Moral Identity Predicts the Development of Presence of Meaning During Emerging Adulthood

Hyemin Han1©, Indrawati Liauw2*, and Ashley Floyd Kuntz3,*

Abstract
We examined change over time in the relationship between moral identity and presence of meaning during emerging adulthood. Moral identity refers to a sense of morality and moral values that are central to one’s identity. Presence of meaning refers to the belief that one’s existence has meaning, purpose, and value. Participants responded to questions on moral identity and presence of meaning in their senior year of high school and 2 years after. Mixed effects model analyses were used to examine how moral identity and presence of meaning interacted during this 2-year period. The findings demonstrated that moral identity positively predicted presence of meaning over time.

Keywords
moral identity, presence of meaning, meaning in life, positive youth development, transitional period

In the present study, we aim to examine how moral identity, the centrality of moral values to one’s self-identity (Hardy & Carlo, 2005), influences the development of meaning in life, one of the most fundamental factors constituting human flourishing (Seligman, 2011; Steger, Bundick, & Yeager, 2011). We explore this relationship during emerging adulthood, a transitional period between adolescence and adulthood that has been associated with identity formation (Erikson, 1968). Previous research has demonstrated that moral identity is one facet of identity development, and for some individuals, morality constitutes one of the most fundamental aspects of self-identity and contributes to eudaimonic happiness (Phillips, De Freitas, Mott, Gruber, & Knobe, 2017; Strohminger & Nichols, 2014). However, few studies have examined how such moral aspects of self-identity affect the development of meaning in life, which is an important predictor of eudaimonic well-being during this critical period of identity formation. Hence, we investigate the developmental influence of moral identity on meaning in life during emerging adulthood using two-wave data collected from high school graduates.

Meaning in Life
Steger, Frazier, Oishi, and Kaler (2006) defined meaning in life as “the sense made of, and significance felt regarding, the nature of one’s being and existence” (p. 81). This definition remains neutral on the content of what makes one’s life meaningful and focuses instead on personal constructions of meaning. Presence of meaning, which can be measured by the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi, & Kaler, 2006), has been associated with less depression, greater self-esteem and optimism, more positive affect, and a greater appreciation for and satisfaction with life (Adams, Bezner, Drabbs, Zambaran, & Steinhardt, 2000; Fry, 2000; Peterson, Park, & Seligman, 2005; Reker & Wong, 1988; Steger et al., 2006). Moreover, higher presence of meaning prevents risky health behaviors in youth, including drug use, unsafe sex, lack of exercise, and overeating (Brassai, Piko, & Steger, 2011). Presence of meaning is similar to another construct, purpose in life, which is often used in positive youth development studies and has been associated with similar benefits. However, the two constructs differ in that purpose is primarily motivated by the desire “to have an impact on causes or individuals beyond the self” (Bronk, 2011, p. 33), whereas presence of meaning refers to a more general sense of direction and focus in one’s life.

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The other dimension in MLQ, search for meaning, also contributes eventually to positive youth development and identity development (Steger et al., 2011). However, search for meaning is less directly related to positive psychological outcomes compared to presence of meaning. Steger, Kashdan, Sullivan, and Lorentz (2008) reported that although search for meaning led to presence of meaning, it was associated with several negative mental statuses, including anxiety. They showed that presence of meaning was more directly and immediately correlated with positive mental and psychological indicators (e.g., purpose in life and perceived well-being). Similar trends have been reported by other studies as well (Park, Park, & Peterson, 2010; Steger & Kashdan, 2007).

Meaning in life is linked to identity development among youth. Longitudinal research found a bidirectional, mutually reinforcing relationship between meaning in life and identity development (Negru-Subtrica, Pop, Luyckx, Dezutter, & Steger, 2016). While search for meaning dovetailed with identity exploration, presence of meaning predicted identity commitment. Youth who developed a “purposeful worldview” and understood their lives to be meaningful internalized this meaning into a sense of self and acted in ways consistent with this burgeoning identity. Similarly, identity commitments bolstered presence of meaning (Negru-Subtrica et al., 2016).

**Moral Identity Development**

Much of the existing literature on youth identity development focuses on identity exploration and commitment but pays less attention to the content of one’s identity (Hardy et al., 2013). However, a recent study of 9,500 students at 31 universities concluded that “not all identity commitments are equally conducive to healthy functioning; moral commitments may be particularly adaptive” (Hardy et al., 2013, p. 337). This result underscores that moral identity development is closely associated with flourishing.

