Identity Status, Service-Learning, and Future Plans

Lynn E. Pelco and Christopher T. Ball

Abstract

Marcia's (1966) identity status paradigm served as the theoretical framework to study the impact of service-learning on clarifying future plans for emerging adults with varying identity statuses. The study participants were 195 undergraduates at a large urban public university in the southeastern United States. The Dimensions of Identity Development Scale (Luyckx, Schwartz, Berzonsky, et al., 2008) was administered at the beginning and end of the semester during which participants completed their service-learning class. The Service-Learning Impact on Future Plan Clarity Questionnaire developed by the authors for this study was administered at the end of the same semester. A two-step cluster analysis resulted in five identity status groups. Students in all five groups indicated that service-learning helped them clarify their future plans. Moratorium identity status group members reported significantly less benefit from servicelearning for clarifying future plans. Results are discussed and implications for research and practice are provided.

Keywords: identity status, service-learning, future plans, emerging adults, tertiary education, cluster analysis

Introduction

dentity is the stable, consistent, and reliable sense of who one is and what one stands for in the world (Josselson, 1987). Understanding one's own identity and beginning to answer the question "Who am I?" are the critical developmental tasks facing traditional-age college students. Participation in tertiarylevel service-learning courses has the potential to influence students' identity development and to shape students' plans for the future, in part, because these courses provide students with opportunities to practice applying what they know in real-world contexts and to reflect on those experiences (Batchelder & Root, 1994; Cone & Harris, 1996). By focusing learning activities in service-learning courses on identity exploration and future plan development, service-learning course instructors can provide a learning space in which students can begin to explore the "Who am I?" and the "Where am I going?" questions that are critical for the developmental period. However, no research has yet been conducted to

study the impact of service-learning on clarifying future plans for emerging adults with varying identity statuses.

Psychosocial theories of identity development (Chickering, 1969; Erikson, 1968; Josselson, 1973; Keniston, 1971) emphasize the importance of the individual's internal psychological processes in directing identity development. These theories detail specific "crises" to be resolved at each age-related stage for continued growth to occur. Widick, Parker, and Knefelkamp (1978) defined crisis as "not a time of panic or disruption: It is a decision point—that moment when one reaches an intersection and must turn one way or the other" (pp. 3-4). Erikson (1968) identified the central "crisis" or decision point during emerging adulthood as "identity versus role confusion." Arnett (2000) identified this "emerging adulthood" period as ranging from the late teens to the late 20s, when individuals are exploring views on love, work, and the world. The specific issues faced during Erikson's identity versus role confusion stage revolve around vocational decisions, relationships, and ideological beliefs and values.

The first researcher to empirically test Erikson's identity versus role confusion stage was developmental psychologist James Marcia. Using an interview protocol to investigate the process of identity development in male college students, Marcia (1966) found identity in emerging adulthood to be characterized by the presence or absence of exploration and commitment in vocational, relational, and ideological decision-making. Rather than describing identity development as a series of stages, Marcia (1966) presents a more fluid model of four identity statuses: achievement, moratorium, foreclosure, and diffusion. These four identity statuses are based on the combination of two underlying dimensions, exploration and commitment. Exploration refers to the individual's active weighing of various identity alternatives; *commitment* refers to the presence of strong convictions or choices (Luyckx, Goossens, Soenens, Beyers, & Vansteenkiste, 2005). Individuals with identity achievement status have formed clear identity commitments after exploring various alternatives (high commitment/high exploration). Individuals in the moratorium status have not yet made clear identity commitments but are actively exploring various alternatives (low commitment/high exploration). Foreclosure status individuals have made strong commitments without going through a period of exploration (high commitment/low exploration), and diffusion status individuals have not made firm commitments and are not actively exploring various alternatives (low commitment/low exploration).

