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Abstract

Adaptive identity development leads to increases in personality traits that allow for social well-being. The current study tested this claim with respect to forgivingness, a dispositional tendency to forgive others. In a sample of university undergraduates ($N = 214$), we examined the relations between forgivingness and two indicators of identity development: commitment and exploration. Forgivingness uniquely positively related with both identity variables, controlling for the other. Next, we tested mediational models to examine the mechanisms underlying these relationships. Our results suggest that, in part, the association between identity development and forgivingness is mediated by levels of agreeableness and neuroticism, as measured by the Big Five Inventory.
Identity Development and Forgivingness: Tests of Basic Relations and Mediational Pathways

Theory (Erikson, 1950, 1968; Roberts & Caspi, 2003; Roberts, Wood, & Caspi, 2008) and research (Clancy & Dollinger, 1993; Lounsbury, Levy, Leong, & Gibson, 2007) suggest that identity development can lead to broad changes in personality. Much of this empirical work, to date, has focused on how identity variables relate to the Big Five traits (although see Lounsbury et al., 2007 for relations with lower-order traits). The current study sought to extend this research to other traits by examining how identity development relates to dispositional forgivingness, defined as one’s general tendency to forgive others (Roberts, 1995). Specifically, we tested the prediction that greater identity commitment and exploration should predict higher levels of forgivingness. We sampled emerging adults currently enrolled in college, given that this period is characterized by increased identity exploration (Arnett, 2000). Moreover, heeding calls to examine the mediators and moderators of relations with forgivingness (e.g., Shephard & Belicki, 2008), we test whether the link between identity development and forgivingness is mediated by agreeableness and neuroticism, viewed as the two superordinate traits most directly related to forgivingness.

Identity Development and Forgivingness

Recent theories have suggested that identity development should influence personality consistency and change (Roberts & Caspi, 2003; Roberts et al., 2008). That is, committing to an identity has been shown to engender greater personality consistency over time and situations. On the other hand, identity exploration likely leads to personality change. Moreover, it has been suggested that the maturation process, a concomitant to identity development, entails increases in
certain traits that promote social integration and well-being, including conscientiousness, agreeableness, and emotional stability (Hogan & Roberts, 2004). Following this theoretical rationale, and some empirical work (Clancy & Dollinger, 1993; Lounsbury et al., 2007), it can be reasoned that identity and personality development influence one another.

Identity development generally involves two processes: commitment and exploration (Marcia, 1966, 1980). Adaptive identity development entails that these processes both occur, and do so in tandem. Less adaptive paths thus involve commitment prior to proper exploration of options, continued exploration without any commitment, or failing to take part in either process. Indeed, identity commitment is viewed as a benchmark of adaptive development during adolescence and emerging adulthood (Erikson, 1950), but primarily so only after appropriate exploration of one’s options. Social cognitive research has suggested that some methods of exploration are more adaptive than others (e.g., Berzonsky, 1989, 1990). We discuss this research further below, but from this work, we suggest that “adaptive” exploration should involve thorough and unbiased processing of one’s identity options.

Research suggests that high levels of identity commitment and exploration should promote the development of those personality traits indicative of social well-being. Forgivingness is one such trait candidate, as it demonstrates consistent positive relations with both agreeableness and emotional stability (see Mullet, Neto, & Rivière, 2005 for a review), two of the traits diagnostic of psychological maturity. Moreover, these traits have been linked to identity development. Indeed, individuals with a greater sense of identity tend to be higher on agreeableness (Lounsbury et al., 2007) and emotional stability (Clancy & Dollinger, 1993). Therefore, one would predict that adaptive identity development should predict greater
forgivingness, at least partially by virtue of its positive effect on agreeableness and emotional stability.

Two theoretical frameworks provide rationale behind this predicted link between forgivingness and identity development. First, identity capital model suggests that when people commit to a sense of self, they accrue psychological and social “capital” that benefits them in their daily lives (Côte, 1996, 1997). Less tangible forms of capital can include better social perspective taking, ability to explore commitments, and moral reasoning skills. Côte (1997) suggests that such attributes “give individuals the wherewithal to understand and negotiate the various social, occupational, and personal obstacles and opportunities commonly encountered throughout (late-modern) adult life” (p. 578). We suggest that greater forgivingness might constitute one type of capital, as forgiving others leads to better social relations (e.g., Fincham, Hall, & Beach, 2006; Hill & Allemand, 2010; McCullough, Worthington, & Rachal, 1997; Paleari, Regalia, & Fincham, 2005; Rusbult, Hannon, Stocker, & Finkel, 2005), as well as perspective-taking and moral development (e.g., Brown, 2003; Coleman & Byrd, 2003; Wade & Worthington, 2003).

