 1.7% non-binary, 1.7% prefer not to say) aged 18–50 ($M = 20.32$, $SD = 5.07$). Our ESM sample size was determined through a power analysis to detect effect sizes of $d = 0.26$ with 80% power and a significance level of $p < 0.05$. However, due to the constraints of our recruitment pool, we acknowledge that our studies may be underpowered to detect smaller effects. The majority of participants were Australian (37%) or Chinese (22.7%) and did not identify with a religion (64.2%). We had missing demographic information for 4 participants. The sample size in Study 2 followed normative EMA design practices (Serdar et al., 2021). To mitigate careless responding, we excluded responses under 650 ms (Geeraerts, 2020), removing one participant with 100% of responses under that threshold. While compliance decline is expected in EMA studies (Eisele et al., 2022; Napa Scollon et al., 2009), we had an acceptable response rate and no participants were removed based on poor compliance ($M = 80.6$, $SD = 20.11$).

8.2 Materials

Shortened versions of the same measures used in Study 1, with the items slightly rewritten to capture momentary data, were used for Study 2. Additionally, a scale measuring positive affect and negative affect was introduced. Table 4 provides descriptive statistics for the variables measured, offering insights into the omega-reliability estimates to reflect internal consistency at within-person and between-person levels, mean levels, within-person variability, between-person variability, and the proportion of variance attributable to differences between individuals (ICC).

Moral Attentiveness. Moral attentiveness was assessed using a shortened version of Reynolds' (2008) scale. Respondents rated five items on a 7-point Likert scale (e.g., "Today, I faced several ethical dilemmas"; 1 = *strongly disagree*, 7 = *strongly agree*; $\alpha = 0.97$).

Moral Identity. Moral identity was evaluated using shortened versions of both Aquino and Reed's (2002) Self-Importance of Moral Identity Scale and Black & Reynold's (2016) Moral Identity Questionnaire. Respondents were presented with a single item from both the internalization and symbolization dimension of the Moral Identity Scale (e.g., "Being someone who has this characteristic was an important part of who I was today"; 1 =

Table 4 Descriptive statistics table for study 2

Scale	Omega within	95% CI within	Omega between	95% CI between	*M*	Within-person SD	Between-person SD	ICC
Moral identity (BR)	0.487	(0.444, 0.531)	0.815	(0.757, 0.872)	3.61	0.42	0.47	0.48
Moral identity (AR)	0.683	(0.647, 0.719)	0.847	(0.784, 0.911)	3.66	0.59	0.69	0.49
Moral attentiveness	0.842	(0.828, 0.856)	0.972	(0.961, 0.983)	2.98	0.86	1.12	0.58
Positive affect	0.798	(0.780, 0.817)	0.952	(0.935, 0.969)	51.97	13.86	17.31	0.53
Negative affect	0.619	(0.584, 0.653)	0.875	(0.833, 0.916)	37.99	12.75	17.05	0.58
Eudaimonia	0.72	(0.693, 0.748)	0.96	(0.945, 0.976)	4.71	0.75	1.08	0.64
Satisfaction with life	–	–	–	–	4.56	0.92	1.17	–
Meaning in life	0.807	(0.786, 0.829)	0.993	(0.989, 0.997)	4.57	0.73	1.27	0.56
Social connectedness	0.514	(0.460, 0.568)	0.809	(0.729, 0.889)	2.97	0.42	0.39	0.72
BBC SWB	0.749	(0.727, 0.771)	0.938	(0.918, 0.957)	3.48	0.42	0.69	0.32
Rumination	0.769	(0.749, 0.790)	0.964	(0.952, 0.976)	3.54	0.84	1.38	0.68

Omega reliabilities were calculated using multilevel confirmatory factor analysis (MCFA) to account for both within- and between-person variance. ICC = intraclass correlation coefficient; *M* = mean; *SD* = standard deviation. Within- and between-person standard deviations represent variability at each level. Life Satisfaction was assessed using a single-item measure; therefore, ICC and omega reliability estimates are not available for this outcome

strongly disagree, 5 = *strongly agree*; α = 0.85). Respondents were presented with a list of three items measuring positive moral traits and three items measuring negative moral traits, from the Moral Identity Questionnaire (e.g., "Today, it was important for me to treat other people fairly."; 1 = *strongly disagree*, 5 = *strongly agree*; α = 0.86).

Subjective Wellbeing. Wellbeing was measured using a shortened version of the BBC-subjective-wellbeing (BBC-SWB) 24-item scale (Kinderman et al., 2011). Respondents rated two items from each of the three domains (physical wellbeing, psychological wellbeing, relationships) from the full scale, on a 5-point Likert scale (e.g., "Are you satisfied with yourself and your achievements?"; 1 = *strongly disagree*, 5 = *strongly agree*; α = 0.94).

Satisfaction with Life. Satisfaction with life was measured using the SWLS scale developed by (Diener et al., 1985). This scale was designed to capture global life satisfaction and is a distinct measure not related to positive affect/negative affect measures of wellbeing. Respondents were presented with 1 item from the scale (Steger et al., 2008), modified to refer to the current day, and rated their response on a 7-point Likert scale ("How satisfied are you with your life, today"; 1 = *not at all*, 7 = *very much so*).

Meaning in Life. Meaning in life was assessed using two items (Steger et al., 2008), rated on a 7-point Likert scale (e.g., "How meaningful does your life feel?"; 1 = *strongly disagree*, 7 = *strongly agree*; α = 0.99).

Eudaimonia. Eudaimonia was measured using Diener et al., (2009) measure of eudaimonia, comprising of three items. Respondents had to rate items on a 7-point Likert scale (e.g., "Considering the last several hours, how much do you agree with the following statement?" and "I have led a purposeful and meaningful life"; 1 = *strongly disagree*, 7 = *strongly agree*; α = 0.92).

Positive Affect and Negative Affect. Trait measures of positive and negative affect were assessed using the positive affect negative affect scale (Watson & Clark, 1994). Respondents rated items on an 11-point Likert scale (0 = *none at all*, 100 = a *great deal*). For ease of analyses, we separated the positive affect items (e.g., "Since yesterday, did you feel happy?"; α = 0.952) from the negative affect items (e.g., "Since yesterday, did you feel angry?"; α = 0.88) to create two separate scales.

