

EXPLORING THE RELATIONS AMONG FORGIVENESS AND EIGHT CHARACTER ATTRIBUTES IN FOURTH- AND FIFTH-GRADE STUDENTS

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Character education programs in elementary schools are believed to be important for fostering moral development and preparing children to thrive in civil society. Character develops through social relationships across contexts. However, transgressions, such as school bullying, threaten the relationships that foster character development. Forgiveness may be considered a moral character virtue that promotes mutually beneficial relations among persons and contexts; but no empirical model exists describing the relations among forgiveness and other character attributes, particularly in elementary school students. Accordingly, I used a sample of 606 fourth- and fifth-grade students (54.3% female) to explore forgiveness in relation to constructs described in extant models of forgiveness: emotion awareness, perspective-taking, humility, empathy, sympathy, caring, generosity, and love. Confirmatory factor analyses demonstrated forgiveness was positively associated with all constructs, indicating a positive manifold among the assessed attributes of character. Furthermore, to explore the robustness of these findings, relations were compared across gender, grade, and race. Model fit was acceptable across the subgroups, and forgiveness remained positively correlated with all constructs, indicating that the findings were robust. In addition, differences in some model fit indices and latent correlations suggest nuances in the relations across demographic subgroups. Implications for research and education are discussed.

Keywords: forgiveness, moral development, character education, school bullying,

Education, across the world and throughout history, has had two great goals: “To help young people become smart, and to help them become good” (Lickona, 1991, p. 6). Schools

and youth programs are tasked not only with imparting information and instructing the intellect, but also with socializing values and instilling good character in youth. As Martin

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Luther King Jr. (1947) wrote, “We must remember that intelligence is not enough. Intelligence plus character, that is the goal of true education” (p. 10). Accordingly, 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). Indeed, character reflects a process involving the social context—how individuals interact with and relate to others in the social world (Berkowitz, 2012; Lerner & Callina, 2014).

Character and Character Education

In a society increasingly marked by multicultural pluralism and the coexistence of competing and contrasting ideas and interests, fostering the development of character is both timely and important. As former U.S. President Clinton stated in his 1997 State of the Union Address, “Character education must be taught in our schools. We must teach our children to be good citizens” (Clinton, 1997). Indeed, good citizens and good societies may be described as moral (e.g., Haidt, 2008) and are evaluated by their effects on self and others (e.g., Staub, 1978). As such, it may be the case that “the moral formation of children is one of the foundational goals of civilization” (Lapsley & Narvaez, 2006, p. 248).

What is character, then, and how do we educate and foster the moral development of children? Character involves thinking, feeling, and acting morally across contexts (Lapsley & Narvaez, 2006). It is what enables one to do the right thing and function as a “competent moral agent” (Berkowitz & Bier, 2014, p. 250). Character and morals are therefore social and relational, and the promotion of their development is concerned with social justice, human rights, welfare, and thriving for all people across all contexts (Berkowitz, 2012; Gert, 1988; Lerner & Callina, 2014; Nucci, 2001).

Character education, then, broadly refers to “the school-based intentional promotion of the development of students’ character” (Berkowitz, 2012, p. 253). According to this definition,

character education may be manifested in different forms and applications, for instance, depending on the particular values and virtues that are emphasized and prioritized in a given context (e.g., social-emotional learning, civic education, moral education, ethics education, values education; see Berkowitz & Bier, 2014). However, as Kristjánsson (2015) noted, character education is a form of moral education as it is focused on cultivating virtues for human flourishing.

Similar to the goals of character and moral education, contemporary developmental science is concerned with promoting social justice and thriving (Fisher et al., 2012; Fisher & Lerner, 2013; Lerner, 2015). Developmental scientists use models derived from a relational developmental systems metatheory to explain character development (Lerner & Callina, 2014; Overton, 2015). According to relational developmental systems-based perspectives, character develops through mutually influential person $\Leftrightarrow$ context relations and, in particular, person $\Leftrightarrow$ person relations within and across contexts (Lerner & Callina, 2014). Moral persons and moral character, then, are modeled, formed, and reinforced through social interactions and relationships (Lapsley & Narvaez, 2014).

However, not all social interactions and relationships are mutually beneficial or adaptive. Such variation may therefore compromise the moral character development of youth and thriving of society. For instance, bullying in schools is a common form of relational aggression (Rodkin et al., 2015) that presents a threat to thriving for individuals, relationships, and broader school and community contexts (see Due et al., 2005; Fekkes et al., 2006; Hawker & Boulton, 2000 for reviews). Bullying and similar interpersonal transgressions may therefore hinder moral character development for youth as well as social justice for all.

How, then, can character development occur in the presence of maladaptive or oppressive social relationships and person $\Leftrightarrow$ context relations? How can character education programs promote mutually beneficial

relations and adaptive developmental regulations (Brandstädter, 1998) where youth are threatened by instances of relational aggression, interpersonal transgression, and bullying? How can we foster the moral development of children's character and teach them to be good in the presence of injustice?

Forgiveness and Character Education

A useful case to explore regarding these challenges is forgiveness, because forgiving in response to a transgression or injustice has been interpreted as promoting mutually beneficial relations and, thus, good character and thriving (Tirrell, 2022). Enright and colleagues (Enright et al., 1998) defined forgiveness as “a willingness to abandon one's right to resentment, negative judgment, and indifferent behavior toward one who unjustly injured us, while fostering the undeserved qualities of compassion, generosity, and even love toward him or her” (p. 47). Fostering the development of forgiveness among school children may contribute to the development of children's social competence and relationships (e.g., Denham et al., 2005).

As well, evidence exists that forgiveness in response to school bullying promotes mutually beneficial person ⇔ context relations for victims, bullies, and the school context climate and culture (see Ahmed & Braithwaite, 2006; Egan & Todorov, 2009; Hui et al., 2011; Tirrell, 2022). For instance, forgiveness has been applied as a coping strategy with students who are victims of school bullying and, as well, the empathy-focused approach may prevent some students from becoming bullies or continuing bullying behaviors (Egan & Todorov, 2009). Among elementary school-aged students in Milwaukee, Wisconsin, forgiveness education, based on the Enright (2001) process model of forgiveness, was associated with decreases in anger (Holter et al., 2008). In Hong Kong, China, a forgiveness intervention among children was found to promote forgiveness attitudes and understanding, psychological well-being, and their decision and emotion to

forgive, with empathy being considered a key strategy (Hui & Chau, 2009).

As Quintana-Orts et al. (2021) reported in their systematic review of forgiveness and bullying (traditional and online bullying), higher levels of forgiveness among adolescents were associated with lower levels of bullying and lower levels of victimization; in turn, unforgiveness was positively correlated with both traditional and online bullying. Furthermore, as reported by Rapp et al. (2022) in their meta-analysis of the effects of forgiveness education interventions on youth outcomes (including 20 studies from 10 countries totaling 1,472 youth), children and adolescents were found to experience significant positive effects for increasing forgiveness and reducing anger as a result of learning about the forgiveness process.

