

**Exploring the Relations between Civic Identity and Character Attributes  
in Young Adult Men<sup>1</sup>**

A thesis submitted by

Jonathan M. Tirrell

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ADVISER: Richard M. Lerner

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### Abstract

Having good character guides individuals to pursue positive goals, to do the right thing, and to think and act in prosocial ways. In order to function in such prosocial ways, one must also have a sense of self, or identity, that prioritizes prosocial attitudes and behaviors over self-serving ideas and interests. This sense of self in relation to society has been termed civic identity. This research explored the relations between civic identity and character among 865 men ( $M_{age} = 19.84$  years,  $SD = 1.86$ ) from four post-secondary schools in Pennsylvania. Results indicated significant relations between civic identity and general character, diligence, and helping behaviors. Results also indicated that helping behaviors were a significantly better predictor of civic identity than were diligence and general character. Implications for future studies of helping behaviors as a component of civic identity and character development are discussed.

*Keywords:* character, civic identity, diligence, integrity, helping behaviors

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**Exploring the Relations between Civic Identity and Character Attributes  
in Young Adult Men**

## CIVIC IDENTITY AND CHARACTER ATTRIBUTES

### **Exploring the Relations between Civic Identity and Character Attributes in Young Adult Men**

This research explored the possible relations between civic identity and character attributes in young adult men. *Character* can be understood as “a set of psychological characteristics that motivate and enable individuals to function as competent moral agents” (Berkowitz & Hoppe, 2009, p. 132). Character is therefore a personal attribute that involves thinking, feeling, and acting morally across multiple varying contexts (Lapsley & Narvaez, 2006). In order to function as competent moral agents, for the good of others and society, individuals must have a sense of self, or identity, that prioritizes prosocial attitudes and behaviors over egoistic ideas and interests (Flanagan, 2004; Lerner, 2004). This sense of self in relation to society, concerned with one’s contribution to society, has been termed *civic identity* (Youniss & Yates, 1999).

The apparent overlap between having a civic identity (a sense of self in relation to society) and exhibiting good character (functioning as a competent moral agent) might suggest that the processes of civic identity development are related to, or contribute to, the processes of character development. However, little research has been done to explore the relations between civic identity and character. Therefore, this study provides preliminary descriptive data about the relation between civic identity and character. Whereas I did not use longitudinal data in this study, and therefore did not study development, the findings presented may elucidate the relations between civic identity and character attributes in ways that have implications for future developmental studies of these relations.

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To assess this covariation, I used data from the first wave of the Assessment of Character in the Trades (ACT) Project, a three-year longitudinal study assessing character, citizenship, and vocational development among young men attending one of four post-secondary educational institutions in Pennsylvania (Johnson, DeSouza, Lerner, & Lerner, 2014). The first wave of testing of the ACT Project involved measurement of both civic identity and character attributes.

The use of these data in the present research was both timely and important. In the field of applied developmental science, an assumption is that the success of future societies and democratic social systems may depend in part on the positive development of children (e.g., Lerner, 2004; Sherrod, Tourney-Purta, & Flanagan, 2010). To promote the success of future societies, the development of good character in children must be promoted, as having good character guides individuals to pursue positive goals (ones that benefit both self and civil society), to do the right thing (i.e., to behave in morally praiseworthy ways; Peterson & Park, 2006), and to approach the social world by thinking, feeling, and acting in prosocial ways (Hay, Castle, Stimson, & Davies, 1995).

Contemporary developmental science uses models derived from the relational developmental systems (RDS) paradigm as a means to explain that the fundamental process of human development entails mutually influential relations between a developing person and his or her changing, multilevel context, represented as individual  $\leftrightarrow$  context relations (Overton, 2013, in press). When these relations are beneficial to both the individual and the context, they are termed adaptive developmental regulations (Brändtstadter, 1998). These

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individual  $\leftrightarrow$  context relations involve people contributing to the social institutions that, in turn, enable people to flourish (Lerner, 2004). Therefore, the development of both character and civic identity is shaped by the ecology of human development, that is, families, schools, and community settings.

The development of character and civic identity are of particular import during adolescence and young adulthood. During these periods, individuals begin to develop a sense of their respective places and purposes in society, and engage in instances of civic participation that may persist throughout the life span (Sherrod, Tourney-Purta, & Flanagan, 2010). For these reasons, Shields (2011) argued that schools should equate excellence not with “the quantity of content learned, [but rather, with] the quality of the *character* the person develops” (p. 49). Accordingly, the present research assessed the interrelation between civic identity and character attributes during the young-adulthood period of life. The ACT Project data set provided a useful data base in which to explore this interrelation because it contains measures of both civic identity and character attributes among people in the adolescent to young adulthood age range. These measures are scales of civic identity and attributes related to a multidimensional conception of character.

In regard to civic identity, the Johnson et al. (2014) measure of *civic identity* involves three cognitive components: exploration, resolution, and centrality. *Exploration* represents the consideration of oneself in a community. *Resolution* represents thinking about one’s commitment to a personal belief about

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one's role in one's community. *Centrality* represents the importance one places on one's role in one's community (Johnson et al., 2014).

