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Work Hope and Work Volition: Exploring the Influence of Community College Students' Rurality and Socioeconomic Status

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WORK HOPE AND WORK VOLITION: EXPLORING THE INFLUENCE OF STUDENTS' RURALITY AND SOCIOECONOMIC STATUS

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Table of Contents

Page

List of Tables

Page

Abstract

WORK HOPE AND WORK VOLITION: EXPLORING THE INFLUENCE OF COMMUNITY COLLEGE STUDENTS' RURALITY AND SOCIOECONOMIC STATUS

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Data from a sample of community college students (N = 478) in Virginia were used to examine relations among rurality, socioeconomic status, work hope, and work volition. Socioeconomic status, work hope, and work volition were positively associated. However, rurality, measured both as a continuous and categorical variable, was not correlated with work hope or work volition. Additional analyses showed convergence between measures of work hope and work volition confirming construct similarity. Results, limitations, implications, and recommendations for future study are included.

Keywords: rurality, socioeconomic status, work hope, work volition

Work Hope and Work Volition: Exploring the Influence of Community College Students' Rurality and Socioeconomic Status

Globalization and changing economies have resulted in increased focus on community colleges, especially in rural regions of the United States. Approximately 3.4 million students attended community colleges in rural areas during Fall 2017, accounting for almost 60% of the total number of community college students nationwide (Rural Community College Alliance, n.d.). Rural community colleges offer standalone two-year degrees and affordable non-credit workforce training for graduates seeking employment in their respective regions. However, declines in rural industry have changed the economic and employment landscape of many rural areas, thereby bolstering need for more short-term workforce training at the community college level.

Recent large-scale economic changes have increased attention on *rurality* as a sociodemographic variable; and, rurality now is considered a target demographic for many two- and four-year institutions across the United States (Belkin, 2017; Pappano, 2017). Overall, there has been an increase in the number of rural residents seeking post-secondary education. The new attention on rural students at both two- and four-year institutions has raised important questions about this population, particularly whether rural students receive adequate support from higher education institutions and, ultimately, what their thoughts, feelings, and attitudes are regarding their pursuit of work. Recent popular press has suggested that rural students struggle to navigate the cultural landscape of higher education. Differences in academic preparation and financial resources are identified as major factors affecting students' adjustment (Nadworny & Marcus, 2018).

Rurality is a complex concept used across disciplines to describe the geographic locale in which a person resides (Waldorf, 2006). Dimensions of rurality are based on county characteristics including population size, density, level of urbanization, and proximity to nearest metropolitan areas sometimes referred to as urbanicity (Brown & Swanson, 2003; Isserman, 2005). Counties closer to urban regions have more access to structural supports such as healthcare and employment, whereas rural counties do not (Bauer, Dyk, Son, & Dolan, 2011). Additionally, rural areas have higher rates of localized poverty and unemployment, with many afflicted by declining economies (Burton, Lichter, Baker, & Eason, 2013; United States Department of Agriculture [USDA], 2017). As a result, rural labor markets generally are more constricted than urban labor markets which, in turn, affect how people think about work.

Blustein and colleagues (2005) have suggested that the "world of work is nested within a socioeconomic hierarchy" that influences how people from lower SES backgrounds access opportunity structures in their environments. People from low SES backgrounds tend to experience relatively more barriers to employment than people from high SES backgrounds. They also may perceive different functions and purposes for engaging in work (Blustein, 2013). For example, a study conducted by Blustein et al. (2002) revealed that young adults from low SES backgrounds were more likely to report work as a means for economic survival versus working for personal satisfaction, a reason unique to those from higher SES backgrounds. In more recent years, SES has emerged as an essential component of theories and models explaining vocational behavior (Duffy, Blustein, Diemer, & Autin, 2016; Lent, et al., 2000; Liu et al., 2004).

Together, rurality and SES represent features of social and cultural identity; however, these factors remain underexplored in vocational psychology literature, especially among

community college students. Vocational choices of individuals from rural and low SES backgrounds reflect the milieu of geographic and social class backgrounds (Liu et al., 2004). Swanson and Fouad (2010) referred to this as the *cultural context* which is believed to influence how people respond to expectations, demands, and opportunities in their environment. Previous research has found that rurality and SES affect not only the decision to pursue postsecondary education, but also what type of institution students choose (Koricich, Chen, & Hughes, 2018). When compared with urban high school students, for example, rural students tend to choose two-year public institutions versus four-year public or private universities. Just as Koricich and colleagues sought to determine the effect of rurality and SES on institution choice, this study examines the impacts of rurality and SES on work-related choice. More specifically, this study tests the hypothesis that community college student rurality and SES predict their thoughts about work hope and work volition--two relatively new vocational psychology constructs.

Existing vocational theories place emphasis on *career*-related outcomes versus *work*-related processes. Blustein, Kozan, Connors-Kellgren, and Rand (2015) suggested that *career* refers to a privileged status in the labor market characterized by an ability to choose work that is of personal interest. They also recommend that researchers emphasize *work* (over career) as work reflects a broader range of activities--which includes careers. The two work-related constructs examined in this study were recently created to respond to criticism regarding emphasis in the literature placed on careers. Both constructs are sensitive to those with limited choice of work and work-related activities.

Work hope is a domain-specific construct representing a positive, motivational, cognitive state comprised of goals, pathways, and intended actions towards those work-related goals (i.e., agency; Juntunen & Wettersten, 2006). Work hope was developed in response to an agreed-upon

overemphasis on individual-level variables such as occupational interests and personality traits in career development theories (Blustein, 2008; 2013; Richardson, 1993). Juntunen and Wettersten assert that work hope may be especially relevant for people who live with "economic disadvantage" believing that these populations have different needs than people from higher SES backgrounds (p. 96).

Work volition (Duffy, Diemer, & Jadidian, 2012) refers to perceptions about the ability to overcome constraints towards work of one's choosing. Work volition also emerged in response to Richardson's (1993) and Blustein's (2008) critiques of career choice theories. Power of choice and work locus of control, closely related industrial-organizational constructs, remain focal areas of attention in early discussion regarding work volition (Blustein, 2008; Duffy et al., 2012). Low perceived power and control over decisions about work- and work-related activities naturally affect the thoughts, feelings, and behaviors one has about opportunities. Duffy and colleagues differentiate between work locus of control and work volition, such that the latter pertains to the perception one has about their ability to make decisions about work versus the former, which pertains to decisions within the work setting. Power and decisional control about work is unsurprisingly contingent upon the economic and employment affordances in one's proximal environment. Therefore, rurality and SES may be important contextual factors to consider when discussing perceptions of ability to overcome financial constraints towards work of their choosing.

This study examines the influence of rurality and SES on community college students' work-related processes. Greater rurality and SES are hypothesized to influence community college students' work hope and work volition. Rural communities generally have fewer economic and employment opportunities than more suburban and urban areas. Students from

rural communities may be less likely to be exposed to diverse work- or career paths than suburban or urban peers, therefore, they may exhibit less work hope and volition towards occupations of their interest. Furthermore, limited economic resources or SES, also affects thoughts, feelings, and attitudes about work. Therefore, community college students from lower SES backgrounds may be less likely to feel themselves able to pursue work goals of their interest should they feel financially constrained. This study examined these factors and determined if rurality and SES influence the way community college students think about work- and work-related activities.

Review of Literature

To orient the reader, the first section of this review discusses contextual factors known to influence career development processes. Second, the relevance of rurality and socioeconomic status (SES) in vocational psychology literature are reviewed. An important feature of this section concerns how rurality and SES have been operationalized in academic research. The last section of this review considers literature relating to the two outcome variables of interest, work hope (Juntunen & Wettersten, 2006) and work volition (Duffy et al., 2012).

Contextual Factors in Vocational Psychology

Overemphasis on individual-level factors (e.g., Holland, 1997; Super, 1981) has been criticized influencing a shift towards group- and societal-level factors in vocational psychology literature (Duffy, Diemer, Blustein, & Autin, 2016). Prior investigations in vocational psychology have demonstrated significant differences in career development processes across group-level factors including gender (Betz, 2005; Betz & Hackett, 1981), race/ethnicity (Flores, Navarro, Brown, & Lent, 2005; Fouad & Byars-Winston, 2005), sexual orientation (Chung &

Harmon, 1994), and religion (Duffy & Dik, 2012). Additionally, a growing body of research suggests that significant differences in vocational choice vary by SES (Ali, McWhirter, & Chronister, 2005; Blustein et al., 2002; Diemer et al., 2010). Although vocational psychology research investigating these group-level differences has expanded significantly within the past 30 years, more research is needed to better understand how these factors influence work processes.

To date, most research on group- or societal-level factors has used the social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994; 2000) as a framework to describe these relationships. The SCCT is a derivative of Albert Bandura's (1977) social cognitive theory and posits that two sociocognitive variables, self-efficacy and outcome expectations, explain development of career interests, goals, and choice implementation. Self-efficacy and outcome expectations are important concepts in SCCT. They are hypothesized as central predictors of career goals and the actions people take towards those goals. Self-efficacy is the perception of an individual's ability to complete certain tasks, whereas outcome expectations are imagined consequences of engaging in behaviors leading to a career. Lent and colleagues (2000) have suggested that outcome expectations maintain a temporal dimension relative to positive (e.g., social support) and negative (e.g., marginalization) factors in an individual's environment. In other words, contextual factors such as those representing barriers or support within an individual's environment, may preclude one from forming an outcome expectation about a specific career.

More recent theoretical developments suggest that SCCT, and theories emphasizing individual-level factors on choice, underestimate the influence of group- and societal-level factors. For example, Duffy and colleagues (2016) argued that traditional theories focusing on individual-level factors inadequately "explain the work-based experiences of people on the

'lower rungs of the social position ladder'" (p. 127). As a complement to existing theories, Duffy and colleagues developed the Psychology of Working Theory (PWT; Duffy et al., 2016) which, in effect, has 'flipped this script' placing contextual factors at the fore and individual-level factors in the conceptual background. The PWT posits that the primary outcome for most people, more especially the economically disenfranchised and marginalized, is *decent work* and not a *career*. In so doing, PWT highlights privilege associated with careers – or work that is chosen by individuals to meet their interests. The consequent emphasis on work (vis-a-vis career) better reflects the range of activities people rely on for economic survival.

Rurality and Socioeconomic Status

Rurality and SES are two contextual factors under-researched in vocational psychology. Whether an area is rural, suburban, or urban, plays an important role in whether individuals have equitable access to resources, opportunities, and employment role models (Chavez et al., 2004). However, geographic characteristics such as rurality or urbanicity have been underemphasized by career development theories. Research examining the influence of SES on these career- and work processes has become more extensive in recent years. The following paragraphs review rurality and SES and the relevance of these factors as it pertains to career- and work processes. Additionally, the following paragraphs address how these variables have been operationalized in academic literature.