Social Connectedness. Social connectedness was assessed using the revised Social Connectedness Scale (SCS-R20; Lee et al., 2001). Respondents rated two items on a 7-point Likert scale (e.g., "Today, did you feel 'close, connected' to others?"; 1 = *strongly disagree*, 7 = *strongly agree*; α = 0.69).

Rumination. Rumination was measured using 5 items from the ruminative response scale (Nolen-Hoeksema & Morrow, 1991). Respondents rated items on a 4-point Likert scale (e.g., "Today, how much did you think ""Why do I always react this way?""; 1 = *almost never*, 4 = *almost always*; α = 0.96).

9 Procedure

All participants in the studies were required to provide informed consent before participating. Participants received instructions through a YouTube video, which is available in the supplementary material and completed surveys using the SEMA3 application (Koval et al., 2019). Participants were asked to complete a brief survey, approximately 3.5 min in length, once a day over the course of 14 days. After completing the study, all participants were fully debriefed.

9.1 Approach to Analyses

Our analytic strategy for Study 2 incorporated Linear Mixed Models (LMMs), conducted using the lme4 package in R (R Core Team, 2022). To account for intra-individual variability, all models included random intercepts for participants. Where model convergence allowed, we also included random slopes for well-being variables to capture within-person variation. Each well-being outcome was examined in separate models, with separate models for each predictor (moral attentiveness or moral identity). This means that for each outcome variable, we tested the association of moral attentiveness and moral identity independently rather than including them in the same model.

To increase transparency and assess the robustness of effects, we ran two versions of each model: one including only the target predictor (i.e., a bivariate model), and a second controlling for the other form(s) of moral engagement. Results for both model types are summarized (Tables 5 and 6); full model specifications and coefficients are reported in the Supplementary Materials (Tables 9, 10, 11 and 12), and all analysis code is available via OSF (https://osf.io/6qevj/files/osfstorage?view_only=8b6598f2c5704e718d7e4052ac7048d7). Given the significant shared variance between moral attentiveness and moral identity ($r = 0.22$, $p < 0.01$), and the minimal differences observed between models with and without controls, we primarily interpret the results from the models with controls in the main text, as they provide a more conservative estimate of the relationships.

All predictor variables were person-mean centered to ensure that models specifically assessed deviations from an individual's mean level, allowing us to isolate within-person effects. The first set of models were momentary continuous prediction models, which examined whether fluctuations in predictor variables (e.g., moral attentiveness or moral identity) were associated with fluctuations in well-being outcomes on the same day. These models assessed day-to-day variations—not moment-to-moment fluctuations within a single day—and did not establish temporal precedence between predictors and outcomes.

Next, we conducted models assessing the association between process variables (social connectedness and rumination) and well-being outcomes, while controlling for the alternative mediator. This allowed us to determine whether process variables contributed to well-being outcomes independent of one another.

To explore temporal relationships, we employed fully cross-lagged models, which examined whether predictors (moral attentiveness or moral identity) on one day predicted changes in process and well-being variables on the following day. These models controlled for prior-day levels of both predictor and outcome variables to better assess directionality and temporal precedence.

Finally, multilevel mediation models were conducted to explore whether process variables (social connectedness or rumination) mediated the relationship between predictor variables at time t and well-being at time $t+1$. These mediation analyses were restricted to pathways that were supported by both the momentary continuous prediction models and the cross-lagged models, ensuring that only theoretically and empirically justified pathways were examined.

Model fit was assessed based on the convergence of the LMMs, and intra-class correlation coefficients (ICCs) were computed where applicable to quantify the proportion of variance explained by between-person differences. All statistical tests were two-tailed, with a significance threshold of $p < 0.05$.

Table 5 Summary of within-person effects of moral engagement on well-being: comparison of bivariate and controlled linear mixed models

Outcome variable	Predictor	Bivariate model β (SE)	Model with controls β (SE)
BBC SWB	Moral Identity (BR)	0.04 (0.02)*	0.04 (0.02)*
	Moral Identity (AR)	0.14 (0.02)***	0.15 (0.02)***
	Moral Attentiveness	0.00 (0.02)	−0.01 (0.02)
Eudaimonia	Moral Identity (BR)	0.13 (0.02)***	0.13 (0.03)***
	Moral Identity (AR)	0.35 (0.03)***	0.36 (0.04)***
	Moral Attentiveness	0.03 (0.03)	−0.01 (0.02)
Satisfaction with life	Moral Identity (BR)	0.10 (0.03)**	0.09 (0.04)**
	Moral Identity (AR)	0.25 (0.04)***	0.26 (0.04)***
	Moral Attentiveness	0.02 (0.04)	−0.02 (0.04)
Meaning in life	Moral Identity (BR)	0.09(0.03)***	0.09 (0.03)**
	Moral Identity (AR)	0.21 (0.04)***	0.22 (0.04)***
	Moral Attentiveness	0.05 (0.03)	0.01 (0.03)
Positive affect	Moral Identity (BR)	1.33 (0.54)*	1.44 (0.57)*
	Moral Identity (AR)	3.15 (0.65)***	3.18 (0.67)***
	Moral Attentiveness	0.03 (0.55)	−0.53 (0.56)
Negative affect	Moral Identity (BR)	0.75 (0.47)	0.36 (0.47)
	Moral Identity (AR)	−2.22 (0.52)***	−2.38 (0.52)***
	Moral Attentiveness	2.47 (0.50)***	2.53 (0.53)***
Rumination	Moral Identity (BR)	0.03 (0.03)	−0.00 (0.03)
	Moral Identity (AR)	−0.15 (0.03)***	−0.15 (0.03)***
	Moral Attentiveness	0.17 (0.04)***	0.19 (0.04)***
Social connectedness	Moral Identity (BR)	0.04 (0.01)*	0.03 (0.01)*
	Moral Identity (AR)	0.01 (0.01)	0.01 (0.02)
	Moral Attentiveness	0.01 (0.01)	−0.00 (0.02)

β = standardised beta, SE = standard error. MI was measured using two scales; MI (Black & Reynolds) & MI (Aquino & Reed). Values reflect fixed effects from linear mixed models. Bivariate models include each predictor independently. Controlled models include the alternative measures of moral engagement as covariates. Full models and code are accessible via OSF (https://osf.io/6qevj/files/osfstorage?view_only=8b6598f2c5704e718d7e4052ac7048d7)