In turn, in regard to indicators of character, there are several pertinent measures within the ACT data set. Lickona and Davidson (2005) proposed a definition of character as consisting of the interconnected and essential components of performance character and moral character. Together, these components of character enable one to realize one's potential for excellence (performance character) by means of, and in service of, successful interpersonal relationships and ethical conduct (Davidson, Lickona, & Khmelkov, 2008). Seider (2012) discussed character as being a multidimensional construct pertinent to performance character, moral character, and civic character. Following Lickona and Davidson (2005), Seider (2012; Seider, Novick, & Gomez, 2013) noted that performance character refers to attributes such as diligence, perseverance, and work ethic; these attributes allow one to achieve success and excellence in an endeavor. Seider and colleagues also followed Lickona and Davidson (2005) in indicating that moral character is focused on enacting virtuous behaviors, such as integrity, empathy, and social responsibility, that allow for ethical behavior in relationships (Seider et al., 2013). In turn, Seider (2012) specified that civic character involves relations with society locally, nationally, and globally, and involves engaged and responsible citizenship.

The ACT data set included indicators pertinent to each of the three character domains discussed by Lickona and Davidson (2005) and Seider (2012). In regard to performance character, I chose a measure of *diligence*; in regard to

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moral character, I chose a measure of *integrity*; and in regard to civic character, I chose a measure of *helping behaviors*. Using these measures, the key question addressed in this research was whether, among young men in the late adolescent and early adulthood portion of the life span, a link existed between indicators of civic identity and character attributes. As described below, this question was addressed through several descriptive interrelational analyses.

### **Method**

In the present study, I explored the relations among the facets of civic identity (exploration, resolution, and centrality) and indicators of three domains of character (performance, moral, and civic). Data for this study were derived from the first wave of the ACT Project.

### **Participants**

The sample consisted of 865 male participants ( $M_{age} = 19.84$  years,  $SD = 1.86$ ) from the first wave of the ACT Project. Within this group, 627 participants (72.5%) self-identified race. Of these participants, 73.7% were White/ Caucasian; 11.2% Black/ African American; 4.3% Asian/ Asian American; 3.3% Hispanic/ Latino; .3% Pacific Islander; .8% Arab or Middle Eastern; 1.1% South Asian or Indian; 1.1% Other; and 4.1% Multi-Ethnic or Multi-Racial. In turn, 238 participants did not identify their race or ethnicity.

Participants were recruited from four schools in Pennsylvania. These four post-secondary schools represented unique educational opportunities. School 1 was a trade school in central Pennsylvania and 9.7% of the sample was drawn from this site. There were approximately 300 students attending this school, and

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15 Associates in Science and Associates in Applied Science degrees were offered. Most students commuted to attend classes. School 2 was a community college in the greater Philadelphia area, from which 37.2% of the sample was drawn. There were approximately 10,000 students attending this school, and 58 Associates in Science, Associates in Arts, and Certificate programs were offered. Most students commuted to attend classes. School 3 was a branch of a large state university located in greater Philadelphia, and 13.9% of the sample was recruited from this site. This school offered 15 Associates degrees and Bachelor degrees. Most students commuted to attend class. School 4 was a trade school in the greater Philadelphia area, from which about 39.2% of the sample was drawn. There were five areas of study, and Associate degrees and Certificates were offered. One unique aspect of this school was that all students attended on full scholarship and lived at the school for the duration of their studies. In addition, all students at this school were exposed to character and citizenship training.

### **Measures**

Four measures were used in this research: 1. the Johnson et al. (2014) measure of *civic identity*, which assesses exploration, resolution, and centrality components of civic identity; 2. a measure of *diligence*, as an index of performance character; 3. a measure of *integrity*, as an index of moral character; and 4. A measure of *helping behaviors*, as an index of civic character.

**Civic identity.** Civic identity was assessed through a scale that Johnson et al. (2014) adapted from their earlier work. Both the original and the adapted scale included three subscales: exploration, resolution, and centrality. The original

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measure contained 18 items with six items on each subscale. In the adapted scale, three items per subscale were retained for a total of nine items (Johnson et al., 2014). Examples of the items are: “I have spent time trying to figure out what it means to be an involved member of my community” (exploration), “I am sure about how I want to be involved in my community” (resolution), and “My involvement in my community is an important part of my identity” (centrality). Items were scored on a scale from 1 = *strongly disagree* through 5 = *strongly agree*; higher scores reflected greater exploration, resolution, and centrality. Table 1 presents item stems and descriptive information for this measure.

**Character.** The present research used a tripartite conception of character that involves performance character, moral character, and civic character, as measured by diligence, integrity, and helping behaviors, respectively. Table 2 presents item stems and descriptive information for the three respective measures: diligence, integrity, and helping behaviors.