Therefore, forgiveness may be argued to represent a character virtue with possible implications for preserving or enhancing character development in the context of social challenges, offenses, transgressions, and other negative social interactions, such as school bullying. As such, character education programs seeking to promote moral and character development, thriving social contexts, and mutually beneficial and adaptive person ⇔ context relations in response to injustice might be wise to include and promote forgiveness (see Tirrell, 2022). As Robert Frost (1923) wrote in his poem, *The Star-Splitter*, “To be social is to be forgiving” (line 47).

Despite the positive implications of forgiveness, few studies exist relating it to positive youth development and integrating it with character education programs (see Klatt & Enright, 2009; Lin et al., 2011). If character education programs are to effectively promote the development of forgiveness, then more research is needed to understand forgiveness as a moral character virtue. Questions exist, for instance, regarding the relations among forgiveness and other moral character attributes (see Berkowitz, 2012). Are there unique features of forgiveness as a character virtue, particularly in elementary school children? How

is forgiveness related to other virtues and skills that may be fostered and promoted in character education programs?

Situating Forgiveness With Other Character Attributes

To better understand forgiveness as a moral character virtue, a logical starting point would be to explore how forgiveness relates to other components of the complete moral person. Exploring these relations would be hypothesis-generating in regard to what to include in future structural and developmental models of forgiveness (i.e., no hypothesized model is tested in the present study, beyond exploring the relations among the character attributes). Berkowitz (2012) described the complete moral person as consisting of foundational characteristics (e.g., perspective-taking; skills) and moral characteristics (e.g., generosity; virtues). Foundational characteristics are non-moral, and may represent the underlying processes and potentially moderating influences on morality. Moral characteristics, then, include the cognitions, emotions and motivations, and action and skills that have implications for morality (see Berkowitz, 2012). Which characteristics (skills and virtues), then, should be explored in relation to forgiveness?

Existing definitions and models of forgiveness suggest several possible characteristics that may be worth exploring. Enright and Fitzgibbons (2000) and Worthington (2006) have proposed models describing the process of forgiveness that include both nonmoral skills and attributes presumed to provide a basis of character, and moral components of character per se. The Worthington (2006) model, for instance, presents five steps to “REACH” emotional forgiveness: (1) “Recall the hurt” (i.e., emotion awareness); (2) “Empathize to emotionally replace” negative emotions, such as bitterness and resentment, with positive emotions, such as empathy, sympathy, compassion, and love; (3) give the “Altruistic gift of forgiving;” (4) “Commit to the forgiveness experienced;” and (5) “Hold on to forgive-

ness.” Similarly, the Enright and Fitzgibbons (2000) forgiveness process model describes forgiveness as beginning with an “uncovering” phase of recognizing or recalling the hurt caused by the transgression. In addition, their process model includes a “work” phase that involves reframing, perspective-taking, empathy, and compassion (Enright & Fitzgibbons, 2000). Enright and Fitzgibbons (2000) also described forgiveness as “giving a moral gift to the offender” (p. 68).

These models refer to constructs of emotion awareness, perspective-taking, and empathy as contributing to the forgiveness process and, as well, include ideas of compassion, generosity, and love (see Worthington et al., 2010 for a review). Therefore, such constructs should be assessed in relation to forgiveness. Furthermore, given that empathy is a phenomenon with cognitive and affective components related to moral development (e.g., Hoffman, 2000) and forgiveness (e.g., McCullough, 2000), multiple components related to empathy should be considered in relation to forgiveness, such as perspective-taking, humility, empathic concern, and sympathy.

To deepen understanding of forgiveness and its development, a useful place to begin would be to understand how forgiveness relates to nonmoral attributes (e.g., emotion awareness, perspective-taking) and moral characteristics (e.g., humility, empathy, sympathy, generosity, caring, love) at one point in development. Understanding these relations would allow researchers to design future studies assessing the development of forgiveness. For instance, is the development of moral characteristics, such as forgiveness, dependent upon the development of other character attributes and of nonmoral ones, such as perspective-taking? Or do moral and nonmoral components of the complete moral person (see Berkowitz, 2012) develop in concert with each other? From a relational developmental systems-based perspective (Overton, 2015), such an integrative, systems-based would be the case. Findings from such studies might also allow researchers and practitioners to better

design and implement effective character education programs that foster the development of forgiveness in developmentally appropriate and meaningful ways.

The Present Study

Therefore, in the present article, I explore the relations among forgiveness and other non-moral attributes and moral characteristics at one point in development. In addition, I assess the robustness of the findings by replicating the analyses across multiple subgroups (gender, grade, and race) present in the data set (see Duncan et al., 2014; see also Bornstein, 2017, 2019, regarding the specificity principle). As Duncan et al. (2014) emphasized, within-study robustness checks are a necessary step in developmental science, and yet remain under-represented in the literature. Based on the findings in the present study, I discuss implications for future studies exploring the development of forgiveness, as well as the importance of such exploratory descriptive studies in developmental science.

A data set rich enough to include the constructs discussed is therefore needed in order to explore their relations with forgiveness among elementary school students. The Arthur Interactive Media (AIM) Buddy Project is a longitudinal study assessing social-emotional and character development among elementary school students from nine schools across two districts in Massachusetts (e.g., Batanova et al., 2016; Bowers et al., 2015) and serves as an ideal data base to explore the developmental structure of forgiveness. I therefore analyzed data from the first wave of the AIM Buddy Project to explore, at one point in development, the interrelations among forgiveness and the aforementioned constructs believed to be related to forgiveness and its development. Based on the existing models of forgiveness (see Worthington et al., 2010, for a review), I chose the following eight constructs included in the AIM data set to understand their interrelations with forgiveness as noted in the literature review: emotion awareness and

perspective-taking (representing foundational, nonmoral attributes), and humility, empathy, sympathy, caring, generosity, and love (representing moral attributes).

Using data from Wave 1 of the AIM data set, this study provides preliminary descriptive data about the relations among forgiveness and these other foundational and moral attributes believed to be related to character in elementary school students. The findings presented may therefore have implications for future studies of the developmental structure of forgiveness.

METHOD

In the present study, I used data from the first wave of the AIM Buddy Project to explore the relations among forgiveness and eight constructs believed to contribute to the developmental structure of forgiveness (emotion awareness, perspective-taking, humility, empathy, sympathy, caring, generosity, and love).