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

10 Results

10.1 Momentary Continuous Prediction Analyses

To examine the relationship between moral engagement and well-being in Study 2, we first ran a series of bivariate linear mixed models, with each moral engagement variable entered separately as a predictor for each outcome variable. These models did not include any covariates and reflect raw within-person associations. We then re-ran the models including the other moral engagement variable(s) as controls to evaluate the robustness of effects. A summary of these models is presented in Table 5 and Table 6. Overall, the pattern of results was consistent across both sets of models: key associations between moral identity and positive well-being outcomes, and between moral attentiveness and negative outcomes

Table 6 Summary of Within-Person Effects of Rumination & Social Connectedness on Well-Being: Comparison of Bivariate and Controlled Linear Mixed Models

Outcome variable	Predictor	Bivariate model β (SE)	Model with controls β (SE)
BBC SWB	Rumination	−0.13 (0.02)***	−0.18 (0.05)***
	Social connectedness	−0.01 (0.01)	−0.01 (0.01)
Eudaimonia	Rumination	−0.19 (0.03)***	−0.24 (0.04)***
	Social connectedness	0.01 (0.02)	0.07 (0.04)
Satisfaction with life	Rumination	−0.25 (0.04)***	−0.24 (0.04)***
	Social connectedness	−0.01 (0.03)	0.20 (0.04)***
Meaning in life	Rumination	−0.18 (0.03)***	−0.25 (0.04)***
	Social connectedness	−0.01 (0.02)	0.21 (0.04)***
Positive affect	Rumination	−4.28 (0.57)***	−0.22 (0.05)***
	Social connectedness	−0.94 (0.45)*	−0.68 (0.44)
negative affect	Rumination	5.25 (0.51)***	−0.34 (0.05)***
	Social connectedness	1.62 (0.45)***	0.02 (0.05)

β = standardised beta, SE = standard error. Values reflect fixed effects from linear mixed models. Bivariate models include each predictor independently. Controlled models include the alternative predictor as a covariate. Full models and code are accessible via OSF (https://osf.io/6qevj/files/osfstorage?view_only=8b6598f2c5704e718d7e4052ac7048d7)

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

(e.g., rumination and negative affect), were observed in both approaches. While effect sizes were generally slightly attenuated in the controlled models, the direction and significance of most findings remained stable. This consistency suggests that the observed effects are not artifacts of model specification. Nonetheless, a few differences emerged—for example, the association between moral attentiveness and meaning in life reached significance only in the controlled model—highlighting the value of considering shared variance.

As seen in Table 5, moral attentiveness was not associated with most well-being outcomes, also when controlling for moral identity. However, in both bivariate and controlled models, moral attentiveness was significantly associated with negative affect and rumination, suggesting that while moral attentiveness may not directly relate to positive well-being outcomes, it is linked to increased negative affect and cognitive distress, particularly in the form of rumination.

The moral identity (Black & Reynolds, 2016) scale showed consistent positive associations with well-being outcomes across all models. It was significantly associated with higher BBC SWB, eudaimonia, satisfaction with life, meaning in life, and positive affect. However, it was not associated with negative affect or rumination. Additionally, this scale was positively associated with social connectedness, indicating that individuals with higher moral identity as measured by Black and Reynolds (2016) tend to experience greater social connectedness.

Across all models, the moral identity (Aquino & Reed, 2002) scale showed strong positive associations with well-being outcomes. It was significantly and positively associated with BBC SWB, eudaimonia, satisfaction with life, meaning in life, and positive affect. Notably, this scale also showed a significant negative association with negative affect and rumination, suggesting that a strong moral identity as measured by this scale may be related to lower negative emotional experiences and reduced cognitive distress. However, it was unrelated to social connectedness.

Table 6 presents the summary of the within-person effects of rumination and social connectedness on various well-being outcomes. Rumination, across all models, was consistently and negatively associated with several well-being outcomes. It showed significant negative associations with BBC Subjective Wellbeing (SWB), eudaimonia, satisfaction with life, meaning in life, and positive affect. Additionally, rumination was negatively associated with negative affect. These findings indicate that higher levels of rumination are consistently linked to lower well-being, reduced satisfaction with life, diminished positive affect, and decreased negative affect, reflecting its detrimental impact on mental health.

When controlling for rumination, social connectedness was associated with some well-being outcomes, including satisfaction with life and meaning in life, but was unrelated with BBC SWB, eudaimonia, or positive affect. This suggests that individuals who experience greater social connectedness report higher satisfaction with life and a greater sense of meaning in life.

10.2 CROSS-LAGGED Analyses

Table 7 presents the results of fully cross-lagged models, which examined the within-person effects of moral attentiveness and moral identity, measured using two scales: Black and Reynolds (2016) and Aquino & Reed (2008) on various well-being outcomes. Moral attentiveness did not show significant associations with most well-being outcomes. Specifically, moral attentiveness was unrelated to any of the wellbeing variables. However, moral attentiveness was significantly associated with rumination, suggesting that individuals who are more attuned to moral considerations are more likely to engage in rumination over time. No significant relationship was observed between moral attentiveness and negative affect or social connectedness.

Table 7 Fully Cross-Lagged Models (Within-Person Effects), Demonstrating the Effect of "Moral Attentiveness" and "Moral Identity" on Each Outcome Variable

	Predictor variables					
	"Moral attentiveness"		"Moral identity (AR)"		"Moral identity (BR)"	
Outcome variables	*β (SE)*	*p*	*β (SE)*	*p*	*β (SE)*	*p*
BBC SWB	−0.02 (0.02)	0.160	0.01 (0.02)	0.709	−0.01 (0.02)	0.601
Eudaimonia	−0.01 (0.03)	0.643	−0.00 (0.03)	0.891	0.00 (0.03)	0.981
Satisfaction with life	0.00 (0.04)	0.954	0.00 (0.04)	0.973	0.00 (0.04)	0.914
Meaning in life	−0.03 (0.03)	0.382	0.03 (0.03)	0.403	−0.05 (0.03)	0.115
Positive affect	−0.19 (0.51)	0.710	−0.42 (0.53)	0.425	−0.02 (0.54)	0.973
Negative affect	0.42 (0.50)	0.402	0.86 (0.46)	0.061	0.58 (0.47)	0.229
Rumination	0.09 (0.04)	**0.012***	0.08 (0.03)	**0.013***	0.03 (0.03)	0.440
Social connect	−0.01 (0.02)	0.648	0.03 (0.02)	0.111	0.01 (0.02)	0.786

β = standardised beta, SE = standard error, CI = confidence interval, Moral identity was measured using two scales; moral identity (Black & Reynolds) & moral identity (Aquino & Reed). Person-mean-centred of predictor variables, lagged iterations of outcome variables, and alternative predictors were included as control variables. Results in bold indicate statistically significant effects

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Moral identity as measured by the Aquino & Reed (2008) scale did not show significant associations with most well-being outcomes. However, there was a marginally significant association with negative affect, suggesting a trend toward higher levels of negative affect for those with higher moral identity. Additionally, moral identity (Aquino & Reed, 2008) was significantly related to rumination, indicating that individuals with higher moral identity tend to ruminate more. No significant associations were observed with social connectedness. Moral identity as measured by the Black and Reynolds (2016) scale did not demonstrate significant associations with any of the well-being outcomes..