**Diligence.** Diligence was used to represent *performance character*. Diligence was assessed through a subset of items from Brandtstädter, Wentura, and Rothermund’s (1999) *tenacious goal pursuit scale*. Six of the original 15 items were chosen for the ACT project based on preliminary results from the Young Entrepreneurs Study (Weiner et al., 2011). Sample items included, “The harder a goal is to achieve, the more appeal it has to me,” and “I stick to my goals and projects even in the face of great difficulties.” Responses ranged from 1 = *Strongly disagree* through 5 = *Strongly agree*; higher scores represent higher levels of diligence.

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***Integrity.*** Integrity was used to represent *moral character*. Integrity was assessed by items that measured participants' social consciousness and personal values. Six items were used from the Search Institute's Profiles of Student Life: Attitudes and Behaviors (PSL-AB; Benson, Leffert, Scales, & Blyth, 1998). These items were also used in the *Character* scale used within the 4-H Study of Positive Youth Development (PYD; Lerner et al., 2005; Phelps et al., 2009). Participants were asked to rate how important each item was in their lives, with responses ranging from 1 = *Not at all Important*, to 5 = *Extremely Important*. An example of such an item is "Doing what I believe is right, even if my friends make fun of me."

***Helping behaviors.*** Helping behaviors were used to represent community-directed *civic character*. Items were adapted from the Search Institute's PSL-AB (Benson et al., 1998). Participants were asked how often they performed certain helping tasks, including sharing their belongings with people who need them, helping to make their community a better place to live, or helping out a neighbor. Participants rated frequency of these behaviors on a scale from 1 = *Never* to 5 = *Very often*; higher scores indicated a higher frequency of helping behaviors.

### **Procedure**

Surveys were electronically administered to participants at the beginning of their first year or in the middle of their second year of post-secondary education. The post-secondary schools provided support in recruiting

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participants. The survey took about 45 minutes to complete. Full details about the method of the ACT Study may be found in Johnson, Hershberg, et al. (2014).

### **Data Analysis**

There were two major domains of variables of interest in this research: civic identity, which involved three subscales; and character, which also involved three scales. Johnson et al. (2014), using a separate, smaller sample from the first wave of the ACT Project, have shown that their measure of civic identity involved three correlated factors: exploration, resolution, and centrality. In turn, I conducted a confirmatory factor analysis (CFA) to confirm the presence of this three-factor structure within the data set used in the present research. In the interest of creating a parsimonious model of civic identity for subsequent analyses exploring relations between civic identity and character, I then tested a higher-order factor structure, wherein exploration, resolution, and centrality formed a second-order latent factor pertinent to civic identity.

In turn, Seider (2012) discussed three components of character—performance, moral, and civic—building on the work done by Lickona and Davidson (2005). Accordingly, I ran a second CFA to confirm that the items from the three measures of character (i.e., diligence, integrity, and helping behaviors) loaded on their hypothesized factors (e.g., that diligence items best represented diligence). I then tested models with first- and second-order latent factor structures related to character, in order to assess the best-fitting model to represent the tripartite conception of character. Because the structure of character is a still-open question in developmental science (Lerner & Callina, 2014), for

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instance, questions remain about the nature of first- and second-order latent constructs reflecting character, I also tested a bifactor model of character. In this model, all of the variables from the three character-related measures were allowed to load on a general latent factor of character while also loading on the three latent factors theorized to be related to character, namely diligence, integrity, and helping behaviors. Bifactor modeling has been recommended in recent literature for modeling multidimensional and complex psychological constructions (Laurenceau, & Zhang, 2012) such as personality (Chen, Hayes, Carver, Laurenceau, & Zhang, 2012; Reise, Moore, & Haviland, 2010), intentional self regulation (von Eye, Martel, Lerner, Lerner, & Bowers, 2011), and the Five Cs of PYD (Geldhof et al., 2013). Accordingly, a bifactor model of character was specified that depicted diligence, integrity, and helping behaviors as related to this other general factor, an attribute that I labeled *character*, which I theorized consisted of the attributes of diligence, integrity, and helping behaviors.

Following these analyses, I assessed the overall relation between the second-order factor of civic identity and the factors related to character (i.e., the factors of diligence, integrity, helping behaviors, and general character, as identified in the bifactor model). In addition, I conducted two types of structural equation models to ascertain which aspects of character were best predicted by civic identity, and in turn, which aspects of character best predicted civic identity. These analyses were preceded by preliminary descriptive information summarizing the means, standard deviations, and zero-order correlations among the six latent factors included in this study.

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### **Results**

In order to cross-validate the Johnson et al. (2014) measure of civic identity, I conducted a confirmatory factor analysis (CFA). I first tested the hypothesized three-factor structure, in accordance with the Johnson et al. (2014) scale validation findings, and then tested a higher-order factor structure for a more parsimonious model. Next, I conducted a CFA with the measures of diligence, integrity, and helping behaviors chosen to index the character domains of performance character, moral character, and civic character, respectively. In order to ensure that this three-factor model was in fact the best fit to the data, I tested alternate models with one and two factors. Next, I tested the bifactor model of character. Based on the findings from these analyses, I then conducted a series of structural equation models to test the relations among the latent variables pertinent to civic identity and character.