Josselson (1987, 1996) investigated Marcia's four statuses with a sample of women and developed new names for the statuses and descriptive details for each. Josselson's descriptive status used the names gatekeeper (foreclosure), pathmaker (achievement), searcher (moratorium), and drifter (diffusion). Luyckx, Schwartz, Berzonsky, et al., (2008) have validated Josselson's statuses with a large sample of female college students and have identified statuses that parallel those originally described by Marcia (1966). Marcia's and Josselson's work in the field of identity status paradigms underlies one of the most coherent bodies of empirical research on identity formation (Côté & Levine, 2002).

Successful identity development during emerging adulthood has been linked to a wide variety of positive life outcomes. Using Marcia's (1966) identity status categories, researchers have found links between identity status and correlates such as personality dimensions, internalizing behavior problems, and family relationships (for recent reviews see Kroger & Marcia, 2011; Meeus, 2011), with the achievement status showing the most positive outcomes. However, empirical studies have shown that only about half of young people obtain achievement status by early adulthood (Kroger, 2007), and a meta-analysis covering 124 identity studies concluded that not until age 36 do half of participants reach the achievement status (Kroger, Martinussen, & Marcia, 2010). Researchers have also explored the relationships between extended identity exploration and college attendance during the emerging adult period (Luyckx, Schwartz, Goossens, & Pollock, 2008) with the hypothesis that some traditional-age university students might get "stuck" in the exploration process and experience difficulty arriving at firm identity choices (Schwartz, Côté, & Arnett, 2005). Some evidence exists to support this hypothesis. Emerging adults in the moratorium identity status group (i.e., individuals with low commitment and high exploration profiles) have been shown to express both adaptive and maladaptive ruminative exploration (Luyckx, Schwartz, Goossens, et al., 2008).

Identity Status, Civic Engagement, and Service-Learning

Research has begun to emerge that addresses the connections between identity status in emerging adulthood, adjustment in college, and civic engagement. Berzonsky and Kuk (2000) assessed 363 matriculating university students (mean age 18.15 years) and found that students with achievement status demonstrated a strong sense of educational purpose. Other research demonstrates a consistent positive relationship between achievement identity group membership and higher levels of civic engagement, civic mindedness, and stronger aspirations to contribute to communities, particularly when compared to individuals with diffusion identity status (*Busch & Hofer, 2011; Crocetti, Jahromi, & Meeus, 2012; Hardy & Kisling, 2006; Jahromi, Crocetti, & Buchanan, 2012; Padilla-Walker, McNamara, Carroll, Masden, & Nelson, 2008; Pancer, Pratt, Hunsberger, & Alisat, 2007).*

Bringle and Clayton (2012) define service-learning as a course or course-based, credit-bearing educational experience in which students (a) participate in mutually identified service activities that benefit the community and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal value and civic responsibility. Despite the steadily increasing use of service-learning pedagogy in tertiary education institutions throughout the United States and beyond, research connecting identity status and service-learning is scant.

Most service-learning research that has focused on identity addresses the relationships between service-learning class participation and the development of a personal, civic, or citizenship identity (Battistoni, 2013; Brandenberger, 2013; Eyler & Giles, 1999; Jones & Hill, 2003; Rhoads, 1997). In their constructivist study, Jones and Abes (2004) interviewed eight individuals 2 to 4 years after they had participated in an undergraduate service-learning internship class. Data from the interviews indicated that these emerging adults identified their service-learning class experiences as influencing their long-term decision-making regarding interpersonal relationships, career plans, and aspirations, as well as open-mindedness about new ideas and experiences. Batchelder and Root (1994) examined career identity development in a small sample (n = 45) of undergraduates from a variety of service-learning classes and found that students' career identity development, evaluated from content analysis of reflection journal entries, slightly increased over the course of the semester. Feen-Calligan (2005) used a qualitative analysis to explore professional identity development in one service-learning class of 11 graduate art therapy students over one semester. Her results supported the hypothesis that service-learning provided a supportive and reflective culture in which the students were able to gain professional experience, examine values, and develop personal awareness.

No studies currently exist that focus on service-learning and identity status. Given the empirical support for and cross-disciplinary importance of the identity status theoretical framework (Josselson, 1987; Luyckx, Schwartz, Berzonsky, et al., 2008; Marcia, 1966), this study sought to explore the role of identity status in emerging adulthood for harvesting service-learning experiences to inform future plans.

