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RESEARCH

Psychosocial Predictors of Wellness in College Students

Ariann Robino and Thomas Foster

The authors examined how the first 6 stages of psychosocial development predict wellness in undergraduate college students using the Measures of Psychosocial Development (Hawley, 1988) and the Perceived Wellness Survey (Adams, Bezner, & Steinhardt, 1997). Results indicated that 4 of the 6 stages predict wellness in college students. Clinical implications for counselors of this population are provided.

Keywords: adult development, life span, college students, psychosocial development, wellness

College students work toward personal and professional development through cultivating their identities, pursuing career interests, and developing relationships. However, high levels of stress may disrupt students' efforts in meeting these goals. Students' academic responsibilities often contribute to this stress. Full-time students typically take between four and six courses per semester and spend a significant portion of time meeting academic demands (Kumaraswamy, 2013). Students also face many financial stressors during college, struggling with accumulating student loans that may take years to repay (Letkiewicz et al., 2014) and attempting to live on a limited weekly budget (Crocker & Luhtanen, 2003). In addition, many students work during college to pay for their current expenses while balancing their employment obligations with their academic commitments (Perna, 2010).

Typical life changes occurring during college add to student stress, such as the transition from high school, which often results in homesickness, isolation, and loneliness (Conley, Travers, & Bryant, 2013; Dusselier, Dunn, Wang, Shelley, & Whalen, 2005; Thurber & Walton, 2012). Additionally, students

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must adjust to the responsibilities of independent living and begin to take ownership of balancing their time between school, work, and recreation (Kumaraswamy, 2013). Because of these responsibilities and life adjustments, half of college students report experiencing high levels of stress regularly associated with symptoms of anxiety and depression (Hudd et al., 2000).

College students who experience psychosocial issues, such as family conflicts and abuse, often encounter the issues prior to enrollment (Kessler et al., 2005). As a result, these students experience a high prevalence of mental and emotional disorders (Association for University and College Counseling Center Directors, 2012; Keyes et al., 2012). In addition to mental health concerns, many college students engage in drug and alcohol use (National Institute on Drug Abuse, 2013; Polak & Conner, 2012) for reasons ranging from recreational use to coping with stress (Arria et al., 2013). Substance abuse often leads to negative consequences for students, such as substance-related injuries, sexual assault (Hingson, Zha, & Weitzman, 2009), and long-term substance use problems (McCabe, West, & Wechsler, 2007). The existence of substance abuse and/or mental health concerns compounded with college stressors and past psychosocial issues ultimately affects academic performance and may lead to attrition, which affects future employment opportunities (Andrews & Wilding, 2004; Douce & Keeling, 2014; Liguori & Lonbaken, 2015).

WELLNESS

Wellness, defined as a “way of life oriented toward optimal health and well-being in which body, mind, and spirit are integrated by the individual to live life more fully” (Myers, Sweeney, & Witmer, 2000, p. 252), often serves as an alternative to the medical model approach to mental health care. The wellness paradigm offers a strengths-based and holistic perspective of counseling that promotes balance, self-responsibility, and a positive view of humanity (Myers & Sweeney, 2004). Numerous models of wellness exist in the literature and across professions, but they all share a multidimensional nature integrating physical, psychological, social, and spiritual dimensions (Adams, Bezner, & Steinhardt, 1997; Hettler, 1976; Myers & Sweeney, 2004; Sweeney & Witmer, 1991). Counselors utilizing a wellness approach encourage students to pursue a healthy lifestyle based on their strengths from these wellness dimensions and encourage them to be accountable for their choices and actions.