### **Preliminary Analyses**

Prior to testing the factor structures of civic identity and character, respectively, I computed descriptive statistics for the measures of civic identity, diligence, integrity, and helping behaviors. In this sample, between 3.1% and 13.8% of the item data were missing. The missing data were determined to be missing at random (MAR), because missing item-level indicators represented non-response, or skipped items. While skipped items are nonrandom and predictable, the MAR mechanism renders the missingness functionally random (Little, 2013) and thus termed ignorable (Rubin, 1976). Table 1 presents the means, standard deviations, and *N*s for all civic identity items, and Table 2

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presents the means, standard deviations, and *N*s all diligence, integrity, and helping behaviors items. Within civic identity items, the means ranged between 3 and 3.5 on the five-point scale, and standard deviations for all items were about 1. Within diligence, integrity, and helping behaviors items, the means ranged from 2.41 to 4.28, and standard deviations ranged from .73 to 1.33.

Data from all measures were considered normally distributed upon examination of histograms, means, standard deviations, skew, and kurtosis for all items. West, Finch, and Curran (1995) proposed an absolute skew value of below 2, and absolute kurtosis value of below 7, as evidence of acceptable normality. A total of 26 univariate outliers had standard scores between -3.66 and -4.23; however, due to adequate sample size and the overall normal distribution of the indicators, these outliers were not considered problematic and were retained in the data set. Due to adequate sample size ( $N = 865$ ), continuous indicators, normal distribution, and relatively low rates of missing data, full information maximum likelihood (FIML) methods were used in these analyses. FIML estimation has been found to be efficient and unbiased in generating parameter estimates when data are missing at random (Wothke, 1998). Through the use of FIML, all available responses for each item were used in the analyses, without deleting cases or imputing missing values.

I then examined item correlations among all measures, both within and across subscales. All items were significantly correlated within their respective subscales, suggesting that, upon further analysis, the factor structures of the items may be appropriate in relation to their respective subscales. All items were also

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significantly correlated across subscales, with the exception of Diligence Item 3. Inter-item correlations on the diligence scale ranged between .39 and .64, but Diligence Item 3 correlated between .17 and .30. In addition, with the integrity and helping behaviors scales, Diligence Item 3 correlated between .10 and .19, and between -.03 and .10, respectively. This exception provided a preliminary indication that Diligence Item 3, “I can be very stubborn in pursuing my goals,” may become problematic.

### **Testing the Hypothesized Models**

Data were analyzed using Mplus software (Version 6.11). Goodness of fit was evaluated using recommendations from Brown (2006), involving multiple fit indices. Absolute fit was tested by checking for  $\chi^2$  significance and the standardized root mean square residual (SRMR), with values closer to 0 indicating better fit. Parsimony-corrected fit was assessed by evaluating the root mean square error of approximation (RMSEA) and its confidence interval, with values closer to 0 indicating better model fit. The suggested upper bounds, or cut-off values, of acceptable fit for the SRMR and RMSEA are .08 (Brown & Cudeck, 1993; Hu & Bentler, 1999), and ideally less than .05 (Stieger, 1990). Comparative fit, that is, the evaluation of the specified solution in comparison to the null model, was tested with the comparative fit index (CFI) and the Tucker-Lewis Index (TLI), with values closer to 1 indicating better model fit. The suggested lower bounds, or cut-off values, of acceptable fit for the CFI and TLI are .90, and ideally above .95 (Bentler, 1990).

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**Testing the civic identity model.** The hypothesized higher-order structural model of civic identity is displayed in Figure 1, based on the Johnson et al. (2014) three-factor structure of civic identity. This figure shows the model of civic identity to be composed of three factors, *exploration*, *resolution*, and *centrality*, as measured by nine manifest indicators, and includes their respective standardized parameter estimates. Each indicator was constrained to load onto one factor. Three items loaded onto the exploration factor, three items loaded onto the resolution factor, and three items loaded onto the centrality factor. The model was over-identified with 36 degrees of freedom. The variance of each factor was constrained to 1.00. All measurement errors were presumed to be uncorrelated. In the three-factor model, which I tested first to validate the Johnson et al. (2014) model, the three latent factors of exploration, resolution, and centrality were allowed to correlate, based on evidence from the exploratory factor analyses from scale development and validation and tested on a separate sample from the ACT Project (Johnson et al., 2014).

