Identity development is the process by which adolescents and emerging adults search for answers to fundamental questions that surround who they are, including their political and religious views, career choices, and future achievements (Ole, 2016). Identity development often characterized as beginning in adolescence and continuing through emerging adulthood (Arnett, 2000; Kunnen, Sappa, van Geert, & Bonica, 2008). However, because of differing opportunities for exploration or commitment, identity development in some domains (i.e., components of identity, such as religion or political views) may develop earlier or later than others. Thus, it is important to understand not just identity development in general, but domain-specific identity development as well (Kunnen et al., 2008).

Contextual factors may play an important role in the process of identity development. In particular, the transition from high school to college may result in significant changes in a number of domains such as romantic relationships, friendships, and academics (Azmitia, Syed, & Radmacher, 2013; Kunnen et al., 2008). This transition is a time when students explore new potential identities and begin to commit to one of their choosing (Luyckx, Goossens, Soenens, & Beyers, 2006). Consistent with this idea, previous work has found that high school students often had neither explored nor committed to an identity, whereas college students were more likely to be currently exploring identity options (Verschueren, Rassart, Claes, Moons, & Luyckx, 2017). Because the first year of college may be a time of identity instability and development (Azmitia et al., 2013), it is important to understand...
Identity Exploration and Commitment

Identity development occurs as emerging adults explore and learn about different identity alternatives and consider which to adopt as their own. It involves two separate processes: exploration and commitment (Kunnen et al., 2008). Exploration occurs when individuals search for and collect information on alternative identities or perspectives. Commitment occurs when emerging adults have selected an identity that they plan to adopt as their own (Kunnen et al., 2008). Historically, exploration and commitment have been used to develop four identity statuses: achievement, foreclosure, moratorium, and diffusion (Marcia, 1966). Achievement, considered an optimal end result (Marcia, 1966), is when identity exploration has occurred and a commitment has taken place. Foreclosure is when a commitment has been made with no exploration. Moratorium involves current exploration but no commitment. Lastly, diffusion is when individuals have not explored or made a commitment. Although it is generally expected that exploration will lead to commitment, commitment and identity achievement are not always final, as emerging adults may also revisit their identity and explore new views even after making a commitment (Marcia, 1966).

Despite the previous categorical treatment, exploration and commitment happen on a continuum; thus, it may be more useful to investigate identity development in a continuous fashion (McLean, Syed, & Shucard, 2016), particularly when investigating changes over time. By taking a dimensional approach to identity development, one can detect changes in exploration and commitment that may not be captured when creating categories. Previous evidence has suggested that continuity in exploration and commitment is common over the course of one year (Meeus, van de Schoot, Keijsers, Schwartz, & Branje, 2010). However, there is also gradual change in exploration and commitment over time, as emerging adults move toward identity achievement (Meeus et al., 2010). As students progress in identity development, it would be expected that greater exploration would be associated with greater commitment (and therefore identity achievement). In contrast, if individuals are still in the process of identity development, exploration and commitment may be negatively related (i.e., foreclosure or moratorium).

Multiple Domains of Identity

Although identity development is often described as a singular process, emerging adults develop multiple domain-specific identities, and this process may occur with different timing for different domains (McLean et al., 2016). For example, individuals might have made a commitment in their friendship identity (with or without exploration), while simultaneously actively exploring their career identity with no commitment. Eight identity domains have been examined in previous research (McLean et al., 2016): career, family, friendship, romantic relationships, religion, politics, general values, and gender roles.

Changes in career. Career decisions are often multistep processes that may involve extensive exploration in college (Gati, Krausz & Osipow, 1996; Rosemond & Owens, 2018). The selection of an undergraduate major may set the trajectory of emerging adults’ future career options, thus declaring a major may prompt career identity exploration. Declaring a major is often required in the first few semesters of college, therefore students are forced to make a commitment relatively early in their college career (Rosemond & Owens, 2018). Although some students may use the first year of college to thoroughly explore potential majors and long-term careers prior to making a commitment, others may select a major without much consideration of alternatives. Making a career commitment has a positive impact on the college experience, whereas exploration of career goals is associated with negative attitudes about college (Waterman & Waterman, 1970). This may be a reflection of the stress associated with career exploration. Thus, academic major selection may drive career identity exploration during the first year of college.