Participants

The sample consisted of 606 fourth- and fifth-grade students (54.3% female; 49.3% fourth grade) from the first wave of the AIM Buddy Project. Within this group, 584 students (96.21%) had age data provided (ranging from 8.83 to 12.05 years, $M_{age} = 10.10$ years, $SD_{age} = .66$), and 516 students (85.15%) had race/ethnicity information provided by parents as an open-ended question on the consent form. Of these participants, 32.5% were White/Caucasian; 19.5% Hispanic; 17.5% Asian/Asian American; 7.6% Black/African American; 6.9% Multiethnic or Multiracial; .2% Arab or Middle Eastern; and 1% Other (e.g., U.S. citizen, American). In turn, 90 students did not have race or ethnicity specified.

Participants were recruited from nine elementary schools across two suburban Boston districts in Northeastern Massachusetts. The nine schools across two districts represented a

diverse range of participants. Seven of the nine schools served populations of a low socioeconomic status (SES) and two schools represented students of higher SES (as indicated by percent of children receiving free or reduced lunch; ranging from 3.5% to 92.5% across the nine schools). Schools also served students who were not native English speakers (i.e., English Language Learners; ELL), ranging from 7.2% to 54.9% ELL across the nine schools. Race and ethnicity statistics for each school also indicated diversity among the student bodies: between 20.6% and 63.9% White; between 3.3% and 59.5% Asian; between 2.2% and 51.8% Hispanic; and between 1.9% and 21.7% African American.

Measures

Nine measures were used in this research: a measure of (1) forgiveness; (2) emotion awareness; (3) perspective-taking; (4) humility; (5) empathy; (6) sympathy; (7) caring; (8) generosity; and (9) love. The measures used in this study relied on students' self-reported perceptions and assessments of how much they relate to or identify with the item stems. Table 1 presents item stems for all measures used in the present study.

Forgiveness. Forgiveness was assessed through a scale adapted from the Child/Adolescent Dispositional Forgiveness Inventory (Leever, 2006) and the Child Trends (2003) Flourishing Children Project. Participants were prompted to "Think about when a friend is mean to you" and rate how true each statement was for them. Examples of the items are: "*I would try to forgive them*" and "*I would forgive them if they showed me they were sorry*" (see Table 1). Response options ranged from 1 ("*Not true at all*") to 5 ("*Always true*"); higher scores reflected greater forgiveness. The internal consistency reliability for the five forgiveness items was .73 for this sample.

Emotion awareness. To assess emotion awareness, three items were adapted from the Emotion Expression Scale for Children (Penza-Clyve & Zeman, 2002). Examples of

the items are: "*I try to understand my feelings*" and "*I pay attention to my feelings*" (see Table 1). Participants indicated the extent to which the item was true for them, and response options ranged from 1 ("*Not true at all*") to 5 ("*Always true*"); higher scores reflected greater emotion awareness. The internal consistency reliability for the three emotion awareness items was .70 for this sample.

Perspective-taking. Perspective-taking was assessed using three items adapted from the Thinking and Feeling Scale (Garton & Gringart, 2005). Examples of items are: "*When I'm upset with someone, I try to understand what they're thinking*" and "*I try to understand people better by putting myself in their shoes*" (see Table 1). Participants indicated the extent to which the item was true for them, and response options ranged from 1 ("*Not true at all*") to 5 ("*Always true*"); higher scores reflected greater perspective-taking. The internal consistency reliability for the three perspective-taking items was .74 for this sample.

Humility. Four items were created for the AIM Buddy Project to assess humility (see Bowers et al., 2015). Examples of items are: "*I think all kids have something good about them*" and "*It's okay when someone shows me that I made a mistake*" (see Table 1). Participants indicated the extent to which the item was true for them, and response options ranged from 1 ("*Not true at all*") to 5 ("*Always true*"); higher scores reflected greater humility. The internal consistency reliability for the four humility items was .58 for this sample.

Empathy. To assess empathy, four items were adapted from the Basic Empathy Scale (Jolliffe & Farrington, 2006). Participants were prompted to "Think about the people who are important to you" and rate how true each statement was for them. Examples of items are: "*When I see them sad, I also feel sad*" and "*When I see them crying, I also feel like crying*" (see Table 1). Response options ranged from 1 ("*Not true at all*") to 5 ("*Always true*"); higher scores reflected greater empathy. The

TABLE 1
Item Stems for the Constructs Measured in the Present Study

<i>Construct</i>	<i>Item</i>
Forgiveness	1. I would try to forgive them. 2. It would be easy for me to forgive them. 3. I would forgive and forget. 4. I would forgive them if they showed me they were sorry. 5. I would forgive them if I knew they didn't do it on purpose.
Emotion awareness	1. I can talk about how I am feeling. 2. I pay attention to my feelings. 3. I try to understand my feelings.
Perspective-taking	1. Before I say something bad to someone, I think about how it might make them feel. 2. When I'm upset with someone, I try to understand what they're thinking. 3. I try to understand people better by putting myself in their shoes.
Humility	1. I am happy for my friends when they win at something. 2. I am willing to tell someone when I do something wrong. 3. It's okay when someone shows me that I made a mistake. 4. I think all kids have something good about them.
Empathy	1. When I see them crying, I also feel like crying. 2. When I see them sad, I also feel sad. 3. When I see them upset, I also feel upset. 4. When I see them happy, I also feel happy.
Sympathy	1. When I see someone being teased, I feel sorry for them. 2. I feel sorry for people who don't have the things I have. 3. I feel sorry for people who are sad.
Caring	1. I care about them if they are treated badly. 2. I care about how they feel. 3. When I see them getting picked on, I want to help them.
Generosity	1. I like to share my things with others. 2. I like to give things to my friends and family. 3. I like to give things to people who need them. 4. I like to help people. 5. When my friends or family are sad, I am extra nice to them. 6. I do good things even when I know I won't get anything back
Love	1. I feel loved. 2. I feel love for others. 3. I want to make the world a better place to live in. 4. I believe everyone should take care of each other.

Note: Forgiveness items were adapted from the Child/Adolescent Dispositional Forgiveness Inventory (Leever, 2006) and the Child Trends (2003) Flourishing Children Project. Emotion awareness items were adapted from the Emotion Expression Scale for Children (Penza-Clyve & Zeman, 2002). Perspective-taking items were adapted from the Thinking and Feeling Scale (Garton & Gringart, 2005). Humility items were created for the Arthur Interactive Media Buddy Project (Bowers et al., 2015). Empathy items were adapted from the Basic Empathy Scale (Jolliffe & Farrington, 2006). Sympathy items were adapted from the Individual Reactivity Index (IRI; Davis, 1983). Caring items were adapted from the IRI (Davis, 1983). Generosity items were adapted from the Interpersonal Generosity Scale (Smith & Hill, 2009) and the Community Feeling Subscale of Aspiration Index (Kasser & Ryan, 1996). Love items were adapted from the Great Love-Compassion Scale (Warren, 2009) and the functional assessment of chronic illness therapy-spiritual well-being scale (FACIT-Sp-Ex; Brady, Peterman et al., 1999).

internal consistency reliability for the four empathy items was .82 in this sample.