Using Brown's (2006) recommendations for evaluating goodness of fit, the fit indices together provided a reliable evaluation of the proposed model solution. The hypothesized three-factor structure for civic identity displayed good fit:  $\chi^2(24) = 71.24, p = .000$ ; RMSEA = .054 (90% CI: .040 to .069); CFI = .985; TLI = .977; SRMR = .022. Standardized factor loadings ranged from .69 to .86. The subscales were significantly correlated,  $r(24) = .72$  to  $.82, p < .01$ , indicating that exploration, resolution, and centrality each represented unique, but related, constructs pertinent to civic identity. The latent correlations for the subscales are

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shown in Table 3. Standardized residuals were inspected for values greater than 2, and modification indices showed no indications of poorly fitting items in the solution (e.g., the largest standardized residual = .50; the largest modification index = 11.03). In short, the results of this test of the model, using a larger sample from the first wave of the ACT Project, confirmed the Johnson et al. (2014) findings regarding the three-factor structure of the measure of civic identity.

Whereas the high factor correlations might suggest that civic identity may not consist of three separate factors, Johnson et al. (2014) found that the three-factor structure fit significantly better than alternate models with two factors, or one general factor. Due to the high factor correlations among the subscales of civic identity, I then tested a higher-order model with a second-order factor of civic identity, in order to have a parsimonious model for the later analyses relating civic identity to character. In the higher-order model of civic identity, the first-order factors were not allowed to correlate, and the three first-order factors of exploration, resolution, and centrality were constrained to load on one second-order factor of civic identity. The model fit indices remained the same from the three-factor model previously tested, because the higher-order model is simply an alternative parameterization. Thus, a difference in model fit could not be computed. The standardized factor loadings for the exploration, resolution, and centrality factors on the second-order factor of civic identity ranged from .844 to .966. These strong factor loadings provided indications that the higher-order

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model was plausible. I thus retained the higher-order model for its advantage of parsimony in future analyses.

**Testing the character model.** The measures of diligence, integrity, and helping behaviors were chosen to represent Seider's (2012) tripartite conception of character. Accordingly, I first conducted a CFA to confirm that all manifest indicators loaded on each respective latent factor appropriately (i.e., that diligence items fit best with the diligence measure, integrity items with integrity, and helping behaviors items with helping behaviors). This proposed three-factor measurement model of character is presented in Figure 2. This figure shows the lower-order modeling of three factors related to character, namely *diligence*, *integrity*, and *helping behaviors*, as measured by 18 manifest indicators, with their respective standardized parameter estimates. Each indicator was constrained to load onto one factor. Five items loaded onto the diligence factor, six items loaded onto the integrity factor, and seven items loaded onto the helping behaviors factor. The model was over-identified with 153 degrees of freedom. The variance of each factor was constrained to 1.00. All measurement errors were presumed to be uncorrelated. The three latent factors of diligence, integrity, and helping behaviors were allowed to correlate, based on the tripartite conception of character discussed by Seider (2012).

I used Brown's (2006) recommendations for goodness of fit to evaluate the proposed model solution. The hypothesized three-factor structure for character displayed good fit:  $\chi^2(132) = 503.385, p = .000$ ; RMSEA = .062 (90% CI: .056 to .068); CFI = .916; TLI = .902; SRMR = .046. The standardized factor

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loadings of the indicators ranged from .33 to .79. The three latent factors had significant correlations, ranging from .33 to .59, indicating that diligence, integrity, and helping behaviors each represented unique, but related, constructs of character. The latent correlations for the subscales are shown in Table 3 (the correlations displayed in Table 3 do not include Diligence Item 3 in the model, for reasons discussed below). Standardized residuals were inspected for values greater than 2, with no problems found (e.g., the largest standardized residual = .89); however, modification indices showed points of poor fit in the solution. Prior to taking these modification indices into account, I tested differentiated models of character with one and two factors.

**Testing differentiated models of character.** Given the theoretical relations among diligence, integrity, and helping behaviors as related to character, I specified different models with one and two factors for the data. Complete model fit statistics for these models are shown in Table 4. The first alternate model tested whether diligence and integrity were undifferentiated (i.e., correlated perfectly), with helping behaviors as the second factor. This model showed a significant decrease in fit as compared with the three-factor model:  $\Delta\chi^2(2) = 499.87, p < .001$ . The second alternate model tested diligence and helping behaviors as an undifferentiated factor, with integrity as the second factor. Again, this two-factor model did not fit as well as the three-factor model:  $\Delta\chi^2(2) = 915.58, p < .001$ . The third alternate model tested integrity and helping behaviors as an undifferentiated factor, with diligence as the second factor. This two-factor model again did not fit as well as the three-factor model:  $\Delta\chi^2(2) = 963.77, p <$

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.001. In the fourth alternate model, I constrained all manifest indicators to load onto one global character factor of diligence, integrity, and helping behaviors.

This model also did not fit as well as the three-factor model:  $\Delta\chi^2(3) = 1472.77, p = .000$ .

Although the fit statistics for some of the alternate models indicated adequate fit to the data, the likelihood ratio tests indicated that the alternate models provided significantly worse model fit than the three-factor model. Taken together, results of these tests of alternate models of character indicate that the best-fitting model of character was the three-factor solution, consistent with Seider's (2012) tripartite conception of character, with performance character (diligence), moral character (integrity), and civic character (helping behaviors) as separate factors.