Research Questions

The purpose of this exploratory study was to investigate the perceived impact of service-learning class participation on clarifying future plans in a group of emerging adults with varying identity statuses. There were two research questions:

- Does service-learning class participation help university undergraduates clarify their plans for the future?
- Does identity status influence the degree of benefit students perceive in clarifying their future plans as an outcome of service-learning class participation?

Method

Participants

One hundred ninety-five undergraduate students (53 males and 142 females) at a large urban public university in the southeastern United States participated in this study. One student's data was removed from the subsequent data analyses because he was identified as a multivariate outlier using the Mahalanobis distance measure. The final 194 participants were recruited from five officially designated service-learning courses taught in geography, education, and religious studies disciplines.

Courses at this university are designated as service-learning in the institution's course management system after the instructor provides evidence that every student in the class completes a minimum of 20 hours of service during the semester, the service meets a community-identified need, and the instructor incorporates reflection on the service into the course activities or assignments. The five class sections were selected for inclusion in this study because they (a) represented a variety of academic disciplines, (b) enrolled only undergraduate students, (c) enrolled undergraduates who were both majors and nonmajors in the courses' academic disciplines, (d) were taught during the semester the study was under way, and (e) were led by instructors who were willing to participate in the study.

Only students under the age of 25 were included in the data analysis, and their mean age was 20.58 years (SD = 1.29, range = 18–24 years). The students came from a variety of majors but were primarily in their sophomore, junior, or senior academic level at university. Table 1 summarizes the demographics of the sample and highlights the diverse student community from which they were sampled. The research was approved by the university's IRB, and all participants provided informed consent before participating in this study.

Table I. Demographic Characteristics of Student Sample (N = 194)

Percentages		
Gender		
Male	26.8%	
Female	73.2%	
Minority status		
Minority	44.4%	
White	55.6%	
Parent education		
1st Generation	37.1%	
Non-1st Generation	62.9%	
Financial status		
Pell Grant recipient	31.8%	
Not a recipient	68.2%	
Academic year		
Freshman	1.0%	
Sophomore	25.8%	
Junior	39.2%	
Senior	34.0%	

Measures

Dimensions of Identity Development Scale (DIDS). The Dimensions of Identity Development Scale was developed by Luyckx, Schwartz, Berzonsky, et al. (2008) to measure four dimensions of identity formation based on the theoretical work of Marcia (1966). Although the DIDS includes a fifth dimension that relates to ruminative exploration, this dimension was not included in the data analyses of the current study because it was not relevant to the goals of the current research. Two dimensions of the DIDS relate to identity commitment: commitment making (CM) and identification with commitment (IC). Each of these dimensions consists of five items. The CM dimension measures the degree to which the

respondent has made a commitment and includes items like "I have decided on the direction I want to follow in life" and "I know what I want to do with my future." The IC dimension measures the extent to which the respondent actually identifies with this commitment and includes items such as "My plans for the future offer me a sense of security" and "My future plans give me self-confidence." The other two dimensions of the DIDS relate to exploration and also consist of five items per dimension: exploration in breadth (EB) and exploration in depth (ED). As can be seen by their labels, the only difference between these two dimensions relates to the focus of the exploration. The EB dimension measures how much the respondent is exploring in breadth different alternatives and includes items such as "I think about the direction I want to take in my life" and "I think a lot about how I see my future." The ED dimension measures how much the respondent is exploring their current commitments in depth and includes items such as "I think about the future plans I have made" and "I talk regularly with other people about the plans for the future I have made." The DIDS uses a Likert response scale for each item, ranging from "1 = strongly disagree" to "5 = strongly agree."