According to Fouad and Kantamneni's (2008) model, rurality and SES represent contextual factors influencing vocational choice. Rurality may be best described as a societal-level factor whereas SES is a group-level contextual factor. Rurality and SES reflect differential access to opportunity structures which Fouad and Kantamneni (2008) assert "affect how careers are chosen and how views on work are formed" (p. 418). Rural areas are disproportionately

affected by increased poverty, lower income earnings, limited education options, and a narrowed exposure to career advancement opportunities (Son, Hyjer Dyk, Bauer, & Katras, 2011). Fouad and Kantamneni suggest that these factors influence access to the opportunity structure which affects how individuals think about work.

Rurality. Few studies have explored the influence of rurality on career- or work-related processes, perhaps because rurality is a conceptually confusing construct lacking consensus among researchers regarding its measurement. Previous studies define rurality using categorical systems based on degrees of population density and adjacency to metropolitan areas (Isserman, 2005). Two common categorization systems are the Rural Urban-Continuum (RUCC; Butler & Beale, 1994), and the Urban Influence Code (UIC; USDA, 2013), both of which use thresholds to collapse United States counties into metropolitan versus nonmetropolitan regions. However, categorical approaches of rurality can be misleading (Waldorf & Kim, 2015). Waldorf and Kim contend that systems like the RUCC and UIC divide counties by arbitrary thresholds, which is problematic – both because multidimensional constructs seldom fit neatly into discrete categories and doing so results in information loss. Consequently, Waldorf (2006) developed the Index of Relative Rurality (IRR) which is a continuous, multidimensional measure of rurality. The IRR includes measures of four dimensions including population size, density, remoteness, and built-up areas (Waldorf & Kim, 2015).

IRR dimensions were selected based on existing conceptualization of rurality and availability of temporal data. Dimensions of remoteness and built-up areas represent qualities of rural regions in the United States. Waldorf and Kim (2015) included remoteness and built-up areas as dimensions based on the notion that rural areas are both geographically isolated and represented by fewer structures built to house larger population densities that typify urban areas.

Rather than classify counties, the IRR produces a code with a range of 0 to 1, wherein scores closer to 1 represent greater county-level rurality. Core advantages of using a continuous measure of rurality include preservation of potential construct variability and ease of use with regression-based statistical models (Waldorf & Kim). The greatest advantage of using IRR in research is the variable's dimensional approach which includes important characteristics of rural communities (i.e., remoteness and built-up) and therefore more precise measurement.

Socioeconomic status. The terms social class and SES sometimes are used interchangeably in vocational psychology; however, there are important distinctions between these terms (Diemer & Ali, 2009; Liu et al., 2004). According to Diemer and Ali, social class refers broadly to a combination of "sociological and internal" variables that influence career development processes (p. 250). In this study social class refers to a higher-order representation of several variables *including* SES. Therefore, SES was operationalized in this study by using a combination of objective and subjective measures. Diemer, Mistry, Wadsworth, López, and Reimers (2013) have suggested that researchers consider both objective (resource-based) indicators (i.e., income, education, and occupation) and subjective indicators (i.e., perceived social status) when investigating SES.

Several studies in vocational psychology have explored correlates of SES among college students (Autin, Douglass, Duffy, England, & Allan, 2017; Mejia-Smith & Gushue, 2016; Metheny & McWhirter, 2013). For example, Blustein et al. (2002) determined that there are important differences among low and high SES people regarding function and the role of work. This study sought to expand upon existing literature and proposed that SES influences two processes which affect the way people think, feel, and act regarding work (i.e., work hope and

work volition). Differing levels of SES may require different types of career- or work-related interventions (Juntunen & Wettersten, 2006).

Work and Rural Environments

Studies of career- and work-related processes of rural incumbents are limited. The few studies that exist have used the SCCT framework (Ali & McWhirter, 2006; Ali & Saunders, 2009; Lapan, Hinkleman, Adams, & Turner, 1999; Wettersten et al., 2005). For example, Lent and colleagues (2000) suggested that societal- and group-level factors play important roles in facilitating or hindering the formation of self-efficacy beliefs and outcome expectations. Sources and perceived levels of interpersonal support, access to training and education, and availability of vocational role models (Lent et al., 2000) are among those factors believed to help or hinder career-related self-efficacy and outcome expectations. The limited number of studies examining the influence of these factors on people from rural communities provides a platform for further investigation, especially studies exploring the influence of geography on work processes.

For example, Lapan and colleagues (1999) explored the influence of parental support and gender on efficacy beliefs and value of occupations among high school students (N =126) from a rural, midwestern community in the United States. Participants completed a vocational mapping activity using Holland's career interest typology derived from the Self-Directed Search (Holland, 1987). Data were collected over three 50-minute sessions with activities assessing students' Holland's Code, parental support, perceived value, and efficacy towards career-related interests. In addition, participants were asked to report their perception of the proportion of men versus women in several familiar occupations. Overall, Lapan and colleagues determined that self-efficacy and parental support for certain occupations were significant predictors of outcome expectations among rural high school students. Specifically, they found that high school students

were more likely to value occupations if they believed that their parents supported the occupation. They also found that young men expressed greater self-efficacy and value for Realistic occupations (Holland, 1997). The Realistic occupational theme reflects careers associated with hands-on outdoor activities, which are more common among people living in rural regions of the United States.

Results from Lapan and colleagues' (1999) study revealed several important findings about career development in rural environments. First, they showed linkages among environmental factors, self-efficacy, and outcome expectations in their rural participants. Second, they found that development of self-efficacy beliefs and outcome expectations among rural high school students were influenced by parental support and gender. Gender differences are well-established in vocational psychology literature (Betz & Hackett, 1981), and gender is viewed as a contributing factor in the development of individuals' self-concepts, as adolescents narrow and rule out careers based on exposure to what is available in their geographic environment (e.g., Gottfredson, 2005). Third, Lapan et al. showed that societal values placed on specific occupations in rural communities play an important role in career development. A core limitation of Lapan et al.'s study, however, pertains to measurement of predictor variables. Lapan and colleagues used dichotomous scales for measurement of efficacy and parental support. For example, participants were asked to rate whether they perceived their parents would support a career by answering either yes or no. Use of dichotomous measures limit response options and inferences which can be made about other samples.

Wettersten and colleagues (2005) also explored how support influences career development in two samples of rural high school students (N = 689). They sought to replicate findings from an earlier study (c.f., Kenny, Blustein, Chaves, Grossman, & Gallagher, 2003),

suggesting that key contextual factors of urban environments influence academic and work success. In that study, limited employment opportunities, poverty, and restricted access to resources were factors associated with reduced self-efficacy and outcome expectations of urban high school students. Wettersten et al. specifically examined the influence of social support, academic self-efficacy, perceptions of parental pro-education behaviors, and perceptions of educational barriers on three SCCT outcomes (i.e., career outcome expectations, academic outcome expectations, and career salience). Work or career salience is the degree to which individuals view work as important and central to their lives (Greenhaus & Simon, 1977). Results from simultaneous hierarchical regression analyses revealed support for Wettersten and colleagues' hypotheses, effectively replicating Kenny and colleagues' results. Wettersten et al.'s findings, therefore, suggest that environmental factors, particularly social support and parental pro-education behaviors, influence high school youth similarly in rural and urban environments.

Taken together, results from Wettersten's (et al., 2005) and Lapan's (et al., 1999) studies suggest that contextual factors are integral to career development processes. Both studies also highlight the importance of parental support and the way parental values on education and career type may be particularly important for youth in rural communities. However, in both studies, parental support and perceptions of parental values (regarding occupations in Lapan et al.'s study, and pro-education behaviors in Wettersten et al.'s), are only linked anecdotally to characteristics defining rural communities in the United States. Lapan and colleagues cite this speculation as an area for further research, specifically recommending that future study examine "contextual and structural features of the environment that interact with an individual's sense of personal agency" (p. 122).

One additional study also examined the influence of SCCT variables on high school students. Ali and Saunders (2009) investigated contextual factors hypothesized to influence career aspirations among rural, Appalachian high school students (N = 63). Along the lines of the studies reviewed above, Ali and Saunders hypothesized that support would play an important role in career-related outcomes amongst a sample of rural students, and they included peer and sibling support as well as parental support. Results of their hierarchical regression analyses were not consistent with studies conducted by Lapan et al. (1999) or Wettersten et al. (2005) and no support variables were found to be significant predictors of career aspirations. Ali and Saunders' results did, however, reveal SES to be a strong predictor of career aspirations. These findings could be attributable to differences in the measures used to assess support, and the relatively small sample size reported in Ali and Saunders's study. In discussing their findings, Ali and Saunders's offered an important comment regarding the significance of SES, stating "issues of classism" may function as limitations of career aspirations among rural youth (p. 13). They also suggested that fewer resources and access to career role models in Appalachia may help explain the association between SES and lower career aspirations.

People from rural, lower SES backgrounds, themselves, may also place restrictions on their work and work-related goals. A study conducted by the Pew Research Center found significant differences in income, values, and employment among those from rural communities compared with those from suburban and urban communities (Parker et al., 2018). Furthermore, rural Americans were less likely to report being optimistic about their employment and economic future than suburban and urban peers. Fouad and Kantamneni (2008) suggested that individuals with diverse or underrepresented backgrounds may "encounter conflicting experiences and messages related to work," thereby necessitating the adoption of a bicultural identity of sorts to aid in navigation of new environments (p. 417), such as the higher education environment, for

example. Therefore, community college students from rural and lower SES backgrounds may experience conflicting messages about work- and work-related activities, especially when envisioning the outcome of their postgraduate experiences. As this review of the literature has shown, people from rural backgrounds, particularly community college students, may have a different outlook on work when compared to their peers from suburban, urban, and higher SES backgrounds.

Work Hope and Work Volition

Work hope. The construct of work hope may be especially salient for people from rural communities and lower SES backgrounds. Originating from Snyder et al.'s well-researched hope theory (1996), this variable is defined as a positive motivational state intended to influence paths and agency necessary to accomplish work-related goals (Juntunen & Wettersten, 2006). In a longitudinal study investigating hope, Snyder and colleagues (2002) found that hope theory could be applied to different domains of life, including career preparation outcomes like graduation from college. Snyder et al. (2002) also found that people with high hope levels were more likely to graduate from college than peers scoring low on measures of hope. Following Snyder and his colleagues, Juntunen and Wettersten reasoned that work hope may be relevant among those from economically disenfranchised backgrounds: primarily because people who lack access to educational and occupational opportunities exhibit difficulty identifying work-related goals. In their initial study of work hope, Juntunen and Wettersten found that college students and college graduates exhibited higher work hope than economically disadvantaged youth, and women receiving welfare benefits.