Sympathy. To assess sympathy, three items were adapted from the Individual Reactivity Index (IRI; Davis, 1983). Examples of items are: *“When I see someone being teased, I feel sorry for them”* and *“I feel sorry for people who are sad”* (see Table 1). Participants indicated the extent to which the item was true for them, and response options ranged from 1 (*“Not true at all”*) to 5 (*“Always true”*); higher scores reflected greater sympathy. The internal consistency reliability for the three sympathy items was .78 for this sample.

Caring. Caring was assessed using three items adapted from the IRI (Davis, 1983). Participants were prompted to “Think about the people who are important to you” and rate how true each statement was for them. Examples of items are: *“I care about them if they are treated badly”* and *“I care about how they feel”* (see Table 1). Response options ranged from 1 (*“Not true at all”*) to 5 (*“Always true”*); higher scores reflected greater caring. The internal consistency reliability for the three caring items was .77 for this sample.

Generosity. Generosity was assessed through six items adapted from the Interpersonal Generosity Scale (Smith & Hill, 2009) and the Community Feeling Subscale of Aspiration Index (Kasser & Ryan, 1996). Examples of the items are: *“I like to help people”* and *“I like to give things to people who need them”* (see Table 1). Participants indicated the extent to which the item was true for them, and response options ranged from 1 (*“Not true at all”*) to 5 (*“Always true”*); higher scores reflected greater generosity. The internal consistency reliability for the six generosity items was .77 for this sample.

Love. To assess love, four items were adapted from the Great Love-Compassion Scale (Warren, 2009) and the functional assessment of chronic illness therapy-spiritual well-being scale (FACIT-Sp-Ex; Brady et al., 1999). Examples of items are: *“I believe everyone should take care of each other”* and *“I want to make the world a better place to live*

in” (see Table 1). Participants indicated the extent to which the item was true for them, and response options ranged from 1 (*“Not true at all”*) to 5 (*“Always true”*); higher scores reflected greater love. The internal consistency reliability for the four love items was .73 for this sample.

Procedure

Schools were recruited by contacting principals and inviting them to participate in a character development study (the AIM Buddy Project; see Batanova et al., 2016; Bowers et al., 2015) with their school. School principals helped to recruit participating classrooms. Written institutional review board approval was obtained from the Tufts University as well as the participating school districts prior to conducting the research. All students within each classroom participated in the AIM Buddy Project program; however, data were collected only from students who received parental consent and who provided assent to participate. In-person paper surveys were administered in school settings to participants at the beginning of the school year (fall 2015). The survey took about 45 minutes to one hour to complete. Full details about the method of the AIM Buddy Project may be found in Bowers et al. (2015).

Data Analysis

Nine major domains of variables of interest were involved in this research: forgiveness, emotion awareness, perspective-taking, humility, empathy, sympathy, caring, generosity, and love. These variables are considered latent factors (meaning they cannot be directly observed or measured but, instead, must be inferred from what can be directly measured); therefore, I conducted a confirmatory factor analysis (CFA) to confirm the presence of these latent factors within the data set used in the present research. The CFA also enabled me to confirm that the items from across the nine measures loaded on their respective hypothesized factors (e.g., that forgiveness items best

represented forgiveness). These analyses were preceded by preliminary descriptive information summarizing the means, standard deviations, and zero-order correlations among the items and mean scores of the nine factors included in this study. Following the CFA, I examined the correlations of the latent constructs to assess how the constructs interrelate with forgiveness. Last, to check the robustness of these relations, I compared the correlations of the latent constructs across gender (male and female students), grade (fourth- and fifth-grade students), and race (White and non-White students).

RESULTS

In order to confirm the latent factors purported by the measures used in this study, I conducted a CFA with the nine constructs of interest: forgiveness, emotion awareness, perspective-taking, humility, empathy, sympathy, caring, generosity, and love. I then replicated the analyses by comparing across gender, grade, and race to test the robustness of the findings.

Preliminary Analyses

Prior to testing the factor structures of the nine constructs, I computed descriptive statistics for all measures used in this study. Table 1 presents the manifest indicators used in this study according to their respective construct measures. Data from all measures were considered normally distributed upon examination of histograms, means, standard deviations, skew, and kurtosis for all items. In this sample, between 1.2% and 13% of the item data were missing. The missing data were determined to be missing at random (MAR), because missing item-level indicators represented nonresponses, or skipped items. Although skipped items are nonrandom and predictable, the MAR mechanism renders the missingness functionally random (Little, 2013) and is thus termed ignorable (Rubin, 1976). Due to adequate sample size ($N = 606$), continuous indi-

cators, normal distribution, and relatively low rates of missing data, full information maximum likelihood (FIML) methods were used in these analyses. FIML estimation is efficient and unbiased in generating parameter estimates when data are missing at random (Wothke, 1998). By using FIML, all available responses for each item were used in the analyses, without deleting cases or imputing missing values.

Before testing the hypothesized models, I examined item correlations among all items, both within and across measures. All items were significantly correlated within their respective measures, suggesting that, upon further analysis, the latent-level factor structures of the items may be appropriate in relation to their respective construct measures. All items were also significantly correlated across measures, providing a preliminary indication that the constructs measured in this study are positively manifolded.

Testing the Factor Structure Model

Data were analyzed using Mplus software (Version 7.3). Goodness of fit was evaluated using recommendations from Brown (2006), involving multiple fit indices. Absolute fit was tested by checking for χ^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).

Each indicator was constrained to load onto one factor (see Table 1). Five items loaded onto the forgiveness factor; three items loaded onto the emotion awareness factor; three items loaded onto the perspective-taking factor; four items loaded onto the humility factor; four items loaded onto the empathy factor; three items loaded onto the sympathy factor; three items loaded onto the caring factor; six items loaded onto the generosity factor; and four items loaded onto the love factor. The model was overidentified with 524 degrees of freedom. The variance of each factor was constrained to 1.00. All measurement errors were presumed to be uncorrelated. The nine latent factors measured in this study were allowed to correlate, based on the item-level correlations across measures found in the preliminary analyses. Table 2 presents the means, standard deviations, Cronbach's alphas and Pearson product-moment correlations for all measures used in this study.

Using Brown's (2006) recommendations for evaluating the goodness of fit, the fit indices together provided a reliable evaluation of the proposed measurement model. The

hypothesized factor structure for the 35 total items displayed moderate to poor fit: $\chi^2(524) = 1210.09$, $p = .000$; RMSEA = .046 (90% CI: .043 to .050); CFI = .908; TLI = .896; SRMR = .056. Standardized factor loadings ranged from .39 to .86. The nine latent constructs were significantly correlated in this sample, $r(524) = .47$ to .91, $p < .001$, indicating that forgiveness, emotion awareness, perspective-taking, humility, empathy, sympathy, caring, generosity, and love each represented unique, but related, constructs.