College students implementing wellness into their lifestyle often experience greater academic success and use of stress management strategies with less engagement in alcohol abuse (Chow, 2010; Conwell, 2013; Lewis & Myers, 2010). Students place greater emphasis on certain aspects of wellness. Specifically, they pursue wellness through social connections and spirituality (Granello, 2001; Spurr, Berry, & Walker, 2013) over other dimensions, such as nutrition and exercise (LaFountaine, Neisen, & Parsons, 2006; Nelms, Hutchins, Hutchins, &

Pursley, 2007). When counselors working with college students encourage them to perceive wellness from a holistic perspective, the likelihood of those students pursuing a healthy lifestyle increases (Nelms et al., 2007). During this time for establishing lifelong patterns, students fostering a wellness lifestyle increase their chances of collegiate success and healthy development throughout life.

PSYCHOSOCIAL DEVELOPMENT

Human development, defined as an “enduring growth and change that makes an individual better adapted to the environment, by enhancing the individual’s ability to engage in, understand, and experience more complex behavior, thinking, and emotions” (Steinberg, Bornstein, Vandell, & Rook, 2011, p. 7), typically addresses growth over the course of the life span using biological, psychological, and sociocultural dimensions (Boyd & Bee, 2014). Within this multidimensional perspective resides psychosocial development, which focuses on specific challenges across the life span. Erikson’s (1968) theory of psychosocial development describes a series of stages related to psychological and social development beginning in infancy and completing in late adulthood. Erikson (1982) noted that psychosocial strengths develop from the appropriate resolution of each stage and that the successful completion of later stages depends upon successful transition through earlier stages. An individual’s environment, culture, and natural state shape the experience of each stage as it builds upon the previous stage; however, earlier stage tasks may be completed during later stages if psychosocial disruption occurs (Erikson, 1982). Each stage throughout the life span contains developmental challenges that uncover psychosocial strengths and virtues when resolved successfully.

Developmental researchers traditionally define the time of late adolescence/early adulthood as between the ages of 18 and 24 years and generally agree that this population focuses on transitions related to autonomy from parents, gender identity, morality, and career selection (Newman & Newman, 2014). Both the formulation of personal and professional identity and the search for affirmation from peers overlap with Erikson’s psychosocial challenges of Identity versus Role Confusion and Intimacy versus Isolation (Erikson, 1968). When a person in these stages struggles with overcoming role confusion or isolation, psychological distress often occurs. (Erikson, 1982). The manner in which psychosocial stages are resolved predicts mental health status in later years (Vaillant & Milofsky, 1980), but nothing yet is known about how the psychosocial stages predict wellness; thus, further investigation is warranted.

Ultimately, students’ primary psychosocial goals during college involve developing a sense of identity and intimacy with others. Previously unresolved psychosocial stages combined with typical college stressors may hinder these goals, which can cause academic impairment and emotional distress. Wellness in college students increases academic success and stress

management skills while providing a healthier overall lifestyle. However, no empirical research exists examining how the psychosocial stages of development predict wellness in college students. For our research question, we asked, How do the first six psychosocial stages of development predict wellness in college students?

METHOD

Participants

We recruited 621 undergraduate students from four universities in the southern region of the United States to participate in our study. Participants consisted of young adult students (25.4% freshman, 35.1% sophomore, 22.8% junior, and 16.7% senior) with a mean age of 20.11 years ($SD = 1.72$). The majority identified as women ($n = 432, 69.6\%$) and heterosexual ($n = 547, 88.1\%$). Over half of the students identified as European American ($n = 341, 54.9\%$), and less than one quarter identified as African American ($n = 140, 22.5\%$). The remaining students identified as Hispanic American ($n = 54, 8.7\%$), Asian American ($n = 25, 4.0\%$), American Indian ($n = 5, 0.8\%$), biracial ($n = 16, 2.6\%$), multiracial ($n = 17, 2.7\%$), and other ($n = 20, 3.2\%$), with three participants giving no response. The majority of students identified their place of origin as the southern region of the United States ($n = 489, 78.7\%$), whereas other students reported the Northeast ($n = 31, 5.0\%$), the Midwest ($n = 34, 5.5\%$), the West ($n = 20, 3.2\%$), multiple regions ($n = 10, 1.6\%$), and international ($n = 35, 5.6\%$); two participants did not respond.