Participants completed the DIDS at the start of the semester and again at the end of the semester. The test-retest reliability as measured by Pearson correlations was very good for each dimension: CM (.82), IC (.69), EB (.66), and ED (.56). The internal consistency coefficients (Cronbach's alpha) of each dimension for both recording times were also quite good: CM Time 1 ($\alpha = 0.85$), CM Time 2 ($\alpha = 0.86$), IC Time 1 ($\alpha = 0.87$), IC Time 2 ($\alpha = 0.89$), EB Time 1 ($\alpha = 0.73$), EB Time 2 ($\alpha = 0.76$), ED Time 1 ($\alpha = 0.63$), and ED Time 2 ($\alpha = 0.64$). Consequently, the mean of both time points was used as the final score for each dimension of the DIDS.

Service-Learning Impact on **Future** Plan Clarity Questionnaire (SLIP). The authors developed a short four-item questionnaire to measure students' beliefs about the perceived impact of their service-learning class experiences on clarifying their future plans (see Table 2). The first item examined the overall impact of the service-learning class, and the other three items distinguished the perceived impact of various service-learning class components on clarifying future plans. The participants expressed their level of agreement with each item from "1 = strongly disagree" to "5 = strongly agree." The internal consistency of this measure was very good (Cronbach's alpha = 0.89). The sum of the four item responses was calculated as the final measure of the perceived impact of the service-learning class on clarifying future plans, with

a range of possible scores from 4 to 20. The mean SLIP score for the sample was 14.10 with a standard deviation of 3.79, suggesting that the majority of students found their service-learning class had helped them to clarify their future plans.

Table 2. Service-Learning Impact on Future Plan Clarity Questionnaire (SLIP) Items

- Being in this service-learning class has helped me clarify some of my plans for the future.
- The instructor for this service-learning class has helped me clarify some of my plans for the future.
- The community service part of this class has helped me clarify some of my plans for the future.
- The reflection activities/assignments I did in this class have helped me clarify some of my plans for the future.

Procedure

Students in five service-learning classes were invited to participate in the current study. Participation was voluntary, and participating students were offered the opportunity to be placed in a raffle for a \$10 gift card. No other incentives were provided to the students for participating in the research. Participants completed the DIDS at the start and again at the end of the 15-week semester. Participants completed the SLIP questionnaire at the end of the semester.

Data Analyses

A two-step cluster analysis was conducted using the four dimensions of the DIDS to classify the students into identity status groupings. The first step involved conducting a hierarchical clustering procedure using Ward's method with squared Euclidean distances to provide the optimal cluster solutions for the four DIDS dimensions after removing multivariate outliers and standardizing scores. A scree plot of the changes to the agglomeration coefficient for different cluster solutions revealed the best number of clusters to fall in the range of four to six clusters. An examination of these cluster solutions in terms of their DIDS centroids revealed that the five-cluster solution provided the optimal statistical and theoretical cluster solution in agreement for the most part with the identity statuses found by Luyckx, Schwartz, Berzonsky, et al. (2008) and consistent with Marcia's original (1966) classification. The second step of the cluster analysis involved conducting a K-means analysis for a five-cluster solution using the centroids provided by the

hierarchical analysis as the initial cluster centers. The resulting five clusters are described in Figure 1 and reveal the following five identity status groupings: (1) achievement (n = 36), (2) emerging achievement (n = 62), foreclosure (n = 35), moratorium (n = 39), and diffusion (n = 22). The emerging achievement status group is unique to the current data set and was labeled in this way to illustrate that this group demonstrates an emerging trend toward identity achievement and exploration that is similar to, but not as well developed as, that of the achievement group. Statistical comparisons between the identity status groups were conducted using chi-square, t, ANOVA, and ANCOVA statistical tests.

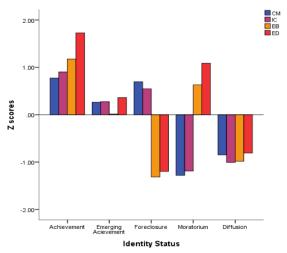


Figure 1. Standardized scores for the DIDS dimensions of Commitment Making (CM), Identification with Commitment (IC), Exploration in Breadth (EB) and Exploration in Depth (ED) for the five identity statuses.