Moral identity is understood as a motivating factor for moral behavior that helps explain whether a person follows through on doing what she or he knows is the right thing to do (Blasi, 2013; Freeman, Aquino, & McFerran, 2009; Reed, Aquino, & Levy, 2007). Certain features of moral identity take on greater salience among youth, given other cognitive and social development advances occurring at the same time. While children are typically motivated to behave morally for fear of punishment or desire for praise, adolescents are motivated to a greater extent by internal factors (Hardy & Carlo, 2011). They begin to understand themselves as individuals with agency in and social responsibility to the social world and to recognize that the social world is complex and seek to develop consistency and integrity in the ways they respond to the demands of social life (Hardy & Carlo, 2011; Krettenauer et al., 2016).

The development of moral identity, similar to the development of meaning in life, has been associated with a variety of positive youth development indicators. Moral identity has been linked to a greater sense of purpose and social responsibility (Hardy, Walker, Olsen, Woodbury, & Hickman, 2014). In addition, college students with stronger moral identity have less anxiety and depression, less alcohol use and sexual risk-taking behaviors, and report higher levels of self-esteem and meaning in life (Hardy et al., 2013).

Of course, identity formation can occur in multiple domains, for example, religious, career, or academic identity, and such identities in multiple domains influence and moderate wellbeing (Hardy et al., 2013; Meca et al., 2017). Thus, it would not be possible to argue that moral identity is the sole or most fundamental factor determining flourishing. However, moral identity is at least one of the most critical determinants of flourishing, as previous studies have demonstrated that moral aspects are central to describe one’s identity (Strohminger & Nichols, 2014), and morality is regarded as the fundamental factor to perceive and evaluate happiness among both ordinary people and psychologists (Phillips et al., 2017).

Psychologists have shown that moral aspects of human life can contribute to the formation of meaning in life. Developing meaning in life appears to be aided by eudaimonic (i.e., purposeful) rather than hedonistic (i.e., pleasure-seeking) activities. Indeed, individuals who engaged in eudaimonic activities (e.g., expressing gratitude, volunteering, and giving), which are closely associated with moral values, were significantly more likely to report higher presence of meaning and life satisfaction the day following this type of purposeful activity compared to their counterparts who engaged in hedonistic activities (Steger, Kashdan, & Oishi, 2008). Existing research suggests that individuals with a strong sense of moral identity are more likely to engage in eudaimonic activities and prosocial behaviors (Winterich, Aquino, Mittal, & Swartz, 2013); these behaviors, in turn, result in greater knowledge of one’s authentic self (Auhagen & Holub, 2006; Young, Chakroff, & Tom, 2012). Although civic–political identity, which is associated with whether civic–political concerns are central to one’s self-identity (Colby, Beaumont, Ehrlich, & Corngold, 2007; Porter, 2013), seems to be conceptually similar to moral identity, the influences of moral identity on prosocial engagement can be differentiated from those of civic identity. Porter (2013) showed that civic–political identity was positively associated with engagement in political activities, while moral identity was positively associated with volunteering but negatively associated with traditional political activities. Furthermore, Aristotelian moral philosophers have argued that the habituation and internalization of moral virtues into one’s self is essential to achieve eudaimonic happiness, which is tied to meaningfulness (Kristjánsson, 2013; Seligman, 2011), as opposed to mere hedonistic happiness (Han, 2015; Kristjánsson, 2012). Thus, the formation of meaning and moral identity development is understood to be conceptually linked.

**The Present Study**

The present study aims to elucidate the relationships between presence of meaning and moral identity. Existing research shows these are important elements that contribute to positive youth development, but few studies have examined whether and how these constructs interrelate and interact over time. Wetherell (2015) found that regarding moral standards as
important to oneself significantly predicted the formation of meaning in life compared to nonmoral conventional standards. In addition, Hardy et al. (2013) reported a significant association between measured moral identity and presence of meaning. These initial findings raise the question of whether moral identity and meaning in life may develop simultaneously or be mutually reinforcing.