Changes in relationships. Similar to career identity, social relationships may also change significantly during the first year of college. Changes in family dynamics, particularly parent-child relationships, often occur when students move away from home (Guassi Moreira & Telzer, 2015; Mounts, Valentiner, Anderson, & Boswell, 2006). This may lead students to reconsider their roles in the family, leading to exploration. Furthermore, the family itself may affect identity exploration, as emerging adults with more family support engage in more exploration (Jourdan, 2006) and may be more likely to develop their family and other identities. Therefore, more positive support from family members can result in more positive identity exploration experiences.
Friendship dynamics often change as well during the transition to college. Comfort from budding college friendships aids in establishing identity development across domains (Barry, Madsen, Nelson, Carroll, & Badger, 2009). However, the loss of high school friendships and the formation of new friendships in a larger environment (Oswald & Clark, 2003) may cause instability as students explore the types of friends and friendships they prefer and make commitments to their roles as friends. Along with changing friendships, college introduces emerging adults to a different dating scene. As students are establishing more mature romantic relationships, they may do further exploration and commitment as to who they are as a romantic partner. Previous evidence has suggested that romantic relationship quality and dissolution are often related to identity development in emerging adulthood (Barry et al., 2009; Norona, Olmstead, & Welsh, 2017). Thus, the dramatic changes in interpersonal environment during the transition to college may prompt emerging adults to engage in exploration and commitment in a number of relationship domains.

Changes in beliefs and opinions. The shift from high school to college may also prompt a period of questioning of personal beliefs and opinions such as politics, religion, general values, and gender roles, which could lead to identity instability. For example, religious exploration may occur when emerging adults engage in critical discussions about religious and value-related ideas with their peers, parents, or college faculty (Foster & LaForce, 1999). However, evidence has also suggested that students tend to adopt religious ideals early on from their parents or other significant adults (Copen & Silverstein, 2007). Thus, it is possible that rather than being something to explore, religion could instead provide stability and comfort to students. If this were the case, during the transition to college students may be less inclined to explore or commit to new religions, resulting in greater stability in religious identity compared to other domains. Likewise, other domains involving more abstract beliefs (e.g., politics, gender roles, and values) may also develop later in adulthood. For many such domains, students initially adopt the beliefs of their parents during high school (Johnson, 2017; Wray-Lake, 2019). These beliefs may remain stable throughout college as emerging adults focus on more pressing and immediate aspects of identity (e.g., career and relationship identities), but may be revised in adulthood.

Identity Development and Psychological Well-Being

The process of identity development may also impact social or emotional well-being, including satisfaction with life. Evidence has suggested that subjective well-being and satisfaction with life are influenced by domains that are important and relevant to an individual (Diener, 1984). Thus, a link between identity development and satisfaction with life would demonstrate the importance of identity in psychological well-being. Consistent with this idea, committing to an identity has been associated with higher quality of life and mental health (Azmitia et al., 2013; Berzonsky, 2003; Luyckx et al., 2006; Oleś, 2016; Waterman & Waterman, 1970). In contrast, identity exploration in college has been associated with poorer mental health (Luyckx et al., 2006; Oleś, 2016) and lower satisfaction with college (Waterman & Waterman, 1970). However, there is also some evidence that exploration may have positive impacts on well-being (Berzonsky, 2003; Kunnen et al., 2008; Luyckx et al., 2006). The process of exploration may be stressful in the short-term, although it may produce more positive identity outcomes in the long term. If some areas of identity are more important than others, there may be domain-specific differences in the impacts of identity development on satisfaction with life.