Standardized residuals were inspected for values greater than 2 and showed no problems (e.g., the largest standardized residual = .85); however, modification indices showed points of poor fit in the solution. For instance, Empathy Item 4, "When I see them happy, I also feel happy," had modification indices related to all other constructs, ranging from 45.50 for Empathy Item 4 by emotion awareness, to 103.04, by love. In addition, Empathy Item 4 was the only item in the measure worded with a positive valence (as compared to "crying," "sad," and "upset" in Empathy Items 1, 2, and 3, respectively). Accordingly, I removed Empathy Item 4 from the model solution. The resulting factor structure for the 34 remaining

TABLE 2
Means, Standard Deviations, Cronbach's Alphas, and Pearson Product-Moment Correlations for the Manifest Constructs Measured in the Present Study

Construct	Pearson Product-Moment Correlations									M	SD	α
	1	2	3	4	5	6	7	8	9			
1. Forgiveness	—									3.85	.83	.73
2. Emotion awareness	.46	—								3.72	.96	.70
3. Perspective-taking	.51	.49	—							3.53	1.03	.74
4. Humility	.53	.49	.51	—						4.16	.65	.58
5. Empathy	.41	.39	.47	.43	—					3.51	1.07	.82
6. Sympathy	.49	.42	.51	.49	.46	—				4.33	.83	.78
7. Caring	.43	.43	.48	.46	.56	.56	—			4.36	.78	.77
8. Generosity	.52	.51	.56	.57	.44	.59	.60	—		4.17	.66	.77
9. Love	.45	.45	.49	.48	.45	.46	.58	.54	—	4.34	.71	.73

Note: All relations were significant, $p < .001$.

items displayed improved and good fit: $\chi^2(491) = 1044.23$, $p = .000$; RMSEA = .043 (90% CI: .039 to .047); CFI = .923; TLI = .912; SRMR = .046.

Standardized residuals were again inspected for values greater than two and showed no problems; however, modification indices continued to show points of poor fit. For instance, Forgiveness Item 4, “*I would forgive them if they showed me they were sorry*,” with Forgiveness Item 5, “*I would forgive them if I knew they didn’t do it on purpose*,” had a modification index value of 44.74 and, as well, were the only two items in the measure that reflected conditional forgiveness. In addition, Love Item 1, “*I feel loved*,” with Love Item 2, “*I feel love for others*,” had a modification index value of 54.67, and were similarly worded, whereas the remaining items were discrepant from these two items. Therefore, I correlated the errors between these two pairs of manifest indicators because the items were similarly worded or related and the modification indices were substantial. The resulting model displayed improved good fit: $\chi^2(489) = 943.74$, $p = .000$; RMSEA = .039 (90% CI: .035 to .043); CFI = .936; TLI = .927; SRMR = .048. Completely standardized factor loadings for the final model are presented in Table 3.

Examining the Relations Among the Latent Constructs

After confirming the factor structures of the constructs measured in the present study, I examined the relations among the nine latent constructs. Correlations for the latent constructs are shown in Table 4. All constructs were significantly correlated, and ranged from $r(489) = .42$ to $.91$, $p < .001$.

Robustness-Checking Across Subgroups

To test the robustness of the latent correlations among forgiveness and the remaining constructs, I next replicated the analyses across three dichotomous demographic sub-

groups within the sample: gender (male and female), grade (fourth and fifth), and race (White and non-White). Table 5 presents the model fit indices by subgroup. The model fit indices were acceptable across subgroups: $\chi^2(489) = 755.09$ to 903.97 , $p = .000$; RMSEA = .042 to .061; CFI = .890 to .934; TLI = .874 to .924; SRMR = .053 to .063. Table 6 presents the standardized factor loadings for each construct across subgroups.

Gender. Table 6 presents the correlations among the latent constructs by gender. For boys ($n_{\text{males}} = 274$), correlations among the latent constructs were significant, and ranged from $r(489) = .45$ to $.94$, $p < .001$. For girls ($n_{\text{females}} = 332$), the latent constructs were significantly correlated, with correlations ranging from $r(489) = .36$ to $.87$, $p < .001$.

Grade. Table 7 presents the correlations among the latent constructs by grade. For Grade 5 students ($n_{\text{fifth graders}} = 307$), the latent constructs were significantly correlated, with correlations ranging from $r(489) = .40$ to $.96$, $p < .001$. For Grade 4 students ($n_{\text{fourth graders}} = 299$), correlations among the latent constructs were significant, and ranged from $r(489) = .44$ to $.87$, $p < .001$.

Race. Table 8 presents the correlations among the latent constructs by race. For White students ($n_{\text{White}} = 197$), the latent constructs were significantly correlated, with correlations ranging from $r(489) = .47$ to $.92$. For non-White students ($n_{\text{non-White}} = 313$), correlations among the latent constructs were significant, and ranged from $.44$ to $.87$.

Table 9 presents the correlations between forgiveness and each of the eight foundational and moral characteristics measured in the present study by subgroups.

DISCUSSION

The purpose of this study was to explore the relations among forgiveness and character attributes among elementary school students. Forgiveness involves abandoning negative thoughts, emotions, and behaviors following a

TABLE 3
Completely Standardized Factor Loadings for the Constructs Measured in the Present Study, by Subgroups