Second, research following identity status (e.g., Marcia, 1966, 1980) and the identity processing style framework (Berzonsky, 1989, 1990) demonstrates that adaptive identity development allows for better social interactions and well-being. Individuals classified in the achieved identity status (marked by levels of both commitment and exploration) have higher levels of intimacy (e.g., Kacerguis & Adams, 1980; Orlofsky, Marcia, & Lesser, 1973), are more willing to reveal themselves to others (Adams, Abraham, & Markstrom, 1987), and are less socially shy (Hamer & Bruch, 1994). With respect to the identity style framework, research suggests that the most adaptive method for identity exploration is through taking an
“informational” approach (Berzonsky, 1989, 1990); informational individuals deliberatively consider incoming information and do not filter out potentially negative reports. These individuals tend to score higher on measures of tolerance, intimacy, and life management than others (Berzonsky & Kuk, 2005), and information-oriented students report better relations within their university (Adams, Berzonsky, & Keating, 2006). Again, such positive social outcomes suggest a possible relation to forgivingness.

In summation, we believe that adaptive identity development should engender greater forgivingness, because this process leads individuals to develop those skills and traits allowing for better social well-being. In the current study, we first, examined the intercorrelations between forgivingness, identity commitment, and identity exploration. To assess adaptive identity exploration, we measured this variable with scores on a measure of information orientation. Second, we tested whether agreeableness and neuroticism mediated the links between the identity development variables and forgivingness. As noted above, we expected that at least part of the effect on forgivingness will result from the positive relations between identity development and these two Big Five traits.

Method

Participants.

Two hundred fourteen undergraduates (56% female, $M_{\text{age}} = 18.8$ years, $SD = 1.10$) participated in an online survey for course credit at a Catholic university in the Midwestern United States. Most students were Caucasian (81%), and were in their first year at college (65%).

Procedure.
All participants took part in the survey through an online site. Participants were able to complete the survey at any time during the day, at any computer with internet access. All data was encrypted prior to transmission to ensure confidentiality.

**Measures.**

**Forgivingness.** Forgivingness was assessed using the Tendency to Forgive scale (Brown, 2003). Participants rate their responses to the four-item measure on a 7-point scale, with higher scores indicating greater willingness to forgive. A sample item is “I tend to get over it quickly when someone hurts my feelings.” Cronbach’s alpha was .78, similar to past studies (Brown, 2003; Hill & Allemand, 2010).

**Adaptive Identity Development.** Two measures of adaptive identity achievement were taken from the Identity Style Inventory (Berzonsky, 1992). Identity commitment was assessed with a 10-item scale; a sample item is “I know what I want to do with my future.” Identity exploration was assessed with an 11-item informational orientation scale; a sample item is “I’ve spent a great deal of time thinking seriously about what I should do with my life.” Participants rate these items on a 5-point scale, with higher scores indicating greater commitment or informational processing. Cronbach’s alphas were .76 and .61 respectively. Although the information orientation alpha is somewhat low, past studies have reported similar values, between .65 to .69 (Adams et al., 2006; Berzonsky, 2008; Berzonsky & Luyckx, 2008; Luyckx et al., 2007).

**Big Five.** The Big Five Inventory (John & Srivastava, 1999) was administered to assess personality. Participants rated the 44 items on a 5-point Likert scale, with higher scores indicating higher levels on the trait of interest. Reliabilities were strong for the two traits of
interest: Agreeableness (eight items, $\alpha = .81$) and Neuroticism (eight items, $\alpha = .82$). Sample items respectively are “is helpful and unselfish with others” and “is depressed, blue.”

Results

Correlational Analyses

Table 1 shows the zero-order correlations, means, and standard deviations for each variables of interest. These descriptive analyses replicated past findings on personality and identity development in two respects. First, forgivingness was strongly positively related to agreeableness, but strongly negatively related to neuroticism. Second, adaptive identity development (both identity commitment and identity exploration) evidenced the same relations with these Big Five variables, albeit to a lesser magnitude.