Juntunen and Wettersten (2006) distinguished work hope from self-efficacy by defining work hope as a construct of *intention* rather than *perception* of an ability to perform a work task.

They contend that work hope captures intended pathways towards work-related goals and emotions related to a goal, whereas SCCT does not consider emotion underlying cognitive states. To this end, work hope is seen as an expression of an individual's willingness to initiate actions toward their work-related goals. In their initial validation study, Juntunen and Wettersten showed that work hope shared variance with self-efficacy but remained a distinct construct.

More recent research has focused on factors influencing work hope, such as financial stress among families and perceived parental support. For example, Thompson, Nitzaram, Her, Sampe, and Diestelmann (2017) investigated associations between financial stress and work hope in 119 adolescents from rural, suburban, and urban regions in a Midwestern state. They hypothesized that financial stress would be negatively associated with work hope; but that caregivers' support would moderate the association by buffering the negative effects of such stress. Thompson et al.'s predictions were supported suggesting that financial status affects rural adolescents' thoughts and attitudes about work goals and the pathways towards those goals. Furthermore, results from their study suggested that familial social class and financial strain significantly influenced the way adolescents think about their work-related goals.

Work volition. Duffy et al. (2012) defined work volition as the perception of occupational choice given felt constraints. Many individuals from rural and lower SES backgrounds lack access to educational opportunities and financial resources. People with limited access to education or economic resources may perceive greater financial and structural barriers to employment than their urban and higher SES peers, so Duffy and his colleagues proposed that students with low work volition may perceive fewer job options within their environment. Moreover, these researchers suggested that college students may face unique barriers and constraints in the selection process of majors and postgraduate careers.

To date, few studies have explored work volition among college students considering their SES, and no studies have investigated rurality and its influence on work volition. However, Autin et al. (2017) explored associations among social status, work volition, and career adaptability in a sample of university students. Career adaptability is a construct that addresses coping with vocational tasks (Savickas & Porfeli, 2012). Autin and colleagues collected data at three time points measuring social status, work volition, and career adaptability across six months. Results of structural equation modeling revealed that students with higher reported social status exhibited greater adaptability, as explained by higher work volition. The authors therefore suggested that work volition plays an important role in explaining the association between social status and the ability to overcome constraints towards work of interest.

Previous research also has shown that work volition mediates the association between social class and work meaning. Allan, Autin, and Duffy (2014), for example, hypothesized that individuals' levels of work meaning could be predicted from their social class. They defined work as meaningful if it aligned with a person's values and contributed to the common good and hypothesized that people from lower social class backgrounds would experience work as less meaningful than those from higher social class backgrounds. Furthermore, Allan and colleagues were interested in determining if work volition helped explain the association between social class and work meaning. Results showed that constraints and volition (as latent variables) fully mediated the association between social class and work meaning. Allan et al. interpreted these findings to mean that people from lower social class backgrounds may be less likely to pursue work that is meaningful (i.e., satisfying the above-mentioned conditions) if they perceive themselves as not able to overcome financial constraints in their work environments.

Review of vocational psychology literature suggests that contextual factors, while complex, remain influential in work- and career-decision processes. Work hope and work volition are two constructs that capture thoughts and feelings which precede decisions about work. Community college students' work hope and work volition, especially those from geographically rural areas and low-income backgrounds, may be uniquely affected by their respective cultural context. Therefore, this study aimed to investigate community college students' rurality and SES and the relation between these factors, work hope, and work volition.

Statement of Problem and Hypotheses

This study explored the influence of rurality and SES on two relatively new but important constructs in vocational psychology: work hope (Juntunen & Wettersten, 2006) and work volition (Duffy et al., 2012). Economic and employment opportunities in rural areas are limited, therefore people from rural communities may experience less exposure to diverse career paths thereby influencing perceptions about work- and work-related activities. Individuals from rural areas are also more likely to have fewer vocational role models which affects perceptions about work and one's ability to pursue certain types of occupations (Ali & Saunders, 2009). If rural communities are situated within a constrained labor market, it makes sense that community college students from these areas may feel less hope about- and volition for occupations that are of interest than people from less constrained labor markets. Furthermore, as Ali and Saunders have suggested, a lack of vocational role models also indirectly contributes to lower SES, which affects work goals. Therefore, it makes sense to investigate individuals' perceptions of work, especially among those from rural and lower SES backgrounds. Few studies have explored relations between rurality, SES, and work-related constructs. Given the increased likelihood of economic disenfranchisement among those from rural, low SES backgrounds, it was

hypothesized that rurality and SES would predict (1.a.) work hope and (1.b.) work volition among community college students beyond the influence of other demographic variables.

Furthermore, it was expected that significant differences in work hope and work volition would exist among those from rural, suburban, and urban hometowns. Limited access to diverse work opportunities, education, and training in rural areas seem to indicate that those from rural communities may exhibit less hope and perceived ability to overcome constraints in their environments towards work than peers from suburban and urban communities. In addition to measuring rurality using the IRR, this study asked participants to self-report their hometown county as rural, suburban, and urban. Using participant's response, the investigator sought to determine whether differences in work hope and work volition existed among community college students identifying their hometown as rural versus suburban or urban. Therefore, the investigator also hypothesized that participants from rural communities would report (2.a.) less work hope and (2.b.) lower work volition than those from suburban and urban hometowns.

Finally, this study sought to explore the extent to which work hope and work volition scales shared variance. A component of work hope is agency, which refers individuals' intentions to pursue of work goals (Juntunen & Wettersten, 2006). Like work hope, work volition captures perceived will but emphasizes effort exhibited towards overcoming constraints to work goals (Duffy et al., 2012). Therefore, it was hypothesized that (3.a.) work hope and work volition would be positively correlated. Furthermore, it was expected that specific components of work hope and work volition would demonstrate convergence among latent variables underlying each construct. As a result, it was hypothesized that (3.b.) agency, a component of the work hope construct, and volition, a component of the work volition construct would be positively correlated.

Method

Participants

Participants consisted of 478 community college students from six institutions within the Virginia Community College System (VCCS). Overall, 587 potential respondents completed online survey items, however, 109 either failed to meet study inclusion criteria or did not complete the full set of measures. These cases were excluded listwise. There were 375 women (78.8%), 96 men (20.1%), and seven (<1.0%) who identified as nonbinary, preferred not to answer, or omitted response. With respect to racial and ethnic background, 73.4% were White/Caucasian, 17.2% Black/African American, 5.0% Latino/a/Hispanic, 2.3% Other, 1.5% Asian American/Pacific Islander, and < 1.0% self-reported as American Indian/Alaskan Native, a racial and ethnic representation proportional to recent enrollment at participating institutions. Three participants did not report age and those remaining ranged from 18 to 70 years (M = 25.68, SD = 10.21). Demographic characteristics of the study sample are provided in Table 1 (by $n > 5$ response to ensure anonymity).

Given that this study investigated the influence of geographic locale on study measures, participants were asked questions about whether they identified their hometown as rural, suburban, or urban. Most identified their hometown state as Virginia (92.5%), whereas the remaining 7.5% claimed a hometown in one of 22 different states. In addition, most (72.4%) had lived in their hometown for more than 10 years. Regarding self-report of hometown, most (n = 362, 75.9%) identified their hometown as rural compared with 73 (15.3%) suburban and 42 (8.8%) urban. One participant omitted a response to this question.

All participants were enrolled at least part-time in coursework. Most participants were enrolled in at least one on-campus course (n = 401) as opposed to other forms of enrollment (n =

76; e.g., hybrid or online coursework). Over half (*n* = 242; 50.6%) claimed that they were employed at least one hour per week whereas 105 participants (22.0%) worked more than 40 hours per week. Several stated that they were not employed but seeking work (*n* = 53, 11.1%) compared with 69 (14.4%) not seeking employment. Less than 2% were disabled and not able to work during the time in which they completed the survey. Participants' course of study varied considerably, with the largest proportion of participants (128; 26.8%) enrolled in nursing coursework. Tabulation of participant field of study is included in Table 2. Demographic items also assessed participants' estimated family income in 2018 as well as parent or guardian level of education. Regarding estimated family income, most (65.3%) reported earnings of less than $50,000 in 2018. Concerning parent or guardian level of education, 28.0% reported that their maternal caregiver had earned either an associate's or bachelor's degree; 7.1% a master's, doctoral, or professional degree. Among paternal caregivers, 19.5% had either an associate's or bachelor's, and 4.2% a master's doctoral, or professional degree.

Table 1.

Demographic Characteristics of Participants (N = 478)

Characteristic	*n*	%
Gender		
Women	375	78.5
Men	96	20.1
Nonbinary, preferred not to answer, or omitted	7	1.5
Race/Ethnicity		
White/Caucasian	351	73.4
Black/African American	82	17.2
Latino/a/Hispanic	24	5.0
Asian American/Pacific Islander	7	1.5
American Indian/Alaskan Native	< 5	< 1

Other	11	2.3
Hometown		
Rural	362	75.9
Suburban	73	15.3
Urban	42	8.8
Employment Status		
Employed, working 40 or more hours per week	105	22.0
Employed, working 1-39 hours per week	242	50.7
Not employed, seeking work	53	11.1
Not employed, not seeking work at this time	69	14.5
Disabled, not able to currently work	8	1.7
Annual Income ($)		
< 20,000	97	20.7
20,000 - 34,999	116	24.8
35,000 - 49,999	99	21.2
50,000 - 74,999	84	17.9
75,000 - 99,999	38	8.1
> 100,000	34	7.3
Maternal Education		
No post-secondary education	215	45.0
Some college	104	21.8
Post-secondary degree	168	35.1
Paternal Education		
No post-secondary education	240	51.2
Some college	88	18.8
Post-secondary degree	113	24.1

Note: Totals of percentages are not 100 for every characteristic due to missing data and rounding

Table 2.