The Present Study

The current study investigated changes and stability in identity exploration and commitment across multiple domains during the first year of college, and investigated the link between identity development and psychological well-being. Students reported on exploration and commitment in eight domains of identity development, and also on satisfaction with life, during the fall and spring of their first year of college. Hypothesis 1 focused on general expectations of stability versus change in both global and domain-specific identity development. It was hypothesized that, although there would be stability in exploration and commitment (Hypothesis 1a), there would also be progress in identity development. It was expected that fall exploration would predict greater commitment in spring (Hypothesis 1b), a pattern indicative of identity achievement. In contrast, fall commitment was expected to be negatively associated with spring exploration (Hypothesis 1c), because individuals who have committed may be less likely to continue to explore other options. Hypothesis 2 predicted that there would be differences in
these patterns across domains. In particular, it was expected that identities that were more directly influenced by the college environment (such as career or relationships) would be more likely to experience change toward identity achievement (i.e., positive relationship between fall exploration and spring commitment, greater support for Hypothesis 1b). In contrast, in domains related to more abstract beliefs and opinions (e.g., politics, religion), individuals may be less likely to engage in exploration if they initially made a commitment (i.e., greater support for Hypothesis 1c). Finally, Hypothesis 3 focused on the relation between identity development and satisfaction with life. It was expected that, across domains, exploration would be negatively associated with satisfaction with life (Hypothesis 3a), whereas commitment would be positively associated with life satisfaction (Hypothesis 3b).

Method

Participants
The current study was conducted at a four-year public liberal arts institution. Following Institutional Review Board approval at the University of Virginia’s College at Wise, college students were invited to complete a series of questionnaires during fall and spring of their first year. In fall, 144 students completed the survey, and in spring, 108 participants completed it. Only the 98 participants (55 women, 56%; 43 men, 44%) who completed questionnaires in both fall and spring were used in the present analyses. Of those students, 91% identified as European American, 10% as African American, 2% as Latino/a, and 2% as American Indian/Native American.

Measures
The Ego Identity Process Questionnaire (Balistreri, Busch-Rossnagel, & Geisinger, 1995) was used to assess identity development in eight domains (career, family, friendship, romantic relationships, religion, politics, values, and gender roles) in both fall and spring. Thirty-two questions assessed exploration and commitment in each domain (see Table 1 for Cronbach’s α for this study at each time point). Exploration questions included items such as, “I have tried to learn about different occupational fields to find the best one for me.” Commitment questions included items such as, “I have definitely decided on the occupation I want to pursue.” Participants responded on a 6-point Likert-type scale, from 1 (strongly disagree) to 6 (strongly agree). Items were reverse-scored as needed so that higher scores indicated more exploration or more commitment. The global exploration and commitment scores included 16 items for each construct, and the mean was taken across all domains. For the domain scores there were two items each assessing exploration and commitment, and the domain score was the mean of the two items. See Table 1 for means and standard deviations for each domain.

The Satisfaction With Life Questionnaire (Diener, Emmons, Larsen, & Griffin, 1985) was used to assess psychological well-being in both fall and spring. The questionnaire had five statements, which participants responded to on a 7-point Likert-type scale of 1 (strongly disagree) to 7 (strongly agree). Example items included, “If I could live my life over, I would change almost nothing,” and “In most ways my life is close to my ideal” (see Table 1 for descriptive statistics).

