

EXPLORING CHARACTERISTICS OF YOUNG ADULT MEN

Initial Findings From a Mixed Methods Evaluation of an All-Male, Character-Focused Trade School

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Little research has investigated postsecondary institutions as a context for character development, despite theoretical suggestions about their potential significance. Accordingly, the authors initiated the Assessment of Character study, a mixed methods investigation of character development, among students at the Williamson Free School of Mechanical Trades (WS) and 3 comparison schools (CS). Analyses of initial data from 214 WS and CS students with a mean age of 18.76 years (60 of whom were also interviewed) indicated that WS students scored higher on several measures of character attributes and that the manifestation of character may differ across contexts. The authors discuss these findings in light of the continued importance of triangulations across quantitative and qualitative methods in subsequent waves of this research.

Across time and place, societies have had the goal of socializing their members to develop attributes of character that are consistent with the common good (Althof & Berkowitz, 2006). Theory and research in human development and facets of educational and social policy similarly converge in supporting the idea

that, to flourish, societies need individuals who have character attributes that will enable them to contribute positively to their own well-being, the health and welfare of their families and communities, their institutions, and civil society at large (Lerner & Callina, 2014; Sokol, Hammond, & Berkowitz, 2010).

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Schools are a key context of character development (Seider, 2012), and this setting is where a major focus on character development research and programming has been centered, particularly in K–12 schools. Character development is an important topic within higher education as well. The missions of many postsecondary institutions contain references to promoting students' character development, although these references vary in their level of explicitness and specificity (Colby, 2002). Indeed, the prominence of interest in this area within postsecondary education is evidenced by the existence of the *Journal of College and Character*, which has been published since 2000.

However, in comparison to literature regarding K–12 character education programs, there is less research on the implementation of specific programs within the college context. Instead, research has focused on the correlates of various character attributes, most often through the lens of the development of moral reasoning (Colby, 2002). There is some research to indicate that various aspects of college students' character development (especially attributes of performance character, such as grit) are correlated with their success both while attending school (e.g., Lounsbury, Fisher, Levy, & Welsh, 2009) and after graduation (Duckworth, Peterson, Matthews, & Kelly, 2007).

Much of this research, however, has focused on students attending 4-year institutions. Far less research has been conducted with students attending community, technical, and trade colleges, despite the fact that these students comprise over a third of all postsecondary students overall and nearly half of postsecondary students at public schools in the United States (Knapp, Kelly-Reid, & Ginder, 2012). Given the importance of character education within the postsecondary context and the far-reaching influences that character development may have on students beyond their postsecondary experience, it is critical to examine the ways in which postsecondary

institutions may promote students' attributes of character.

Accordingly, we present results from the first wave of the Assessment of Character (ACT) Study, a 3-year quasi-experimental cohort-sequential and mixed methods investigation of character development in the context of trade-oriented postsecondary educational institutions. The primary component of the ACT Study is an evaluation of the character education component of the Williamson Free School of Mechanical Trades (WS).¹ WS is an all-male, three year residential postsecondary institution that has implemented a character-focused trade education program since its opening in 1891. The enhancement of character is the *raison d'être* of the WS and, as well, the explicit basis for the design of every facet of residential life for the three years of the educational program (e.g., beginning with a flag-raising ceremony at or before dawn on each week day, followed by mandatory but nondenominational chapel service; strict behavior and dress codes at all times; dormitories organized like military barracks at collegiate service academics; a flag-lowering ceremony at the end of the class day; required community service; and mandatory study periods and lights out schedules in the evenings). Indeed, the WS theory of change is arguably unique in its thorough focus on character development. Accordingly, our assessment of the character development of students living for three years in this setting is, in effect, a test of the presence of character-related changes across this period.

As part of this assessment, we selected three other postsecondary schools (described later in more detail) from which to recruit a sample of comparison students. Each of these three other institutions, however, is an important context for character education in its own right, as all institutions of higher education have at least an implicit aim of promoting their students' character development (Colby, Ehrlich, Beaumont, & Stephens, 2003), even if their approach is not as explicit as that implemented at WS. Thus, an additional—and

equally important—aim of our study is to explore the contextual and individual factors that contribute to young adults' character development more generally. In the current study, we present initial data from first-year students at each of these four schools with the aim of understanding their baseline characteristics as well as of identifying the nature of the match between the WS and comparison school samples (the process of choosing comparison schools is described below in more detail).

Conceptualizations of Character Within Human Development and Positive Psychology

Within the fields of human development and positive psychology, character has been conceptualized in various ways and with various levels of precision. Still, the understanding and discussion of what character involves is diffuse across the social and behavioral sciences. Many discussions of character frame the construct as an individual's propensity to respond to deeply rooted and ethically significant habits (Jacobs, 2001; Liddell & Cooper, 2012), values (Blasi, 2005), or virtues (Lickona, 2004), or as a set of qualities guiding the individual to want to pursue the good (Park & Peterson, 2006). Character often has been represented as an aspect of morality, or an inner compass through which a person can determine the proper course of action when facing issues reliant upon moral judgment (Gardner, Csikszentmihalyi, & Damon, 2001; Seider, 2012). In this regard, character has been described as a multifaceted and complex system that enables moral agency or moral competence (Berkowitz & Bier, 2004; Park & Peterson, 2006). Other accounts of character specify that it is a dimension of ethics or morality pertaining to understanding and action (Althof & Berkowitz, 2006; Power & Khmelkov, 2008). Rest and Narvaez (1994) asserted that moral action is where character is most relevant: character builds on an emotional awareness of others (moral sensitivity), a cognitive assessment of a situation (moral

judgment), and a prioritizing of moral values (moral motivation), all of which inform the determination of moral action.

Sokol et al. (2010) noted that character is a “pattern of processes that build on one another” (p. 584) and that these processes are interconnected in building moral agency. Lapsley and Narvaez (2006) suggested that multiple levels of overlapping systems influence character development. They used a framework, termed developmental contextualism (Lerner, 2002), to highlight the importance of the context in influencing individual development. Developmental contextualism is an instance of a broader family of theories, termed relational developmental systems theories (RDST; Overton, 2013). The ACT Study is framed by RDST, and, thus, our conceptualization of character is heavily influenced by this perspective.

Character Within a RDST Perspective

Understanding character development within RDST requires conceptualizing character itself as a feature of person-context relations rather than as an inherent or immutable attribute of any individual. From this perspective, character develops through the mutual influence of context on person and person on context. Investigations of character development from an RDST perspective seek to systematize research through an understanding of the function, content, and structure of character as a feature of individual \leftrightarrow context relations (see Lerner & Callina, 2014, for further details). The RDST framework informs our definition of character as “an individual's contributions across ontogenetic time and place to a specific set of mutually beneficial relations between person and context” (Lerner & Callina, 2014, p. 3). This definition implies that the content of character—the specific attributes believed to comprise it—are contextually dependent.

In the ACT Study, we, therefore, are assessing the content of character based on the attributes that are relevant to our context of

primary interest, the Williamson School. WS has identified specific character attributes that are important to its mission, based on the historical, cultural, and vocational components of the school: faith, integrity, diligence, excellence, and service. These character attributes have the function of all character attributes—they are ways in which the school administration believes that the students should act to maintain and sustain their life context. However, the specific manifestations of these attributes will vary among participants and are particular to the broader context of these students' lives, to the strategies the institution is trying to teach students to use in maintaining and sustaining their society, and to the strategies students are expected to use as they adapt to the specific context of the school.

In addition to attributes explicitly identified by WS as focal outcomes of their educational curriculum and school structure (across all facets of residential life), we assessed attributes that have been associated with character development more broadly (Lerner & Callina, 2014). WS administrators also indicated an interest in investigating whether their students developed these attributes through their educational and associated residential experiences at WS, even though these attributes are not specifically targeted within the WS curriculum.

Character Development in the Context of Higher Education

Research on character development within postsecondary contexts has focused more on the development of moral reasoning than on character per se. Colby (2002) argued that postsecondary education should include the teaching of values and behaviors to promote moral and civic development. Colby (2002) also suggested, however, that institutions promote different moral frameworks, based on their missions and student populations, and one is not necessarily better than the other. More recently, postsecondary education research has found that colleges are increasingly seeking common core values and ethics

to teach to their students (Dalton & Crosby, 2011). The present research, noting the critical role of person ↔ context relations in the development of character (Lapsley & Narvaez, 2006), seeks to understand the development of character attributes that are necessary for individuals to thrive within a specific context. However, questions remain regarding which values promote which aspects of character development, among which students, and about the most effective strategies for promoting those values (Dalton & Crosby, 2011). The ACT Study constitutes an initial attempt to address these issues. Accordingly, in this section we present information about the features of the institutions involved in the present study.