Participant Academic Field of Study

Field of Study	*n*	%
Accounting	8	1.7
Administration of Justice	18	3.8
Arts	10	2.1
Biology	17	3.6
Business Management & Administration	36	7.6
Chemistry	5	1.1
Computer Science	16	3.4
Dental Hygiene	5	1.1
Education	32	6.7
Emergency Medical Services	7	1.5
Engineering	10	2.1
Health	12	2.5
Human Services	20	4.2
Information Technology Design and Database	12	2.5
Nursing	128	26.9
Political Science	5	1.1
Psychology	24	5.1
Radiography	5	1.1
Respiratory Therapy	6	1.3
Veterinary Technology	14	2.9
Other ($n < 5$)	85	17.9

Note: Totals of percentages are not 100 for every characteristic due to missing data and rounding

Measures

Demographics. A 17-item demographic questionnaire was administered to all participants including questions about age, gender identification, racial/ethnic background, year

in school, parental education, hometown zip code, and hometown state and county. Participants were not asked for specific information about their community college, as to ensure anonymity.

Rurality. An Index of Relative Rurality (IRR; Waldorf, 2006; Waldorf & Kim, 2015) score was derived from participants' report of hometown county. The IRR produces a continuous score of rurality based on four dimensions: size, density, urbanization, and distance to closest metropolitan region. Index scores of relative rurality use a scale from 0 to 1. Scores closer to 1 are suggestive or greater rurality. Index scores are identifiable by county via a free database accessible on the Purdue University Research Repository website. Additionally, a single item was included in the demographic questionnaire measuring self-identification of participants' hometown as rural, suburban, or urban (i.e., "How would you describe your hometown?"). This single-item question was based on previous use in a Pew Research Center (Parker et al., 2018) investigating rural, suburban, and urban differences in the United States (i.e., "How would you describe the community where you currently live? (1) rural, (2) suburban, (3) urban.").

Social status. The MacArthur Subjective Social Status Scale (Adler, Epel, Castellazo, & Ickovics, 2000) was used to measure social status, a subjective self-report variable representing SES in society. Participants were shown a ladder with 10 rungs representing education, income, and occupational prestige. Participants were then asked to respond to the prompt: "Think of this ladder as representing where people stand in our society. At the top of the ladder are the people who are the best off, those who have the most money, most education, and best jobs. At the bottom are the people who are the worst off, those who have the least money, least education, and worst jobs or no job." Participants were asked to place an 'X' on the ladder, representing a 10-point scale. Higher scores are indicative of greater perceived social status. A previous study using this scale found social status significant in the prediction of work volition and career

adaptability among college students (Autin et al., 2017). The MacArthur Subjective Social Status Scale has been widely used in health psychology research and is associated with varying outcomes including depression, cardiovascular health risk, and diabetes (Singh-Manoux, Marmot, & Adler, 2005). Studies using the MacArthur Subjective Social Status Scale by Callan, Kim, and Matthews (2015) revealed a test-retest reliability coefficient of .82.

Work hope. The Work Hope Scale (WHS; Juntunen & Wettersten, 2006) was used to assess three factors of work hope. Consistent with Snyder's (2000) hope theory, the WHS assesses components of hope influencing perceptions of work and work-related goals. The WHS is a 24-item measure with three subscales assessing pathways, goals, and agency. All items use a 7-point Likert-type scale with scores ranging from 1 (strongly disagree) to 7 (strongly agree). The goals subscale includes eight items assessing work-related goals (e.g., "I have goals related to work that are meaningful to me" and "I have a difficult time identifying my own goals for the next five years."). The pathways subscale includes eight items which identifies ideas individuals have about reaching work-related goals (e.g., "I can identify many ways to find a job that I would enjoy" and "My desire to stay in the community in which I live (or ultimately hope to live) makes it difficult for me to find work I would enjoy."). The agency subscale includes eight items assessing energy directed toward work-related goals (e.g., "I am capable of getting the training I need to do the job I want" and "I can do what it takes to get the specific work I choose."). The WHS contains nine negatively valanced items requiring reverse coding for full-scale scoring. The WHS demonstrated strong internal consistency with college students (N = 456) in a previous study, which included a full-scale Cronbach alpha coefficient of .93 (Dik, Eldridge, Steger, & Duffy, 2012). In this study, the full-scale reliability estimate was .90, whereas alphas for subscales were .68 for pathways, .82 for agency, and .75 for goals.

Work volition. Work volition is defined as the capacity to make occupational choices despite constraints (Duffy et al., 2012). The Work Volition Scale-Student Version (WVS-SV; Duffy et al., 2012), is a 16-item measure comprised of subscales assessing general volition and constraints. The volition subscale captures students' feelings about their ability to choose a job they want and includes items such as, "I feel total control over my future job choices" and "I will be able to change jobs if I want to." The constraints subscale measures students' perceptions of their ability to overcome constraints to work they choose. The constraints subscale includes items such as, "What I want has little impact on my future job choice" and "The only thing that matters in choosing a job is to make ends meet." Scores on each scale use a 7-point rating scale with anchors ranging from (1) strongly disagree to (7) strongly agree. The subscale measuring constraints includes nine negatively valanced items requiring reverse coding for full-scale scoring. The WVS-SV demonstrated strong internal consistency with a sample of diverse college and university students from a large Southeastern university (N = 379), with a total scale Cronbach alpha coefficient of .92 (Duffy et al., 2012). For this study, reliability estimates were .87 for the full scale, .83, and .83, for the constraints and volition subscales, respectively.

Procedure

Participants were recruited via email and course management platform announcements at six community colleges across differing geographic locales within the Virginia Community College System (VCCS). Approval was obtained from the Institutional Review Board (IRB) at Virginia Commonwealth University prior to recruitment. Additionally, approval was required and obtained from the IRB or equivalent governing entity at participating community colleges including Blue Ridge Community College, Mountain Empire Community College, Paul D. Camp Community College, Rappahannock Community College, Southside Community College,

and Virginia Highlands Community College. Samples of recruitment materials are included in Appendix A. Participating colleges were identified based on their inclusion in the Rural Virginia Horseshoe Initiative (RVHI). The RVHI is a statewide program implemented by the Virginia Community College System in 2015 to increase enrollment in postsecondary education and improve job readiness among rural residents of Virginia. The rural horseshoe represents a geographic arc including 2.1 million people (approximately 75% of the state population; Virginia Community College System, 2015). Community colleges situated in the rural horseshoe include students enrolled from various regions across Virginia, including those colloquially identified as rural, suburban, and urban. All participating institutions selected were 2-year, public colleges with certificate and associate degree programs all maintaining a Carnegie Classification as an Associates College (Carnegie Foundation for the Advancement of Teaching, 2011).

Participants were asked to complete an anonymous online survey evaluating thoughts, feelings, and behaviors relating to work- and work-related activity during the Fall 2019 academic semester. Most participants completed the survey within four weeks between September and October 2019. Data were collected using REDCap, a secure electronic data capture software (Harris, Taylor, Thielke, Payne, & Conde, 2009). Survey completion time was estimated between 10 and 15 minutes. Participants were advised of the study purpose and informed that they could discontinue at any time. Those completing the survey were redirected to a separate secure weblink and invited to submit contact information for a chance to win one of ten $50 electronic gift cards. Study data were stripped of timestamp information prior to analysis such that participation in the raffle could not be meaningfully paired with responses to questionnaires.

Results

Preliminary Analyses

All analyses were conducted using IBM SPSS 26.0 statistical package. Univariate summary reports of study variables were inspected prior to analyses to apply exclusion criteria, evaluate respondent effort, and assess completion of study measures. Overall, 587 respondents completed survey items. Respondents violating age criterion (n = 24; 4.09%), cases missing responses to items used to assign IRR codes (n = 2, < 1%), and those with missing data on the MacArthur Subjective Social Status Scale (n = 15, 2.56%) were excluded listwise from analyses. Additionally, respondents missing more than 20% of items on the work hope and work volition measures (n = 68, 11.58%) were excluded as these cases had too few values for analyses. Visual inspection of missing values suggested that a subset of participants discontinued after completing demographic items. Remaining missing item values on study measures were few and replaced with series means prior to analyses.

Self-reported hometown zip codes and counties were used to assign IRR codes using Microsoft Access 2010. The IRR uses Federal Information Processing Standard (FIPS) state codes rather than zip codes, therefore, a database was created by the investigator to pair FIPS codes with participants' self-reported hometown zip code and county based on 2010 zip-tract information (United States Department of Housing and Urban Development, 2010). These data were visually inspected to ensure that self-reported hometown counties were commensurate with those listed in the 2010 IRR database.

Data were then checked for normality and outliers by examining descriptive information, scatter plots, and histograms for all study variables. No outliers were observed across variables. Data were normally distributed for all variables excepting age and IRR. Age distribution was positively skewed, whereas the distribution of IRR was negatively skewed. The investigator did not transform these variables as age and rurality are not normally distributed in the population.

Descriptive statistics including means, standard deviations, ranges, and reliability coefficients for all continuous study variables were computed and included in Table 3.

Table 3.

Means, Standard Deviations, Range, and Reliability Coefficients for Continuous Variables

Study Variable	*M*	Range	*SD*	*α*
Age	25.68	18.00 – 70.00	10.21	--
IRR2010	.47	.12 - .56	.10	--
Standing	5.08	1.00 – 10.00	1.74	--
WH_Total	135.04	74.00 – 168.00	19.73	.90
WH_Pathways	45.08	24.00 – 56.00	6.47	.68
WH_Agency	51.41	28.00 – 63.00	8.34	.82
WH_Goals	38.55	16.00 – 49.00	6.95	.75
WVS_Total	81.94	29.00 – 112.00	16.10	.87
WVS_Constraints	45.03	9.00 – 63.00	10.89	.83
WVS_Volition	36.90	10.00 – 49.00	7.61	.83

Note: IRR2010 = Index of Relative Rurality; Standing = MacArthur Subjective Social Status (Socioeconomic Status); WH_Total = Work Hope – Total Scale; WH_Pathways = Work Hope Pathways Subscale; WH_Agency = Work Hope Agency Subscale; WH_Goals = Work Hope Goals Subscale; WVS_Total = Work Volition Scale – Student Version Total Scale; WVS_Constraints = Work Volition Constraints Subscale; WVS_Volition = Work Volition Volition Subscale

Power analyses. Power analyses were conducted *a priori* using G*Power Software (Faul, Erdfelder, Buchner, & Land, 2009) revealing that a sample size of 107 would be sufficient for regression analyses with the hypothesized predictor variables assuming power ≥ 0.95, $\alpha \leq 0.05$, and a medium effect ($f^2 = 0.15$). In an earlier study examining the influence of multiple contextual factors on work hope, Thompson and colleagues (2014) determined that 119 participants had been sufficient to detect a significant effect.