Although much of the existing literature on the development of these constructs has been cross-sectional in nature, we adopted a two-wave analysis design to better understand how these constructs develop over time and to what extent they may be interrelated with one another during emerging adulthood. Drawing from previous developmental psychological studies related to the association between morality and life meaning (Hardy et al., 2013; Negru-Subirica et al., 2016), we hypothesized that moral identity and presence of meaning would positively contribute to the development of each other over time.

### Method

#### Participants

The present study reanalyzed survey data initially collected from 1,555 Californian high schoolers from seven high schools located in Northern, Central, and Southern California for the Civic Purpose Project (Malin, Ballard, & Damon, 2015; Malin, Han, & Liauw, 2017; Porter, 2013; see Table 1 for the distribution of participants according to gender and ethnicity). Participants completed online survey forms in a computer lab during their economics or government class. The survey data were collected using Qualtrics. The title of the survey presented to participants was “Civic Purpose Survey.” There was no incentive for the survey at Time 1 (T1). At T1, all participants were 12th graders and 17.33 years of age on average ($SD = 0.43$ years).

A follow-up survey at Time 2 (T2) was conducted 2 years after the initial survey at T1. At T2, 470 participants responded to the survey (attrition rate = 69.77%; see Table 1 for the attrition rate breakdown by gender and ethnicity). All participants received a US$20 gift card for their time. Although the attrition rate was significantly different across gender, $\chi^2(1, N = 1,555) = 22.57, p < .001$, $\phi = .12$, and ethnicity groups, $\chi^2(6, N = 1,555) = 30.72, p < .001$, $\phi = .14$, the effect size was small ($0.10 \leq \phi < 0.30$). Finally, we conducted Little’s missing completely at random test (Little, 1988) to examine whether participants withdrew from T2 survey at random, and the results were not biased by missing values. The result of the test reported that the data were missing at random without significant systematic biases, $\chi^2(5) = 1.96, p = .85$.

Only a portion of the data set containing all responses relevant to moral identity and meaning in life variables was used for the present study. Data collected from participants who did not complete the meaning in life or moral identity questionnaire were excluded from our analyses. Thirteen of 470 participants (2.78%) were excluded from our analyses when we examined the missingness of T1 meaning in life and moral identity. Moreover, 20 of 470 participants (4.26%) were excluded from our analyses when we examined the missingness of T2 variables. The result of Little’s missing completely at random test indicated that the data were missing at random without significant systematic biases, $\chi^2(16) = 25.76, p = .06$. In addition, we found that data from the included cases did not contain any outlier when we executed STATA 14’s extremes function (Cox, 2017).

#### Measures

**Presence of meaning subscale in MLQ.** Participants responded to a 5-item presence of meaning subscale from the MLQ (Steger et al., 2006). Compared to search for meaning, the presence of meaning has more direct and immediate association with positive psychological indicators, such as purpose in life and perceived well-being (Park et al., 2010; Steger & Kashdan, 2007; Steger, Kashdan, Sullivan, et al., 2008), hence, we decided to focus on the Presence of Meaning subscale in the present study. This subscale assesses the extent to which an individual believes she or he has identified a sense of purpose and meaning in life. Items included “I understand my life’s meaning” and “My life has a clear sense of purpose.” Responses were indicated on a 5-point Likert-type scale anchored at 1 = strongly disagree and 5 = strongly agree, and

### Table 1. Distribution of Participants According to Gender and Ethnicity.

<table>
<thead>
<tr>
<th>Category</th>
<th>T1, n (%)</th>
<th>T2, n (%)</th>
<th>Attrition Rate (Total: 69.77%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>751 (48.30)</td>
<td>184 (39.15)</td>
<td>75.50</td>
</tr>
<tr>
<td>Female</td>
<td>804 (51.70)</td>
<td>286 (60.85)</td>
<td>64.43</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>397 (25.53)</td>
<td>162 (34.47)</td>
<td>59.19</td>
</tr>
<tr>
<td>African American</td>
<td>85 (5.47)</td>
<td>22 (4.62)</td>
<td>75.00</td>
</tr>
<tr>
<td>Latino/Latina</td>
<td>717 (46.11)</td>
<td>189 (40.21)</td>
<td>74.12</td>
</tr>
<tr>
<td>Caucasian</td>
<td>98 (6.30)</td>
<td>29 (6.17)</td>
<td>71.41</td>
</tr>
<tr>
<td>Native American</td>
<td>5 (0.32)</td>
<td>0 (0.00)</td>
<td>100.00</td>
</tr>
<tr>
<td>Multiracial</td>
<td>153 (9.84)</td>
<td>43 (9.15)</td>
<td>73.62</td>
</tr>
<tr>
<td>Other</td>
<td>100 (6.43)</td>
<td>25 (5.32)</td>
<td>75.00</td>
</tr>
<tr>
<td><strong>College attendance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>433 (92.13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>37 (7.87)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. T1 = Time 1; T2 = Time 2.*
2 items are reverse scored. The internal consistency quantified in terms of Cronbach’s $\alpha$ was .71 at T1 and .76 at T2.