The Williamson Free School of Mechanical Trades

The WS was founded in 1888 by Isaiah Vansant Williamson, a Philadelphia merchant and philanthropist (WS, 2013). His purpose in founding the school, which is located in Media, Pennsylvania, was to provide financially disadvantaged young men with the opportunity to become productive and respected members of society through a free education in the trades. Until 1972, the students of WS were high school age. Currently WS serves as a postsecondary institution and accepts students who are between the ages of 17 and 19 at entry; students must attend full time for the entire 3-year period and reside on campus during the week. These students pursue craftsman diplomas in carpentry and masonry as well as associates in specialized technology degrees in construction technology (with an emphasis on carpentry or masonry); horticulture, landscaping and turf management; machine tool technology; paint and coatings technology; and power plant technology. Students spend their mornings in academic classes geared towards building professional skills such as speech, business, and computers; in the afternoon, they attend shop classes,

which include discussions of theory along with supervised projects (WS, 2013).

In conjunction with trade education, WS involves a ubiquitous and thorough emphasis on character development, and specifically on the attributes of faith, integrity, diligence, excellence, and service. The design of the WS curriculum and features of the residential life are put into place to promote these attributes (e.g., as noted above, attendance at daily chapel service, a stringent code of conduct, and participation in community-related activities). The theory of change involved in the WS educational model posits that if (a) healthy, able-bodied young men; who are (b) intellectually and emotionally prepared, honest, frugal, entrepreneurial, temperate, and industrious; and who are given (c) a curriculum that educates them with the knowledge and skills needed to pursue a good mechanical trade; in the context of a school setting that (d) provides Judeo-Christian ethics and values; then (e) they will succeed in life (WS, 2013). Success is marked, according to the WS model, by participants becoming useful and respected members of society, and dependable, honest, and productive workers. The WS model involves the expectation that graduates will have beliefs and values that reflect a tireless commitment to craftsmanship (i.e., that work should be done to the best of one's ability, out of personal integrity, and with high expectations of achievement) and that such commitment converges with a commitment to serve others, that is, a commitment to serve the community (WS, 2013).

Identifying Comparison Schools

As described above, a primary purpose of this project is to evaluate the WS model for promoting young men's positive development. To facilitate the process of identifying the possible unique impacts of a WS education, this project includes a comparison sample of students from other postsecondary institutions. Carefully identifying a comparison sample was important, as WS selects students not only

based on their age, socioeconomic status, and prior academic experiences, but also on their demonstrated character attributes, including those attributes on which the WS educational model is based (e.g., excellence, service). It was therefore necessary to disentangle the baseline attributes of WS students from the attributes that WS seeks to develop.

In choosing our comparison sample, we sought out collaborations with institutions in the WS geographical area that shared one or more characteristics with the WS. We were specifically interested in identifying institutions that students at WS might have attended if they were not accepted into WS. Using recommendations made by WS administrators as well as our own research into similar schools, we began with an initial list of 13 schools that served young men from similar backgrounds. Of these, the three schools described below chose to participate.

We were not aiming to directly compare the three comparison schools to each other, or to compare each school separately to WS. First, the selection of comparison schools was informed by the need to obtain collectively—across all three comparison schools—a sample of young men who would be similar to WS students on as many of the variables of interest in this study as possible. Thus, we were interested in whether the mean and range of characteristics represented by comparison school (CS) participants matched the mean and range of characteristics represented by the WS students, rather than whether the mean scores at any particular CS differed from each other. Second, the focus of analyses presented here is at the level of the student, rather than the school. Because we were interested in CS students' match with WS students, we did not attempt to obtain a large or representative sample from the three CS. Thus, any school-level comparisons would lead to potentially misleading conclusions about the characteristics of the general student population at the CSs. Given these reasons, we conducted our analyses at this point in the study using the entire group of CS students. This is not to say, how-

ever, that we are uninterested in the particular characteristics of the comparison schools themselves. We acknowledge that the unique features of each institution are likely to influence the developmental trajectories of its students, and we will include school group in our future longitudinal analyses to investigate these potentialities. Accordingly, below we describe each of the three schools from which we recruited our comparison sample, including demographic characteristics of their student populations and potential differences between each school and WS. Pseudonyms are used for the names of schools at their request.

School 1 (“Technical College”). School 1 is a trade school in central Pennsylvania. About 350 students (72% male) attend Technical College, which offers 15 associates in science and associates in applied science degrees; most students (97%) attend full time. Most students commute to attend classes, although a small percentage (<5%) live on campus. Twenty-nine participants (24.3% of the comparison sample) were from this school.

School 2 (“Community College”). School 2 is a community college in the greater Philadelphia area that offers 58 degrees encompassing associates in science, associates in arts, and certificate programs. All students commute to attend classes. Students pursue multiple academic and trade education paths. About 10,000 students (44% male) attend this college at any given time; however, only a small percentage met our inclusion criteria: male students between the ages of 18 and 25 who were enrolled in school full time. Less than half (45%) of Community College’s students are enrolled full time (and thus eligible for our study), and, similar to most community colleges, a large percentage are nontraditional age students. Fifty-four participants (45.3% of the comparison sample) attended this school.

School 3 (“State College”). School 3, also located in greater Philadelphia, is a branch campus of a large state university system. It offers 15 bachelors and associates degrees, and most students commute to attend classes. State College serves a larger and more diverse range

of students compared to WS, but it was identified by our collaborators at WS as an institution that their prospective students might have attended had they not pursued a WS education. State College has about 1,600 students (58% male); of these, 86% attend full time. Thirty-six participants (30% of the comparison sample) attended this school.

ACT Study Design

The goal of ACT is to assess the WS model for promoting character and success in young men. To pursue this goal, we are conducting a quasi-experimental cohort-sequential mixed-methods study across a 3-year grant period. ACT employs two types of mixed methods designs in which the quantitative and qualitative data work directly in concert with each other. In addition, we are collecting several supplemental free-standing forms of qualitative data.

First, we are employing a convergent design (Creswell & Plano-Clark, 2011), in which quantitative and qualitative data are collected and analyzed simultaneously but separately, and then the results are triangulated with each other and interpreted. In this article, we present findings exploring the convergence of our qualitative and quantitative data from Wave 1, in line with this aspect of our design. The second type of mixed methods design we are implementing is a sequential explanatory design (Creswell & Plano-Clark, 2011). In the general form of this design, analysis of one type of data drive the questions pursued using the second type of data. Our particular use of this method involves using results from quantitative analyses to develop questions for interviews that will be conducted with a subgroup of participants who “stand out” based on their scores on particular variables of interest. We are currently implementing aspects of this design, and these analyses will be addressed in subsequent publications from this project.

Finally, we are collecting two additional forms of qualitative data—interviews with alumni and teachers—to provide historical and

cultural context for the study. We are collecting data from alumni of WS and each CS to explore their career and life trajectories 5 to 50 years postgraduation. Our interviews with faculty and administrators at all four schools will enable us to generate a more contextualized understanding of the educational settings and experiences of WS and CS students, and, possibly, their views of how the strengths of these contexts promote character in their students. Both of these supplemental forms of data collection will be addressed in subsequent publications from this project and are not described in further detail here.

In sum, we focused our data collection and analysis on understanding the baseline characteristics of first-year WS and CS students as well as on identifying the nature of the match between these two groups. For reasons noted above, we conducted both our quantitative and qualitative analyses using the collective group of CS students, rather than comparing across the three schools. For the *quantitative* portion of the design, our research questions were: What are the demographic characteristics of WS and CS students, and how do they compare? What are the baseline (i.e., first semester) scores of WS and CS students on the attributes of character and other constructs important to the study, and how do they compare? The *qualitative* research questions guiding this study were: How, if at all, are the life experiences and narratives of WS students similar to and/or different from those of CS students? How, if at all, do references to character attributes arise in young men's narratives examined in this study, and how, if at all, are these references similar or different between WS and CS students? Our final research question aimed to take advantage of mixed-methods design by focusing on meta-inferences (i.e., integrations of qualitative and quantitative findings into a coherent whole; Teddlie & Tashakkori, 2009). For this question, we asked: What types of meta-inferences can be made about our WS and CS participants when interpreting our qualitative and quantitative findings together?