Procedure

We initially sampled and recruited professors from the four universities using a cluster random sampling method; specifically, we randomly sampled academic departments from the universities and then randomly selected faculty members from those departments. We contacted professors and asked for permission to recruit their students to participate in the study. Twenty percent of the professors contacted granted permission to recruit their students and provided convenient times for us to enter the classroom to distribute survey packets. Survey packets consisted of the Perceived Wellness Survey (PWS; Adams et al., 1997), Measures of Psychosocial Development (MPD; Hawley, 1988), a demographic form, and a document outlining informed consent. We randomized the surveys and demographic form to account for any interaction effects between instruments (Fowler, 2013).

At designated dates and times, we visited each classroom and distributed the packets to those interested in participating in the study. Students completed the research packets during that time, giving us a 99% return rate. Students generally completed the survey packets within 20 to 25 minutes. We obtained institutional review board approval from our university and the four universities within the study.

Measures

PWS. The PWS is a self-report measure containing 36 items that generates an overall wellness score (Adams et al., 1997). Each item is measured using a 6-point Likert scale ranging from 1 (*very strongly disagree*) to 6 (*very strongly agree*). Scores range from 36 to 216, with higher scores suggesting a greater level of wellness (Harari, Wachler, & Rogers, 2005). The PWS takes approximately 10 minutes to complete.

Researchers found strong psychometric validity and reliability of the PWS in its ability to measure overall wellness. Adams, Bezner, Garner, and Woodruff (1998) identified adequate construct validity, discriminant validity, and temporal stability within the PWS. In addition, two studies established high internal consistency ($\alpha = .91$) for the instrument (Adams et al., 1997; Harari et al., 2005). Internal consistency for the current study was .90.

Harari et al. (2005) also examined the PWS for its psychometric properties using a sample of young adult participants. They found adequate criterion validity when comparing the PWS with other mental health measures, such as the Hopkins Symptom Checklist–21, Beck Depression Inventory–II, and Beck Anxiety Inventory. Harari et al. also substantiated the unidimensional nature of the PWS by examining its factor structure; specifically, they performed a factor analysis to determine if any factors existed within the instrument. Results of the factor analysis indicated a one-factor model to fit the data.

MPD. The MPD is a 112-item self-report instrument designed to measure the eight stages of Erik Erikson's psychosocial stages of development (Hawley, 1988). Each item is measured on a 5-point Likert-type scale from *very much like you* to *not at all like you*. The MPD contains a total of 27 scales that examine adolescent and adult personality development. Of these 27 scales, 16 measure attitudes of each stage of psychosocial development (eight measure positive attitudes, eight measure negative attitudes). A positive and negative scale is assigned to each stage. An additional eight resolution scales measure the degree of stage conflict resolution. Each resolution scale is calculated by subtracting the score of its respective negative scale from the score of the positive scale.

Three Total scales also exist within the MPD. The Total Positive and Total Negative scales present scores regarding an individual's overall positive and negative attitudes about the eight stages, whereas the Total Resolution scale provides a determination of conflict resolution and overall psychosocial adjustment (Hawley, 1988). Total Resolution is calculated by subtracting the Total Negative score from the Total Positive score. The MPD takes approximately 25 minutes to complete and is scored based on gender and age.

Overall, the test–retest reliability coefficients for the MPD were close to or surpassed .80. Internal consistency reliability coefficients all ranged from .70 to .84 except for two scales: Trust (.65) and Guilt (.69). Construct validity was substantiated by comparing the MPD with two other self-report instruments assessing for psychosocial development. Hawley (1988) used a multitrait–multimethod

design to examine the convergent and discriminant validity of the positive and negative scales (see Campbell & Fiske, 1959, for a description of this design). Results suggested that the MPD scales had high convergent and discriminant validity. For this current study, internal consistency scores for the first six positive attitude scales ranged from .64 to .81, whereas internal consistency scores for the negative attitude scales ranged from .63 to .81.