**Moral identity.** Moral identity was measured with the Moral Identity subscale included in the civic and moral identity questionnaire; it was initially developed for the Political Engagement Project (Beaumont, Colby, Ehrlich, & Torney-Purta, 2006; Colby et al., 2007) based on Arnold’s (1993) measure and reused in the Civic Project Conducted by Stanford Center on Adolescence (Ballard, Malin, Porter, Colby, & Damon, 2015; Malin et al., 2017; Porter, 2013; see the Supplementary Materials for the questionnaire). Participants saw a drawing of concentric circles, read a list of values, and then responded to the question, “how important are each of the following to your identity.” A total of 16 values were presented. Items included both moral (e.g., “being fair,” “honest”) and nonmoral values (e.g., “smart,” “athletic”). Each value item was rated on a 4-point Likert-type scale anchored at 1 = *not at all central to my identity* and 4 = *very central to my identity*. The final moral identity score was calculated by averaging the perceived centrality of morality-related values (e.g., being fair, willing to stand up for what I believe is right). The calculated Cronbach’s $\alpha$ was .88 at T1 and .89 at T2.

**Demographics.** In addition to the above-mentioned variables on presence of meaning and moral identity, we asked participants to indicate their gender, ethnic background, college attendance at T2, and socioeconomic status (SES). For SES, we asked participants to report the perceived deciles of the overall wealth, educational, and vocational status of their family relative to the U.S. population.

**Procedures**

We first recruited 12th graders in California at T1. Participants were provided with an Internet link to access the survey form hosted online on Qualtrics. Two years after T1, the study researchers contacted each participant via e-mail and phone call and sent participants the Internet link for the survey on Qualtrics. Although some questions (e.g., questions related to life plans) were modified, all other questions including those for our variables of interest and the overall order of presentation of items did not change in the T2 survey.

**Analysis**

In the present study, only data collected from participants who completed all of the MLQ, moral identity scale, and demographics survey were used in the analyses. We conducted correlational analysis in order to examine association between T1 and 2 variables of interest and demographical variables. Then, we conducted mixed model analyses to examine the change over time in the relationship between the development of presence of meaning and moral identity (Rausch, Maxwell, & Kelley, 2003). The dependent variables were T2 presence of meaning and moral identity, respectively. First, we created three different models with different independent variables and covariates. The first model had the variable that was being analyzed (T1 moral identity or T1 presence of meaning) as the independent variables to control for the pretest baseline. In the second model, we added demographic variables, that is, gender, ethnicity, and SES, into the first model. In the third model, we included the T1 independent variable of interest, T1 moral identity when presence of meaning was set as the independent variable, and T1 presence of meaning when moral identity was set as the independent variable. In all three models, participant’s ID and school affiliation were included as random effects to test whether the school-level factor influenced outcomes. We then compared the Akaike information criterion (AIC) and Bayesian information criterion (BIC) values of these models to identify the model with the smaller AIC and BIC values, and thus better fits the data (Aho, Derryberry, & Peterson, 2014). Furthermore, we calculated the intraclass correlation coefficient (ICC) to examine whether the school-level effect significantly influenced dependent variables.

**Results**

**Correlational Analyses**

The correlational coefficients between T1 and T2 variables of interest and demographical variables are presented in Table 2. Descriptive statistics were also presented in the same table. The correlational analyses demonstrated that moral identity and presence of meaning at both time points were positively correlated.

**Model Selection**

To identify the model that best fits the data, we compared the AIC and BIC values among the four different models. The AIC and BIC value for each model is presented in Table 3. According to the reported criterion values for T2 presence of meaning, the third model showed the smallest AIC and BIC values. However, for T2 moral identity, the AIC was smallest in the third model, but the BIC was smallest in the second model. To use the same model for both analyses, we decided to employ the third model, which included the T1 baseline, demographic variables, and T1 independent variable of interest, based on the AIC and logL values.