METHOD

Participants

Quantitative. Two hundred and fourteen participants (95 WS, 119 CS) completed surveys. Table 1 shows demographic information about the total sample as well as tests of similarities and differences between WS and CS students, which are described in the Results section.

Qualitative. As described below, we interviewed 60 participants (30 WS and 30 CS) who were selected from among the quantitative sample using a primarily random process (described in further detail below). Thus, the demographic characteristics of the interview sample were similar to the overall sample. We did, however, conduct analyses to determine empirically whether the interview and noninterview samples were indeed similar. We discuss these comparisons in the Results section.

Procedure

Quantitative. Students took the survey during the Fall semester of 2012. At WS, students were invited to take the survey during an arranged session in a computer lab during their orientation. Although WS personnel arranged this session, students were informed that their participation was voluntary, and personnel were not able to observe whether any particular student took the survey. Ninety-five of the 100 first-year students completed the survey.

At the three other schools, school administrators sent a recruitment e-mail to students. At Technical College and State College, e-mails were sent only to male first-year students who were enrolled full time and between the ages of 18 and 25. At Technical College, the total number of potential participants who met those criteria was 145; our group of 29 students, therefore, represents a 20% response rate. At State College, there were 200 individuals who met our criteria, and 36 completed surveys for a response rate of 18%. At Community College, it was not possible to limit the e-mail list

TABLE 1
Demographic Information for Total Sample and by WS and CS Group

	<i>Full Sample (N = 214)</i>	<i>WS (N = 95)</i>	<i>CS (N = 114)</i>	<i>Comparison</i>
Mean age (SD)	18.76 (1.39)	18.33 (.61)	19.05 (1.67)	$t(1, 198) = 3.69, p < .001$
Racial/Ethnic Identification				$\chi^2(2) = 16.17, p < .001$
% White/Caucasian/European American	65.4	80.0	53.8	
% Other	7.9	12.6	26.9	
% Missing	26.7	7.4	19.3	
Parental Education				$\chi^2(5) = 7.91, p = .161$
% Less than high school diploma	4.7	1.2	7.6	
% High school diploma or GED	38.1	45.2	32.4	
% 2-year degree	12.7	10.7	14.3	
% Some college	13.8	13.1	14.3	
% 4-year degree	19.6	21.5	18.1	
% Graduate degree	11.1	8.3	13.3	

by age, so the email was sent to the 2,000 first-year students who were male and enrolled full-time. Thus, an exact response rate cannot be calculated for Community College because we do not know how many of the 2,000 students who received the email were within our specified age range (as noted above, Community College has a large number of continuing education students who may not have met our age criterion).

Interested students at the CSs clicked on a link contained within the email that brought them to an online survey. After verifying that they met eligibility criteria (male, within the age parameters, and attending school full time), students read the electronic consent form and, if they consented, continued to complete the survey. The questionnaire took, on average, 45 minutes. Students received a \$20 gift certificate as compensation for their time, and all participants were also entered into a raffle drawing for a \$125 gift card.

Our original aim was to recruit 50 students from each of the three comparison schools. Response to the email recruitment method varied across the three schools; we quickly met

our quota of 50 students from Community College, but recruitment at Technical College and State College proceeded more slowly. At these two schools, we implemented several additional recruitment methods, including sending reminder postcards, campus visits, mailing paper surveys, and “snowball” sampling (asking participants to refer their eligible friends).

Qualitative. At WS, we conducted interviews with a random sample of 30 first-year students during their orientation, held in late August 2012. Prior to the orientation, we obtained the list of first-year students from WS administrators and assigned each student an identification number. We then randomly chose 30 of those numbers and provided the list of selected students to the dean of enrollments at WS, who privately contacted each student to ask whether he would be willing to participate in an interview. Only one student from the initial list of 30 declined to participate, so we repeated the random selection process to identify another potential participant. The dean of enrollments informed the selected students that participation was voluntary, that their relationship with WS would not be

affected by whether they chose to participate, and that they could make a final decision about participation at the time of the interview (i.e., they could arrive at the interview and then choose not to participate). Students had an interview scheduled into their orientation at a time when other students would be participating in various activities, and thus staff members (except the dean of enrollments) would be unable to determine whether students were participating in an interview. Once the interview was scheduled, the dean of enrollments no longer was involved in the process and did not know whether students actually participated. He did not share the identity of potential interviewees with anyone except the research team.

Six research team members conducted the interviews, which began with an informed consent procedure and lasted between 30 and 90 minutes (with an average of an hour). Participants were compensated with a \$50 gift card. Each interviewer followed the same semistructured interview protocol (described below), although several interviews addressed additional questions, as the protocol was semistructured and interviewers were instructed to follow the lead of participants in discussing topics of importance to them (Rubin & Rubin, 2005).

Similarly, we recruited 30 first-year CS students who had completed the survey; we aimed to recruit 10 students from each of the three schools. We randomly selected students from among the survey participants and contacted them to see if they had an interest in participating in a semistructured interview. Three of the initially selected students had not provided adequate contact information on the survey, 18 never returned phone calls or responded to our emails, and two directly declined to participate in an interview. We continued to randomly select participants from the list until we had successfully scheduled interviews with 10 students from each of the three schools. These interviews were conducted between September 2012 and January

2013, and we followed the same interview procedure as described above for WS students.

Data Collection Instruments

Quantitative. Our quantitative assessments included variables explicitly identified within the WS theory of change as well as other variables that research in positive youth development has shown to be important for positive developmental outcomes (e.g., intentional self-regulation, Gestsdóttir & Lerner, 2008). For this article, we focused our analyses on the attributes explicitly identified as of interest to WS. These attributes include the bases on which students are selected to attend WS (health, commitment to school, honesty, thrift, and entrepreneurship), the attributes of character that are focal outcomes of the WS model (faith, integrity, diligence, excellence, service), and other attributes of character that are of interest to WS more generally (future mindedness, generosity, gratitude, humility, love, and purpose).

Commitment to School. We assessed three dimensions of participants' commitment to school—emotional, cognitive, and behavioral—using nine items from the Li and Lerner (2011) tripartite measure of school engagement. The emotional engagement subscale assesses students' sense of belonging and affect toward school; an example item is "I felt like a part of my school." These questions were posed in reference to participants' experiences in high school and answered on a 5-point Likert-type scale, with 1 = *strongly disagree* and 5 = *strongly agree*. In this sample, the Cronbach's alpha was .90. The behavioral engagement subscale assesses students' behaviors in the school context; an example item is "How often did you work hard to do well in school?" These questions were also posed in reference to high school and were answered on a 5-point scale, with 1 = *never* and 5 = *always*. The Cronbach's alpha for scores on this subscale in this sample was .71. Finally, the cognitive engagement subscale measures the extent to which participants

value education and things learned at school. An example item is “I want to learn as much as I can at school.” Items were answered on a 5-point scale, with 1 = *strongly disagree* and 5 = *strongly agree*. In this sample, the Cronbach’s alpha for scores on this subscale was .86.

Entrepreneurship. Goals related to entrepreneurship were assessed by eight survey items from the Stanford Youth Purpose Survey (Bundick et al., 2006). Participants rated eight goals according to how important they were for the participant’s life. Four goals were entrepreneurial in nature (e.g., “developing my own business”) and four were more general (e.g., “having a good relationship with my family members”). Response options ranged from 1 = *not at all important* to 5 = *extremely important*. For these analyses, we used only the four items related to entrepreneurship. In this sample, Cronbach’s alpha was .86.

Dependability. Based on our knowledge of the character development literature (e.g., Lerner & Callina, 2014; Sokol et al., 2010), our research team developed eight items to assess whether participants perceived themselves as dependable. Example items are “I show up on time” and “People can count on me to do what I promise.” Responses ranged from 1 = *strongly disagree* through 5 = *strongly agree*, with higher scores indicating greater self-perceived dependability. Cronbach’s alpha in this sample was .89.

Diligence. We chose a subset of six items from the original 15-item Tenacious Goal Pursuit scale (Brandtstädter, Wentura, & Rothermund, 1999) based on preliminary results from the Young Entrepreneurs Study (Wiener, Geldhof, & Lerner, 2011). An example item is “I stick to my goals and projects even in the face of great difficulties.” Responses ranged from 1 = *strongly disagree* through 5 = *strongly agree*, such that higher scores represent higher levels of diligence. Scores showed adequate internal consistency reliability, with a Cronbach’s alpha of .79.