Given these results, we then tested our first primary hypothesis, that adaptive identity development would be positively related to forgivingness, controlling for age and sex. As predicted, forgivingness was positively associated with both identity development variables: commitment, $r(209) = .21$, $p < .01$; identity exploration, $r(209) = .24$, $p < .01$. Furthermore, the two identity measures were positively interrelated. We next examined whether each variable uniquely related to forgivingness using a multiple regression with identity commitment and exploration as predictors. Indeed, both variables remained significant predictors when controlling for each other: commitment, $\beta = .14$, $t(208) = 1.99$, $p < .05$; exploration, $\beta = .19$, $t(208) = 2.66$, $p < .01$. Therefore, our results provide evidence that forgivingness was uniquely related to both indicators of adaptive identity development.

Tests of Mediation

After finding support for our initial hypothesis, we next examined whether the links between the identity development variables and forgivingness were mediated by agreeableness
and neuroticism. We tested two models, one for each identity predictor, which included both Big Five traits simultaneously as mediators. Tests of the indirect effects were performed using the bootstrapping technique suggested by Preacher and Hayes (2008), using 2000 bootstrapped samples. We report on the coefficient values for the direct and indirect effects, as well as the 95% confidence intervals for the indirect effects in Table 2.

The results were similar across both models. For identity commitment, the indirect effects for agreeableness, $Z = 3.05$, $p < .01$, and neuroticism, $Z = 2.96$, $p < .01$, were both significant. Moreover, the direct effect from commitment to forgivingness was nonsignificant, $B = .12$, $t(210) = 1.02$, $p > .1$, suggesting these mediators served to fully mediate the link. For identity exploration, again both indirect effects were significant: agreeableness, $Z = 2.85$, $p < .01$; neuroticism, $Z = 3.06$, $p < .01$. The direct effect was reduced to only marginal significance, $B = .29$, $t(211) = 1.79$, $p < .08$, providing some evidence again for full mediation. These results suggest that, in line with predictions, the effect of identity development on forgivingness can be explained by its promotion of agreeableness, and attenuation of neuroticism. Given that both mediators were significant in both models, we ran contrasts to examine whether the magnitude of the direct effects differed. This contrast failed to reach significance for either model, both $t < 1$, suggesting that the indirect effects for agreeableness and neuroticism were similar.

Discussion

The current study was designed to advance our understanding of the relationship between identity development and forgivingness. Forgivingness appears to be related to adaptive identity development, such that greater forgivingness was related to higher levels of identity commitment and exploration. Moreover, our study provided insights into possible reasons for these
relationships. Indeed, it appears that identity development engenders greater forgivingness, at least in part, because of it relates positively to agreeableness and negatively to neuroticism.

A clear limitation of our study is its cross-sectional nature, and thus limiting our ability to make any causal inferences. However, these findings offer several promising steps toward characterizing the link between identity development and forgivingness. First, it provides clear evidence of such a relation, given the zero-order correlations, as well as the direct effects found in the mediational analyses. While part of the effect on forgivingness can be explained by agreeableness and neuroticism, it appears that identity development engenders greater forgivingness above and beyond these effects. One reason why this might occur is that identity development necessitates fruitful interactions within one’s social environment. Either way, it is conceivable that both of these would be better achieved by forgiving individuals. Indeed, similar claims have been made with respect to patterns of environmental mastery and personal growth in adulthood (Hill & Allemand, 2010), although again with cross-sectional data. Therefore, we would encourage longitudinal work to better examine the pathways underlying the development of forgivingness.

Another possibility is that people who have committed to an identity might perceive transgressions differently from others. Specifically, committed individuals might view generally innocuous day-to-day transgressions as less personally offensive, because they understand that these transgressions are not negative attacks on who they are as a person. On the other hand, consider an individual who is uncertain of her identity. If someone transgresses against her, she might interpret this offense more personally, even if this transgressions is irrelevant to her sense of identity, because she feels the need to be more defensive of her less developed self. Not surprisingly, forgivingness negatively relates with personality correlates of ego-defensiveness.
(Eaton, Struthers, & Santelli, 2006). Future research thus should examine the link between identity development and forgivingness at the level of individual transgressions.