10.3 Mediation Analyses

In Study 2, mediation modeling was used to explore whether our hypotheses were supported when observing within-person variance in the cross-lagged modeling. We examined only those pathways supported by momentary prediction and cross-lagged analyses. Consequently, moral identity as measured by the adapted Aquino & Reed (2008) scale was excluded, as it was not associated with social connectedness. The mediation models were conducted using lagged iterations, with moral engagement variables predicting the process variables (like rumination) and well-being outcomes on the next day. Moral identity, as measured by the Black and Reynolds (2016) scale, did not show significant direct effects between moral identity and well-being, nor any significant indirect effects via social connectedness. Thus, we found no evidence supporting a mediated relationship between moral identity and well-being (see Supplementary Materials).

The regression coefficients between moral attentiveness and various well-being measures were unrelated, with the exception of negative affect. However, it is still possible to explore indirect effects even in the absence of direct effects (Bollen, 2014; Hayes, 2022). For moral attentiveness, rumination mediated the relationship with negative affect (direct effect: $\beta = -0.08$, 95% CI [−0.85, 0.81]; indirect effect: $\beta = 0.70$, 95% CI [0.31, 1.10]). The analysis also revealed significant indirect effects, even though there was no total effect, for meaning in life (direct effect: $\beta = -0.003$, 95% CI [−0.06, 0.05]; indirect effect: $\beta = -0.03$, 95% CI [−0.05, −0.02]), eudaimonia (direct effect: $\beta = 0.01$, 95% CI [−0.04, 0.06]; indirect effect: $\beta = -0.03$, 95% CI [−0.05, −0.02]), BBC-SWB (direct effect: $\beta = -0.01$, 95% CI [−0.03, 0.02]; indirect effect: $\beta = -0.02$, 95% CI [−0.03, −0.01]), satisfaction with life (direct effect: $\beta = 0.03$, 95% CI [−0.04, 0.10]; indirect effect: $\beta = -0.04$, 95% CI [−0.08, −0.02]), and positive affect (direct effect: $\beta = 0.24$, 95% CI [−0.74, 1.21]; indirect effect: $\beta = -0.61$, 95% CI [−1.00, −0.23]). These findings suggest that moral attentiveness may influence various well-being outcomes through increased rumination.

11 Discussion

The results of Study 2 provide nuanced insights into the relationships between moral engagement variables—moral attentiveness and moral identity—and various well-being outcomes. Utilizing ecological momentary assessment (EMA) data collected via daily diaries, the study aimed to explore the temporal dynamics between these variables on a day-to-day basis, with a particular focus on understanding the potential mediating roles of rumination and social connectedness. While most scales demonstrated adequate reliability at both within- and between-person levels (McNeish, 2018), we note that the within-person omega values for Moral Identity (BR) and Social Connectedness were relatively

modest, indicating some caution is warranted in interpreting within-person variation for these constructs.

Moral attentiveness did not show significant direct effects on most well-being outcomes, including BBC-SWB, eudaimonia, satisfaction with life, and meaning in life. However, a notable exception was found with negative affect, where higher levels of moral attentiveness were associated with increased negative affect (Table 5). This finding aligns with the idea that heightened moral attentiveness may lead to increased rumination or self-critical reflection, potentially exacerbating negative emotions. Indeed, our mediation analyses supported this notion, revealing an indirect effect via rumination of moral attentiveness on several well-being outcomes, including negative affect, meaning in life, eudaimonia, BBC-SWB, satisfaction with life, and positive affect. While the mediation effects were statistically significant, it is important to approach these findings cautiously, especially given the lack of direct effects for most well-being outcomes. The role of rumination as a mediator suggests that moral attentiveness might have complex, multifaceted impacts on well-being, possibly dependent on how individuals process and reflect on moral content.

In contrast, moral identity, as measured by both the Black and Reynolds (2016; BR) and Aquino & Reed (2018; AR) scales, demonstrated consistent positive associations with several well-being outcomes. Moral identity (BR) was positively associated with BBC-SWB, eudaimonia, satisfaction with life, meaning in life, and positive affect, while moral identity (AR) showed even stronger associations across these outcomes. This suggests that individuals who view morality as central to their identity generally experience greater well-being. However, the fully cross-lagged models did not reveal significant lagged effects of moral identity on well-being, implying that these relationships may not manifest dynamically over short periods. Given that moral identity is often seen as a stable trait, it may not fluctuate significantly over a few days, which could limit its capacity to predict day-to-day changes in social connectedness and well-being. An unexpected finding, however, was that increased moral identity (as measured by the AR scale) predicted higher levels of rumination. This result reflects ongoing debates about the stability versus situational variability of moral identity (Blasi, 2004; Monin & Jordan, 2009; Moshman, 2005; Stets & Carter, 2006), suggesting that moral identity may not function uniformly across contexts. While often conceptualized as a stable aspect of the self, recent perspectives acknowledge that the salience and expression of moral identity can fluctuate depending on situational cues and internal psychological processes. It is possible that when individuals are more attuned to their moral identity on a given day, they may also be more likely to reflect critically on their moral actions or perceived failures, which in turn could heighten ruminative thought. This context-dependent activation may help explain the observed link between daily moral identity and increased rumination in our findings.

The examination of rumination and social connectedness as predictors of well-being yielded some noteworthy findings. Rumination was consistently negatively associated with well-being outcomes, including BBC-SWB, eudaimonia, satisfaction with life, meaning in life, and positive affect, and was positively associated with negative affect. This reinforces the well-established understanding that rumination is detrimental to well-being, potentially amplifying negative emotional states and diminishing positive ones. Conversely, social connectedness did not show significant associations with most well-being outcomes, except for strong positive associations with satisfaction with life and meaning in life. This was somewhat surprising, given that previous literature has often highlighted the protective role of social connectedness for well-being. The lack of significant findings here could suggest that the effects of social connectedness might be more context-dependent or require a longer time frame to manifest.