Excellence. Excellence was measured by the 6-item striving for excellence subscale of

the Perfectionism Inventory (Hill et al., 2004). Items from this subscale assess “tendency to pursue perfect results and high standards” (p. 83). In addition, the subscale is considered empirically and theoretically to be an indicator of conscientious perfectionism (rather than self-evaluative perfectionism, which includes negatively-valenced constructs such as Rumination). Items were scored on a scale from 1 = *strongly disagree*, through 5 = *strongly agree*, with higher scores indicating greater striving for excellence. An example item is “I drive myself rigorously to achieve high standards.” In this sample, Cronbach’s alpha was .88.

Faith behaviors. We used six of the 9 items from the Faith Experiences Survey (Miller-Perrin & Thompson, 2010) to determine how frequently participants engaged in behaviors related to their faith or religion, such as praying, church attendance, and reading religious or spiritual books. Participants were asked to report how often they had engaged in the behaviors over the past year, with response options ranging from 1 = *never* to 7 = *daily*. Scores from this sample showed good internal consistency reliability, with a Cronbach’s alpha of .86.

Generosity. We adapted seven items from the Search Institute’s Profiles of Student Life: Attitudes and Behaviors (PSL-AB; Leffert, Benson, Scales, Sharma, Drake, & Blyth, 1998) to assess behaviors reflecting giving of oneself or helping. Participants were asked how often they performed certain helping tasks (e.g., “share my belongings with people who need them,” “help out a neighbor”) on a scale from 1 = *never* to 5 = *very often*, such that higher scores indicated a higher frequency of helping behaviors. Scores on this subscale had a Cronbach’s alpha of .83.

Gratitude. We used the four positively worded items from the 6-item Grateful Questionnaire (McCullough, Emmons, & Tsang, 2002); two other items are reverse-coded. Respondents rated how much they agreed with statements about being thankful using a scale of 1 = *strongly disagree*, through 5 = *strongly agree*, such that higher scores indicated greater

gratitude. An example item is “I have so much in life to be thankful for.” Scores in this sample showed good internal consistency reliability, with a Cronbach’s alpha of .86.

Health. We used one item adapted from the Youth Risk Behavior Surveillance Survey (Centers for Disease Control and Prevention, 2012). Participants rated their self-perceived health on a 5-point scale of 1 = *poor* through 5 = *excellent*.

Honesty. We used four items from the Self-Description Questionnaire (SDQ) III Instrument honesty subscale (Marsh & O’Neill, 1984). A sample item is “I tell the truth.” The original response format was an 8-point Likert-type scale with options *definitely true* to *definitely false*. To be consistent across sections of our survey, we changed the response items to a 5-point scale with options 1 = *strongly disagree* through 5 = *strongly agree*, such that higher scores indicate higher self-perceived honesty. Cronbach’s alpha for the scores was .70.

Hopeful Future Expectations. We assessed participants’ expectations for a hopeful future using 10 items from the 4-H Study of Positive Youth Development (Lerner, Lerner, Bowers, & Geldhof, in press) that assessed participants’ expectations that they will experience certain situations later in life (Schmid et al., 2011). Participants were asked: “Think about how you see your future. What are your chances for the following?” Example items include being healthy, having a job that pays well, and having a happy family life. The response format ranged from 1 = *very low* to 5 = *very high*. Higher scores indicate higher expectations of the likelihood that those positive future outcomes will occur. In this sample, Cronbach’s alpha was .92.

Humility. We used the Modesty scale of the HEXACO Personality-Inventory Revised (Ashton & Lee, 2008). The four items of the modesty scale are part of the Honesty-Humility domain and assess a tendency to be modest and unassuming. Low scorers consider themselves to be superior and entitled to privileges that others do not have, whereas high scorers

view themselves as ordinary people without any claim to special treatment. Respondents indicated how much they agree with each statement on a scale of 1 = *strongly disagree* to 5 = *strongly agree*, with two items being reverse coded. In this sample, however, the items showed inadequate internal consistency reliability, with a Cronbach’s alpha of .35. We did not include this measure in further analyses and will replace these items in future waves of data collection.

Integrity. We used six items from the PSL-AB (Leffert et al., 1998). These items are also used in the Character scale within the 4-H Study of Positive Youth Development (Lerner et al., 2005). Participants rated how important each item was to them, with responses ranging from 1 = *not at all important* to 5 = *extremely important*, with higher scores indicating higher self-perceived integrity. An example item is “Doing what I believe is right, even if my friends make fun of me.” Cronbach’s alpha for scores in this sample was .81.

Love. We assessed Love using six items (of 9 original) from Warren’s (2009) scale, *Great Love-Compassion*, which reflects the extent to which an individual wishes for all (i.e., all human beings, the whole of humanity) to have freedom and joy and the complementary wish for all to be relieved of their pain and suffering. The original scale contains items about both personal beliefs (6 items) and spiritual experiences (3 items). We used only the items concerning personal beliefs, with responses ranging from 1 = *strongly disagree*, to 5 = *strongly agree*. A sample item is, “I feel responsibility to reduce pain and suffering in the world.” These items showed adequate internal consistency reliability, with a Cronbach’s alpha of .78.

Sense of Purpose. Participants completed the Identified Purpose subscale of the Stanford Youth Purpose Survey (Bundick et al., 2006), in which participants rate items such as “I have a good sense of what makes my life meaningful” on a scale of 1 = *strongly disagree* to 5 = *strongly agree*. Higher scores indicate higher endorsement of a sense of purpose in one’s

life. Scores showed good internal consistency reliability, with Cronbach's alpha of .87.

Service. To index participants' orientations toward service, we used five items from the Stanford Youth Purpose Survey (Bundick et al., 2006). Participants read the items, which pertained to service-oriented life goals, and rated how much they agreed with the statement "The purpose of my life is to ... [name of item]) on 5-point scale from 1 = *strongly disagree* to 5 = *strongly agree*. Through exploratory factor analysis, we identified five items that formed a factor related to a service orientation: "help others," "serve my country," "do the right thing," "serve God/a higher power," "serve my country," and "improve my community." Higher scores represent higher endorsement of a service orientation. Cronbach's alpha in this sample was .71.

Strength of Faith. We used seven items from the Santa Clara Strength of Religious Faith Questionnaire (Plante & Boccaccini, 1997), which assesses participants' religiosity and belief or faith in God. Example items include "My relationship with God is extremely important to me" and "I look to my faith as a source of inspiration." Response options ranged from 1 = *strongly disagree* to 5 = *strongly agree*, with higher scores indicating stronger religious faith. Scores on this subscale showed excellent internal consistency reliability, with a Cronbach's alpha of .98.

Thrift. We used four items (of 8 original) from the scale of frugality developed by Lastovicka, Bettencourt, Hughner, and Kuntze (1999). A sample item is "I believe in being careful about spending money." Response options ranged from 1 = *strongly disagree* to 5 = *strongly agree*, with higher scores indicating greater endorsement of frugality. Scores on this scale showed adequate internal consistency reliability, with a Cronbach's alpha of .83.

Qualitative. The interview protocol included a life-narrative task (Habermas, 2007) as well as semistructured questions. The life-narrative task aimed to elicit participants' narratives about their lives prior to attending

their respective postsecondary institutions, including descriptions of meaningful experiences that may have influenced their paths toward their respective schools. The life-narrative task began with interviewers asking participants to write on index cards the five to seven most important events that happened in their lives (participants could choose the exact number). Participants were then asked to tell their life stories, from birth to present, and to include the events they listed on the index cards in their narratives in the order in which they occurred.

The semistructured interview questions were developed to further explore students' experiences and their goals and expectations for their futures. We developed these questions with the aim of eliciting responses that would complement and expand our interpretations of students' responses on the quantitative survey. The first section of the semistructured interview protocol addressed high school activities, relationships, and academic experiences. The second section included questions about how and why the participant chose his postsecondary school and his thoughts about being a student there. In the third section, interviewers asked the participant to describe himself and his goals for the future. Finally, participants were asked directly about their experiences as men, as we thought it would be important to investigate how the all-male WS context may influence students' experiences of and development during their postsecondary educations. In several interviews, additional questions were addressed, as the interviews were semistructured and the interviewer was instructed to follow the lead of the participant.