**Completing the character model.** With the three-factor structure of character found to be the best fit, I then began to improve upon the model in order to prepare it for structural equation modeling. First, I observed the modification indices for points of poor fit in the model solution. I correlated the errors between five pairs of manifest indicators, based on the modification indices (e.g., modification indices ranging from 29.63 to 73.51) for items that were similarly worded or related. For example, Integrity Item 2, "Doing what I believe is right, even if my friends make fun of me," and Integrity Item 3, "Standing up for what I believe, even when it's unpopular to do," were similar, whereas the other items on the integrity scale were discrepant from these two items.

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This three-factor structure with five correlated errors displayed good fit:  $\chi^2(127) = 291.321, p = .000$ ; RMSEA = .042 (90% CI: .036 to .048); CFI = .963; TLI = .955; SRMR = .039. These fit indices indicated a better fit than the original three-factor structure of character, before errors were allowed to correlate. Standardized residuals were inspected for values greater than 2, and modification indices showed no indications of poorly fitting items in the solution (e.g., the largest standardized residual = .90; the largest modification index = 16.82). The largest modification index was for Helping Behaviors Item 4, “Help make my community a better place for people to live,” with Helping Behaviors Item 7, “Help someone you don’t know.” I decided that these items were not closely related enough to justify correlating the errors.

Next, I removed Diligence Item 3, because it had the weakest standardized factor loading (0.322), and the wording of the item was not a strong indicator of diligence (e.g., in the item, “I can be very stubborn in pursuing my goals,” the word *stubborn* often has a negative connotation that does not necessarily accurately represent the character-related attribute of diligence). With the five pairs of correlated errors included, and diligence item 3 removed from the model, the model again displayed good fit:  $\chi^2(111) = 261.157, p = .000$ ; RMSEA = .043 (90% CI: .036 to .050); CFI = .965; TLI = .958; SRMR = .038.

The last step in completing the bifactor character model was to introduce a general factor of character to the model, where all manifest indicators of diligence, integrity, and helping behaviors were allowed to load on their respective factors, as well as the general factor of character. Bifactor modeling

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was chosen because it has the advantage of separating the contribution of general and domain-specific factors, so as to examine their effects independently, as discussed in the Method section.

The bifactor model of character is shown in Figure 3, with the standardized parameter estimates of the final model, discussed below. As shown in this figure, the bifactor model of character is composed of a general factor of character, as well as the three factors believed to be related to character, namely diligence, integrity, and helping behaviors. Each indicator was constrained to load onto two factors: the general character factor, as well as its respective measure of diligence, integrity, or helping behaviors. Therefore, four items loaded onto the diligence factor (as Diligence Item 3 was removed from the model), six items loaded onto the integrity factor (in the figure, no items load onto the integrity factor in the final model, following the Chen et al., 2012, recommendation discussed below), and seven items loaded onto the helping behaviors factor; in addition, all 17 of these items also loaded onto the general character factor. The model was over-identified with 136 degrees of freedom. The variance of each factor was constrained to 1.00. The measurement model contained double-loading indicators in accordance with the bifactor model, and five correlated errors as discussed in the previous steps. The three latent factors of diligence, integrity, and helping behaviors were not permitted to intercorrelate, and were not permitted to correlate with the general factor of character (i.e., the correlations were set to zero), as per the specifications of bifactor modeling (see Chan et al., 2012).

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The specified bifactor model of character displayed excellent fit:  $\chi^2(94) = 171.916, p = .000$ ; RMSEA = .034 (90% CI: .025 to .041); CFI = .982; TLI = .974; SRMR = .028. Compared to the three-factor and higher-order models of character, which only differed in parameterization and not model fit, the bifactor model also showed significantly better fit:  $\Delta\chi^2(17) = 89.241, p < .001$ . All items had factors loadings on the general character factor that were significant and mostly moderate or higher, which indicates that items shared considerable variance with the general character factor. In addition, most items (with the exception of integrity items, discussed below) loaded on their corresponding specific factors with moderate to high values. Therefore, items in each of these dimensions were also associated with unique variation pertinent to their respective domain-specific constructions, independent of the general character factor.

The loadings of the six integrity items on the general character factor ranged from .54 to .79; however, Mplus was not able to compute the loadings of the integrity items with respect to the integrity factor and reported issues with a non-positive definite psi matrix for the integrity factor (i.e., it was not possible to compute a variance for the integrity factor). According to Chen et al. (2012), when “certain items primarily load on the general construct with weak loadings on their facets, those facets should be eliminated as specific facets” (p. 245). In other words, if a particular specific factor (in this case, integrity) does not seem to hold as a unique factor above and beyond the general factor, it can be removed from the model and the items can be specified to load only onto the general factor. Thus, I removed the domain-specific factor of integrity from the bifactor model of

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character (so that the integrity items loaded only on the general factor), and this new model was tested. This model, displayed in Table 5, again displayed excellent fit:  $\chi^2(102) = 213.076, p = .000$ ; RMSEA = .038 (90% CI: .031 to .046); CFI = .974; TLI = .966; SRMR = .031.