| TABLE 1 |
| Descriptive Statistics for All Variables |
| | Fall | Spring |
| | N | M | SD | α | N | M | SD | α |
| Global exploration | 98 | 3.73 | .63 | .69 | 98 | 3.63 | .62 | .68 |
| Global commitment | 98 | 4.24 | .73 | .78 | 98 | 4.18 | .69 | .76 |
| Career exploration | 98 | 4.44 | .86 | .78 | 97 | 4.32 | 1.05 |
| Career commitment | 98 | 4.08 | 1.21 | .78 | 98 | 4.21 | 1.19 |
| Family exploration | 97 | 3.90 | 1.13 | .78 | 97 | 3.77 | 1.08 |
| Family commitment | 98 | 4.51 | 1.20 | .78 | 98 | 4.43 | 1.06 |
| Friendship exploration | 98 | 3.82 | 1.05 | .78 | 98 | 3.77 | 1.01 |
| Friendship commitment | 98 | 4.28 | 1.01 | .78 | 98 | 4.31 | 0.99 |
| Romantic relationships exploration | 98 | 3.94 | 1.15 | .78 | 98 | 3.71 | 1.19 |
| Romantic relationships commitment | 98 | 4.22 | 1.25 | .78 | 98 | 4.37 | 1.18 |
| Religion exploration | 98 | 3.16 | 1.14 | .78 | 98 | 3.11 | 1.06 |
| Religion commitment | 98 | 4.58 | 1.94 | .78 | 97 | 4.54 | 1.10 |
| Politics exploration | 98 | 3.95 | 1.24 | .78 | 98 | 3.86 | 1.32 |
| Politics commitment | 98 | 3.83 | 1.44 | .78 | 98 | 3.70 | 1.29 |
| Values exploration | 98 | 3.47 | 1.02 | .78 | 98 | 3.35 | 1.14 |
| Values commitment | 98 | 4.62 | 1.09 | .78 | 97 | 4.40 | 1.05 |
| Gender roles exploration | 98 | 3.17 | 1.31 | .78 | 98 | 3.12 | 1.14 |
| Gender roles commitment | 98 | 3.81 | 1.38 | .78 | 97 | 3.54 | 1.21 |
| Satisfaction with life | 94 | 5.24 | 1.35 | .91 | 98 | 5.20 | 1.22 | .89 |

Note. N = 98.
Procedure
Participants were assessed during the first eight weeks of the fall and the last 12 weeks of the spring semester in their first year of college. In fall, the majority of participants (77%) completed surveys within the first four weeks (the median date for fall surveys was 2.5 weeks after the first day of classes). There was a mean of approximately 6.5 months (194 days, SD = 23.77) between the administration of the fall and spring surveys. At each time point, participants were contacted via phone or email, and then came to the lab to complete the questionnaires under the supervision of a trained research assistant.

Results
First, bivariate correlations were run among all variables for descriptive purposes, to establish general relations among variables (see Supplemental Table 1 at https://osf.io/6tjyw). Of particular interest was the relationship between exploration and commitment within domain, which could indicate the stage of identity development. In fall, there was a significant negative relationship between exploration and commitment in global identity ($r = -.32, p < .01$) as well as for politics ($r = -.41, p < .01$), values ($r = -.25, p < .01$), and gender roles ($r = -.65, p < .01$). Thus, for these domains, higher exploration was associated with less commitment, and less exploration was associated with more commitment. Likewise, in spring, there were significant negative correlations between exploration and commitment in all domains except for family and religion ($rs = -.21$ to $.51, all $p < .05$). This evidence suggests that within each time point individuals may be in either moratorium (exploring without commitment) or foreclosure (made a commitment without exploration).

Stability and Change Over Time in Exploration and Commitment
First, analyses explored the relationship between exploration and commitment over time during the first year of college to address Hypothesis 1. Linear regressions were used to identify whether fall exploration or commitment predicted spring exploration and commitment (see Table 2). The interaction between fall exploration and fall commitment was included in preliminary models, but was not significant for any analyses, thus was excluded from the final models. The results for global identity supported Hypothesis 1a by demonstrating that exploration and commitment were quite stable; greater fall global exploration predicted greater spring exploration, and likewise greater fall global commitment predicted more spring commitment. Contrary to Hypothesis 1b, greater fall global exploration predicted less spring commitment. However, consistent with the Hypothesis 1c, greater fall commitment predicted less spring exploration. Thus, during the first year of college, students did not appear to complete identity achievement, but rather were more likely to continue the identity task they were engaged in during the fall.

Next, fall exploration and commitment within each domain were used to further test Hypothesis 1 and predict spring exploration or commitment in the same domain (see Table 2). These analyses indicated several domain-specific patterns of identity development that differed from the global patterns, consistent with Hypothesis 2. The most common pattern, shared by friendship, politics, and values domains, demonstrated stability in both exploration and commitment, consistent with Hypothesis 1a. In addition, consistent with Hypothesis 1c, for each of these domains, more commitment in the fall predicted less exploration in spring. This pattern is also consistent with the Hypothesis 2 expectation that domains related to abstract beliefs (i.e., politics and values) would demonstrate the patterns predicted by Hypothesis 1c, although the same pattern was not expected for friendship, which is more directly impacted by the college transition.