Quantitative Analyses

The aim of our quantitative analyses was to determine the overall levels and patterns of the participants' scores on baseline attributes of interest in the WS model and important character-related attributes and, as well, to investigate possible differences between WS and CS students on these scores. We first assessed

demographic differences between the samples. Then, we investigated overall levels of, and possible differences between, WS and CS students on the WS entrance attributes and the character attributes of interest. Ideally, we would have conducted tests of measurement invariance for the multiitem scales to determine whether the relations between the items and the construct they were intended to measure were the same for both groups. However, because of the small sample size of the groups (95 WS and 199 CS), we did not have enough power to detect noninvariance (Meade & Bauer, 2007); furthermore, the sample sizes in each group were too small to support our large model. Given this limitation, we computed scale scores for each of the multiitem constructs and then conducted nonparametric tests (e.g., the Mann-Whitney *U* test) to investigate possible between-group differences, given the markedly nonnormal distributions of the variables (with the exception of health status, as described below). It is important to note that noninvariance of the items cannot be guaranteed at this stage in analysis, and we will investigate this issue further in future analyses once we have more data.

Qualitative Analyses

With our qualitative analyses, we aimed to provide more in-depth information about the prior experiences and life histories of WS and CS students. We also aimed to explore potential differences in the narratives and interview responses provided by WS students compared to CS students. Moreover, we sought to determine to what degree differences between the WS sample and CS sample, as identified in our quantitative analyses, converged with differences we identified in our qualitative analyses (Creswell & Plano-Clark, 2011). In preparation for the analyses of interview data, each of the 60 interviews was transcribed by an outside company. Transcripts were checked for errors by the team members who conducted the initial interviews as well as members of the coding team. The coding team included three

graduate students and a qualitative methodologist who served as an auditor of the coding process (Reissman, 2008). Members of the qualitative team read each transcript before coding the data in the Nvivo10 Software Program.

Coding. Each transcript was double-coded by two graduate students using an iteratively developed and modified coding scheme. We employed a diversity coding method (Bazeley & Jackson, 2013) wherein we embraced the multiple perspectives of our coders and, accordingly, refined our coding scheme through discussion of each coder's perspectives at biweekly meetings. The auditor also suggested revisions to the codebook to ensure that the diversity of perspectives of the coders was captured, including in the definitions of each code.

The coding team engaged in continuous memo writing to increase the rigor of the analyses (Reissman, 2008; Strauss & Corbin, 1998). Specifically, the team engaged in reflective memos to aid them in identifying when their own coding of the data was drawing from experiences outside the context of the study and exerting too much influence on the analysis process (Strauss & Corbin, 1998). The team also engaged in analytic memo writing and linked their memos to coded data in NVivo to keep a record of their analytic process, especially when they were unsure of which code most accurately labeled a particular excerpt in a transcript (Strauss & Corbin, 1998). At coding meetings, we reviewed memos and revised our coding until we came to 100% agreement about which code definitions and codes fit the data best.

Our first qualitative research question was: how, if at all, are the life experiences and narratives of WS students similar to and/or different from those of CS students? To address this question, we reviewed the data we coded under the *deductive* codes that referred primarily to students' experiences prior to attending their postsecondary institutions and the reasons they chose to attend their respective institutions. These codes were developed based on the WS

model and the positive youth development literature more broadly and also frequently responded to the interview questions. These codes classified high school experiences, relationships with teachers and peers, and involvement in community service activities, among other features of participants' narratives about their experiences prior to postsecondary school.

We also explored the data classified under some of the *inductively* developed codes we created to answer our first research question. These codes were more directly informed by the words participants used to describe their experiences, rather than by a priori theories from the youth development field about what participants would discuss in their life narratives. The inductive codes were created to classify aspects of participants' experiences and histories that appeared in multiple transcripts, but were not anticipated at the outset of the study based on what we knew about participants when the study began (Hsieh & Shannon, 2005). For example, we added an inductively generated code of "hardship" early in our coding process as we discovered that many students reflected on hardship experiences that seemed important to understanding their personal and family histories and educational choices.

Our second qualitative research question was how, if at all, do references to character attributes arise in young men's life narratives, and how, if at all, are these references similar/different between WS and CS students? To address this research question, we began by analyzing the data we initially coded under "self-description." The self-description code was applied to responses to the interview question of "How would you describe yourself right now?" We note that we did not ask questions in interviews about character attributes directly as we did not want to overly prime students to describe themselves or to discuss their experiences, prior to attending their respective institutions, in terms of character development. We initially focused on data categorized under the self-description code, however, because

our team observed that when participants were asked to describe themselves, they frequently did so in terms of character attributes, although our semistructured interview questions did not explicitly prompt them to do this.

In addition to the data coded as "self-description," we focused on data we coded under "self-awareness." The self-awareness code was inductively developed early in our coding process based on our recognition that the majority of students demonstrated being very aware of meaningful changes they experienced in their lives, or ways in which they hoped to change in the future. We defined this code as representing instances in which the interviewee was talking about himself and noting important changes in his sense of self of which he was aware. We also noted that the language used by the participant must reference awareness to receive this code. The students' narrations that we coded under self-awareness also referenced character attributes.

Although the data coded in these two categories yielded rich excerpts, the team also noted that there were important data not captured. Our coding team therefore decided to recode all of the interviews for references to character attributes, focusing specifically on the character attributes in the WS model (e.g., diligence, service, honesty). We defined our character codes deductively and based on definitions in the youth development literature (e.g., Lapsley & Narvaez, 2006). After reviewing these data in our team meetings, we identified which codes were salient across narratives. We then considered how the findings related to the quantitative results.

RESULTS

In this section, we present initial findings from Wave 1. We first describe quantitative findings, then qualitative results, and, finally, findings based on our analyses of data triangulation.

Quantitative Research Question 1

Our first research question concerned the demographic characteristics of the WS and CS students, along with their similarities and differences (see Table 1). WS students were significantly younger than CS students. All WS students were between 17 and 20 (as this is the eligible age range for first year students), and 81% ($n = 77$) were 18 or 19. CS students ranged in age between 18 and 25 (we set an older age limit on the CS students to increase the number of eligible students); however, 75% ($n = 89$) were either 18 or 19. Thus, although WS students were younger, on average, there was considerable overlap in the age distributions of the two groups.

About 65% of participants ($n = 144$) self-identified their racial/ethnic background as White, European American, or Caucasian, and 20.1% chose a different identification. Of those, 7.9% chose Black or African American, 3.7% multiethnic or multiracial, 2.8% Asian or Asian American, 2.3% Hispanic or Latino, 1.9% South Asian or Indian, 0.9% Arab or Middle Eastern, 0.5% Pacific Islander, and 0.5% other. Thirty students (14%) did not select a racial or ethnic identification. Visual inspection showed that the distribution of racial/ethnic identifications was unequal across groups, but with the small number of individuals reporting some identifications, we were unable to conduct statistical analyses (i.e., the cell sizes were too small) using the original categories. Instead, and given the high percentage of students who identified as White, Caucasian, or European American, we conducted statistical tests (see Table 1) to examine the proportions of participants in each sample who identified as White or Caucasian or European American, chose a different identification, or did not choose any identification at all. WS students were more likely to identify as White, Caucasian, or European American than CS students, and CS students were more likely not to select an identification (i.e., missing a response). This finding suggests that

racial/ethnic identification may be an area where WS and CS are less closely matched.

We next examined the educational attainment of the person who participants identified as their primary caregiver (65% identified their mother, with other responses including fathers, grandparents, and other relatives); our intention was to use this question as a proxy for socioeconomic status to give us a better understanding of participants' social and economic backgrounds. The patterns were similar between WS and CS groups, $\chi^2(5, 189) = 7.91$, $p = .164$.

To provide context, we then compared the educational attainment of participants' primary caregivers (across all schools) to the general pattern of educational attainment of individuals aged 25 and older in Pennsylvania (Kids Count Data Center, 2012). These comparisons showed only a few areas of difference. In particular, lower proportions of participants identified their caregiver as having less than a high school diploma (4.7%, compared to 8.6% of the general Pennsylvania adult population) or some college (13.8% compared to 17.6%). However, a higher proportion of participants identified their caregiver as having a high school diploma or GED (38.1%) or 2-year or associate's degree (12.1%) compared to the proportions of adults in Pennsylvania (34.8% and 8.8%, respectively). All other proportions were similar. These findings suggest that the participants' caregivers showed similar patterns of educational attainment as the general adult population in the state in which the study is being conducted.