Results

There were no significant differences in the gender, age, minority status, Pell grant status, and first-generation status of the students who made up the five identity status groupings, p > .05. However, there was a significant difference between the minority status groupings and the service-learning classes taken by those students, $\chi 2(N = 194, df = 4) = 18.09, p = .001$, with respect to one specific service-learning class. This was deemed a possible confound when comparing the five identity status groupings, because students in this class (n = 56) provided higher SLIP ratings (M =15.80; SD = 3.81) than students in other service-learning classes (M = 13.42; SD = 3.74), t(192) = 4.23, p < .001. Consequently, membership in this class was coded as a covariate in comparisons between the five identity status groups on their SLIP ratings. A significant ANCOVA was found when comparing the five identity status groups on their SLIP ratings, F(4, 188) = 2.45, p < .05. Post hoc analysis revealed that the only significant difference between the groupings was between the moratorium and achievement groups (refer to Figure 2). Students in the achievement group perceived their service-learning class as more beneficial for clarifying future plans than did students in the moratorium group.

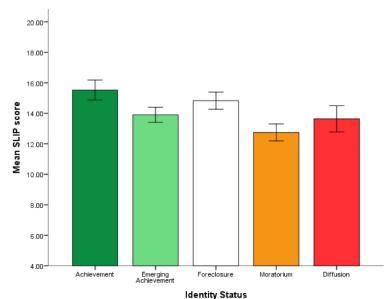


Figure 2. Differences between the identity statuses on the perceived benefits of the service-learning class for future plans clarification (SLIP).

Discussion

The purpose of this exploratory study was to examine the role of identity status on university students' perception of the degree to which participating in a service-learning class helped them to clarify their goals for the future. The identity status theoretical framework developed by Marcia (1966) and extended by Josselson (1987, 1996) and Luyckx, Schwartz, Berzonsky, et al. (2008) represents one of the most coherent bodies of empirical research on identity formation (Côté & Levine, 2002). However, this framework has not yet been applied to the study of service-learning as a high-impact educational practice. The results of this study add impor-

tant information to the literature on service-learning and identity in emerging adulthood.

The participants in this study were a diverse sample that included a significant percentage of traditionally underrepresented student groups, such as students from low income and racial minority backgrounds as well as first-generation students. Our data showed that students from diverse backgrounds generally found their service-learning class experiences helpful in clarifying their future plans. Across all participants, the mean SLIP rating was significantly higher than the midpoint (neutral) of the response scale, suggesting that the majority of students found their servicelearning class had helped them to clarify their future plans.

There were no significant differences across demographic categories in identity status membership, indicating that each of the identity status categories created through cluster analysis consisted of a demographically diverse group of students. This finding provides preliminary evidence that identity status in emerging adulthood may not be dependent on demographic characteristics such as economic status, racial group, or gender; however, a larger sample would be needed to test the statistical difference between these student subgroups. Although our data showed no demographic differences in identity status categories, theoretical and empirical research exists that demonstrates the intersectionality of multiple social identities, particularly the individual experience of difference and oppression in the context of social identity development (Jones, 1997; Jones & Abes, 2013; Jones & McEwen, 2000). This study did not explicitly address these topics; however, future research should explore the role of intersectionality on social identity commitments and service-learning participation.

Our results also showed an equal distribution of chronological age across the identity status categories, indicating that older individuals in this sample were just as likely to be in the diffusion and moratorium identity status clusters as in the achievement and emerging achievement identity status clusters; the same was true of younger individuals.

Prior research indicates that about 50% of individuals in the emerging adult age range (18-24 years) fall within the achievement identity status group (Kroger, 2007). In our sample, only 18% had reached achievement identity status. Cluster analysis of this sample produced a unique category that we labeled emerging achievement, and 32% of our sample fell into this group. DIDS dimension score profiles for this emerging achievement identity status group showed a constellation that appeared to be evolving toward an achievement identity status. For example, individuals in the emerging achievement identity status showed positive levels of commitment making (CM), identification with commitment (IC), and exploration in depth (ED), but these levels were lower than those of individuals in the achievement group. Together, the achievement and emerging achievement identity status groups make up 50% of the sample; both groups reported that their service-learning class experiences had a positive influence on clarifying future plans. Because the emerging achievement identity status group has not been reported in other studies to date, more research is needed to replicate our findings and, if replicated, to explore the characteristics and outcomes of this emerging achievement identity status group. For example, students in the emerging achievement identity status group may benefit from service-learning experiences that target their tentatively chosen career path and that integrate learning activities designed to explicate the relationships among community-based activities, academic/interpersonal/civic skills, and future plans.