Independent samples t-tests. Preliminary independent-samples t-tests were conducted prior to study analyses to determine whether scores differed based on gender, college enrollment status, and employment status. Most participants identified their gender as either woman (n = 375) or man (n = 96) whereas < 1.0% selected non-binary, other, or did not say. Therefore, mean scores were compared among women and men. Results revealed that women, on average, have greater overall work hope than men, $t(469) = 2.32$, $p = .021$. Furthermore, women reported higher scores on the pathways and goals subscales of the work hope measure. No other differences by gender were observed on remaining study measures and subscales. Results are included in Table 4. Review of similar studies among college students revealed that college women responded to surveys assessing work hope and work volition more than college men. Tabulation of these studies are included in Table 5 to illustrate proportional gender differences in response patterns. College enrollment status was assessed using a single-item on the demographic questionnaire asking participants of whether they were enrolled in at least one on-campus course (n = 401) during survey administration (e.g., "yes" or "no"). An independent samples t-test status revealed no significant differences based on college enrollment status. Employment categories, as measured by an item on the demographic questionnaire (see Appendix C), were collapsed into a dichotomous variable (i.e., employed; n = 347 and not employed; n = 130). No differences were observed on study measures based on participant employment status.

Table 4.

Differences Between Women and Men on Measures of Work Hope and Work Volition

	Women	Men

Study Measure	*M*	*SD*	*M*	*SD*	*df*	*t*	*p*	Cohen's *d*
WH_Total	136.30	19.57	131.08	19.94	469	2.32	.021*	.26
WH_Pathways	45.45	6.39	43.92	6.74	469	2.06	.040*	.23
WH_Agency	51.83	8.28	50.25	8.36	469	1.66	.097	.19
WH_Goals	39.02	6.85	36.09	7.17	469	2.68	.008*	.42
WVS_Total	82.16	16.21	81.35	15.69	469	.44	.663	.05
WVS_Constraints	45.06	11.00	45.12	10.43	469	-.05	.958	.01
WVS_Volition	37.10	7.56	36.24	7.74	469	.99	.319	.11

Note: * Significant at $p < .05$. WH_Total = Work Hope – Total Scale; WH_Pathways = Work Hope Pathways Subscale; WH_Agency = Work Hope Agency Subscale; WH_Goals = Work Hope Goals Subscale; WVS_Total = Work Volition Scale – Student Version Total Scale; WVS_Constraints = Work Volition Constraints Subscale; WVS_Volition = Work Volition Volition Subscale

Table 5.

Studies Examining Work Hope and Work Volition among College Students (Since 2006)

	Work Hope	
Study Source	Women	Men
Thompson, Her, & Nitzarim (2014)	125 (71%)	50 (28.4%)
Yakushko & Sokolova (2010)	195 (62.5%)	117 (37.5%)
Juntunen & Wettersten (2006)	161 (72%)	58 (26%)
	Work Volition	
	Women	Men
Bouchard & Nauta (2018)	300 (76%)	77 (20%)
Autin, Douglass, Duffy, England, & Allan (2017)	222 (83.1%)	45 (16.9%)
Duffy, Douglass, Autin, & Allan (2016)	136 (58.9%)	93 (40.3%)
Duffy, Diemer, Perry, Laurenzi, & Torrey (2012)	197 (84.9%)	35 (15.1%)
Duffy, Diemer, & Jadidian (2012)	213 (56.2%)	162 (42.7%)

Note: Percentages do not equal 100 due to missing data or report of other gender.

Correlational analyses. Bivariate correlations of primary study variables were calculated using Pearson product-moment coefficients and are presented in Table 6. Significant associations with primary study variables are included in the following paragraphs.

Work hope. Results revealed that work hope was significantly positively associated with primary study variable of interest, social status, as measured by the MacArthur Subjective Social Status Scale. Work hope also demonstrated positive correlations with demographic variables of age, income, and maternal level of education, such that work hope was higher among those whose maternal caregiver attended some college compared those without post-secondary education. In addition, the effect of identifying as a man was negatively correlated with work hope. As expected, work hope demonstrated strong positive associations with all three subscales of the measure (i.e., pathways, agency, and goals). The work hope pathways and goals subscales demonstrated positive associations with social status, age, and income. These scales were negatively correlated with identifying as a man. Of note, the work hope agency subscale was positively associated with IRR, such that participants from more rural hometowns reported higher levels of agency.

Work volition. Work volition was positively correlated with social status, as well as income, and parental education, specifically maternal and paternal caregivers with a post-secondary degree (i.e., associate's, bachelor's, or advanced). As expected, total measure scores on the work volition scale demonstrated strong positive correlation with the two subscales (i.e., constraints and volition). The constraints subscale demonstrated positive relations with social status and several demographic variables including age, income, and parental level of education. More specifically, participants reported themselves as more able to make future work choices

despite financial constraints if maternal and paternal caregivers held a post-secondary degree (i.e., associate's, bachelor's, or advanced). Lastly, the work volition subscale demonstrated significant positive associations with social status and income, as well as all primary study measures.

Testing of Hypotheses

Two hierarchical multiple regression analyses were conducted to test Hypotheses 1 and 2 examining the influence of rurality using IRR codes and social status using the MacArthur scale on work hope and work volition, respectively. In both regression analyses, demographic covariates including age, gender, income, and parental level of education were entered in the first block, whereas the primary study variables of interest (i.e., rurality and social status) were entered into the second block. Categorical variables of gender and parental level of education (i.e., maternal and paternal) were dummy coded prior to entry into each regression analyses. As a reminder, dummy coding of categorical variables is required prior to offering meaningful interpretation of direct effects. Results of regression analyses are included in Table 7.

Hypothesis 1.a. Rurality and social status will predict work hope over and above the influence of demographic variables, such that greater rurality and lower social status will result in lower work hope.

Results of the first hierarchical multiple regression analyses indicated that demographic covariates significantly predicted work hope, $F(7, 447) = 4.00$, $p = <.001$, $R^2 = .059$, accounting for 5.9% of variance in the outcome. When rurality and social status were entered into the model, the combination of these variables significantly improved the prediction of work hope scores over and above the influence of the demographic covariates, $\Delta R^2 = .043$, $\Delta F(7, 445) = 10.77$, $p < .001$. The combined predictive effects of the demographic covariates and primary study variables

of rurality and social status accounted for 10.2% of the variance in work hope. Age, $t(7, 447) = 3.40$, $p < .01$, and income, $t(7, 447) = 2.33$, $p < .05$, predicted work hope prior to the entry of primary study variables. When primary study variables were entered into the model, only age and social status, $t(7, 445) = 4.63$, $p < .001$, were significant in the prediction of work hope. Social status was a stronger predictor of work hope ($\beta = .224$) compared with age ($\beta = .147$). Rurality was not a significant predictor of work hope. Review of the bivariate relation between social status and work hope revealed a positive correlation ($r = .25$, $p < .01$), indicating that higher social status resulted in greater work hope. Results of these analyses offer partial support for Hypothesis 1.a., insofar as social status affects work hope.

Hypothesis 1.b. Rurality and social status will predict work volition over and above the influence of demographic variables, such that greater rurality and lower social status will result in lower work volition.

The second hierarchical regression analyses investigated the influence of rurality and social status when controlling for the effects of demographic covariates. As with the first regression analyses, demographic covariates of age, gender, income, and parental level of education were entered into the first block. Rurality and social status were entered into the second block. Demographic covariates were significant in the prediction of work volition, $F(7, 447) = 8.63$, $p < .001$, $R^2 = .119$, accounting for 11.9% variance in the outcome. Demographic covariates accounting for variance in the first block of the model included age, income, and maternal level of education, specifically having had some college compared to the reference group of not having any post-secondary education experience. Variance estimates of demographic variables are included in Table 7. The regression model remained significant when rurality and social status were entered into the second block, $\Delta R^2 = .074$, $\Delta F(7, 445) = 20.49$, $p <$

.001, however, age, income, and social status were the only significant predictors of work volition accounting for 19.4% of the variance in the outcome. Social status was the strongest predictor in the overall model (β = .293) compared with age (β = .105) and income (β = .187). Rurality was not a significant predictor of work volition. Review of bivariate correlations revealed a significant positive relation between social status and work volition (r = .35, p <.01), such that higher social status resulted in higher reported work volition. Results of these analyses offer partial support for Hypothesis 1.b.

Hypothesis 2.a. Participants self-reporting their hometown as rural will report less work hope than those from suburban and urban hometowns.

Hypothesis 2.b. Participants self-reporting their hometown as rural will report less work volition than those from suburban and urban hometowns.

A between-subjects multivariate analysis of variance (MANOVA) was conducted to test Hypothesis 2.a. and 2.b. and determine if differences existed across study measures based on participants' self-report of hometown as rural, suburban, or urban. A Levene's Test of Equality of Variances revealed that variance was equal between groups of the independent variable, therefore the assumption of homogeneity was not violated. Additionally, a Box's Test revealed that variance was equal between dependent variables of work hope and work volition, which suggested that the assumption of homogeneity of covariance was not violated. Overall, the combined dependent variables of work hope and work volition were not affected by hometown identification as rural, suburban, or urban, Wilks' Λ = 1.00, $F(4, 946)$ = .51, p = .732.

Hypothesis 3.a. Theoretically similar constructs of work hope and work volition will demonstrate convergence as evidenced by a positive correlation.

Hypothesis 3.b. Agency and volition subscales of work hope and work volition measures, respectively, will demonstrate convergence as evidenced by a strong positive correlation.

Bivariate correlation analyses were conducted to test Hypotheses 3.a. and 3.b. examining relations between work hope and work volition (3.a.), and latent constructs of agency and volition (3.b.). As expected, work hope and work volition demonstrated a strong positive correlation, $r = .69$, $p < .001$. The work hope agency scale also demonstrated a strong positive correlation with the volition subscale of the work volition measure, $r = .59$, $p < .001$. Results from these analyses are included in Table 6.

Table 6.