RESULTS

Descriptive statistics (i.e., means, standard deviations, and ranges) for the PWS overall wellness score and the first six resolution scale scores for the MPD are reported in Table 1. We calculated the *t* scores for the MPD scales as suggested by Hawley (1988). MPD resolution scale score results demonstrated that many students had resolved the first six psychosocial stages of development, with 78% (*n* = 482) resolving Trust versus Mistrust, 85% (*n* = 525) resolving Autonomy versus Shame, 82% (*n* = 508) resolving Initiative versus Guilt, 81% (*n* = 501) resolving Industry versus Inferiority, 82% (*n* = 507) resolving Identity versus Role Confusion, and 68% (*n* = 420) resolving Intimacy versus Isolation.

Before analyzing the data, we tested for the assumptions of normality, homoscedasticity, linearity, and multicollinearity. Results showed overall wellness and all six resolution scales to be normal, and scatterplots confirmed homoscedasticity and linearity. We evaluated multicollinearity between the predictor variables and found it to be low. We found that power was sufficient with a sample size of 621 and a *p* value of .05 when using 12 predictor variables (Cohen, 1988). We used Pearson product–moment correlation to analyze the bivariate relationships between the variables. Results indicated that wellness had

TABLE 1
Correlations, Means, Standard Deviations, and Ranges
for the Study Variables

Variable	1	2	3	4	5	6	7
1. Wellness	—						
2. Trust versus Mistrust	.59**	—					
3. Autonomy versus Shame	.56**	.53**	—				
4. Initiative versus Guilt	.55**	.41**	.64**	—			
5. Industry versus Inferiority	.61**	.47**	.61**	.67**	—		
6. Identity versus Role Confusion	.65**	.54**	.57**	.58**	.65**	—	
7. Intimacy versus Isolation	.46**	.60**	.41**	.43**	.40**	.52**	—
<i>M</i>	161.06	50.00	50.00	50.00	50.00	50.00	50.00
<i>SD</i>	21.82	10.00	10.00	10.00	10.00	10.00	10.00
Range	105–215	17–73	13–76	17–75	18–71	21–72	21–71

***p* < .01.

statistically significant positive moderate relationships with all six resolution scales, and all six resolution scales had significant positive moderate relationships with each other (see Table 1).

To address the research question, we performed a hierarchical regression analysis to determine how the first six psychosocial stages of development predicted wellness in college students. We used the hierarchical regression model to determine how much the demographic variables contributed to the variance with regard to wellness. The demographic variables of sex, race, relationship status, sexual orientation, religious/spiritual orientation, and income growing up were entered at Step 1. Results indicated that the demographic variables were not statistically significant predictors of wellness. We also ran a series of *t* tests to determine if any differences existed within the demographics and found only one difference in that African Americans had statistically significant higher levels of wellness compared with Caucasians, with a modest effect size ($t = 4.10, p < .05, d = 0.43$).

For Step 2, we entered the six resolution scales that measure the first six psychosocial stages of development. Results from the second step of the analysis revealed that four of the six psychosocial stages of development were statistically significant in predicting wellness and accounted for 57% of the variance (see Table 2). The beta weight scores for Trust versus Mistrust ($\beta = .29$), Initiative versus Guilt ($\beta = .17$), Industry versus Inferiority ($\beta = .17$), and Identity versus Role Confusion ($\beta = .31$) had statistically significant positive predictive value, suggesting that as student resolution levels increase for these psychosocial stages, wellness increases.