<i>Items by Construct</i>	<i>Standardized Factor Loadings</i>						
	<i>Full Sample</i>	<i>Male Students</i>	<i>Female Students</i>	<i>Grade 4 Students</i>	<i>Grade 5 Students</i>	<i>White Students</i>	<i>Non-White Students</i>
Forgiveness Item 1	.72	.66	.79	.74	.71	.76	.67
Forgiveness Item 2	.71	.74	.72	.72	.70	.77	.67
Forgiveness Item 3	.65	.67	.63	.66	.64	.68	.65
Forgiveness Item 4	.44	.45	.40	.40	.48	.55	.37
Forgiveness Item 5	.46	.47	.43	.42	.51	.54	.41
Emotion Awareness Item 1	.55	.55	.57	.52	.60	.59	.55
Emotion Awareness Item 2	.72	.72	.71	.69	.76	.69	.72
Emotion Awareness Item 3	.73	.71	.72	.73	.70	.80	.68
Perspective-Taking Item 1	.65	.65	.66	.67	.64	.72	.59
Perspective-Taking Item 2	.72	.71	.71	.72	.72	.82	.64
Perspective-Taking Item 3	.72	.74	.71	.71	.73	.80	.68
Humility Item 1	.61	.65	.57	.63	.59	.61	.60
Humility Item 2	.47	.33	.61	.45	.50	.49	.51
Humility Item 3	.39	.42	.40	.40	.39	.45	.40
Humility Item 4	.60	.57	.61	.58	.62	.63	.57
Empathy Item 1	.77	.74	.77	.74	.79	.79	.76
Empathy Item 2	.86	.87	.83	.88	.85	.89	.85
Empathy Item 3	.81	.78	.82	.75	.86	.83	.80
Sympathy Item 1	.75	.74	.77	.73	.78	.79	.74
Sympathy Item 2	.66	.75	.55	.68	.64	.76	.61
Sympathy Item 3	.83	.86	.81	.83	.83	.88	.80
Caring Item 1	.73	.78	.63	.61	.86	.78	.75
Caring Item 2	.78	.80	.72	.79	.77	.81	.76
Caring Item 3	.69	.72	.64	.63	.74	.70	.68
Generosity Item 1	.55	.50	.58	.60	.50	.61	.50
Generosity Item 2	.59	.62	.55	.53	.66	.71	.54
Generosity Item 3	.62	.58	.65	.65	.61	.70	.60
Generosity Item 4	.65	.64	.66	.59	.71	.67	.63
Generosity Item 5	.59	.66	.52	.58	.60	.61	.56
Generosity Item 6	.58	.58	.59	.55	.62	.66	.54
Love Item 1	.44	.43	.46	.41	.47	.41	.48
Love Item 2	.59	.54	.65	.59	.59	.63	.63
Love Item 3	.63	.68	.50	.53	.76	.73	.53
Love Item 4	.76	.85	.60	.78	.74	.85	.69

Note: All factor loadings were significant, $p < .001$.

transgression, while fostering positive characteristics for the offender (e.g., compassion, love, generosity; Enright et al., 1998). As well, forgiveness has been considered to be a moral character virtue and may preserve or foster character development by promoting mutually beneficial relations and thriving in response to

injustice (Tirrell, 2022, in press; Tirrell et al., 2023).

One form of injustice often faced by elementary school students is school bullying (Rodkin et al., 2015), which threatens thriving for individuals, relationships, and school climates (e.g., Due et al., 2005). Even beyond

TABLE 4
Correlations for the Latent Constructs Measured in the Present Study

<i>Construct</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
1. Forgiveness	—								
2. Emotion awareness	.61	—							
3. Perspective-taking	.68	.68	—						
4. Humility	.76	.76	.77	—					
5. Empathy	.42	.45	.55	.54	—				
6. Sympathy	.57	.58	.68	.75	.50	—			
7. Caring	.49	.59	.65	.75	.61	.73	—		
8. Generosity	.64	.69	.75	.91	.51	.78	.81	—	
9. Love	.55	.64	.69	.79	.50	.67	.85	.78	—

Note: All relations were significant, $p < .001$.

TABLE 5
Fit Statistics for the Nine Attributes Measured in the Present Study, by Subgroups

<i>Model</i>	<i>N</i>	χ^2	<i>df</i>	<i>p</i>	<i>RMSEA</i>	<i>90% CI</i>	<i>CFI</i>	<i>TLI</i>	<i>SRMR</i>
Full sample	606	943.74	489	.000	.039	.035 to .043	.936	.927	.048
Male students	274	795.93	489	.000	.048	.042 to .054	.911	.898	.059
Female students	332	903.97	489	.000	.051	.045 to .056	.890	.874	.055
Grade 5 students	307	755.09	489	.000	.042	.036 to .048	.934	.924	.060
Grade 4 students	299	848.46	489	.000	.050	.044 to .055	.896	.880	.055
White students	197	841.64	489	.000	.061	.054 to .067	.890	.874	.063
Non-White students	313	760.52	489	.000	.042	.036 to .048	.917	.905	.053

Note: N = sample size; χ^2 = chi-square value; df = degrees of freedom; p = p value; RMSEA = root mean error of approximation; CI = confidence interval; CFI = comparative fit index; TLI = Tucker-Lewis index; SRMR = standardized root mean squared residual.

TABLE 6
Correlations for the Latent Constructs Measured in the Present Study, by Gender

<i>Construct</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
1. Forgiveness	—	.52	.70	.70	.45	.58	.47	.58	.51
2. Emotion awareness	.68	—	.67	.70	.47	.48	.60	.73	.64
3. Perspective-taking	.65	.69	—	.74	.58	.58	.63	.72	.67
4. Humility	.78	.80	.80	—	.55	.68	.80	.94	.83
5. Empathy	.36	.42	.51	.50	—	.50	.61	.54	.49
6. Sympathy	.53	.65	.75	.80	.47	—	.77	.79	.71
7. Caring	.52	.56	.57	.69	.57	.66	—	.83	.87
8. Generosity	.66	.64	.77	.87	.44	.76	.80	—	.79
9. Love	.61	.64	.75	.80	.47	.62	.77	.78	—

Note: Male students = above the diagonal; Female students = below the diagonal. All relations were significant, $p < .001$.

TABLE 7
Correlations for the Latent Constructs Measured in the Present Study, by Grade

<i>Construct</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
1. Forgiveness	—	.53	.65	.80	.40	.60	.50	.63	.52
2. Emotion awareness	.69	—	.62	.78	.45	.62	.53	.69	.61
3. Perspective-Taking	.71	.74	—	.80	.55	.67	.59	.70	.60
4. Humility	.72	.74	.75	—	.57	.82	.71	.96	.81
5. Empathy	.44	.46	.56	.52	—	.55	.58	.49	.52
6. Sympathy	.54	.53	.68	.67	.45	—	.84	.78	.72
7. Caring	.49	.66	.73	.79	.67	.61	—	.74	.81
8. Generosity	.64	.69	.80	.80	.52	.77	.87	—	.73
9. Love	.58	.69	.76	.80	.50	.64	.87	.82	—

Note: Grade 5 students = above the diagonal; Grade 4 students = below the diagonal. All relations were significant, $p < .001$.

TABLE 8
Correlations for the Latent Constructs Measured in the Present Study, by Race

<i>Construct</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
1. Forgiveness	—	.57	.66	.69	.48	.58	.52	.58	.52
2. Emotion awareness	.65	—	.79	.67	.58	.65	.73	.72	.73
3. Perspective-taking	.72	.64	—	.66	.55	.66	.70	.70	.65
4. Humility	.86	.83	.82	—	.47	.70	.75	.92	.71
5. Empathy	.44	.44	.58	.61	—	.57	.67	.48	.50
6. Sympathy	.56	.53	.68	.74	.51	—	.75	.80	.73
7. Caring	.49	.48	.61	.68	.61	.69	—	.80	.83
8. Generosity	.65	.71	.76	.87	.55	.78	.80	—	.74
9. Love	.60	.56	.71	.76	.56	.62	.83	.80	—

Note: White students = above the diagonal; non-White students = below the diagonal. All relations were significant, $p < .001$.