Intercorrelations Among Demographic and Primary Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Age	--															
2. Gender (Men) [a]	-.14	--														
3. Income	-.07	.11*	--													
4. Mat_Ed_Some_Coll[a]	.03	-.01	-.04	--												
5. Mat_Ed_Degree[a]	-.13**	-.02	.31**	-.39**	--											
6. Pat_Ed_Some_Coll[a]	.03	-.02	.01	.22**	.00	--										
7. Pat_Ed_Degree[a]	-.02	.11*	.26**	-.05	.36**	-.27**	--									
8. IRR2010	.08	-.09	-.10*	.08	-.03	-.03	-.05	--								
9. Status	.02	-.06	.33**	.00	.18**	.08	.12**	-.04	--							
10. WH_Total	.15**	-.10*	.09*	.10*	.01	.01	.06	.05	.25**	--						
11. WH_Pathways	.10*	-.09*	.13**	.08	.01	-.03	.06	.01	.22**	.89**	--					
12. WH_Agency	.14**	-.07	.04	.10*	.00	.00	.05	.09*	.25**	.93**	.73**	--				
13. WH_Goals	.15**	-.12**	.10*	.08	.00	.06	.06	.02	.20**	.90**	.71**	.75**	--			
14. WVS_Total	.09	-.02	.28**	.08	.10*	.04	.12**	.01	.35**	.69**	.60**	.63**	.64**	--		
15. WVS_C	.11*	.01	.34**	.07	.13**	.03	.14**	.02	.35**	.56**	.47**	.51**	.54**	.91**	--	
16. WVS_V	.03	-.04	.12**	.07	.03	.04	.05	-.01	.24**	.65**	.59**	.59**	.57**	.81**	.50**	--

Note: * Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed). [a] Denotes dummy coded categorical demographic variable. Mat_Ed_Coll = Maternal Education – Some College; Mat_Ed_Degree = Maternal Education – College Degree and/or Advanced; Pat_Ed_Coll = Paternal Education – Some College; Paternal Education – College Degree and/or Advanced; IRR2010 = Index of Relative Rurality; Status = MacArthur Subjective Social Status (Socioeconomic Status); WH_Total = Work Hope – Total Scale; WH_Pathways = Work Hope Pathways Subscale; WH_Agency = Work Hope Agency Subscale; WH_Goals = Work Hope Goals Subscale; WVS_Total = Work Volition Scale – Student Version Total Scale; WVS_Constraints = Work Volition Constraints Subscale; WVS_Volition = Work Volition Volition Subscale.

Table 7.

Effects of Rurality and Socioeconomic Status on Work Hope and Work Volition

	Criterion Variable: Work Hope[a]							
Step and Variable	*df*	R^2	ΔR^2	ΔF	*B*	*SE B*	β	*t*
1. Demographic Covariates	(7, 447)	.06	.06	4.00**				
Age					.31	.09	.16	3.40**
Gender (Men)					-4.52	2.32	-.09	-1.95
Income					1.53	.66	.12	2.33*
Mat_Ed_Coll					4.68	2.49	.10	1.88
Mat_Ed_Degree					.57	2.39	.01	.24
Pat_Ed_Coll					-.29	2.53	-.01	-.11
Pat_Ed_Degree					2.05	2.50	.04	.82
2. Rurality and Status	(2, 445)	.10	.04	10.77**				
IRR2010					3.77	9.33	.02	.40
Standing					2.56	.55	.22	4.63**
	Criterion Variable: Work Volition[b]							
Step and Variable	*df*	R^2	ΔR^2	ΔF	*B*	*SE B*	β	*t*
1. Demographic Covariates	(7, 447)	.12	.12	8.63**				
Age					.19	.07	.12	2.68**
Gender (Men)					-.96	1.81	-.02	-.53
Income					2.96	.51	.28	5.78**
Mat_Ed_Coll					4.09	1.94	.11	2.11*
Mat_Ed_Degree					2.82	1.87	.08	1.51
Pat_Ed_Coll					1.03	1.97	.03	.52
Pat_Ed_Degree					1.80	1.95	.05	.92
2. Rurality and Status	(2, 445)	.19	.07	20.50**				
IRR2010					4.08	7.13	.03	.57
Standing					2.70	.42	.29	6.39**

Note: Mat_Ed_Coll = Maternal Education – Some College; Mat_Ed_Degree = Maternal Education – College Degree and/or Advanced; Pat_Ed_Coll = Paternal Education – Some College; Paternal Education – College Degree and/or Advanced; IRR2010 = Index of Relative Rurality; Status = MacArthur Subjective Social Status (Socioeconomic Status); WH_Total = Work Hope – Total Scale; WH_Pathways = Work Hope Pathways Subscale; WH_Agency = Work Hope Agency Subscale; WH_Goals = Work Hope Goals Subscale; WVS_Total = Work Volition Scale – Student Version Total Scale; WVS_Constraints = Work Volition Constraints Subscale; WVS_Volition = Work Volition Volition Subscale.
(β) are based on step of variable entry
[a] Final model for Work Hope: $R^2 = .10$, $F(2, 445) = 5.64$, $p < .001$.
[b] Final model for Work Volition: $R^2 =$, $F(2, 445) = 11.85$, $p < .001$.
* $p < .05$, ** $p < .01$

Discussion

The purpose of this study was to explore the influence of rurality and SES on work hope and work volition of community college students in Virginia. Rural areas of the United States tend to be disproportionately affected by poverty, lower earnings, and limited educational and employment options (Son et al., 2011). For these reasons it was hypothesized that rurality and SES would influence community college students' work hope and work volition. That is to say, these group- and societal-level contextual factors would affect community college students' (1) work-related goals, their ideas for achieving those goals, and their motivation to pursue those goals, and (2) their perceived ability to overcome financial constraints and pursue work that is of interest. An additional aim of this study was to determine if there were significant differences among community college students who reported their hometown as rural versus suburban or urban. Lastly, from a psychometric point of view, this study sought to explore the overlap in variance among work hope, work volition, and two subscales of these measures. The following paragraphs provide further discussion on each set of hypotheses.

Effects of Demographic Covariates, Rurality, and Socioeconomic Status

Results of regression analyses partially supported research hypotheses. Rurality was not a significant predictor of work hope or work volition, therefore hypotheses regarding its effect on these outcomes were not supported. As previously mentioned, rurality remains an under-investigated and conceptually complex construct in psychology literature. Previous studies have suggested that geography may play a meaningful role in the development of thoughts, feelings, and behaviors relating to work- and career options (Ali & Saunders, 2009; Ali & McWhirter,

2006). However, no studies to date have conceptualized rurality as a predictor of work-related outcomes making this study unique in the psychological literature.

The IRR is a composite measure of four dimensions representing population size, density, remoteness, and urbanicity. This measure was selected because its dimensional qualities were believed to represent economic and employment barriers unique to geographically rural community college students. The lack of significance in regression models suggests that these underlying dimensional qualities may be less relevant factors influencing thoughts, feelings, and behaviors relating to work processes among community college students.

Social status as measured by the MacArthur Subjective Social Status Scale (Adler et al., 2000), accounted for the greatest variance in both work hope and work volition. This finding was consistent with previous research suggesting that work hope and work volition are influenced by SES, such that higher social status results in greater work hope (Thompson et al., 2014) and work volition (Autin et al., 2017). Results of analyses also provided support for an inverse relation among these variables such that lower status could be expected to result in less work hope and work volition among community college students in the sample. This finding is consistent with results from a closely related study conducted by Thompson and colleagues (2017) who determined that perceived financial strain was negatively related to work hope among adolescents.

Per Diemer and colleagues' (2013) recommendation, objective indicators of SES were also included as covariates in both regression models. Estimated family income was a significant predictor of work hope before the two primary study variables (i.e., IRR and social status) were entered into the model. However, when IRR and social status were entered, income was no longer a significant predictor of work hope. This finding suggests that the subjective measure of

SES accounted for greater variance in the model, indicating that it is a more meaningful predictor of work hope than the objective measure of family income. Also, surprisingly, parental education was not a significant predictor of work hope.

The second model, examining predictors of work volition, also included objective indicators of SES (i.e., income and parental education). Estimated family income and having a mother who had attended some college (compared to the reference group of not having a post-secondary education) were significant predictors of work volition prior to entry of the primary study variables. When IRR and social status were entered into the regression model, the effect of maternal level of education was no longer significant and variance in the outcome was accounted for only by age, income, and social status. Like the first regression model, it would appear as though the subjective measure of SES (i.e., MacArthur Subjective Social Status Scale) is a more meaningful predictor of community college students' ability to overcome financial constraints and pursue work of their interest.

Objective measures included in this study (i.e., estimated family income and parental education) were not significant predictors of work hope or work volition in either regression model after primary study measures were entered. Despite its prominence in psychological literature, relatively few studies have examined the influence of parental education on work hope and work volition. Prior to the development of the work hope construct, a study conducted by Jackson and Neville (1998) had found that parental education significantly predicted vocational identity and hope among African American college students. This finding suggests that parental education may have a more meaningful influence on work hope when accounting for racial and ethnic identities of participants.

As previously mentioned, age was a significant predictor in both regression models when accounting for variance of the two primary study variables and other covariates. Therefore, as community college students get older, they are more likely to exhibit greater work hope and work volition. Juntunen and Wettersten's (2006) initial validation study noted that age did not correlate with the work hope scale and was, as a result, left out of analyses. Furthermore, no studies, to date, have accounted for age in research examining work volition. As previously mentioned, the average age of community college students in this study sample (N = 478) was 25.7, which was between two and seven years higher than the average age of all other studies examining predictors of work hope (Dik et al., 2006; Juntunen & Wettersten; Thompson et al., 2014; Yakushko & Sokolova, 2010) and work volition (Autin et al., 2017; Duffy et al., 2012; Duffy, Douglass, Autin, & Allan, 2016) among college students. Results from this study suggest that further research is necessary.

Gender Differences

Preliminary analyses revealed gender differences (man, woman, non-binary) on the work hope measure. More specifically, individuals identifying as women tended to report greater overall work hope likely accounted for by differences on the pathways and goals subscales. The pathways subscale represents thoughts one has about how to achieve work goals, whereas the goals subscale refers to the hope one has about work-related activities. Scores on both subscales were higher among women than men, a result that differed from Juntunen and Wettersten's (2006) preliminary investigation revealing no significant gender differences. Gender differences among men and women are well-documented in vocational psychology literature. Early research conducted by Betz and Hackett (1981) found that self-efficacy expectations differed among women and men based on traditional or nontraditional gendered occupations. For example,

college women reported higher self-efficacy for traditional gendered occupations such as art or elementary teacher and lower self-efficacy expectations for what was considered a nontraditional occupation for women at that time, such as an engineer. Several efforts have been made to reduce the effects of gender role socialization as it pertains to occupational choice, including increased funding at colleges and universities for programs advancing opportunities for women in science. However, results from this study suggest that gender continues to affect the way women and men think about work goals.

Gender differences on the work hope measure may also be attributed to field of study. Nearly 30% of participants reported that they were nursing students, which by task and function reflect characteristics of the Social occupational theme according to Holland's (1997) typology. In their study of rural adolescents, Lapan and colleagues (1999) found that young women were more likely value Social and Artistic occupations versus young men who valued Realistic occupations. Health care careers, including nursing, are among the 30 fastest growing occupations projected between 2018 and 2028 (United States Bureau of Labor Statistics, 2019). Therefore, projected job growth and clear outcome expectations associated with field of study may have contributed to gender differences on the work hope measure. Lastly, it is also important to comment on survey response rate among women compared with men. Further discussion regarding this concern will be provided in the following section.