Another common pattern was found for religion and gender role identities. Again, there was significant stability in both exploration and commitment within these domains (consistent with Hypothesis 1a), but students who engaged in more exploration in fall were lower in commitment in spring, contrary to Hypothesis 1b. There was also no significant relationship between fall commitment and spring exploration, contrary to Hypothesis 1c and Hypothesis 2.

Next, career identity demonstrated a unique pattern. Although career commitment was stable, as expected, fall exploration was not a significant predictor of spring exploration, contrary to expectations in Hypothesis 1a. Thus, exploration in the career domain was the only indicator that was not stable across the first year of college. Contrary to Hypothesis 1b, greater fall career exploration predicted less spring commitment. The lack of this relationship in the career domain contradicts Hypothesis 2, that domains directly related to the college transition would experience more growth
toward identity achievement. In addition, greater fall commitment did predict less spring exploration, consistent with Hypothesis 1c, although according to Hypothesis 2 this pattern was not expected to be as prominent in a domain directly influenced by the college transition. It is important to note, however, that although the overall model for spring career exploration was significant, the predictors only explained a small portion of the variance ($R^2 = .07$).

There were several patterns displayed in only one domain. For example, romantic relationship identity mirrored the pattern for global exploration and commitment, with evidence for stability in both exploration and commitment, consistent with Hypothesis 1a. There was also a negative relationship between exploration and commitment, consistent with Hypothesis 1c and inconsistent with Hypothesis 1b (according to Hypothesis 2, this domain was expected to demonstrate significant support for Hypothesis 1b). Finally, the pattern for family identity indicated only stability in exploration and commitment, consistent with Hypothesis 1a and inconsistent with Hypotheses 1b and 1c, although the model predicting spring family exploration did not meet the standard threshold of significance ($p = .06$).

**Satisfaction With Life**

To address the final hypothesis, that identity development may impact psychological well-being, linear regressions were used to identify whether fall exploration, commitment, and satisfaction with life could predict change in satisfaction with life across the first year of college (see Table 3). The initial model included a Fall Exploration x Fall Commitment interaction, but it was not significant in any of the analyses and therefore was excluded from final models. As expected according to Hypothesis 3a, higher global exploration in fall predicted significant decreases in satisfaction with life but, contrary to Hypothesis 3b, global commitment did not predict change in satisfaction. However, this pattern differed across domains. Consistent with global results and Hypothesis 3a, exploration in friendship and political identity domains had a negative impact on life satisfaction. The pattern for commitment was less clear. Consistent with Hypothesis 3b, fall commitment with regard to romantic relationship identity improved satisfaction with life over the first year of college. However, fall commitment to a political identity decreased life satisfaction, contrary to Hypothesis 3b. Finally, neither exploration nor commitment in career, family, religion, values, or gender roles predicted changes in life satisfaction across the first year of college.

**Discussion**

This study explored identity development in multiple domains during the first year of college. Overall, findings demonstrated that, consistent with Hypothesis 1a, there was significant stability in exploration and commitment from fall to spring.

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**TABLE 2**

| Fall Exploration and Commitment Within Domain Predict Spring Exploration and Commitment in Some Domain |
|--------------------------------------------------------------------------------------------------|
| | Global | Career | Family | Friendship | Romantic Relationships |
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As expected by Hypothesis 1c, global commitment predicted less exploration over time, but contrary to expectations of Hypothesis 1b, global exploration predicted less (rather than more) commitment over time. Thus, global findings suggested that students may not yet be progressing toward identity achievement (contrary to Hypothesis 1b), but rather engaging in either exploration or commitment throughout the first year of college. Furthermore, these patterns differed by domains, consistent with Hypothesis 2, although domain-specific findings generally underscored the pattern of stability in either exploration or commitment, rather than progress toward identity achievement in domains directly affected by the college transition. Finally, as expected by Hypothesis 3a, global exploration predicted decreases in satisfaction with life, particularly in the friendship and political domains of identity. In contrast, global commitment did not predict life satisfaction, although these findings differed somewhat by domain. Thus, this study demonstrated that the processes of exploration and commitment may differ for different domains of identity, and these processes may also have differential impacts on psychological well-being.