The results from Study 2 offer valuable insights into the complex interplay between moral engagement and well-being, but they also underscore the importance of interpreting these relationships with caution. The absence of significant lagged effects in the cross-lagged models suggests that the daily associations observed may not imply causal relationships over short periods. The strong direct link between moral identity and well-being outcomes highlight the importance of moral identity as a potential source of well-being, but these findings are tempered by the lack of support for temporal dynamics. Moreover, while the mediation analyses provided some evidence for the role of rumination in mediating the effects of moral attentiveness on well-being, these findings should be viewed as exploratory rather than confirmatory. The study's design, while robust in capturing day-to-day variability, may not fully capture the longer-term processes that contribute to well-being.

12 General Discussion

Across the two studies presented in this paper, we explored the relationship between different forms of moral engagement—moral identity and moral attentiveness—and various aspects of well-being. Our findings suggest that these forms of moral engagement are differentially associated with well-being, although these associations are not uniform across all well-being indicators. This underscores the complexity and multifaceted nature of both moral engagement and well-being, necessitating a nuanced interpretation of the results.

13 Moral Identity

Moral identity, as measured by both the Black & Reynolds (BR) and Aquino & Reed (AR) scales, consistently demonstrated positive associations with well-being, particularly in terms of BBC-SWB, eudaimonia, satisfaction with life, meaning in life, and positive affect. The AR scale showed even stronger associations across these outcomes, suggesting that individuals who perceive moral values as central to their identity tend to experience higher levels of well-being. However, the fully cross-lagged models did not reveal significant lagged effects of moral identity on well-being, indicating that these relationships may not be temporally dynamic within the short-term daily framework of this study. This could be attributed to the stable nature of moral identity, which may not fluctuate significantly within individuals over short periods, thus limiting its predictive power for day-to-day changes in well-being. An unexpected finding was that increased moral identity (as measured by the AR scale) predicted higher levels of rumination. This suggests that while moral identity may be linked with a sense of purpose and fulfillment, it may also increase emotional distress, possibly due to the pressures or challenges associated with upholding moral values. These findings imply that the well-being benefits of moral identity are nuanced and may come with emotional costs that should be considered in future research.

We acknowledge a potential limitation in our use of a daily measure of moral identity in Study 2. While our aim was to explore whether fluctuations in moral identity might relate to day-to-day variation in well-being, our findings did not support strong within-person associations. As such, it is possible that the daily reports of moral identity captured relatively stable individual differences rather than meaningful within-person fluctuations. Alternatively, this approach may have reflected participants' perceived moral importance on a given day, which may not reliably track shifts in their core moral self-concept. Future

research using more intensive longitudinal designs or alternative measurement strategies may help clarify whether and how moral identity varies meaningfully at short timescales.

14 Moral Attentiveness

Moral attentiveness demonstrated more nuanced and variable relationships with well-being. Although the cross-sectional data showed some positive associations, these were less consistent when controlling for other variables. The mediation analyses suggested that rumination partially mediated the relationship between moral attentiveness and well-being, particularly negative affect, indicating that increased moral attentiveness might lead to greater rumination, which in turn negatively impacts well-being. However, this pathway was not robust across all models, indicating that other mediators or moderators may play a role in this relationship. The lack of consistent direct effects between moral attentiveness and well-being suggests that cognitive engagement with moral content alone might not be sufficient to drive well-being outcomes and that the emotional and social context in which this engagement occurs is crucial.

We recognize that our cross-lagged analyses, which used a 1-day lag, have limitations in capturing the temporal dynamics of processes like moral attentiveness and rumination. These effects may indeed manifest over much shorter timescales, such as minutes or hours, and a 1-day lag may be too coarse to detect these interactions. Future studies should consider employing designs that can capture these more immediate temporal dynamics, perhaps through more frequent sampling, to better understand the nuances of how moral attentiveness and rumination interact and influence well-being.

15 Wellbeing

In selecting our outcome measures, we sought to encompass a wide array of dimensions to understand the relationship between moral engagement and well-being more broadly. This exploratory approach commonly used by researchers (Bastian et al., 2012; Erbas et al., 2014; Erbas et al., 2019; Haines et al., 2016), helps to ensure that findings are not restricted to a single aspect of well-being. Our results reveal variability across different measures of well-being, highlighting that well-being is a complex and multifaceted construct. The variability observed underscores the importance of future research to delineate the specific pathways through which different forms of moral engagement may uniquely relate to various components of well-being.

Our mediation analyses across both studies provide insight into the potential mechanisms linking moral identity and moral attentiveness to well-being. Social connectedness appeared to mediate the relationship between moral identity and positive well-being, while rumination mediated the relationship between moral attentiveness and negative well-being. However, these findings are based on correlational data and should be interpreted with caution. The persistence of direct effects in some cases indicates additional unexplained variance or partial mediation, and in cases where indirect effects reduced direct effects to non-significance, it suggested full mediation. These results highlight the complexity of the relationships and suggest that future research should explore additional mediators or pathways. Moreover, while we have taken steps to mitigate concerns about collinearity, we acknowledge that statistical artifacts may still influence our results.

While our findings contribute to understanding the relationship between moral engagement and well-being, it is important to consider potential third variables that could influence both moral attentiveness and well-being. Variables such as personality traits (e.g., conscientiousness or agreeableness), situational factors (e.g., stress or social environment), or broader contextual influences (e.g., cultural norms) might affect both an individual's moral attentiveness and their well-being. For instance, a highly conscientious person might naturally be more morally attentive and have higher well-being due to their disciplined approach to life. Similarly, individuals in supportive social environments may experience enhanced well-being, which could also foster greater moral attentiveness. The cross-lagged analyses used in this study, while valuable for exploring temporal relationships, are limited in their ability to establish causality. These models cannot fully account for all potential confounding factors, leaving open the possibility that unmeasured variables may be driving the observed relationships. Future research should consider incorporating additional control variables, employing more sophisticated statistical techniques, or using experimental designs to better isolate the effects of moral attentiveness on well-being.