Disproportionate Response Rate by Gender

As mentioned, a disproportionate number of women completed the survey (n = 375) compared with men (n = 96). Review of research examining work hope and work volition has reflected similar response rates among college students (see Table 5), with women tending to participate in surveys more frequently than men. Response rate patterns like this suggest that a

more significant methodological issue may be influencing research in psychology, especially in cross-sectional studies. A study examining response rates and nonresponse bias in online and paper surveys among college students revealed that women tended to respond, regardless of modality, at a higher rate than men (Sax, Gilmartin, & Bryant, 2003). Therefore, results regarding differences in women and men in levels of work hope should be interpreted with caution.

Differences Among Rural, Suburban, and Urban Participants

Participants in this study were also asked to self-identify their hometown as rural, suburban, or urban so that scores on outcome measures could be compared across groups. It was hypothesized that community college students from rural hometowns would have significantly less work hope (2.a.) and work volition (2.b.) than suburban and urban peers. A between-subjects MANOVA revealed no significant differences in work hope and work volition across groups, therefore these hypotheses were not supported. This is the first study of its kind examining differences in work hope and work volition among rural, suburban, and urban community college students, therefore further evidence of differences does not yet exist. However, interpretation of these results should be made with caution. Sample sizes across groups were not equal with most participants identifying their hometown as rural (76%) versus suburban (15%) or urban (9%). As a reminder, unequal sample sizes are not required to conduct a between-subjects MANOVA. However, unequal sample sizes can affect confidence in the outcome and increase risk of committing a Type I error.

Convergence of Work Hope and Work Volition

As mentioned, work hope and work volition demonstrated significant convergence as evidenced by robust positive correlations among total scale and subscale scores. Therefore, Hypotheses 3.a. and 3.b., investigating bivariate relations between work hope and work volition, and the agency and volition subscales were supported. Results of these analyses draw attention to an important issue concerning superfluity of constructs in vocational psychology. Reliability coefficient for the work hope pathways subscale was questionable (r = .68) which is consistent with the seminal study conducted by Juntunen and Wettersten (2006). As a reminder, this subscale measures thoughts participants have about how to achieve work goals. The questionable reliability of this subscale suggests that there may be variability in participant responses to items on this measure and further research may be warranted.

Limitations

Four limitations likely influenced outcomes of this study. First, participants were disproportionately White women from self-reported rural hometowns in Virginia. College enrollment has increased in rural areas (USDA, 2017) and women outpace men (Lopez & Gonzalez-Barrera, 2014). However, gender differences on the work hope measure, specifically the pathways and goals subscales indicate that women are more likely to have work-related goals and ideas about how to pursue them than men. Further research may be warranted regarding types of occupational preparation programs and available courses at community colleges as its likely gender role socialization may be inhibiting men's motivation to pursue certain work- or career options. Additionally, greater geographic and racial or ethnic diversity among participants would provide more opportunities to compare differences across groups, as well as explore interaction effects based on these demographic characteristics.

Second, the two primary study variables of interest were measured using single-item indicators of rurality and social status (i.e., IRR and MacArthur Subjective Social Status Scale). Single-item measures limit content validity and make it difficult to measure internal consistency, a metric used to determine test-retest reliability. Rurality, as measured by the IRR, is objectively based on dimensional characteristics which preclude participants' perceptions of their environment and how such characteristics may influence attitudes, thoughts, and feelings about work. These factors may be purposeful to consider given that participants' perceptions of their environments appear to have an influence on work hope and work volition, as evidenced by significance of social status in both regression models.

Third, this study did not examine the influence of social support, which could contribute towards better understanding of factors affecting work hope and work volition. Previous studies conducted with rural samples have suggested that perceived support plays an important role in work and career development processes (Lapan et al., 1999; Ryan, Solberg, & Brown, 1996; Wettersten et al., 2005), and research conducted by Duffy et al. (2016) has suggested that social support may buffer effects of marginalization on work volition. In other words, people who perceive themselves as supported by family, friends, or their communities may be more likely to pursue work-related goals and able to overcome financial constraints towards work that is of interest.

Lastly, these data were collected early in the Fall academic semester when students might be less concerned and more hopeful about post-graduation plans. Performance, academic success, and post-graduation plans have been considered the top three stressors contributing to anxiety and depression among college students (Beiter et al., 2015). Given emphasis on work-related processes, it may be such that students felt more hopeful about their goals and ability to

pursue work of interest in the beginning of the semester. It could be purposeful to conduct a longitudinal analysis exploring whether differences exist among college students work hope and work volition at different time points during an academic semester.

Implications

Implications of this study are significant for clinicians and researchers investigating group- or societal-level factors influencing work processes. Regarding research significance, there are three primary implications for future study. First and foremost, this study conceptualized rurality as a contextual factor and utilized a novel continuous index for its measurement. Conceptualization of rurality as a contextual factor rather than a sampling parameter offers researchers new avenues to consider when developing models and theories of work or career development processes. Although the IRR was not a significant predictor of work hope or work volition, use of this measure may broaden options for statistical analyses in vocational psychology research in the future.

Second, this study determined that subjective report of social status affects how community college students think and feel about work goals and their abilities to pursue them. According to Diemer and colleagues (2013; 2009), measurement of SES using only traditional or objective indicators undermines dimensional qualities of social class. In this study, perceived social status explained more variance in work hope and work volition among community college students when controlling for the effects of traditional indicators, such as parental level of education and estimated family income. This finding was consistent with the seminal study using the MacArthur Subjective Social Status Scale (Adler et al., 2000), which found that perceived social status was a more meaningful predictor than traditional objective measures of SES.

Finally, this study supports a growing body of evidence showing that SES affects work- and work-related prospects for community college students. The significance of social status in the prediction of work hope and work volition helps clinicians and researchers narrow areas for intervention. For example, students may benefit from programs that promote vicarious learning, especially for those from lower SES backgrounds such as work mentoring and externship programs. Vicarious learning or role modeling remains a central component of SCCT research and could contribute meaningfully towards community college students' hope and volition, especially if role models exemplify characteristics reflective of the cultural context.

Recommendations

Results of this study should be used to inform future research exploring factors influencing community college students' work processes. First, future studies should explore qualitative factors influencing work hope and volition among community college students. Prior research suggests that qualitative differences exist among rural regions of the United States, which likely affect work processes. Ali and colleagues' (2009; 2006) research exploring career development processes of adolescents in Appalachia have suggested that parental and societal support affect self-efficacy and outcome expectations, tenets of SCCT (Lent et al., 1994, 2000). Appalachia is a distinct rural region within the United States representing interrelated factors that influence decisions about work such as kinship ties and acculturation to Appalachian values (Ali & Saunders, 2009). Future research should include measures that approximate adherence to values uniquely related to differing geographic rural regions of the United States, as variability likely exists.

Second, future research should also investigate differences in work hope and volition across occupational clusters. Reauthorization of the Higher Education Opportunity Act in 2011

has required that colleges and universities report on post-graduate outcomes, student loan debt, and wage earnings based on course of study. Increased accountability of higher education institutions has increased visibility of outcomes associated with specific academic coursework. Therefore, it may be purposeful for future research to explore how rising tuition and debt-to-income ratios affect work processes of community college students.

Third, further research should be conducted on rurality using the IRR, despite non-significance in predicting work hope or work volition. Research across disciplines indicate that significant differences exist among people from rural versus suburban and urban regions. Historically, rural-urban differences have utilized the RUCC or UIC, which are threshold-based measures used to discretely categorize regions in the United States. Items on the demographic questionnaire used in this study evaluated rurality of hometown based on the IRR and participant self-report of their hometown as either rural, suburban, or urban. Future research should examine the loglinear relation between IRR and subjective self-report of hometown locale using multinomial or ordinal logistic regression. Multinomial and ordinal logistic regression analyses can be used to determine the effect of a linear set of continuous predictors on a dependent variable with two or more levels (e.g., rural, suburban, or urban). This type of analyses could help researchers better understand parameter estimates of the IRR, particularly ranges that effectively predict whether a person identifies a region as rural, suburban, or urban.

Finally, theorists should reduce construct redundancy in vocational psychology literature and work towards a more unified understanding of explaining work processes. To do so, further research is necessary on the relation between the work hope and work volition measures. Work hope and work volition were significantly positively correlated, as were the pathways and agency subscales, respectively. Robust correlations among subscale and full measures suggest that these

constructs and latent variables are interrelated. Both work hope and work volition emerged in literature as constructs sensitive to the effects of marginalization, particularly in response to growing concern about occupational choice. Limited occupational choice affects perceptions of self-efficacy (Lent et al., 1994, 2000), a construct like work hope and work volition and well-documented in vocational psychology literature. Self-efficacy is closely related to work hope (Juntunen & Wettersten, 2006) and work volition (Duffy et al., 2012), insofar as these constructs relate perceptions to occupational choice. Therefore, to reduce construct redundancy and improve parsimony in vocational psychology research, future research should factor analyze self-efficacy, work hope, and work volition to determine factor loadings of similar items.

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Appendix A

Sample Recruitment Message #1

Dear [FACULTY/STAFF MEMBER]:

I am writing to request your assistance in recruiting participants for an online study exploring students' perceptions about work- and work-related activities. This study has been approved by the Virginia Commonwealth University (VCU) Institutional Review Board [INSERT IRB PROTOCOL NUMBER HERE].

The purpose of this study is to investigate perceptions students have about work and work-related activities. Participation in this study is voluntary. Participants must be 18 or older and enrolled in at least six (6) credit hours (half time) in on-campus courses at a community college in Virginia. The anonymous survey will take 10-15 minutes to complete. Upon completion, participants will be invited to enter their name and email address via a separate anonymous link to for a chance to win one of 10 $50 gift cards.

To participate in this study, please click on the link below:

Study URL: [INSERT STUDY URL HERE]

QUESTIONS

If you have questions, complaints, or concerns about your participation in this research, contact:

Jesse A. Wingate, M.S.
wingatej@vcu.edu
(xxx) xxx-xxxx
Doctoral Student
Department of Psychology

Victoria A. Shivy, Ph.D.
vshivy@vcu.edu
(804) 828-0294
Associate Professor
Department of Psychology

The researcher/study staff members named above are the best person(s) to call for questions about your participation in this study. If you have any general questions about your rights as a participant in this or any other research, you may contact:

Office of Research
Virginia Commonwealth University
800 East Leigh Street, Suite 3000
P.O. Box 980568
Richmond, VA 23298

Sample Recruitment Message #2

Dear Students,

My name is Jesse Wingate and I am a graduate student in the Counseling Psychology program at Virginia Commonwealth University. I am conducting a brief online study exploring community college students' thoughts, attitudes, and interests in work.