**Stability and Change in Exploration and Commitment**

Consistent with Hypothesis 1a, there was significant stability in exploration and commitment (Meeus et al., 2010). Students who began their first year as higher in exploration were likely to continue to explore identity options in spring, and likewise students high in commitment were likely to remain committed in spring. Global exploration and commitment were also inversely related over time, indicating that students who engaged in exploration in fall were lower in commitment in spring, and those higher in commitment in fall were lower in exploration in spring. Mapping this on to the traditional categorical discussion of identity status (e.g., Meeus et al., 2010), this suggests that students who start out higher on exploration are likely remaining in moratorium (continuing exploration without commitment), rather than transitioning to achievement (as predicted in Hypothesis 1b). These students may enter college actively considering and exploring potential identities. During the first year of college, they may be continuing to explore identity options. Although they may eventually increase their commitment over time (Meeus et al., 2010; Verschueren et al., 2017), the lack of positive relationship between fall exploration and spring commitment, indicated that few students made direct progress toward identity achievement by the end of their first year. In contrast, students who were high on commitment in fall were less likely to engage in exploration (consistent with Hypothesis 1c), thus likely remaining in achievement (if they previously explored) or foreclosure (if they did not explore prior to entering college). These students may be unwilling to explore even in contexts that encourage it, such as starting college or moving away from home, and instead remain committed to their initial identity. The college transition appears to encourage continued exploration for those who explore early on, but leads to doubling down on commitment for those who enter college committed to an identity. This is consistent with Meeus and colleagues (2010), who found movement toward identity achievement over four years, but not one year. Thus, the transition to identity achievement may not have been captured in the time frame of the present study.

**TABLE 3**

| Variable                        | Global | Career | Family | Friendship | Romantic Relationships | Religion | Politics | Values | Gender Roles |
|---------------------------------|--------|--------|--------|------------|------------------------|----------|----------|--------|--------------|
|                                 | $\beta$ | $p$    | $\beta$ | $p$        | $\beta$               | $\beta$  | $\beta$  | $\beta$ | $\beta$      |
| Fall Satisfaction With Life     | .48    | <.01   | .52    | <.01       | .53                    | <.01     | .50      | <.01   | .43          |
|                                  |        |        |        |            |                        |          |          |        |              |
|                                  |        |        |        |            |                        |          |          |        |              |
| Fall Exploration Within Domain  | -.22   | .02    | -.05   | .58        | -.11                   | .22      | -.19     | .04    | -.08         |
|                                  |        |        |        |            |                        |          |          |        |              |
|                                  |        |        |        |            |                        |          |          |        |              |
| Fall Commitment Within Domain   | .04    | .72    | .00    | .97        | .06                    | .51      | .02      | .86    | .21          |
|                                  |        |        |        |            |                        |          |          |        |              |
|                                  |        |        |        |            |                        |          |          |        |              |
| $R^2$                           | .31    | <.01   | .26    | <.01       | .29                    | <.01     | .31      | <.01   | .32          |

*Note:* Dependent variable for all analyses in spring satisfaction with life. $R^2$ and corresponding value relate to the whole model. $N = 94$
Differences in Identity Development Across Domain

As expected in Hypothesis 2, results indicated that there were differences in the process of development in different identity domains. However, in contrast to predictions, even in domains directly impacted by the transition to college, students did not yet appear to be making progress toward identity achievement. First, over time, fall career commitment predicted less exploration and more commitment in spring, but early exploration did not predict later exploration, and was associated with less commitment. Thus, the process of taking general education courses and choosing a college major may promote exploration in the career domain, but this exploration does not appear to be completed by the end of the first year. The fact that the patterns were unique to career identity underscores that colleges provide an important opportunity for career exploration, and this may drive occupational identity achievement (Fouad & Ghosh, 2016). However, these patterns did not indicate progress toward identity development, at least within the first year, thus were inconsistent with Hypothesis 2.