16 Limitations & Future Directions

In the current research, we explored moral engagement through the lenses of moral attentiveness and moral identity. While both constructs reflect engagement with moral content, they differ in their focus and underlying processes. Moral attentiveness relates to the attentional and cognitive aspects of engaging with moral dilemmas, whereas moral identity involves a deeper, motivational-emotional connection to moral values. Given these differences, it is challenging to pinpoint precisely which aspect of moral engagement drives the observed effects on well-being. Future research should aim to disentangle these dimensions further to provide a clearer understanding of their unique contributions.

Furthermore, in Study 2, we used reduced versions of established measures to minimize participant burden while capturing the key constructs of interest. While this approach aligns with best practice to reduce burden on participants in longitudinal studies (Donnellan & Kashy, 2020), we recognize its limitations, particularly regarding the internal consistency of some measures. Reduced item sets can sometimes compromise the reliability and validity of the constructs being measured, potentially affecting the robustness of our findings. Additionally, the abbreviated measures may not fully capture the nuances of the constructs, leading to a less comprehensive assessment of the relationships under investigation. Future research should consider balancing the need to reduce participant burden with the importance of maintaining strong psychometric properties.

Furthermore, moral identity and moral attentiveness are not opposing ways of engaging with moral content but represent different emphases on how individuals approach moral choices and decisions. Our findings indicate a correlation between moral identity and moral attentiveness, supporting the idea that these constructs can co-occur. This highlights the complexity of moral engagement and suggests that future research should explore the interplay between different dimensions of moral engagement more thoroughly.

17 Conclusion

The exploratory results from this research offer valuable insights into how different forms of moral engagement are associated with well-being outcomes. While we observed significant associations between moral identity, moral attentiveness, and well-being, these associations were not uniform across all well-being indicators. Moreover, the pathways through which these forms of moral engagement influence well-being appear to be complex and multifaceted, warranting further investigation. Our study highlights the importance of considering the specific dimensions of moral engagement and the different pathways through which they may lead to increases or decreases in well-being. Future research should continue to explore these relationships with more targeted hypotheses, clearer theoretical frameworks, and a focus on longitudinal or experimental designs to establish causality and better understand the dynamic interplay between moral engagement and well-being.

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s10902-025-00918-z.

Author Contributions Conceptualization: Brock Bastian; Methodology: Tamanna Taher Chloe Goutallier,; Formal analysis and investigation: Tamanna Taher, Chloe Goutallier, Kelly Kirkland; Writing—original draft preparation: Tamanna Taher; Writing—review and editing: Tamanna Taher, Kelly Kirkland, Brock Bastian; Supervision: Brock Bastian.

Funding Open Access funding enabled and organized by CAUL and its Member Institutions. No funding was received to assist with the preparation of this manuscript.

Data Availability The datasets generated by the research during and analyzed during the current studies are available in the Open Science Framework repository, https://osf.io/6qevj/.

Declarations

Conflict of interest The authors have no competing interests to declare that are relevant to the content of this article.

Informed Consent Informed consent was obtained from all participants, and participants were fully debriefed after the study.

Ethical Approval This research project was approved by the Human Research Ethics Committee of The University of Melbourne (HREC Project no. 27777) prior to its initiation.

References

Al Halbusi, H. (2022). Who pays attention to the moral aspects? Role of organizational justice and moral attentiveness in leveraging ethical behavior. *International Journal of Ethics and Systems, 38*(3), 357–379. https://doi.org/10.1108/IJOES-09-2021-0180

Al Halbusi, H., Ruiz-Palomino, P., Morales-Sánchez, R., & Abdel Fattah, F. A. M. (2021). Managerial ethical leadership, ethical climate and employee ethical behavior: Does moral attentiveness matter? *Ethics & Behavior, 31*(8), 604–627. https://doi.org/10.1080/10508422.2021.1937628

Al Halbusi, H., Tang, T.L.-P., Williams, K. A., & Ramayah, T. (2022). Do ethical leaders enhance employee ethical behaviors? *Asian Journal of Business Ethics, 11*(1), 105–135. https://doi.org/10.1007/s13520-022-00143-4

Ames, J., Bluhm, D., Gaskin, J., & Lyytinen, K. (2020). The impact of moral attentiveness on manager's turnover intent. *Society and Business Review, 15*(3), 189–209. https://doi.org/10.1108/SBR-03-2020-0025

Aquino, K., Freeman, D., Reed, A., Lim, V. K. G., & Felps, W. (2009). Testing a social-cognitive model of moral behavior: The interactive influence of situations and moral identity centrality. *Journal of Personality and Social Psychology, 97*(1), 123–141. https://doi.org/10.1037/a0015406

Aquino, K., & Reed, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology, 83*(6), 1423–1440. https://doi.org/10.1037/0022-3514.83.6.1423

Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review, 3*(3), 193–209. https://doi.org/10.1207/s15327957pspr0303_3

Bastian, B., Kuppens, P., Hornsey, M. J., Park, J., Koval, P., & Uchida, Y. (2012). Feeling bad about being sad: The role of social expectancies in amplifying negative mood. *Emotion, 12*(1), 69–80. https://doi.org/10.1037/a0024755

Bindra, V. G., & DeCuir-Gunby, J. T. (2020). Race in cyberspace: college students' moral identity and engagement with race-related issues on social media. *The Urban Review, 52*(3), 541–561. https://doi.org/10.1007/s11256-020-00560-4

Black, J. E., & Reynolds, W. M. (2016). Development, reliability, and validity of the moral identity questionnaire. *Personality and Individual Differences, 97*, 120–129. https://doi.org/10.1016/j.paid.2016.03.041

Blasi, A. (2004). Moral development, self, and identity. In D. K. Lapsley, D. Narvaez, (Eds.). Lawrence Erlbaum Associates Publishers.

Boegershausen, J., Aquino, K., & Reed, A., II. (2015). Moral identity. *Current Opinion in Psychology, 6*(1), 162–166. https://doi.org/10.1016/j.copsyc.2015.07.017

Bollen, K. A. (2014). Structural equations with latent variables. *Structural Equations with Latent Variables*. https://doi.org/10.1002/9781118619179

Bratanova, B., Loughnan, S., & Gatersleben, B. (2012). The moral circle as a common motivational cause of cross-situational pro-environmentalism. *European Journal of Social Psychology, 42*(5), 539–545. https://doi.org/10.1002/ejsp.1871

Chu, P. S., Saucier, D. A., & Hafner, E. (2010). Meta-analysis of the relationships between social support and well-being in children and adolescents. *Journal of Social and Clinical Psychology, 29*(6), 624–645. https://doi.org/10.1521/JSCP.2010.29.6.624

Cloninger, C. R. (2013). What makes people healthy, happy, and fulfilled in the face of current world challenges? *Mens Sana Monographs, 11*(1), 16–24. https://doi.org/10.4103/0973-1229.109288

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Colby, A., & Damon, W. (1992). *Some do care: Contemporary lives of moral commitment*. Free Press.