### **Testing the Structural Equation Models**

With both the civic identity higher-order model and the character bifactor model completed, I next ran a series of structural equation models to test the relations among the factors pertinent to character and civic identity. As shown in Figure 4, I first tested the hypothesized structural equation model where civic identity predicted the aspects of character in the bifactor model, namely, general character, diligence, and helping behaviors. This model displayed excellent fit:  $\chi^2(276) = 529.220, p = .000$ ; RMSEA = .035 (90% CI: .031 to .040); CFI = .967; TLI = .961; SRMR = .039. The second-order factor of civic identity was a significant predictor of general character, diligence, and helping behaviors factors, such that a 1-point change in civic identity was associated with a .17-point change in general character, a .26-point change in diligence, and a .59-point change in helping behaviors. The variance in diligence ( $R^2 = .067, p = .003$ ) and helping behaviors ( $R^2 = .351, p = .000$ ) accounted for by civic identity was also significant. However, the variance in general character ( $R^2 = .029, p = .061$ ) accounted for by civic identity was not significant.

As shown in Figure 5, I next ran a structural equation model in which the latent constructs related to character (i.e., general character, diligence, and helping behaviors) predicted civic identity. Because only the direction of the regressions

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changed in this model, the fit statistics remained the same:  $\chi^2(276) = 529.220$ ,  $p = .000$ ; RMSEA = .035 (90% CI: .031 to .040); CFI = .967; TLI = .961; SRMR = .039. The latent constructs of general character, diligence, and helping behaviors were all significant predictors of civic identity, such that a 1-point change in character was associated with a .17-point change in civic identity; a 1-point change in diligence was associated with a .17-point change in civic identity; and a 1-point change in helping behaviors was associated with a .55-point change in civic identity. The variance in civic identity accounted for by general character, diligence, and helping behaviors was also significant:  $R^2 = .392$ ,  $p < .000$ .

### **Comparing the Paths**

Considering the difference in magnitudes among the paths in both structural equation models (ranging from .17 to .59), I next tested if there were any significant differences among the paths. For each structural equation model, I specified alternate models where different path loadings were held constant, and compared these models to the original model. A total of eight alternate models were tested, four for each of the two original structural equation models. Complete model fit statistics for these models are shown in Table 6. With the exception of one alternate model, all other models showed a significant decrease in fit as compared with the original models. The one alternate model in which this decrease in fit did not hold was the model wherein the diligence and general character paths loading onto civic identity were held constant. In this model, there was no significant difference in model fit compared to the original model in which no paths were held constant:  $\Delta\chi^2(1) = 3.211$ ,  $p = .073$ .

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Taken together, these findings indicated that the paths of the diligence and general character factors were of similar magnitude, whereas the path of the helping behaviors factor was significantly different. The magnitudes of the paths (.17 for general character, .17 for diligence, and .55 for helping behaviors) also suggested that helping behaviors were a significantly stronger predictor of civic identity than general character and diligence.

### **Discussion**

The purpose of this study was to explore the relations between civic identity and character attributes. Civic identity refers to one's sense of self in relation to society (Youniss & Yates, 1999), and character refers to the personal attributes that are involved in an individual's pursuing positive goals, doing the right thing, and thinking and acting in prosocial ways (Bekowitz & Hoppe, 2009; Flanagan, 2004; Lapsley & Narvaez, 2006; Lerner, 2004). This apparent overlap between civic identity and character suggested that the processes of civic identity development might be related to, or contribute to, the processes of character development. This study therefore provided preliminary descriptive data about the relation between civic identity and character attributes, as a first step toward assessing the interrelated processes of civic identity and character development.

Considering the assumption that the success of future societies and democratic social systems may depend in part on the positive development of children (e.g., Lerner, 2004; Sherrod et al., 2010), the present research was both timely and important. Having a strong civic identity might give an individual a sense of how he or she relates to others in society, and having good character

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might motivate that individual to pursue goals that benefit both self and society in prosocial and morally praiseworthy ways (Flanagan, 2004; Lerner, 2004).

Therefore, the presence of civic identity and character attributes in children and young adults may contribute to the success of future societies and democratic social systems.

In order to assess the relations between civic identity and character attributes, I analyzed data from a sample of young men attending post-secondary schools in Pennsylvania. During the periods of adolescence and young adulthood, individuals' senses of their respective places and purposes in society burgeon and become substantially elaborated as they engage in instances of civic participation that may persist throughout the life span (Sherrod et al., 2010). Therefore, a sample of young men in this age range was used.