For friendship, political, and value identities, in addition to stability in both exploration and commitment, entering college having greater commitment predicted less exploration in spring. Thus, making an early commitment in friendship, political, or value domains appeared to deter students from engaging in exploration in these domains during their first year of college. Many of these students may be in foreclosure status, in which they have made a commitment without exploration, and continue to stay with that decision despite opportunities to explore. On the other hand, some students might have explored prior to entering college, and thus might enter college in identity achievement. These students might be happy with their identity and therefore not considering other options. Although Hypothesis 2 predicted this pattern for the abstract domains of political and value identities, it was initially hypothesized that students would experience growth toward identity achievement in friendship identity as a result of the transition to college. The common pattern in these domains may be rooted in the fact that students might have had extensive exposure to potential friendship, political, and value identities prior to college entry, and therefore might be hesitant to consider alternatives. Consistent with this idea, evidence has suggested that civic and political identity development often begins in adolescence (Johnson, 2017; Wray-Lake, 2019), so many of these students might have already explored and made a commitment before they enter college.

Similar to the previous pattern, religion and gender roles demonstrated stability in both exploration and commitment. However, higher exploration in these domains in fall was associated with lower commitment in spring. This is in contrast to expectations that individuals would move from exploration into commitment during their first year, although according to Hypothesis 2 these patterns were expected to be less likely in abstract domains such as these. The negative relation between exploration and commitment indicates that exploration in these domains may be particularly likely to lead individuals to continue to question their identity. Consistent with this, some evidence has suggested that religion serves to promote identity development (King, 2003), so during the process of exploration in fall, students might realize how little they know about their religious or gender role options and therefore be less likely to make a commitment in spring.

Romantic relationship identity mirrored the global pattern; those who were currently exploring their romantic identity were less likely to make a commitment, and those who had made a commitment were less likely to explore. This is in contrast to the Hypothesis 2 expectation that relationship domains would be impacted by the college transition and therefore experience growth toward achievement. It could be that students have either entered college in a romantic relationship or with an idea of their romantic identity and refuse to consider alternatives (foreclosure) or have entered with plans to explore their romantic options with no interest in making a commitment (moratorium). Emerging adults just entering college may be transitioning between the more casual affection phase of a relationship and more complex bonded love (Seiffge-Krenke, 2003), and these patterns of romantic relationship identity development may reflect these different relationship goals.

Finally, the pattern for family identity indicated only stability in exploration and commitment, with no relationship between exploration and commitment over time. Family relationships may be set in place earlier in adolescence, and therefore, may be unlikely to change at college entry, even in the face of substantial changes such as moving out and establishing long-distance relationships.
Overall, there was the most substantial support for Hypothesis 1a, and stability in exploration and commitment. It also appeared that rather than the expected progress toward identity development (Hypothesis 1b), students were instead engaged in either exploration or commitment, but were not transitioning between the two. Development in the different domains of identity reflected pieces of this global pattern, suggesting that the general process may be the same but the timing of changes within domains might be different. In contrast to Hypothesis 2 expectations, findings for domains directly impacted by the college transition as well as those related to more abstract beliefs demonstrated that students were stably engaging in either exploration or commitment within the first year of college, rather than transitioning toward identity achievement.

Identity Development and Satisfaction With Life
Consistent with Hypothesis 3a and previous research (Kunnen et al., 2008; Luyckx et al., 2006; Oleś, 2016), greater global exploration in fall predicted significant decreases in satisfaction with life over the course of the year. The process of exploration and questioning one’s beliefs or values may create stress that decreases satisfaction with life. Conversely, global commitment did not predict satisfaction with life. This is in contrast to Hypothesis 3b and previous research that demonstrated links between commitment and psychological well-being (Azmitia et al., 2013; Berzonsky, 2003; Oleś, 2016). However, these effects differed across domains.