Throughout this discussion, we have suggested that the direction of the effect goes from identity development to greater forgivingness. This directionality follows from theories of identity capital (Côte, 1996, 1997), as well as longitudinal work suggesting that psychological adjustment precedes forgiveness rather than the opposite direction (Orth, Berking, Walker, Meier, & Znoj, 2008). However, as noted earlier, our cross-sectional design precludes us from testing directional hypotheses. Moreover, it seems logical that forgiving individuals are better equipped for the demands of identity development. Accordingly, it will be of interest to examine the directionality and possible reciprocal causal influences of these constructs using longitudinal data. Indeed, bidirectionality would follow theories of personality development that suggest both that (a) personality changes in response to environmental demands, and (b) people select environments and social roles that best suit their personality (Caspi & Roberts, 1999; Roberts & Caspi, 2003; Roberts et al., 2008).

It also is worth noting the relevance of this work for identity development research. In this study, we examined both identity commitment, and information orientation scores, indicative of participants’ tendency to more adaptively process identity-relevant information. Both were uniquely related to forgivingness, noting the importance of both identity commitment and adaptive identity exploration for understanding identity-to-personality relations. Moreover, our study adds to the blossoming literature on the interrelations of identity and personality development, by proposing that identity development might influence more specific traits partially through its effect on broader traits (like the Big Five).
In addition, the correlations we evidenced between identity variables and personality traits were generally larger in magnitude than those evidenced in past studies. For example, Dunkel, Papini, and Berzonsky (2008) also found that information orientation scores were related to emotional stability and agreeableness, but neither relation received significance (although they did employ a much more stringent significance criterion). Moreover, while Duriez, Soenens, and Beyers (2004) did find a significant relation with agreeableness, again no relation was found with emotional stability. One possible reason for the discrepancy between these findings lies in our measure of personality. While those past studies used a short ten-item measure of the Big Five (Gosling, Rentfrow, & Swann, 2003), we employed a longer measure that might have allowed for greater variability, and thus greater ability to detect effects. Future research thus is needed to reconcile these somewhat discrepant findings.

Two further limitations are worth noting. First, a larger sample size would provide more precise estimates of the mediational pathways, and thus would have allowed a better examination of the direct effects of identity commitment and exploration. Accordingly, we have avoided making any strong conclusions about these direct paths. Second, our sample was largely homogeneous, being primarily Caucasian university freshmen at a religious institution. University freshmen are possibly the most interesting group to study when examining the effects of identity development, as this developmental period is one of wide-scale identity exploration (Arnett, 2000; Erikson, 1950, 1968). However, future work should examine whether these effects hold in more representative samples. Despite these limitations, the current study greatly furthers our understanding of how identity development variables and personality traits coincide, and provides valuable insights for future research on the development of forgivingness.
References


Table 1: Correlations between variables of interest, controlling for age and sex.

<table>
<thead>
<tr>
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<th>2</th>
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<th>4</th>
<th>5</th>
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<td>Forgiveness (1)</td>
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<td>.21*</td>
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<td>.36*</td>
<td>.27*</td>
<td>-.22*</td>
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<td>Identity Exploration (3)</td>
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<td>.24*</td>
<td>-.22*</td>
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<td>Agreeableness (4)</td>
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<td>Neuroticism (5)</td>
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**Mean**

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<th></th>
<th>1.20</th>
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<td><strong>SD</strong></td>
<td>3.83</td>
<td>3.70</td>
<td>3.41</td>
<td>3.69</td>
<td>2.84</td>
</tr>
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</table>

Note: * indicates $p < .01$. N = 214. All variables are on a 5-point scale, except for forgivingness, which is rated on a 7-point scale.
Table 2: Tests of mediation predicting forgivingness from identity development, with agreeableness and neuroticism as mediators.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Direct Effect (s.e.)</th>
<th>Indirect Effect (s.e.)</th>
<th>95% CI for Indirect Effect</th>
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<td>Commitment</td>
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<tr>
<td>Agreeableness</td>
<td>.15 (.05)*</td>
<td>.06 to .28</td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.16 (.05)*</td>
<td>.06 to .28</td>
<td></td>
</tr>
<tr>
<td>Exploration</td>
<td>.29 (.16)</td>
<td></td>
<td></td>
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<tr>
<td>Agreeableness</td>
<td>.18 (.06)*</td>
<td>.07 to .36</td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.23 (.07)*</td>
<td>.09 to .39</td>
<td></td>
</tr>
</tbody>
</table>

Note: * indicates $p < .01$. N = 214.