TABLE 9
Correlations Between Forgiveness and the Eight Latent Constructs Measured in the Present Study, by Subgroups

<i>Latent Construct</i>	<i>Correlation With Forgiveness</i>						
	<i>Full Sample</i>	<i>Male Students</i>	<i>Female Students</i>	<i>Grade 4 Students</i>	<i>Grade 5 Students</i>	<i>White Students</i>	<i>Non-White Students</i>
Emotion awareness	.61	.52	.68	.69	.53	.57	.65
Perspective-taking	.68	.70	.65	.71	.65	.66	.72
Humility	.76	.70	.78	.72	.80	.69	.86
Empathy	.42	.45	.36	.44	.40	.48	.44
Sympathy	.57	.58	.53	.54	.60	.58	.56
Caring	.46	.47	.52	.49	.50	.52	.49
Generosity	.64	.58	.66	.64	.63	.58	.65
Love	.55	.51	.61	.58	.52	.52	.60

Note: All relations were significant, $p < .001$.

school bullying or injustice, better understanding forgiveness and its links to character education may foster opportunities for teachers to facilitate forgiveness in the classroom, for instance, in response to difficult student behavior. Character education programs seeking to promote the positive development of elementary school students, then, might be wise to include forgiveness in their curriculum in order to promote positive character development in the face of such instances of injustice as bullying. This study provided preliminary descriptive data about the relations among forgiveness and character attributes, and serves as a first step toward assessing the processes that may contribute to the development of forgiveness and character among elementary school students.

Considering the view that developmental science, and character development, are concerned with promoting social justice, human rights, welfare, and thriving for all people across contexts (e.g., Berkowitz, 2012; Gert, 1998; Lerner & Callina, 2014; Nucci, 2001), the present research was timely and potentially important. A better understanding of forgiveness may enable researchers and practitioners to promote the positive development of children's social competence and relationships (see Denham et al., 2005) and, in turn, foster the development of character virtues among youth. Indeed, 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).

In order to assess the relations among forgiveness and character attributes, I analyzed data from a sample of fourth- and fifth-grade students participating in the first wave of the Arthur Interactive Media (AIM) Buddy Project (see Bowers et al., 2015). Constructs were chosen based on existing definitions and models of forgiveness (see Worthington et al., 2010), and included both foundational, nonmoral characteristics that may moderate morality (e.g., emotion awareness, perspective-taking), as well as moral attributes of character (e.g., empathy, sympathy, humility, caring, generosity,

love). Therefore, forgiveness was explored in relation to the following eight constructs included in the AIM Buddy Project data set: emotion awareness, perspective-taking, humility, empathy, sympathy, caring, generosity, and love.

Confirmatory factor analyses provided support for the factor structure of the constructs measured in this study. Correlations among the latent constructs indicated a positive manifold among forgiveness and the constructs related to character, providing further evidence and support for the place of forgiveness among the catalogue of character virtues (see also Peterson & Seligman, 2004; Tirrell, 2022, *in press*). Furthermore, these findings provide further evidence supporting the conceptual models of forgiveness and the forgiveness process, for instance, the Worthington (2006) REACH model (which includes components of emotion awareness, empathy, sympathy, caring, love, and forgiveness) and the Enright and Fitzgibbons (2000) forgiveness process model (which includes components of emotion awareness, perspective-taking, empathy, caring, and generosity).

All relations were significant and ranged from $r(489) = .42$ (forgiveness with empathy, a moderate correlation) to $.76$ (forgiveness with humility, a strong correlation). As Peterson and Seligman (2004) proposed, forgiveness and humility might reflect common characteristics of a core virtue of temperance, which might explain the strong correlation. In addition, as presented in Table 4 (and as disaggregated by gender, grade, and race in Tables 6–9), the correlations among the latent constructs yielded results that may be worthy of further exploration. For instance, humility was strongly associated with nearly all character attributes, especially generosity, $r(489) = .91$, suggesting humility and generosity might not be distinct constructs in this sample.

It may be noteworthy that the correlations among the latent factors varied in the present sample—for instance, in the full sample, forgiveness was moderately correlated with empathy, caring, love, and sympathy; and

strongly correlated with emotion awareness, generosity, perspective-taking, and humility (see Table 4). The moderately correlated character attributes (empathy, caring, love, sympathy) seem to reflect ones feelings for others; whereas the strongly correlated attributes (emotion awareness, generosity, perspective-taking, and humility) seem to reflect self-awareness (in regard to emotions, perspective, and humility) and action toward others (generosity). This finding is interesting and may generate hypotheses for further testing; for instance, is forgiveness, at least among elementary school students, more cognitively driven than affectively driven, following the Worthington et al. (2007) conception of decisional versus emotional forgiveness?

Indeed, from a developmental perspective, Werner's (1957) orthogenetic principle states that "whenever development occurs, it proceeds from a state of relative globality and lack of differentiation to a state of increasing differentiation, articulation, and hierarchic integration" (p. 126). The strong correlations among forgiveness and some character attributes might reflect development and the orthogenetic principle such that, for the present sample of elementary school students, there is yet a lack of differentiation among those attributes. Developmental questions arise then, as to whether and when forgiveness may develop toward increasing differentiation, articulation, and integration.

To test the robustness of these findings, I followed recommendations made by Duncan et al. (2014) and replicated the analyses across dichotomous subgroups within the data set. I therefore tested the model fit across three subgroups: gender (male and female), grade (fourth and fifth), and race (White and non-White). As indicated in Table 8, model fit was within acceptable ranges across subgroups. However, nuances arose that may be useful to consider in further explorations of forgiveness and character. For instance, model fit was slightly better for male students than female students, for Grade 5 students than Grade 4 students, and for non-White students

than White students. Nonetheless, the model fit indices were not discrepant enough to suggest a systematic difference between subgroups, thus supporting the robustness of the findings.

To further examine the robustness of these findings, I then assessed correlations among the latent constructs across subgroups. Tables 6, 7, and 8 presented the latent correlations by gender, grade, and race, respectively, and Table 9 presented the correlations of the latent constructs with forgiveness across the subgroups. As was seen in these tables, the constructs remained positively manifolded across subgroups, providing support for the robustness of these findings. However, as seen in Table 9, nuances emerged that might be hypothesis-generating and inform future studies of forgiveness. For instance, humility had the strongest association with forgiveness in the full sample. However, across subgroups, this finding seemed to be driven by female students as compared to male students; by Grade 5 students as compared to Grade 4 students; and by non-White students as compared to White students. Furthermore, when comparing across gender, forgiveness was moderately correlated with emotion awareness, generosity, and love for male students, but the same correlations were strong among female students (please note that further tests would need to be conducted, such as the Wald test of parameter constraints, to determine whether the correlations were significantly different across groups). Following the Duncan et al. (2014) approach to disaggregating data to check the robustness of findings therefore revealed differences that might otherwise have been masked (see also Tirrell et al., 2019, 2021, and the Bornstein, 2017, 2019, specificity principle).