First, peer relationship identities appeared to have a significant impact on psychological well-being. Friendship exploration was associated with poorer satisfaction with life, consistent with Hypothesis 3a. Because students generally rely on precollege friendships for social support during the first year of college (Shell & Absher, 2019), questioning friendship identity could create strain in these relationships and lead to less social support. Alternatively, students may engage in friendship exploration in fall because of a significant loss of social support during the college transitions (Oswald & Clark, 2003), leading to a decrease in life satisfaction. Conversely, consistent with Hypothesis 3b, commitment in romantic relationship identity had a positive impact on satisfaction with life, consistent with previous research linking commitment to better psychological well-being (Berzonsky, 2003; Oleś, 2016). Students high on commitment to a romantic identity may be entering college already in a romantic relationship, and the emotional support from that relationship could improve satisfaction with life. Even if students are not in a committed relationship, making a commitment about preferences and expectations for romantic partners could relieve the stress of actively exploring potential romantic options. Combined, this evidence demonstrates that identity with regard to peer relationships has a significant impact on psychological well-being during the first year of college.

Political identity also appeared to be particularly linked to well-being, although both exploration and commitment in the political domain were associated with a decrease in well-being over the first year. Political identity develops in adolescence as a result of parental influences and high school community engagement experiences (Wray-Lake, 2019), and therefore may be firmly rooted in students’ family values, especially in more conservative and rural areas such as the one in which this study was conducted (Feinberg, Tullett, Mensch, Hart, & Gottlieb, 2017). This could make challenges to identity in this domain particularly impactful. Students who explore political views may experience stress as a result of reconsidering previously accepted assumptions, particularly if these views contrast those of their families. However, commitment in political identity was also negatively associated with satisfaction with life. Exposure to alternative ideas may cause stress or dissatisfaction for students who enter college having already committed to a political perspective. Overall, it appears that the effects of exploration and commitment may differ depending on domain.

Implications
This study demonstrated significant stability in exploration and commitment during the first year of college, although the two constructs were inversely related over time. Thus, colleges might support identity development by providing structured opportunities for exploration, as well as encouraging commitment following exploration to help students progress toward identity achievement. However, it also demonstrated that different domains of identity develop at different rates, highlighting the importance of investigating domains of identity separately. Exploration of career identity was particularly common, but did not predict later commitment. Greater support and guidance for career exploration may ensure that first year college students have thoroughly investigated potential careers and are making...
commitments. For friendship, political, and value identities, students who have committed appear to be less likely to explore over time, thus these identities may not change much in the first year of college. In contrast, for religion and gender roles, students who begin exploring are less likely to make a commitment. This suggests that students may benefit from support for exploration in these domains in particular; classes or discussion groups may help students explore and may motivate commitment. Furthermore, associations between identity status and psychological well-being suggested that peer relationship identities may be particularly linked to satisfaction with life, thus colleges might focus on supporting such relationships.

Limitations

Despite these contributions, there were several limitations to this study. First, the current study only investigated identity development in the first year of college; continuing farther into college may lead to better understanding of individual trajectories of identity development, as well as a better picture of the timing of identity achievement. The relationship between identity and psychological well-being may also differ over a longer period of time. Second, findings demonstrated links between identity development and a very general measure of psychological well-being (satisfaction with life). Identity development within each domain may be associated with different measures of psychological well-being. Finally, there are some limitations to generalizability. Many students were local to the rural Appalachian community in which the study was conducted, which tends to be predominantly Christian and culturally conservative. This may impact the amount of reliance on family (Russ, 2010) as well as early expectations of responsibility, leading to earlier commitment. In addition, identity development processes may differ for emerging adults who do not attend college, as they may have fewer opportunities for exploration.

Conclusions

Altogether, this study provided important information about the identity development process during the first year of college. Consistent with hypotheses, exploration and commitment were generally stable over time. Students who had more commitment in fall did less exploration in spring, and those who did more exploration in fall were less likely to make a commitment in spring. This demonstrates that identity development is certainly not complete by the end of the first year of college. This study also highlighted the importance of investigating domains of identity separately, as patterns differed across domains. It also underscored the importance of continuing to investigate identity development throughout students’ entire college career, as exploration and commitment to various domains may change later in college. Finally, it suggested that colleges may increase psychological well-being by providing support for peer relationship identities and exploration in general.

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