To inform our qualitative analyses by increasing our understanding of the interview sample, we also investigated the demographic characteristics of students who had participated in an interview as compared to those who had not. Although the group of interview participants had been recruited primarily through a process of random selection, we wanted to verify quantitatively that the two samples were comparable demographically. Indeed, interview participants were similar to

students who did not participate in an interview regarding age, $t(1, 198) = -0.14, p = .89$, racial/ethnic identification, $\chi^2(1) = 0.30, p = .58$, and parental education, $\chi^2(1) = 1.96, p = .85$.

Quantitative Research Question 2

Our second quantitative research question related to the baseline scores of, and potential differences between, WS and CS students on the attributes of character and other constructs important to the study. First, we evaluated descriptive statistics (presented in Table 2) for each scale, including the mean, standard deviation, range, skewness, and kurtosis. Mean scores in both groups were primarily on the high end of the response scale (5-point, with

the exception of faith behaviors, which was a 7-point scale), and most distributions were highly negatively skewed. Formal statistical tests of nonnormality (i.e., Kolmogorov-Smirnov and Shapiro-Wilk) also showed that the distributions of most variables (except perceived health status), both within and across groups, significantly deviated from a normal distribution. Due to the presence and extent of nonnormality in our quantitative variables, we conducted nonparametric tests of differences in means (specifically, Mann-Whitney U tests) for all variables except health (for which we conducted an independent samples t test). The results of these tests also are shown in Table 2. We found significant between-group differences on entrepreneurship, dependability, faith behavior, and strength of faith; for all differ-

TABLE 2
Descriptive Statistics for Full Sample and by School Group

Attribute	<i>N</i>	Full Sample	WS	CS	Comparison	
Health	202	3.52 (0.90)	3.55 (0.88)	3.49 (0.92)	$t(1, 200) = -0.49, p = .619$	
Commitment to School	Emotional	193	3.51 (1.13)	3.65 (0.11)	3.40 (0.11)	$U = 5,806.00, z = 1.26, p = .224$
	Cognitive	197	4.43 (0.59)	4.49 (0.05)	4.37 (0.06)	$U = 5,092.00, z = 1.12, p = .224$
	Behavioral	207	3.80 (0.80)	3.92 (0.07)	3.71 (0.08)	$U = 6,045.00, z = 1.72, p = .075$
Honesty	199	3.95 (0.67)	4.05 (0.06)	3.87 (0.07)	$U = 5,629.00, z = 1.73, p = .083$	
Thrift	197	3.92 (0.81)	3.97 (0.08)	3.88 (0.08)	$U = 4,994.50, z = 0.43, p = .665$	
Entrepreneurship	204	3.26 (0.95)	3.41 (0.69)	3.14 (0.09)	$U = 6,036.00, z = 2.09, p = .036$	
Dependability	196	4.25 (0.65)	4.40 (0.05)	4.12 (0.07)	$U = 5,667.00, z = 2.25, p = .024$	
Diligence	199	3.88 (0.70)	4.17 (0.07)	3.93 (0.08)	$U = 5,674.00, z = 1.85, p = .063$	
Excellence	196	3.64 (0.84)	3.74 (0.08)	3.55 (0.08)	$U = 5,343.50, z = 1.41, p = .157$	
Faith Behaviors	200	2.77 (1.58)	3.07 (0.16)	2.51 (1.15)	$U = 6,182.00, z = 2.89, p = .003$	
Strength of Faith	194	3.23 (1.25)	3.48 (1.12)	3.01 (1.13)	$U = 5,558.00, z = 2.22, p = .026$	
Generosity	202	3.13 (0.73)	3.16 (0.06)	3.11 (0.08)	$U = 5,280.50, z = 0.51, p = .608$	
Gratitude	197	3.94 (0.67)	4.27 (0.04)	4.05 (0.08)	$U = 5,517.50, z = 1.73, p = .082$	
Hopeful Future Expectations	197	4.15 (0.58)	4.31 (0.05)	4.12 (0.06)	$U = 5,538.50, z = 1.78, p = .075$	
Integrity	204	4.21 (0.59)	4.27 (0.05)	4.15 (0.06)	$U = 5,500.00, z = 0.81, p = .418$	
Love	196	3.64 (0.70)	3.61 (0.07)	3.67 (0.07)	$U = 4,552.00, z = -0.60, p = .548$	
Sense of Purpose	204	3.62 (0.81)	3.71 (0.07)	3.57 (0.08)	$U = 5,631.00, z = 1.10, p = .268$	
Service	205	3.98 (0.67)	3.92 (0.06)	3.75 (0.06)	$U = 5,936.50, z = 1.70, p = .088$	

Note: Significant between-group differences are bolded. U = Mann-Whitney U statistic.

ences, WS students had higher scores. Although the mean scores between groups on most variables were very similar, we observed differences in the variance of scores; the CS group had consistently larger amounts of variation compared to WS students.

We conducted a similar set of between-groups nonparametric analyses to test for possible differences between interview and noninterview participants' scores on the character-related attributes of interest. Consistent with our primarily random selection process, we found no significant differences between groups (details of these analyses are available upon request from the first author). Finally, we conducted analyses to determine whether any of the differences we identified between WS and CS students were moderated by the demographic characteristics we described earlier (racial/ethnic background and educational attainment of the students' primary caregiver). We found no evidence of moderation by demographic characteristics (details of these analyses are also available upon request from the first author).

Qualitative Research Question 1

Our first qualitative research question concerned participants' life experiences and narratives. Through our review of the coded data, we found that both WS and CS students' narratives about their lives prior to attending post-secondary school focused on family instability, high school experiences, and taking on responsibilities during adolescence.

Family instability was a prominent aspect of students' narratives. About half of participants in both groups reported instability in the form of divorce or moving repeatedly during childhood. When discussing his childhood, one WS student shared: "My dad was abusive to my mom and to us, so she finally left him after 8 years.... We lived with my grandparents for a couple years." Similarly, a CS student shared: "After my dad died, we moved in with friends.... We would go to my aunts and

uncles. We just bounced around a lot. I had 13 different houses in two years."

The narratives that students in both groups shared about their high school experiences were also similar. Specifically, they described a range of neutral, positive, and negative experiences in and associations with high school in reference to their social groups, academics, and relationships with teachers. A WS student noted, for example:

My high school experience, it was pretty good. It was like any other high school. You got picked on some times; you got into little—some fights sometimes, well, verbal fights. You had friends that stabbed you in the back, friends that were good to you; some of the teachers that would help you out and some that would be strict as anything.

When reflecting on high school, a CS student similarly shared: "And it was pretty good. I still wasn't like the coolest guy, but I made friends here and there. Eleventh grade I joined more sports, made more friends, had a girlfriend."

The majority of students in both samples also talked about different forms of responsibilities that they took on in high school, and there were several poignant examples of significant caregiving responsibilities provided by students in both groups. Two students, one WS and one CS, stood out in their descriptions of family responsibility. Specifically, these students (whom we refer to by their pseudonyms Fred and Nate, respectively) shared narratives about taking on caregiving responsibilities to support the needs of their families. Fred explained: "All of 11th grade I went down and lived at [my aunt's] house for a year, doing online schooling, to help raise her three kids while she was on bed rest, and then helped them with the newborn for the first nine months." He expressed that although moving in with his aunt presented him with significant responsibilities; it also provided him an opportunity to turn his life around. He shared that after living with his aunt, "I had to go home and fix my life, make something of myself. So

I went back to school. I passed [high school] no problem. I got a job. I was working. I stayed out of trouble.” The CS student, Nate, shared that when he was 15, his sister gave birth. According to Nate, his sister ran away and left him and his mother with her child to care for. He shared: “My mom was working full time, so was my brothers. I was her dad. I did everything for her. I watched her from morning to night.”

In addition to similarities, we also identified substantive differences related to the histories of WS and CS students. We found, for example, that the majority of WS students had meaningful connections to the trades, whether in school, work, or through family ties to tradespeople, and this connection was largely not present in the CS students’ narratives. When describing connections to tradespeople, for example, a WS student noted: “I was just gonna go to a community college but ... my oldest brother went here, and he told me to try it out. So I studied, did all my work and I got accepted.” Seven CS students also had experiences related to the trades, but some of these experiences were narrated as negative and deterred these students from pursuing trade careers. In response to a question about prior experiences with the trades, one CS student explained: “One brother works at Home Depot. They do manual labor. So that’s what I want to get away from ‘cause I don’t want to have to work until I die.”