Individuals in four of the five identity status groups (achievement, emerging achievement, foreclosure, and diffusion) reported equivalent and positive levels of perceived benefit from their service-learning class experiences on clarifying future plans. Individuals with diffusion identity status in our sample found their service-learning class experiences to be as helpful in clarifying their future plans as did individuals in the achievement, emerging achievement, and foreclosure identity status groups. Though preliminary, this finding is encouraging, given the less than positive life outcomes that diffusion identity status group membership can portend (*Kroger & Marcia, 2011; Meeus, 2011*).

Only individuals in the moratorium identity status group reported significantly lower, although still positive, levels of perceived benefit from their service-learning class experiences on clarifying future plans. In our sample, 20% of individuals were identified as having a moratorium identity status. Individuals in the moratorium identity status group remain uncommitted about their future directions and are actively searching for options using both breadth and depth strategies. They demonstrate DIDS dimension score profiles that are low on commitment making (CM) and identification with commitment (IC) and high on both the exploration in breadth (EB) and exploration in depth (ED) dimensions.

In psychosocial identity development theories, moratorium has often been assumed to represent a hallmark of successful

transition to adulthood (Luyckx, Schwartz, Berzonsky, et al., 2008). Traditional-age, full-time university students are often able to delay adult commitments and spend several years exploring life alternatives with few limitations on their choices (Arnett, 2000; Côté & Schwartz, 2002). Under these conditions, individuals can thrive to develop fully formed identity commitments. However, some individuals experience this moratorium identity status as a confusing and anxiety-provoking stage during which seemingly limitless possibilities are experienced as both intimidating and disequilibrating (Schulenberg, Wadsworth, O'Malley, Bachman, & Johnston, 1996; Schwartz et al., 2005). Modern Western consumer societies may appear increasingly chaotic to young people (Berzonsky, 2003) and expect individuals to create their own identities with little external help (Baumeister & Muraven, 1996; Côté, 2002). In such societies the potential exists for emerging adults to become stuck in the moratorium exploration process and to experience considerable difficulty and stress arriving at identity commitments (Schwartz et al., 2005).

Luyckx, Schwartz, Berzonsky, et al. (2008) found that a large percentage of emerging adults in the moratorium status category scored high on rumination. These researchers, however, hypothesize that this ruminative form of exploration is likely to be an indication of developmentally appropriate indecision within this age group rather than a trait of indecisiveness. Still, chronically indecisive individuals may experience fear in the face of important identity commitment decisions and may procrastinate or develop other forms of maladaptive functioning (Milgram & Tenne, 2000; Rassin & Muris, 2005). The current study represents exploratory research aimed at describing relationships among identity status, service-learning, and future plans; therefore, rumination was not specifically measured. However, service-learning classes that are designed to help students explore future plans might also include strategies for referring students who express fear in the face of commitment decisions to the appropriate support services on campus, such as the career center or the counseling center.

How might service-learning instructors create learning environments that provide supports and scaffolds for increasing the identity commitments of students within the moratorium status identity category? One strategy could be to design reflection activities and assignments that provide opportunities for students to practice identity commitments, particularly career commitments, in a non-anxiety-provoking learning space. For example, students might benefit from reflection questions that ask them to describe potential careers related to the course topic and service site as well as the individual student's perceptions of the ways in which these potential careers do and do not fit their strengths and interests. Some sharing of reflection question responses among classmates could provide students, particularly those in the moratorium status identity group, with positive examples of emerging identity commitments. Professionals working within the service site(s) might also speak to the service-learning students about their own identity commitment journeys. Table 3 provides a beginning set of ideas for service-learning class activities that target career identity exploration for students in each identity status group.