Therefore, the present study provides preliminary descriptive findings regarding the relations among forgiveness and character attributes. The positive manifold among forgiveness and the eight attributes indicated that forgiveness, emotion awareness, perspective-taking, humility, empathy, sympathy, car-

ing, generosity, and love represent related, but unique, aspects pertinent to character. In addition, the present study confirms the robustness of these findings. As well, it points to possible nuances about the relations across gender, age, and race that may be worth exploring in future studies.

Implications for Character Education

For character education, then, forgiveness can be approached, fostered, and promoted in several ways, capitalizing on the relations among forgiveness and these foundational and moral character attributes. To forgive (and, e.g., to apologize) can be difficult for anyone, let alone for elementary school-aged children. Accordingly, increasing the lexicon and “tool-box” related to forgiveness for character education might enable teachers as well as parents and program leaders to more successfully navigate situations that might call for or benefit from forgiveness, for instance, by focusing on recognizing emotions, taking perspective, being humble, and being generous.

Indeed, these findings further support the models of forgiveness introduced in the present article (e.g., the REACH model and the forgiveness process model; Enright & Fitzgibbons, 2000; Worthington, 2006) by providing evidence for the empirical relations among the purported constructs involved in and relevant to forgiveness. Furthermore, this work serves to further illuminate the developmental models of forgiveness presented in Tirrell (2022, in press) by empirically justifying the inclusion of these related character attributes to the processes of and outcomes associated with forgiveness. The implications for character and moral education discussed in Tirrell et al. (2023) are also relevant and supported—in that study, forgiveness exemplars (survivors of the 1994 genocide against the Tutsi in Rwanda who came to forgive and become community servers and leaders) described a process of forgiveness with implications for reconciliation, peace, and restorative justice. Character education should therefore take a holistic, integrated,

and dynamic approach to forgiveness and character development (e.g., Berkowitz, 2021; Lerner et al., 2022; Nucci, 2019; as compared to, e.g., a disembodied approach considering forgiveness as an isolated attribute or virtue), as demonstrated by the exemplars in Tirrell et al. (2023), and as empirically supported in the present study in regard to the nomological net (Cronbach & Meehl, 1955) of character attributes

Limitations and Future Research

Whereas this study presents significant findings with implications for the understanding of the relations among forgiveness and character attributes, the findings should not be interpreted without considering their limitations. First, this study was cross sectional, and therefore did not assess intraindividual development. In order to understand the development of forgiveness and the processes related to its development, future studies should include multiple points of measurement, thus allowing trends to be ascertained across ontogenetic points. Such longitudinal data could then be analyzed with structural equation models and mediation models, such as cross-lagged panel models, which may be used to explain the influence of nonmoral characteristics and moral attributes on subsequent developmental processes (see Lindenberger & Pötter, 1998; Selig & Preacher, 2009). Findings from such analyses might describe the relations among the processes believed to contribute to character development. For instance, further research is needed to ascertain whether underlying processes exist that explain and predict the development of moral characteristics, or whether moral development is best described as the unfolding of nonmoral and moral characteristics in mutually influential ways. Future research involving longitudinal data and mediation models could therefore explicate the relations among the developmental processes of forgiveness and character attributes.

Second, the sample was limited in that the models were tested only on fourth- and fifth-grade students from one geographic region in Massachusetts. Although findings were robust across subgroups within the sample, these findings may not apply to other samples, for instance, across other ages, demographic groups, or geographic locations. Therefore, relations among forgiveness and character attributes should be tested with different populations in order to assess the generalizability of the results.

Third, limitations in measurement need to be considered. Although nine constructs were assessed in the present study, additional measures related to forgiveness and other character attributes might provide greater breadth and depth of information about general or specific aspects of forgiveness, for example, its relations with to-be-measured variables (e.g., self-control, intentional self-regulation, connection, etc.). Furthermore, each measure was limited in the number of items representing each latent construct, which may affect validity of the scales. Future studies might consider additional items that have been contextualized to the specific context and constructs being assessed. Specific to the forgiveness measure, it is important to note that Item 3, "I would forgive and forget," conflates forgiving with forgetting. Research agrees that forgiving does not mean forgetting and such connotations (reflected in the popular idiom, to forgive and forget) may be a disservice to research and practice of forgiveness (see Tirrell, *in press*; also Lichtenfeld et al., 2015).

Also regarding measurement, I did not test a higher order factor model or bifactor model to assess whether a higher order factor or general character factor existed in relation to these constructs. Because the structure of character is a still-open question in developmental science (Lerner & Callina, 2014), questions remain about the nature of first- and second-order latent constructs reflecting character. As such, the present study assessed the attributes believed to be related to character as

separate constructs, and found them to be unique but positively correlated.

Additional limitations in measurement must also be considered. For instance, the Cronbach's alpha for the construct of humility was somewhat low. This low alpha score may be reflective of the items used to measure humility in this sample, perhaps suggesting that the items were not developmentally meaningful or appropriate to measure elementary school students' self-reported humility. In addition to the particular items asked in the student surveys, more data could be gathered qualitatively from observations and interviews, further elucidating the meanings and perceptions of forgiveness and other character attributes among different individuals and across ages, genders, and races. Last, the measures used in this study relied solely on self-reported assessments and perceptions from students and, as such, responses may have been skewed by a social desirability or a response style bias. Future studies should therefore include additional informants, such as parents, teachers, and peers, for a more reliable and valid assessment of individuals' character attributes.

Conclusions

Nonetheless, these findings regarding the relations among forgiveness 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. Indeed, fostering forgiveness as a character virtue in youth has been demonstrated in the positive psychology literature as promoting well-being, mental health, and relationships (e.g., McCullough & Witvliet, 2002; Worthington et al., 2014). Future research from a developmental science perspective might capitalize on testing developmental structural models of forgiveness in order to understand and promote its development (e.g., see models I have proposed in Tirrell, 2022, *in press*). Future studies empirically testing such a model

would be especially useful for understanding the development of forgiveness among elementary school students whose moral formation, character development, and thriving may be threatened or hindered by school bullying, conflict, and other maladaptive person $\leftrightarrow$ context relations at that age in the life span. Indeed, a better understanding of the development of forgiveness in elementary school students—including understanding its relation to other foundational and moral character attributes (Berkowitz, 2012)—should equip, encourage, and empower character education programs to foster and promote forgiveness as a moral character virtue that enhances mutually beneficial and adaptive person $\leftrightarrow$ relations involved in thriving.

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