In addition to this difference in trade-related experiences and orientations, there was a substantive difference in family orientations articulated by participants. Although just over one third of both WS and CS students described wanting a family as a life goal, WS students described this goal as related to their more immediate futures, and in more definite terms. One WS student explained: “I’m sure you’ve picked up that I’m very family oriented, and I plan on having a family. I want to have a family and I want to be there. I want to be the best dad I can be. I want to be the best husband.” Another WS student shared:

I definitely want a family, though, and have like a son, and I would be there for him. You know what I mean? Again, not saying my dad was a bad dad, but he wasn’t around. He was in jail the majority of my life, so be there for my kids and watch them grow up.

In contrast, most CS students spoke of family in vague terms or when prompted repeatedly by our interviewers to answer the question of what their future life goals were. They spoke specifically about *maybe* wanting families ... *eventually*. In response to the probe of: “Do you have any life goals related to family?” one CS student said: “Eventually, maybe in ten years, whatever, I’ll have a family, but I’m not really rushing into that.”

Another difference was that 17 WS students discussed hoping to have their own businesses, compared to only three CS students. One WS student said, for example: “I wanna start—obviously I wanna start working in masonry. Probably get into union jobs and everything like that. Build up my character and everything like that, and then open my own business.”

Qualitative Research Question 2

Our second qualitative question explored how, if at all, references to character attributes arose in participants’ narratives. We present excerpts from the interviews to illustrate the salience of references to diligence, responsibility, and service. We chose to focus on these attributes in particular because they were the most prevalent within the interview data and also provided points of comparison to our quantitative analyses. When possible, we also identify nuances in the ways in which these attributes arose in WS and CS student narratives.

Diligence. Drawing from the character development literature, we defined diligence as working hard, persevering, and managing behaviors to finish a job or reach a goal (Davidson & Lickona, 2007). We coded excerpts as reflecting diligence typically as part of participants’ descriptions of the self.

We also coded data as reflecting diligence when participants reflected on a past experience where they evidenced their diligence, or spoke of having future goals related to diligence in some way. We found indicators of diligence in just over a third of the WS sample and in a third of interviews with CS students. A WS student explained: "I ... got a goal in my head. I just knew I wanted to get a degree in [horticulture]. So I just kind of am just chasing my dream right now. I'm trying to be where I want to be. I want to be successful, and I'm not going to stop until I get that degree." Similarly, a CS student described himself in these terms: "I think I'm a hard working person.... If there is anything I started, I want to finish it.... I just wanna give up sometimes, but in the back of my mind, I know I have to do it. So it's like a never giving up kind of a feeling." Even though we identified diligence as a prominent attribute in interviews with both groups, we did not identify substantive differences in the ways in which diligence arose within or between groups.

Responsibility. Based on the literature, we defined responsibility as students' managing their behaviors to meet expectations or fulfill social roles (Blasi, 2005). We coded examples of responsibility that came up as students described themselves, reflected on past experiences, discussed their reasons for choosing to attend their respective educational institutions, and/or explained their future goals. About one third of students in both samples described themselves as responsible or aiming to be more responsible through specific actions they were taking. When answering the interview question of: "How did your family respond to you choosing to attend WS", one WS student explained: "They're happy that I'm coming here because they know I'm gonna become a lot more responsible. I've always been responsible; it's just I never took action to do it. You know what I mean?" Similarly, a CS student noted that while he was at his postsecondary institution he was planning on prioritizing: "Progressing as a student, just because, like I said, with how well I didn't do in high school,

I'm teaching myself how to be responsible and have priorities and stuff like that."

Service. Finally, of all the character attributes we identified in these young men's narratives, references to service and descriptions of students' orientations to service appeared to differ substantively between WS and CS interviews. We defined service in terms of examples students presented of helping others, volunteering, and/or other behaviors related to meeting the needs of other people or of one's community (e.g., Reed & Aquino, 2003). The majority of students in both groups talked about service, and several talked about multiple forms of service. Twenty-one WS students discussed service; several of these students mentioned engaging in multiple types of service. Eight of the 21 students provided descriptions of service that related to their church or religious institution; ten talked about community-based service, such as volunteering through their high schools; and seven spoke of general helping (examples of general helping included interviewees talking about helping a relative or a neighbor, as well as moments of enjoying helping others and planning to do so in the future). Only three CS students, however, related their service participation to a religious institution. Among CS students, fourteen narratives of service were related to the participants' communities. Finally, five CS students referenced engaging in general helping behaviors, and/or planning to do so in the future.

In relation to church-based service, a WS student said: "I'm thinking that, with my degree and newly learned skills, I can travel across seas and go help the impoverished there, maybe build churches for people who really need it, and stuff like that. Wherever the Lord takes me now." Another WS student noted: "Basically, in order, my priorities go basically to God, to my country and to my community, and then community includes your family, your school, all that."

There were similar descriptions of helping behaviors in both subsamples. WS and CS students provided narratives of helping that

evidenced the positive developmental characteristics they possessed at the start of their respective postsecondary educations. When describing his experiences of service, for example, one WS student said:

There was an old lady down the street, I always took in her trash cans, every time she brought her groceries in, I made sure I was out there diligently to help her. So you know, I've changed two flat tires for people that had no idea what was going on.... If I see that someone needs help and I drive by them, there's got to be a really good reason. I'm not just going to walk by anyone that needs help because I wouldn't want anyone to do that to me.

As stated above, service experiences based in the community were much more prominent among the narratives provided by CS students compared to WS students. One CS student shared: "In high school, all four years, I was part of the Big Brothers Big Sisters program ... but, like, local, just community events and stuff. If they ever needed volunteers, I was always happy to go and volunteer. It was a good time." Another CS student shared:

I love volunteering. I would rather do volunteer than get paid to do it, just because that self-satisfaction of helping the community, helping yourself, helping other people ... I'm gonna keep up my fire and EMT volunteering.

Mixed Methods Research Question/ Meta-Inferences

Our quantitative and qualitative findings converged in several ways. First, through both sets of analyses, we found many areas of commonality between the two groups. WS and CS participants, on average, evidenced high levels of the attributes of interest, and they reported a similar range of positive, negative, and neutral associations with their high school experiences.

Our analyses of the qualitative and quantitative data also converged in regard to findings of differences between WS and CS students.

For example, our quantitative analyses showed that WS students reported higher levels of religiosity (both religious behaviors and importance of faith in their lives) compared to CS students, and our qualitative analyses revealed that WS students' experiences of service more commonly revolved around their religious institutions. These quantitative and qualitative findings together suggest that there are substantive differences in the religious orientations of students at WS compared to CS students.

Both sets of analyses also identified clear differences between groups on entrepreneurial aspirations and intentions. Over half of WS students, compared to only three CS students, spoke of hoping to own a business in the future. Similarly, quantitative findings indicated that WS students had higher scores on our measure of entrepreneurial life goals. This finding could reflect an important difference in career and life goals of WS students compared to CS students.

Qualitative analyses illuminated several additional areas of potentially important differences between the groups, which will influence our quantitative measures and future data collection and analyses. In some cases, we identified important topics that we had not previously included in our quantitative survey, such as how prior experiences with the trades influenced students' life paths toward (or away from) the trades. For example, most WS students attended vocational-technical schools or took vocational-technical courses in high school. These same students also reported having connections to tradespeople during adolescence and described having positive associations with the trades related to these experiences. This finding suggests that WS students were directed toward trade careers prior to applying to WS.

In other cases, through qualitative analyses we identified nuances in the content of participants' experiences related to a particular construct, even when mean-level quantitative analyses showed no significant differences in the levels of the construct. For example, when

we examined students' narratives around service, WS students more commonly described engaging in service related to religious affiliations or beliefs, whereas CS students more frequently described service experiences related to community-based organizations. This finding suggests that WS and CS students have similar levels of particular character attributes (e.g., service orientation), but that the content of these specific attributes may be manifested differently even from the beginning of their educational experiences. These findings point to the importance of continuing to assess participants' experiences and attributes (e.g., students' experiences with the trades, their orientations toward service, and their family goals) in future waves of data collection. These findings also highlight the importance of mixed method designs in developmental research with youth, as such designs provide time and opportunity for iteratively honing quantitative and qualitative measures based on meta-inferences from triangulated findings.