**Mixed Effects Model Analysis**

Using the third model, we conducted mixed effects model analyses with two dependent variables (see Table 4). First, when T2 presence of meaning was the dependent variable, the baseline presence of meaning and T1 moral identity significantly predicted T2 presence of meaning. Second, when T2 moral identity was the dependent variable, the baseline moral identity was the only significant predictor of T2 moral identity.

Given the significant effect of T1 moral identity on T2 presence of meaning after controlling for T1 presence of meaning, moral identity positively influenced long-term presence of meaning. Participants with T1 moral identity scores that were higher than the median showed a slight decline in their presence of meaning scores from T1 to T2, while participants with
Table 2. Results of Correlation Analyses.

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Moral identity T1</td>
<td>3.25</td>
<td>.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Moral identity T2</td>
<td>3.21</td>
<td>.59</td>
<td>.42***</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Presence of meaning T1</td>
<td>3.75</td>
<td>.81</td>
<td>.21***</td>
<td>.14***</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Presence of meaning T2</td>
<td>3.62</td>
<td>.86</td>
<td>.22***</td>
<td></td>
<td>.31***</td>
<td></td>
<td>.51***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Female</td>
<td></td>
<td></td>
<td>.12**</td>
<td>.11*</td>
<td></td>
<td>-0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Asian</td>
<td></td>
<td></td>
<td>-1.2*</td>
<td>-1.6***</td>
<td>-1.1*</td>
<td>-1.3***</td>
<td>-0.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. African American</td>
<td></td>
<td></td>
<td>-0.03</td>
<td>0.06</td>
<td>0.01</td>
<td></td>
<td>0.01</td>
<td>-0.16***</td>
<td>Ø</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Latino/Latina</td>
<td></td>
<td></td>
<td>0.03</td>
<td>0.06</td>
<td>0.04</td>
<td>0.07</td>
<td>0.02</td>
<td>-0.58***</td>
<td>-0.18***</td>
<td>Ø</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Caucasian</td>
<td></td>
<td></td>
<td>0.06</td>
<td>-0.00</td>
<td>0.01</td>
<td>0.04</td>
<td>0.03</td>
<td>-0.18***</td>
<td>-0.06</td>
<td>-0.21***</td>
<td>Ø</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Multiethnic</td>
<td></td>
<td></td>
<td>0.03</td>
<td>0.07</td>
<td>0.05</td>
<td>-0.01</td>
<td>0.00</td>
<td>-0.22***</td>
<td>-0.07</td>
<td>-0.26***</td>
<td>-0.08</td>
<td>Ø</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Other</td>
<td></td>
<td></td>
<td>0.09*</td>
<td>0.06</td>
<td>0.08</td>
<td>0.06</td>
<td>0.05</td>
<td>-0.17***</td>
<td>-0.05</td>
<td>-0.19***</td>
<td>-0.06</td>
<td>-0.07</td>
<td>Ø</td>
<td></td>
</tr>
<tr>
<td>12. SES</td>
<td>3.17</td>
<td>1.94</td>
<td>.03</td>
<td>-0.01</td>
<td>.13*</td>
<td>.13***</td>
<td>-0.03</td>
<td>0.02</td>
<td>-0.00</td>
<td>-0.16***</td>
<td>0.13***</td>
<td>0.07</td>
<td>0.06</td>
<td>Ø</td>
</tr>
<tr>
<td>13. T2 college attendance</td>
<td></td>
<td></td>
<td>0.02</td>
<td>0.03</td>
<td>-0.01</td>
<td>-0.03</td>
<td>0.03</td>
<td>0.10*</td>
<td>-0.04</td>
<td>-0.02</td>
<td>-0.05</td>
<td>-0.04</td>
<td>0.04</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Note. SES: 1 = the lowest decile of SES; 10 = the highest decile of SES. SES = socioeconomic status; T1 = Time 1; T2 = Time 2.
*p < .05. **p < .01. ***p < .001.

Table 3. Mixed Effects Model Comparison.