Culiberg, B., & Mihelič, K. K. (2016). Three ethical frames of reference: Insights into Millennials' ethical judgements and intentions in the workplace. *Business Ethics: A European Review, 25*(1), 94–111. https://doi.org/10.1111/beer.12106

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13

Diener, E., Napa Scollon, C. N., & Lucas, R. E. (2009). The evolving concept of subjective well–being: The multifaceted nature of happiness. In E. Diener (Ed.), *Assessing well–being: The collected works of Ed Diener* (pp. 67–100). Springer. https://doi.org/10.1007/978-90-481-2354-4_4

Donnellan, M. B., & Kashy, D. A. (2020). Designing and managing longitudinal studies. In A. G. C. Wright & M. N. Hallquist (Eds.), *The cambridge handbook of research methods in clinical psychology* (pp. 230–240). Cambridge: Cambridge University Press.

Eden, A., Daalmans, S., Van Ommen, M., & Weljers, A. (2017). Melfi's choice: Morally conflicted content leads to moral rumination in viewers. *Journal of Media Ethics, 32*(3), 142–153. https://doi.org/10.1080/23736992.2017.1329019

Eisele, G., Vachon, H., Lafit, G., Kuppens, P., Houben, M., Myin-Germeys, I., & Viechtbauer, W. (2022). The effects of sampling frequency and questionnaire length on perceived burden, compliance, and careless responding in experience sampling data in a student population. *Assessment, 29*(2), 136–151.

Erbas, Y., Ceulemans, Eva., Lee Pe, Madeline., Koval, P., Kuppens, P. (2014). Negative emotion differentiation: Its personality and well-being correlates and a comparison of different assessment methods. *Cognition and Emotion, 28*(7), 1196–1213. https://doi.org/10.1080/02699931.2013.875890

El Hazzouri, M., Main, K. J., & Sinclair, L. (2019). Out of the closet: When Moral identity and protestant work ethic improve attitudes toward advertising featuring same-sex couples. *Journal of Advertising, 48*(2), 181–196. https://doi.org/10.1080/00913367.2018.1518736

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149–1160.

Fiske, S. T. (2000). Stereotyping, prejudice, and discrimination at the seam between the centuries: Evolution, culture, mind, and brain. *European Journal of Social Psychology, 30*(3), 299–322.

Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). Mcgraw-Hill Book Company.

Garcia, D., Moradi, S., Amato, C., Granjard, A., & Cloninger, K. (2018). Well-being and moral identity. *Psych Journal, 7*(1), 53–54. https://doi.org/10.1002/pchj.205

Geeraerts, L. (2020). Investigating careless responding detection techniques in experience sampling studies [Unpublished manuscript]. OSF. Retrieved from https://osf.io/8ymh5/download

Giacalone, R. A., Jurkiewicz, C. L., & Promislo, M. (2015). Ethics and well-being: The paradoxical implications of individual differences in ethical orientation. *Journal of Business Ethics, 137*(3), 491–506. https://doi.org/10.1007/s10551-015-2558-8

Haidt, J., & Kesebir, S. (2010). *Morality*. John Wiley & Sons, Inc. https://doi.org/10.1002/9780470561119.socpsy002022

Haines, E. L., Deaux, K., & Lofaro, N. (2016). The times they are a-changing … or are they not? A comparison of gender stereotypes, 1983–2014. Psychology of Women Quarterly. Advance online publication.

Hardy, S. A., & Carlo, G. (2011). Moral identity: What is it, how does it develop, and is it linked to moral action? *Child Development Perspectives, 5*(3), 212–218. https://doi.org/10.1111/j.1750-8606.2011.00189.x

Harrington, R., & Loffredo, D. A. (2010). Insight, rumination, and self-reflection as predictors of well-being. *The Journal of Psychology, 145*(1), 39–57. https://doi.org/10.1080/00223980.2010.528072

Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (Third)*. Guilford Press.

Hofmann, W., Wisneski, D. C., Brandt, M. J., & Skitka, L. J. (2014). Morality in everyday life. *Science, 345*(6202), 1340–1343. https://doi.org/10.1126/science.1251560

Huang, X., Western, M., Bian, Y., Li, Y., Côté, R., & Huang, Y. (2019). Social networks and subjective wellbeing in Australia: New evidence from a national survey. *Sociology, 53*(2), 401–421. https://doi.org/10.1177/0038038518760211

Hui, B. P. H., Ng, J. C. K., Berzaghi, E., Cunningham-Amos, L. A., & Kogan, A. (2020). Rewards of kindness? A meta-analysis of the link between prosociality and well- being. *Psychological Bulletin*. https://doi.org/10.1037/bul0000298

Kalokerinos, E. K., Erbas, Y., Ceulemans, E., & Kuppens, P. (2019). Differentiate to regulate: Low negative emotion differentiation is associated with ineffective use but not selection of emotion-regulation strategies. *Psychological Science*, *30*(6), 863–879. https://doi.org/10.1177/0956797619838763

Kant, I. (2011). Immanuel Kant: Groundwork of the metaphysics of morals. *Cambridge University Press*. https://doi.org/10.1017/CBO9780511973741

Khan, R., Murtaza, G., Neveu, J. P., & Newman, A. (2022). Reciprocal relationship between workplace incivility and deviant silence—The moderating role of moral attentiveness. *Applied Psychology, 71*(1), 174–196. https://doi.org/10.1111/apps.12316

Kinderman, P., Schwannauer, M., Pontin, E., & Tai, S. (2011). The development and validation of a general measure of well-being: The BBC well-being scale. *Quality of Life Research, 20*(7), 1035–1042. https://doi.org/10.1007/s11136-010-9841-z

Koval, P., Hinton, J., Dozo, N., Gleeson, J., Alvarez, M., Harrison, A., Vu, D., Susanto, R., Jayaputera, G., & Sinnot, R. (2019). SEMA3: Smartphone Ecological Momentary Assessment, Version 3. http://www.sema3.com.