DISCUSSION

Promoting young people's character development is important for society to flourish, and institutions of higher education are a key context for this development. Building on the prior work of Lapsley and Narvaez (2006) and Sokol et al. (2010), we have used a relational developmental systems theory perspective (Overton, 2013) to conceptualize character as a feature of person-context relations, and character development as a process of mutual influence of context on person and person on context. The ACT Study represents an initial attempt to investigate character development within a postsecondary context from this perspective. The overarching aim of the project is to evaluate an educational model for promoting character among young men enrolled at the Williamson Free School of Mechanical Trades (WS). Accordingly, we presented analyses and findings from the first wave of the study, in order to assess baseline characteristics of WS

and comparison school (CS) students. Because we have conceptualized character as a feature of person-context relations, rather than as an attribute inherent to any individual, the character attributes we assessed were based on the context of this study, that is, within the WS.

As anticipated, our quantitative and qualitative results showed that students in both groups had high levels of the character attributes of interest. Through quantitative analyses, we found that the attributes of WS and CS students were generally similar at the mean level, with the exception of entrepreneurship, strength of faith, and faith behaviors (as well as dependability, as described below). We also identified differences between students' entrepreneurial goals and faith related behaviors through our qualitative analyses. These differences can be interpreted further given what we know about the WS context. Specifically, WS has a clear aim of selecting students with entrepreneurial aspirations prior to attending WS (WS, 2013). In addition, although WS does not claim to intentionally seek out young men who demonstrate specific faith behaviors prior to attending, it is possible that the faith-based context of WS (e.g., the daily chapel service) may differentially attract young men for whom faith is an important aspect of their lives.

These interpretations demonstrate that exploring our qualitative and quantitative findings together enabled us to better make sense of each set of findings. Each distinct group of analyses, however, also made unique contributions to our understanding of the baseline similarities and differences between WS and CS students. Quantitative analyses showed, for example, that WS students had higher self-reported dependability, although this aspect of participants' lives did not seem more salient in interviews with WS students, compared to CS students. These quantitative findings are also quite interpretable, however, in light of how WS selects students. Specifically, because WS administrators believe that dependability and reliability are crucial attributes for success at the school, prospective students must provide evidence that they are

reliable (such as through an entrance interview and letters of recommendation) prior to admission (WS, 2013).

Qualitative analyses showed that the majority of WS interview participants had positive connections to the trades before attending the WS that may have influenced their pathways. The CS students did not appear to have as strong of a connection to the trades, whether through connections to tradespeople or attending a vocational-technical high school. This qualitative finding will be explored across the entire sample of participants in future waves of data collection, as described below. Although we cannot conclude how trade experiences in adolescence may be related to students' post-secondary educations at this point in the study, these initial findings do suggest that WS selects students who are already well-prepared for and familiar with the WS educational model, which may enable students to thrive in this unique context. This finding also provides further illustration of, and support for, the idea that character development represents the alignment of individual strengths with the strengths of the context. Whether the differences we identified in the present analyses are maintained over time will be assessed in additional waves of the study.

Future Directions

As previously mentioned, a primary purpose of these initial analyses was to investigate the quality of the "match" between first-year students at WS and students recruited from the comparison schools. We acknowledged the potential for differences between WS and CS students before beginning data collection, as the unique context of WS meant that similar schools would not be easy to identify. However, we believed that the comparison schools we selected enrolled students who would provide reasonable points of comparison to WS students. Including the CS students in this study was also important because the administration of each school had an interest in examining the character attributes and positive

developmental outcomes of their student populations. Our analyses showed that overall the characteristics of the two groups were similar in many respects, with several small but perhaps important differences between WS and CS students, which will be accounted for in future waves of data collection and analyses. Identification of these potential differences—through both quantitative and qualitative methods—will inform our future use of propensity scoring techniques to facilitate longitudinal comparisons between WS and CS students on outcomes of interest. Propensity scoring techniques will allow us to select from among our group of CS students those who are most similar to WS students on both the primary variables in this study (e.g., character attributes) as well as others that we have identified through these analyses as being important (e.g., prior trade experiences).

In addition, the findings presented here have laid the foundation for honing our measures for future waves. Initial quantitative analyses showed that our measure of humility did not perform well in terms of internal consistency reliability. In future waves, this measure will be replaced. Based on our qualitative analyses, we will also add several questions to the quantitative survey. These questions include ones regarding trade experiences (e.g., attendance at a vocational-technical high school or program) and additional social class items to help us better understand our initial findings regarding family instability and hardship. We will also add questions regarding students' views of poverty to our future qualitative interview protocols, to better understand possible relationships between students' experiences of hardship and their post-secondary trajectories.

In future qualitative analyses, we will also conduct inductive analyses regarding what the participants in this study find to be most meaningful and influential in their postsecondary educational contexts. Here, we presented sample-level qualitative analyses to identify aspects of students' life paths and narratives related to character attributes and to explore

baseline characteristics of students in more depth. Future analyses will aim to identify important cases in our overall sample that may help us further conceptualize character development among young men.

Limitations

The present results should be interpreted in the context of several limitations. First, the present analyses are all from one time point of data collection. Future waves of data collection will provide longitudinal data allowing us to model person-context relations directly. Another limitation is that WS is a unique school context; studying the environment of this school and its possible impacts on students presents both an interesting opportunity and a potential limitation to the generalizability of our findings to other samples. Given that random assignment of students to schools is not ethically acceptable or feasible, our future analyses will address this limitation through the quantitative use of propensity scoring techniques as well as continuing in-depth qualitative investigations into the nature of students' experiences.

Still another potential limitation related to the unique context of the WS is the all-male nature of the school. Certainly, the character and personal development of young women attending nontraditional postsecondary institutions is also of high interest and worthy of investigation in other studies. It will be important to investigate whether similar results would be found within a sample of young women. Another limitation to the generalizability of this study pertains to the sample of comparison schools. We selected each of these three schools for its potential to attract students with similar individual characteristics to those who choose to attend WS; in this regard, they have proved to be suitable. The CS students were not, however, chosen to be representative of any particular group of schools either within Pennsylvania or across the United States. Thus, the ability of these findings to generalize to other trade schools, technical schools, and

community colleges is unclear, though this aspect of generalizability will be investigated further in future waves of the study. In addition, our ability to generalize to the greater population at each of these three schools is limited because we did not attempt to gather a representative sample from each school but instead relied on those students who were willing to participate.

Finally, an important limitation to the findings from the first wave of this study is that much of the data we collected pertains to person-level factors, and our approach to studying character places person \leftrightarrow context interactions at the center of conceptualizing character development in youth. In future waves of data collection, we will collect and analyze interviews from teachers and administrators at each of the participating institutions, to enhance our understanding of the contexts under investigation in this study, and how resources (e.g., teachers, administrators) in these contexts contribute to the promotion of character and other positive developmental outcomes among the participants. We will also triangulate findings from teachers and administrators with findings from student interviews and surveys to generate a more holistic understanding of the processes through which students influence and are influenced by their postsecondary institutions.

CONCLUSIONS

Despite these important limitations of generalizability, the findings we have presented here provided significant information on the baseline demographic and character attributes and background experiences of postsecondary education students. We thus have provided some insight into the lives of students who choose to attend trade schools and community colleges in eastern Pennsylvania. We have learned, for example, that upon beginning their postsecondary educations, young men at trade schools and community colleges appear to have high levels of many attributes of character. They

also appear to have participated in significant, yet varied, service experiences during adolescence, and they express a continued commitment to service and helping behaviors. These young men also appear to have significant experiences of hardship and family instability in their pasts that may have influenced their trajectories to postsecondary school. We have also learned that young men who choose to attend WS appear to have strong entrepreneurial and family-related goals upon beginning their educations. In future waves of this study we will continue to examine the ways in which students' experiences through late adolescence, and specifically their postsecondary schooling in general, may continue to influence them.

Finally, in addition to enabling us to identify important baseline information about the students in this study, our findings from the first wave of ACT have contributed to mixed method work in youth development. Specifically, we have illustrated here how qualitative and quantitative forms of data can be more rigorously triangulated to examine the manifestation of character and to examine endogeneity at the beginning of a study. Our use of these particular mixed-methods analyses and interpretations also provided information about how we can hone future waves of data collection and analyses to account for findings from the first year of this study. We have, for example, identified how our measurement can be strengthened in the longitudinal phases of our research. Our continued mixed method investigation will not only shed light on the nature of participants' character development but also contribute knowledge about the individual and contextual factors that contribute to the development of character in young men. In addition, this study represents one of the first attempts to evaluate character development with reference to a specific context (Lapsley & Narvaez, 2006). Future analyses will, therefore, contribute to research in the field of higher education, and, more specifically, to the research on character development of young men that takes place in higher education.

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NOTE

1. The Williamson Free School of Mechanical Trades requested to be referred to by name in articles resulting from this project.

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