This study has been approved by the VCU IRB (INSERT IRB PROTOCOL NUMBER HERE) and the [COMMUNITY COLLEGE IRB]. The study consists of an online survey that you may complete at home or while at school and takes approximately 15 minutes to complete. Study participation is anonymous, and the investigators will not be able to identify you based on your responses to questions on the survey.

Participants must be enrolled in community college coursework and be at least 18 years of age. After completion of the survey, you will be invited to enter your name and email address into a separate link for a chance to win one of ten $50 electronic gift cards. Winners of the raffle will be notified after the study is completed in approximately January/February 2020.

To participate in this study, please click on the link below:
Study URL: [INSERT STUDY URL HERE]

Thank you for your time!

Sincerely,

Jesse Wingate, M.S.
wingatej@vcu.edu
(xxx) xxx-xxxx
Doctoral Student

Appendix B

Demographic Questionnaire

1. What is your age (in years)? _____

2. List the five-digit United States zip code of the place you'd consider "home":
   (i.e., this could be where you spent your childhood or the place you lived the longest)
   _ _ _ _ _

3. Please select the state your hometown is in: _____
   (Dropdown)

4. Please list the United States county your hometown is in: _____

5. How long did you live, or have you lived in the place you listed as your hometown?

   ____ Less than 1 year
   ____ 1 – 5 years
   ____ 5 – 10 years
   ____ 10 – 15 years
   ____ > 15 years
   ____ No response

6. How would you describe your hometown?
   ____ Rural
   ____ Suburban
   ____ Urban

7. What is your gender?
   ____ Woman
   ____ Man
   ____ Non-binary
   ____ Other
   ____ Prefer not to say

8. How many credit hours are you currently enrolled in?

   ____ Less than 3 credits
   ____ 6 – 8 credits
   ____ 9 – 11 credits
   ____ 12 – 18 credits

9. Which of the following best describes your field of study anticipated degree? ____ (Dropdown)

10. What is your race/ethnicity?
____ White/Caucasian
____ African American/Black
____ American Indian/Alaska Native
____ Asian American/Pacific Islander
____ Latino/a/Hispanic
____ Other

11. What is/was your maternal caregiver's highest education?
____ 8th Grade or less
____ High School/GED
____ Vocational/Trade
____ Some college
____ Associate's
____ Bachelor's
____Master's/Doctoral/Professional
___ I don't know

12. If your maternal caregiver is/was employed, which industry best represents their PRIMARY workplace?
____Dropdown Menu of Job Industries

13. What is/was your paternal caregiver's highest education?
____ 8th Grade or less
____ High School/GED
____ Vocational/Trade
____ Some college
____ Associate's
____ Bachelor's
____Master's/Doctoral/Professional
____ I don't know

14. If your paternal caregiver is/was employed, which industry best represents/represented their PRIMARY workplace?
____Dropdown Menu of Job Industries (included in REDCap)

15. Which of the following best describes your current employment status?

a. ____ Employed, working 40 or more hours per week
b. ____ Employed, working 1-39 hours per week
c. ____ Not employed, seeking work
d. ____ Not employed, not seeking work at this time
e. ____ Disabled, not able to currently work

16. What would you estimate your family income was in 2018?

____ Less than $20,000
____ $20,000 to $34,999
____ $35,000 to $49,999
____ $50,000 to $74,999
____ $75,000 to $99,999
____ Over $100,000

17. Are you currently enrolled in *at least* one on-campus course?
(Does not include hybrid courses, online, or distance-learning courses).

___ Yes ___ No

MacArthur Subjective Social Status Scale (Adler et al., 2000)

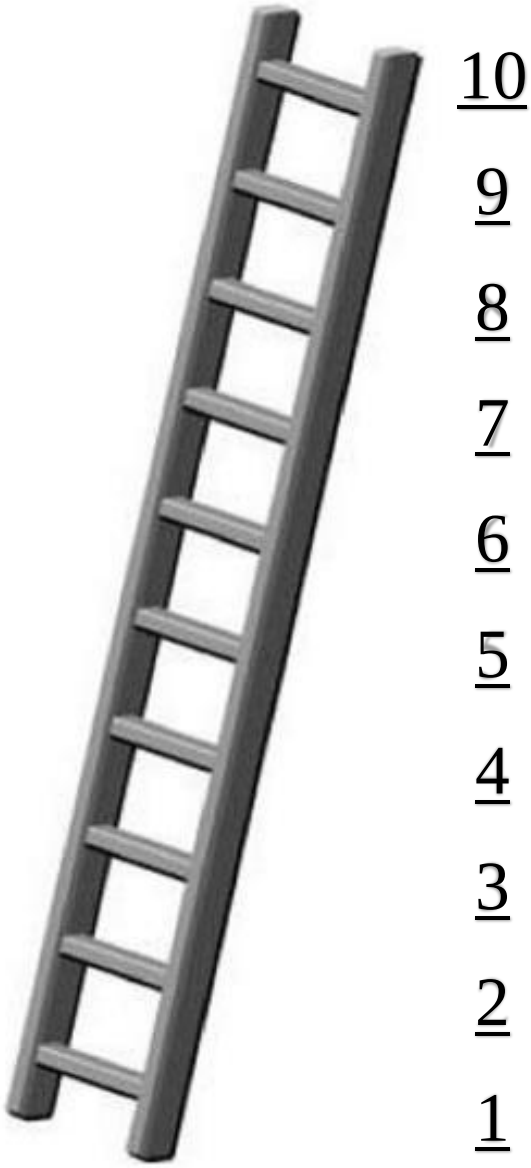
Think of this ladder as representing where people stand in the United States.

At the **top** of the ladder are the people who are the best off – those who have the most money, the most education and the most respected jobs. At the **bottom** are the people who are the worst off – who have the least money, least education, and the least respected jobs or no job. The higher up you are on this ladder, the closer you are to the people at the very top; the lower you are, the closer you are to the people at the very bottom.

Where would you place yourself on this ladder?

The number 1 represents the bottom of the ladder, whereas the number 10 represents the top of the ladder.

Select the number which best represents where you think you stand at this time in your life, relative to other people in the United States.



Work Hope Scale (Juntunen & Wettersten, 2006)

These questions pertain to how you think about work and jobs. Please indicate how much you disagree or agree with each statement.

1 = Strongly Disagree

2 = Moderately Disagree

3 = Slightly Disagree

4 = Neutral

5 = Slightly Agree

6 = Moderately Agree

7 = Strongly Agree

1. I have a plan for getting or maintaining a good job or career.

2. I don't believe I will be able to find a job I enjoy.

3. There are many ways to succeed at work.

4. I expect to do what I really want to do at work.

5. I doubt my ability to succeed at the things that are most important to me.

6. I can identify many ways to find a job that I would enjoy.

7. When I look into the future, I have a clear picture of what my work life will be like.

8. I am confident that things will work out for me in the future.

9. It is difficult to figure out how to find a good job.

10. My desire to stay in the community in which I live (or ultimately hope to live) makes it difficult for me to find work that I would enjoy.

11. I have the skills and attitude needed to find and keep a meaningful job.

12. I do not have the ability to go about getting what I would out of working life.

13. I do not expect to find work that is personally satisfying.

14. I can do what it takes to get the specific work I choose.

15. My education did or will prepare me to get a good job.

16. I believe I am capable of meeting the work-related goals I have set for myself.

17. I am capable of getting the training I need to do the job I want.

18. I doubt I will be successful at finding (or keeping) a meaningful job.
19. I know how to prepare for the kind of work I want to do.
20. I have goals related to work that are meaningful to me.
21. I am uncertain about my ability to reach my life goals.
22. I have a clear understanding of what it takes to be successful at work.
23. I have a difficult time identifying my own goals for the next five years.
24. I think I will end up doing what I really want to do at work.

Work Volition Scale – Student Version (Duffy, Diemer, & Jadidian, 2012)

Please circle one answer to each of the following statements based on this scale:

1 = Strongly Disagree

2 = Moderately Disagree

3 = Slightly Disagree

4 = Neutral

5 = Slightly Agree

6 = Moderately Agree

7 = Strongly Agree

1. What I want has little impact on my future job choice (r).
2. In order to provide for my family, I will have to take jobs I do not enjoy (r).
3. Due to discrimination, I do not feel I have complete control over my ability to get a job (r).
4. Due to my financial situation, once I get a job I couldn't change jobs even if I wanted to (r).
5. I feel that my family situation limits the types of jobs I might pursue (r).
6. I worry that my life circumstances will prevent me from achieving my long term career goals (r).
7. Due to my financial situation, I will need to take any job I can find (r).
8. The only thing that matters in choosing a job is to make ends meet (r).
9. I know I won't like my future job, but it will be impossible for me to find a new one (r).
10. I will be able to change jobs if I want to.
11. Discrimination will not affect my ability to choose a job.
12. Once I enter the work world, I will easily find a new job if I want to.
13. I will be able to choose jobs that I want.
14. I will learn how to find my own way in the world of work.
15. I feel total control over my future job choices.
16. I will be able to do the kind of work I want to, despite external barriers.

Total scale: All items

Constraints subscale: 1, 2, 3, 4, 5, 6, 7, 8, 9

Volition subscale: 10, 11, 12, 13, 14, 15, 16

Vita

Jesse Alexander Wingate was born on October 23, 1985 in Port Jefferson, NY and is an American citizen. He graduated from North Country Union High School in Newport, VT in 2003 and received a Bachelor of Science in Psychology from St. Lawrence University in Canton, NY in 2007. He also earned a Master of Education in Higher Education and Student Affairs Administration (HESA) from the University of Vermont in Burlington, VT in 2009. Jesse was formerly employed as a Career Advisor and Program Manager with the HowardCenter Developmental Services in Burlington, VT. He later served as Assistant Director of Career Services at Dartmouth College in Hanover, NH and the University of Richmond in Richmond, VA prior to his studies at Virginia Commonwealth University (VCU). He received a Master of Science in Psychology from VCU in 2016. While completing doctoral coursework, Jesse was an Advisor with the Career Services department, a Teaching Assistant, an Instructor for graduate and undergraduate courses, and an Assistant Director of the Center for Psychological Services and Development (CPSD) at VCU. He is completing a predoctoral internship in clinical psychology with Cherokee Health Systems in Knoxville, TN. Jesse will serve as the Director of Behavioral Health at Eastern Shore Rural Health Systems, Inc. in Eastville, VA following completion of his doctoral studies.