Confirmatory factor analyses provided strong support for a three-factor structure of civic identity, consisting of exploration, resolution, and centrality. A parsimonious model with a higher-order civic identity factor structure was also found to be plausible. A bifactor model of character including constructs of diligence, integrity, and helping behaviors indicated that integrity did not exist as a factor separate from a general character factor, whereas diligence and helping behaviors did exist as factors separate, but related, to character. The integrity factor was eliminated from the final model because the integrity items loaded more strongly onto the general character factor than the specific integrity factor (see Chen et al., 2012). These findings suggested that integrity was not necessarily a specific factor over and above the general character factor, and the

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variance related to integrity was therefore explained by the general character factor. Whereas diligence and helping behaviors each represented more unique constructs pertinent to character, integrity was not a unique contributor after taking into account the common variance shared by the diligence, integrity, and helping behaviors factors.

One possible explanation for the absence of integrity being empirically identified in this data set as a specific factor could be related to the measurement of these constructs in this study. Items on the integrity measure could be closely related both to helping behaviors (e.g., Integrity Item 1, “Speaking up for equality”) and to diligence (e.g., Integrity Item 6, “Doing my best, even when I have a job I don’t like”). This confound of item and construct might have resulted in integrity dropping out as a specific factor when the general character factor (which represented the overlap between diligence, helping behaviors, and integrity) was introduced. Thus, most of the variance in the integrity factor may have been overlapping with the other two constructs due to the wording of the items, with little integrity-specific variance remaining to be attributed to a specific factor. Researchers could investigate this potentiality by using different items to measure the three character-related constructs, and assessing whether the issue is eliminated through the use of other items.

Structural equation models of civic identity and character factors indicated significant relations between civic identity and general character, diligence, and helping behaviors, and also indicated that helping behaviors were a significantly better predictor of civic identity than diligence and general character. As noted in

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the Results, character attributes involved an  $R^2$  of .392 for civic identity, and civic identity involved an  $R^2$  of .351 and .067 for helping behaviors and diligence, respectively. Civic identity also involved an  $R^2$  of .029 for general character; however, this finding was not significant,  $p = .061$ . These findings suggested that functioning as competent moral agents (i.e., having good character) might be related to having a sense of self, or identity, that prioritizes prosocial attitudes and behaviors over egoistic ideas and interests (i.e., a civic identity) (Flanagan, 2004; Lerner, 2004; Youniss & Yates, 1999). These models further suggest that the processes related to civic identity development, namely, the exploration, resolution, and centrality of one's civic identity, might be related to one's character attributes. When civic identity predicted factors related to character, significant path coefficients indicated that the one's civic identity was related to his or her character. In addition, the significant path coefficients of factors related to character predicting civic identity indicated that one's character was related to his or her civic identity. Furthermore, helping behaviors were the strongest predictor of civic identity, indicating that civic identity may be more closely related to helping behaviors than to diligence or general character. Whereas further research is necessary to assess the development of civic identity and character, these preliminary findings suggest that future research should assess how the development of civic identity might contribute to character development, and vice versa.

### **Limitations and Future Research**

Whereas this study presents significant findings with implications for our understanding of civic identity and character development, it should not be interpreted without considerations of its limitations. First, this study was cross sectional and did not use a longitudinal design to assess intraindividual development. In order to understand the development of civic identity and character, and the processes related to development, future research should involve multiple points of measurement, thus allowing results to be generalized across ontogenetic points. Such longitudinal data could then be analyzed with mediation models, such as cross-lagged panel models, which may be used to explain the influence of contextual factors and developmental processes on subsequent developmental processes (see Lindenberger & Pötter, 1998; Selig & Preacher, 2009). Future research involving longitudinal data and mediation models could explicate the relations between the developmental processes of civic identity and character.

Second, the sample was limited in that the models were tested on an all-male, mostly White sample from solely the Pennsylvania geographic region. This sample limitation indicates that these findings may not apply to other samples, such as those involving women, more diverse populations, or other demographic and geographic populations. Relations between civic identity and character should be tested with different populations in order to generalize the results.

Third, limitations in measurement need to be considered. The addition of other measures of civic identity and character would provide greater breadth and

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depth of information about the structure and relations of these constructs.

Character was studied using only three attributes. Considering the contemporary understanding of character as a set of attributes that involve thinking, feeling, and acting in moral ways (Lapsley & Narvaez, 2006), other attributes related to character beyond diligence, integrity, and helping behaviors certainly exist and should be studied. Future research should therefore include other indicators of character in order to deepen understanding of the structure of character.

Similarly, civic identity was assessed using a measure that is relatively untested. Future research should therefore further validate this measure of civic identity, and also conceptualize what else the development of a person's sense of self in relation to society might entail beyond exploration, resolution, and centrality as conceived in the Johnson et al. (2014) measure. In addition to the particular questions asked in the surveys, more information could also be gathered qualitatively from observations or interviews, elucidating the meanings of civic identity and character to different individuals.

Nonetheless, these findings regarding the relations between civic identity and character attributes provide important information for this burgeoning area of research. Future developmental research may lead to implications for parents, teachers, and youth-program leaders. By providing developmental information, such research may offer evidence about how to promote helping behaviors in children and young adults through capitalizing on the relations between civic identity and character.

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