<table>
<thead>
<tr>
<th>Model</th>
<th>df</th>
<th>logL</th>
<th>AIC</th>
<th>BIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable = T2 presence of meaning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only with baseline presence of meaning (T1 presence of meaning)</td>
<td>4</td>
<td>-514.97</td>
<td>1,037.95</td>
<td>1,054.40</td>
</tr>
<tr>
<td>With demographical variables</td>
<td>13</td>
<td>467.98</td>
<td>961.97</td>
<td>1,013.86</td>
</tr>
<tr>
<td>With T1 moral identity</td>
<td>13</td>
<td>456.30</td>
<td>940.32</td>
<td>992.07</td>
</tr>
<tr>
<td>Dependent variable = T2 moral identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Only with baseline moral identity (T1 moral identity)</td>
<td>5</td>
<td>-356.41</td>
<td>772.81</td>
<td>743.32</td>
</tr>
<tr>
<td>With demographical variables</td>
<td>12</td>
<td>299.59</td>
<td>623.18</td>
<td>670.87</td>
</tr>
<tr>
<td>With T1 presence of meaning</td>
<td>13</td>
<td>297.55</td>
<td>621.09</td>
<td>672.58</td>
</tr>
</tbody>
</table>

Note. AIC = Akaike information criterion; BIC = Bayesian information criterion; T1 = Time 1; T2 = Time 2.

T1 moral identity scores that were lower than the median had a steeper decline in their presence of meaning scores from T1 to T2 (see Figure 1). However, T1 presence of meaning did not significantly influenced T2 moral identity.

The analysis of ICC demonstrated that the school-level effect was very small or small in our analyses. When T2 presence of meaning was set as the dependent variable, the calculated ICC value was .15. In the case of the analysis of T2 moral identity, the ICC was .03. These results suggest that the effect of the school-level factor on T2 dependent variables was not large.

Discussion

Findings from our regression analysis partially supported our hypothesis. T1 moral identity positively predicted T2 presence of meaning while controlling for the baseline (T1) presence of meaning; however, the effect of T1 presence of meaning on T2 moral identity was insignificant. This finding may be explained by the fact that the presence of meaning construct remains neutral on the content of what makes one’s life meaningful (Steger et al., 2006). In other words, youth may construct meaning of their lives in ways that are not oriented toward expressively moral ends (e.g., finding meaning through being a star athlete or student). Thus, the mere presence of meaning does not necessarily promote moral identity. However, the findings from this study suggest that developing a moral identity does predict presence of meaning. Presumably, the content of this meaning of life would be prosocial in nature, but further research is needed to test this assumption.

We found a decline in presence of meaning during emerging adulthood, although moral identity alleviated such a trend. To date, there are only a handful of studies that had examined T2 presence of meaning during emerging adulthood. However, a similar pattern of decline has been observed in students when they transitioned from high school to emerging adulthood in studies on purpose of life (Damon, 2008; Malin, Reilly, Quinn, & Moran, 2014). Malin, Han, and Liauw (2017) also reported a significant decline in civic engagement and civic purpose after graduation from high school. Collectively, these studies suggest that during the transition to early emerging adulthood that typically involve adjusting to more autonomy and agency, individuals may experience a more uncertain period in the formation of their purpose and meaning in life (Smith, Christoffersen, Davidson, & Herzog, 2011). Given the increased search for meaning and purpose during this period as reported by previous studies (Bronk, Hill, Lapsley, Talib, & Finch, 2009; Steger, Oishi, & Kashdan, 2009), the temporary decrease in presence of meaning could be a process of seeking long-term meaning in life.

While the findings from this study support and extend our existing knowledge of the relationship between moral identity and presence of meaning, there are several limitations that should be addressed in future research. First, participant recruitment was limited to a single state. Second, the search for meaning subscale in MLQ was not surveyed in the present study because as informed by previous literature, presence of meaning more directly predicts well-being outcomes, and it
was necessary to shorten the length of the survey form. Future studies should also examine the relationship between moral identity, searching for meaning, and presence of meaning, as it contributes to identity development and well-being in the long term. Third, although identity formation in multiple domains influence positive youth development (Hardy et al., 2013), we focused on only one domain of identity, moral identity in the present study. A previous study showed that the positive psychological influence of cultural identity diminished after controlling for personal identity (Meca et al., 2017). Similarly, the influence of moral identity might be the influence of identity in another domain associated with moral identity. Hence, there may be left-out variable bias in the present study that should be tested in future study. Fourth, we had to employ a brief measure for moral identity instead of the moral centrality questionnaire designed by Aquino and Reed II (2002), which has been utilized in various previous studies, due to the length of our survey. Additional studies replicating the findings from the present study with the moral centrality questionnaire would contribute to better generalization. Fifth, the quantitative methods used in our study demonstrated that moral identity predicts meaning in life development, but mixed methods or qualitative research would provide insight into whether the content of meaning in life for youth strong on moral identity is prosocial in nature. Finally, because the present study was based on a two-wave data set, instead of a longitudinal data set with multiple time points, we could not fully explain the longitudinal trend in the development of moral identity and presence of meaning. In order to conduct more sophisticated longitudinal analyses, such as the growth curve modeling and latent growth modeling, data should have been collected at more than two time points.