Table 3. Examples of Service-Learning Career Exploration Learning Activities for Students in Different Identity Status Groups

Identity status groups (Josselson, 1996; Marcia, 1966)	Learning goal(s)	Learning activities
Achievement/ Emerging Achievement (Pathmakers) Characteristics: high commitment high exploration	Increase student awareness of their own skills/talents as these relate to their own career interests Build professional networks through community service sites Analyze what it means to be a civic-minded professional within their chosen academic field	Reflect (in writing or in class discussion) about a skill/talent you possess and describe a situation from your community service this semester when you have successfully used that skill/talent. Reflect (in writing or in class discussion) on how professionals at your service site and in your chosen profession/academic field demonstrate civic-mindedness. Interview a professional at your community service site about their career and describe the academic and interpersonal skills they have developed over time.

Note: Continued on next page

Identity status groups (Josselson, 1996; Marcia, 1966)	Learning goal(s)	Learning activities
Foreclosure (Gatekeepers) Characteristics: high commitment low exploration	 Increase student awareness of the variety of paths that exist within their chosen career interest Explore how their own personal strengths can be capitalized on within a professional work environment, including within their community service site/project 	 For your chosen career path, research and describe at least two different/distinct work environments in which professionals within that career path work. Develop a list of pros and cons for each work environment related to your own personal strengths and interests. Reflect (in writing or in a class discussion) on how the work environment of your community service site/project capitalizes, or could capitalize, on your personal strengths and interests. Write an end-of-semester thank you letter to your community service site supervisor thanking them for providing you with opportunities to put into practice professional skills. Specify the professional skills you practiced and how these skills will be used in your future career.

Note: Continued on next page

Identity status groups (Josselson, 1996; Marcia, 1966)	Learning goal(s)	Learning activities
Moratorium (Seekers) Characteristics: low commitment high exploration	 Increase student's awareness of their own personal strengths Connect personal strengths to a "best fit" career direction 	Complete StrengthsFinder (i.e., the CliftonStrengths Assessment, Gallup) and reflect on how you are applying your top strengths during your community service. Describe (a) a career path that would utilize your top strengths from the StrengthsFinder assessment and (b) the work settings/tasks of professionals in this career path.
Diffusion (Drifters) Characteristics: low commitment low exploration	Identify career options that exist at the student's community service site Identify career skills that already exist in the student's skill repertoire and that the student enjoys performing	Research (in a written paper or small group discussion) the job titles and position descriptions of the staff members employed at your community service site (or other organizations like your community service site) and identify the professional skills needed for each position. From a list of (21st century/transferable) professional skills provided to you by your instructor or campus career center, chose two that you enjoy performing. Describe a situation (in class, at your community service site/ project) during which you demonstrated at least one of those skills.

Note: Instructors may provide students with a choice of learning activities from across the identity status group rows and allow them to select the activities they find most interesting and/or helpful.

Implications for research. This study is the first to explore the relationships of identity status and service-learning class participation with future plans clarification. Research has demonstrated the importance of identity development during emerging adulthood, making the college context critical for identity exploration (Luyckx, Goossens, & Soenens, 2006; Montgomery & Côté, 2003; Waterman & Archer, 1990). "College environments provide a diversity of experiences that can both trigger consideration of identity issues and suggest alternative resolutions for identity concerns" (Waterman, 1993, p. 53). Therefore, service-learning and other experiential pedagogies within the higher education context hold great promise for deepening our understanding of how identity development in emerging adulthood can be facilitated. Future research should seek to replicate and explain the findings. Longitudinal research and qualitative methodologies should be utilized to identify the longterm impact of service-learning courses on identity status as well as strategies for increasing identity commitments through servicelearning class experiences. Future research should also explore the role of intersectionality on social identity commitments and service-learning participation.

Implications for practice. The results of this study are important for service-learning class instructors, community partners, and the administrators who operate service-learning programs on college and university campuses.