Krettenauer, T. (2022). When moral identity undermines moral behavior: An integrative framework. *Social and Personality Psychology Compass*. https://doi.org/10.1111/spc3.12655

Krettenauer, T., & Hertz, S. (2015). What Develops in Moral Identities? *A Critical Review. Human Development, 58*(3), 137–153. https://doi.org/10.1159/000433502

Lapsley, D. K., & Narvaez, D. (2004). *Moral development, self, and identity*. Lawrence Erlbaum Associates Publishers.

Lee, R. M., Draper, M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal of Counseling Psychology, 48*(3), 310–318. https://doi.org/10.1037/0022-0167.48.3.310

Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research, 46*(2), 137–155. https://doi.org/10.1023/A:1006824100041

McNeish, D. (2018). Thanks coefficient alpha, we'll take it from here. *Psychological Methods, 23*(3), 412–433. https://doi.org/10.1037/met0000144

Monin, B., & Jordan, A. H. (2009). The dynamic moral self: A social psychological perspective. In: *Personality, Identity, and Character* (pp. 341–354). Cambridge University Press. https://doi.org/10.1017/CBO9780511627125.016.

Morgan, B., & Fowers, B. (2022). Empathy and authenticity online: The roles of moral identity, moral disengagement, and parenting style. *Journal of Personality, 90*(2), 183–202. https://doi.org/10.1111/jopy.12661

Moshman, D. (2005). *Adolescent psychological development: Rationality, morality, and identity* (2nd ed.). Lawrence Erlbaum Associates Publishers.

Murtaza, G., Neveu, J., Khan, R., & Talpur, Q. (2022). Gossip 2.0: The role of social media and moral attentiveness on counterproductive work behaviour. *Applied Psychology*. https://doi.org/10.1111/apps.12449

Nolen-Hoeksema, S., & Morrow, J. (1991). A prospective study of depression and posttraumatic stress symptoms after a natural disaster: The 1989 Loma Prieta earthquake. *Journal of Personality and Social Psychology, 61*(1), 115–121. https://doi.org/10.1037/0022-3514.61.1.115

Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science, 3*(5), 400–424. https://doi.org/10.1111/j.1745-6924.2008.00088.x

Oser, F. (2010). The unhappy moralist effect: A story of hybrid moral dynamics. In: *International research handbook on values education and student wellbeing* (pp. 605–614). Springer Netherlands. https://doi.org/10.1007/978-90-481-8675-4_34.

Piliavin, J. A., & Siegl, E. (2007). Health benefits of volunteering in the Wisconsin longitudinal study. *Journal of Health and Social Behavior, 48*(4), 450–464. https://doi.org/10.1177/002214650704800408

Pratt, M. W., Hunsberger, B., Pancer, S. M., & Alisat, S. (2003). A longitudinal analysis of personal values socialization: Correlates of a moral self- ideal in late adolescence. *Social Development, 12*(4), 563–585. https://doi.org/10.1111/1467-9507.00249

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385–401. https://doi.org/10.1177/014662167700100306

R Core Team. (2022). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. https://www.R-project.org/.

Reed, A., & Aquino, K. F. (2003). Moral identity and the expanding circle of moral regard toward outgroups. *Journal of Personality and Social Psychology, 84*(6), 1270–1286. https://doi.org/10.1037/0022-3514.84.6.1270

Reynolds, S. J. (2008). Moral attentiveness: Who pays attention to the moral aspects of life? *Journal of Applied Psychology, 93*(5), 1027–1041. https://doi.org/10.1037/0021-9010.93.5.1027

Reynolds, S. J., & Miller, J. A. (2015). The recognition of moral issues: Moral awareness, moral sensitivity and moral attentiveness. *Current Opinion in Psychology, 6*, 114–117. https://doi.org/10.1016/j.copsyc.2015.07.007

Rhee, J. J., Schein, C., & Bastian, B. (2019). The what, how, and why of moralization: A review of current definitions, methods, and evidence in moralization research. *Social and Personality Psychology Compass, 13*(12), e12511. https://doi.org/10.1111/spc3.12511

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069–1081. https://doi.org/10.1037/0022-3514.57.6.1069

Serdar, C. C., Ceran Serdar, C., Yücel, D., & Serdar, M. A. (2021). Sample size, power and effect size revisited: Simplified and practical approaches in pre–clinical, clinical and laboratory studies. *Biochemia Medica, 31*(1), 010502.

Shao, R., Aquino, K., & Freeman, D. (2008). Beyond moral reasoning: A review of moral identity research and its implications for business ethics. *Business Ethics Quarterly, 18*(4), 513–540. https://doi.org/10.5840/beq200818436

Smith, J. M., & Alloy, L. B. (2009). A roadmap to rumination: A review of the definition, assessment, and conceptualization of this multifaceted construct. *Clinical Psychology Review, 29*(2), 116–128. https://doi.org/10.1016/j.cpr.2008.10.003

Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology, 53*(1), 80–93. https://doi.org/10.1037/0022-0167.53.1.80

Steger, M. F., Kashdan, T. B., & Oishi, S. (2008). Being good by doing good: Daily eudaimonic activity and well-being. *Journal of Research in Personality, 42*(1), 22–42. https://doi.org/10.1016/j.jrp.2007.03.004

Stets, J. E., & Carter, M. J. (2006). The Moral Identity: A Principle Level Identity. In *Purpose, meaning, and action* (pp. 293–316). Palgrave Macmillan US. https://doi.org/10.1007/978-1-137-10809-8_12.

Suikkanen, J. (2014). Morality and wellbeing. In *Encyclopedia of quality of life and well- being research* (p. 4129–4133). Springer. https://doi.org/10.1007/978-94-007-0753-5_3372.

Watson, D., & Clark, L. A. (1994). *The PANAS-X: Manual for the positive and negative affect schedule - expanded form*. https://doi.org/10.17077/48VT-M4T2.

Waytz, A., & Hofmann, W. (2020). Nudging the better angels of our nature: A field experiment on morality and well-being. *Emotion, 20*(5), 904–909. https://doi.org/10.1037/emo0000588

Wright, J., & Baril, G. (2011). The role of cognitive resources in determining our moral intuitions: Are we all liberals at heart? *Journal of Experimental Social Psychology, 47*, 1007–1012. https://doi.org/10.1016/j.jesp.2011.03.014

Wurthmann, K. (2013). A social cognitive perspective on the relationships between ethics education, moral attentiveness, and PRESOR. *Journal of Business Ethics, 114*(1), 131–153. https://doi.org/10.1007/s10551-012-1330-6