This present study is the first two-wave investigation that examines how moral identity predicts presence of meaning during a transitional period in emerging adulthood. Another key strength of this study is that we sought to understand how these various important constructs associated with positive youth development interact and relate to each other. Despite the limitations of this study, the findings extend our current understanding of the relationship between identity and presence of meaning by showing that the relationship between a single identity content (i.e., moral identity) and presence of meaning is not bidirectional. The findings from the present study might provide empirical evidence to moral philosophers, psychologists, and educators who emphasize the importance of morality in positive psychology and positive youth development (Han, 2015; Kristjánsson, 2013; Malin et al., 2015). The present study may suggest that teaching moral virtues, moral reasoning, and importance of moral values in human life can contribute to the promotion of flourishing during adolescence and emerging adulthood.

### Table 4. Mixed Effects Model Analyses of T2 Presence of Meaning and Moral Identity.

<table>
<thead>
<tr>
<th>Variable</th>
<th>DV = T2 Presence of Meaning</th>
<th>DV = T2 Moral Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>T1 Moral identity</td>
<td>.17</td>
<td>.07</td>
</tr>
<tr>
<td>T1 Presence of meaning</td>
<td>.53</td>
<td>.05</td>
</tr>
<tr>
<td>SES</td>
<td>.04</td>
<td>.02</td>
</tr>
<tr>
<td>Gender</td>
<td>-.00</td>
<td>.08</td>
</tr>
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<td>-.15</td>
<td>.09</td>
</tr>
<tr>
<td>African American</td>
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<td>.18</td>
</tr>
<tr>
<td>Caucasian</td>
<td>.01</td>
<td>.16</td>
</tr>
<tr>
<td>Multiethnicity</td>
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<td>.14</td>
</tr>
<tr>
<td>Other</td>
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<td>.20</td>
</tr>
<tr>
<td>T2 college attendance</td>
<td>-.07</td>
<td>.16</td>
</tr>
</tbody>
</table>

Note. Latino/Latina is the reference category for ethnicity, as the most participants were from this group. Gender: 1 = male; 2 = female. SES: 1 = the lowest decile of SES; 10 = the highest decile of SES. College attendance: 1 = attending; 2 = not attending. The T1 independent variable of interest in each analysis was bolded. SES = socioeconomic status; DV = dependent variable; CI = confidence interval; T1 = Time 1; T2 = Time 2.

*p < .05. **p < .01. ***p < .001 (two-tailed).

![Figure 1](image_url). The change in presence of meaning over time among participants with Time 1 (T1) moral identity score higher than the median and those with T1 moral identity score lower than the median with 95% confidence interval. Solid line: strong moral identity (≥median); dashed line: weak moral identity (<median).
**Authors’ Note**

Indrawati Liauw and Ashley Floyd Kuntz contributed equally to this work.

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**Author Contributions**

Hyemin Han contributed to conception and design, contributed to analysis and interpretation, drafted manuscript, critically revised manuscript, gave final approval, and agrees to be accountable for all aspects of work ensuring integrity and accuracy. Indrawati Liauw contributed to conception and design, contributed to analysis and interpretation, drafted manuscript, critically revised manuscript, gave final approval, and agrees to be accountable for all aspects of work ensuring integrity and accuracy. Ashley Floyd Kuntz contributed to conception and design, contributed to analysis and interpretation, drafted manuscript, critically revised manuscript, gave final approval, and agrees to be accountable for all aspects of work ensuring integrity and accuracy.

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**Supplemental Material**

Supplementary material for this article is available online.

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