Our data provide preliminary support for the hypothesis that service-learning students who have not yet begun to make identity commitments may be the least able to derive benefit from their service-learning experiences to inform decisions about their futures. This finding is somewhat counterintuitive, as it may seem more likely that experiential education methodologies like servicelearning would provide the most benefit to these uncommitted students. The findings from this study indicate that practitioners would be wise to develop explicit supports and scaffolds within their service-learning classes that enable students to "try on" and to evaluate the fit of a limited number of concrete future directions, particularly career directions.

Higher education institutions have the potential to leverage high-impact experiential education practices such as servicelearning to provide students with the critical supports they need to explore career opportunities that lead to firm career identity commitments. It has been our experience that within the curricula of academic majors, these supports are either un- or underdeveloped. Career exploration and career identity commitments through service-learning cannot occur within the confines of a single 15-week semester. However, academic departments that strategically and thoughtfully embed service-learning and other experiential learning opportunities across the entire curriculum map of the academic major have rich opportunities to support career exploration and career identity commitment. Resources to support this reenvisioning of the curriculum have been developed and are available to guide departmental faculty (see *Battistoni*, *Gelmon*, *Saltmarsh*, *Wergin*, & *Zlotkowski*, 2003; Furco, 2003; Kecskes, Gelmon, & Spring, 2005; and Smith et al., 2009). Individual service-learning course instructors can use Ash and Clayton's (2009) DEAL critical reflection model as an excellent starting place for the development of reflection activities that can promote deeper levels of career exploration and career identity commitment.

The results of this study also have implications for the community partners who interact with service-learning students. Students across all identity status groups indicate that their service-learning experiences helped them to clarify future plans, and community partners can leverage these opportunities by (a) building career information into their volunteer orientation programs (e.g., what sorts of transferrable professional skills do volunteers use and develop while volunteering; what career paths can be followed in organizations like theirs), (b) taking opportunities throughout the semester to acknowledge students' professional skills as these skills are demonstrated, and (c) describing to students the career paths experienced by the organization's leadership as well as the professional skills these leaders regularly use on the job. By making these invisible aspects of the workplace visible to students, community partners can play a powerful role in supporting students' career exploration and commitment, which in turn can help students become more engaged volunteers.

Limitations. One important limitation of this study is that it was conducted at a single university. Replication of the study at higher education institutions of varying types is needed. The relatively small size of the sample did not allow the researchers to test the model with specific subgroups of students; to separate out participants' commitments in vocational, relational, and ideological decision-making; or to explore questions of intersectionality and multiple social identity commitments as these relate to service-learning class participation. The relatively small number of class sections limited the representation of academic disciplines in this study to the humanities and social sciences. Replication of the study should seek to include a greater variety of academic

disciplines, including the sciences and the arts. Finally, these data cannot address the lingering concern about whether students selfselect into service-learning and, if so, how this self-selection might have impacted the results of this study.

Conclusion

Higher education institutions are working to expand highimpact experiential learning opportunities such as service-learning (Kuh, 2008; Kuh & O'Donnell, 2013). As they do so, it is incumbent on them to demonstrate the ways in which these pedagogies have positive impacts on student success. An important measure of student success is the extent to which students have made clear future plan commitments, and this study provides preliminary evidence that service-learning courses can be helpful to students in clarifying their future plans. Service-learning courses, through cycles of action and reflection, have the potential to provide curriculumembedded opportunities for diverse groups of students to explore identity options and to make career and social identity commitments. Careful and scholarly approaches to the development of curriculum-embedded experiential education opportunities like service-learning hold great promise for transitioning a greater number of higher education students into successful adult lives.

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About the Authors

Lynn E. Pelco is associate vice provost for community engagement in the Division of Community Engagement at Virginia Commonwealth University. Her research interests include university-community partnerships, service-learning, and university student development. She earned her Ph.D. in school psychology from the Pennsylvania State University.

Christopher T. Ball is an associate professor in the Department of Psychological Sciences at the College of William & Mary. His teaching and research interests include research methodology and cognitive psychology. He is a first-generation college graduate and earned his Ph.D. from the Flinders University of South Australia.