TABLE 2

Hierarchical Regression Analysis of Wellness Predictors

Step and Variable	ΔR^2	<i>F</i>	β	<i>t</i>
Step 1	.01	1.88		
Sex			-.02	-0.52
Race			-.13	-2.98
Relationship status			.02	0.55
Sexual orientation			.00	-0.21
Religious/spiritual orientation			.04	0.83
Income growing up			.03	0.74
Step 2 ^a	.57*	71.76*		
Trust versus Mistrust			.29**	7.50
Autonomy versus Shame			-.03	-0.78
Initiative versus Guilt			.17**	4.08
Industry versus Inferiority			.17**	4.00
Identity versus Role Confusion			.31**	7.00
Intimacy versus Isolation			.00	-0.06

^aAll scales in Step 2 are resolution scores.

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

DISCUSSION

We examined the relationship between the first six psychosocial stages of development and wellness in undergraduate students and discovered that four of the stages significantly predicted wellness in this population. Specifically, students who possess a greater ability to trust others, take initiative in tasks, behave industriously, and hold a greater sense of identity increase their chances of achieving higher overall wellness. These findings provide clinical implications for counselors working with college students. Linking these psychosocial strengths to the practice of a wellness lifestyle provides a treatment opportunity for this population. Counselors can help students to both accentuate their psychosocial strengths and work on their unresolved developmental goals to pursue a healthy wellness lifestyle. Students can examine their stages of development and gain insight into why they exceeded in some goals and struggled to meet others. In the next section, we describe a clinical perspective counselors can gain from these results and suggest future research ideas.

Clinical Applications

Although providing specific clinical recommendations for each psychosocial stage of development is beyond the scope of this article, we do provide a perspective in how to use our findings. Hawley (1988) noted that individuals can struggle with any psychosocial issue at any point on the life span. For example, a student can present with trust issues developed either during the critical period of the 1st year of life or when ending an unhealthy relationship as a young adult. Knowing the etiology of the mistrust is important in implementing the appropriate therapeutic approach. If the student successfully resolved his or her psychosocial stages during each stage's respective critical period, but struggles with a stage reoccurrence as a result of a current life event, we recommend a therapeutic approach that builds upon existing strengths (e.g., narrative therapy [Walther & Carey, 2009]), challenges thoughts and behaviors (e.g., cognitive behavior therapy [Monti, Tonetti, & Rice Bitti, 2014]), and encourages self-direction (e.g., person-centered therapy [Tudor, 2010]). Students unsuccessfully resolving one or more psychosocial stages of development during the stage's critical period might have a history of struggling with such issues as mistrust, guilt, inferiority, and identity confusion. For these students, we recommend a more in-depth approach, such as psychodynamic therapy (Martin, 2014). The chosen therapeutic intervention will ultimately affect the therapeutic outcome and the student's potential for overall wellness.

Additionally, counselors wishing to include a more detailed perspective of psychosocial development in their clinical practice with college students should thoroughly assess for the existence and timeline of psychosocial problems. We recommend a combined assessment procedure using psychometric instrumentation and clinical interviewing to assess for the psychosocial stages. These

methods provide counselors a more robust perspective of a student's resolution of each stage of development.

Limitations and Future Research

One limitation of this study can be seen in the demographics of the participants. Over half of our sample consisted of Caucasian female students from the southern region of the United States. Also, although we used a wellness instrument that was proven to measure wellness unidimensionally, we were unable to examine how specific wellness dimensions related to the psychosocial stages of development.

We offer three suggestions for future research. First, we recommend expanding this study to other regions of the United States and focusing specifically on racial minorities in college to determine how the psychosocial stages predict wellness in these populations. Second, we recommend using wellness instruments that possess substantiated subscales to further examine how psychosocial stages relate to specific dimensions of wellness in college students. Last, studies examining how the psychosocial stages predict wellness should be conducted at other stages of development to determine how these relationships evolve over the life span.

CONCLUSION

Our research addresses a gap in the literature involving college student psychosocial development and wellness. We used the MPD and PWS to examine how the first six stages of psychosocial development predict wellness in college students. Through data collection at four southeastern U.S. universities, we discovered that four of the six stages significantly predicted wellness in this population. These results apply to counselors who integrate the philosophical tenets of wellness and development into their clinical practice as they work with the college student population.

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