

Assessing Character Strengths in Young Children

by

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ABSTRACT

ASSESSING CHARACTER STRENGTHS IN YOUNG CHILDREN

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Character strengths (i.e., positive core traits that manifest through people's thoughts, feelings, and behaviours) are a central focus of positive psychology and positive youth development research. Character strengths are theorized to develop across early childhood and throughout development, evidencing numerous associations with wellbeing and the potential to buffer against illbeing. Despite the substantial advancement of character strengths research with older children, adolescents, and adults, very little attention has focused on understanding and assessing character strengths in young children. This dissertation sought to address this deficit by building a better understanding of young children's character strengths using an exploratory sequential mixed method design. The first objective was to develop a rigorous coding system for identifying early childhood character strengths from caregiver descriptions, and to document the coding system to facilitate future research via a coding manual. The second objective was to examine which character strengths were most prevalent in caregiver descriptions of children aged 4 to 6. Results from 147 caregiver interviews were generally consistent with previous research on the most and least prevalent character strengths with the exception of zest, which was more prevalent in descriptions of this younger sample. Sex differences were also examined. Strengths of love and creativity were more prevalent in descriptions of female children, while

humour and prudence were more prevalent in descriptions of male children. The third objective was to explore associations between character strengths and descriptive characteristics of the sample. Response duration and word count were not associated with key participant demographics, with the exception of caregiver level of education. Caregiver level of education was also positively associated with character strengths content. The fourth objective was to examine how early childhood character strengths associate with childhood functioning. Child happiness was significantly positively associated with strengths of creativity, hope, and love of learning, appreciation of beauty and excellence, and zest. Child difficulties were significantly positively related to zest, and prosocial behaviour was significantly positively related to kindness and social intelligence, and significantly negatively related to humour and prudence. Implications and future directions for character strengths research with young children are discussed.

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1 Introduction

1.1 Overview

Early childhood sets the stage for developmental trajectories (e.g., physical, social, emotional, and psychological) that often carry into adolescence and adulthood (Reynolds et al., 2007). Because of the marked speed in which the brain develops in the first six years of life (Mundkur, 2005), young children are both more vulnerable *and* more receptive to their environments (Blakemore & Frith, 2005). This plasticity allows for the potential to promote positive changes in human development (Lerner, 2005). Lerner's (2009) positive youth development (PYD) theory posits that for youth to thrive, positive qualities must be nurtured (e.g., through family, school, community). PYD theory emphasizes that strengths are present in all youth, and views youth as resources to be developed (Lerner, 2005). Central to this theory is the premise that youth have the inherent capacity for positive development, and developmental trajectories can be influenced (i.e., they are not fixed; Lerner, 2005).

Much psychological research has focused on risk factors and vulnerability to psychopathology, and on improving negative functioning by reducing distress (for a review see Wood & Tarrrier, 2010). Up until two decades ago, research in the field of youth development relied mainly on a deficit-based orientation, focused on better understanding and facilitating the absence of problems (e.g., child depression, aggression) versus the presence of thriving (e.g., social competency; Lerner, 2005). As such, most developmental research has focused on factors that may lead to negative outcomes/trajectories or protect against such outcomes/trajectories. By contrast, PYD research highlights the need to complement this knowledge with a broadened and deepened understanding of the resources, capacities and competencies children possess that may promote their wellbeing and resilience in the face of challenges (Lerner et al., 2005; VanderVen,

2008). This shift from a deficit-based approach to a strengths-based one is aligned with the broader field of positive psychology (Seligman & Csikszentmihalyi, 2000), which along with Lerner's PYD model, form the theoretical basis for my dissertation.

1.2 Positive Psychology Approach

The positive psychology perspective proposes that better understanding human strengths and virtues, promoting human potential, and understanding how to best foster positive functioning and experiences of wellbeing ought to take a more prominent position within psychological research, prevention, and intervention efforts (Peterson & Seligman, 2004; Seligman & Csikszentmihalyi, 2000). Seligman (1998, 2011), widely considered to be a key founder of the positive psychology field, describes lasting wellbeing as comprising five fundamental elements: positive emotion, engagement, relationships, meaning, and accomplishment (PERMA). Positive emotions extend beyond happiness to include emotions such as excitement, satisfaction, and pride, which contribute to wellbeing as they are experienced (Seligman, 2011). Engagement entails a state of deep effortless involvement (also known as flow; Csikszentmihalyi, 1997) or being completely absorbed in activities of interest. Relationships with others (e.g., family, friends, colleagues) are important as humans are social beings that benefit from interpersonal connections in both good times and bad (Seligman, 2011). Meaning, or a sense of purpose (the "why" that motivated doing something) can be pursued through various means (e.g., work, social cause, creative endeavour) and is vital for a sense of contributing to something bigger than oneself (Seligman, 2011). Accomplishment is a result of pursuing success or achieving meaningful goals and contributes to wellbeing through a sense of pride (Seligman, 2011). Seligman (2011) posits that individual character strengths underpin PERMA, and therefore, focusing on identifying and developing character strengths is considered

a key path towards increasing overall wellbeing. In sum, in contrast to a problem focused approach that is reactive and aims to fix, a positive psychology approach is proactive, focused on strengths and capacities for growth, with the aim to support positive adjustment and increased wellbeing.

1.3 What Are Character Strengths?

Character strengths are positive core traits that manifest through people's thoughts, feelings, and behaviours (Park & Peterson 2005, 2006b; Peterson & Seligman, 2004). Character strengths are known to play an important role in PYD by serving as protective factors against mental illness *and* by facilitating wellbeing (Niemi, 2013; Park, 2004). Good character is a family of positive characteristics (focused on what's right with people), not merely the absence of deficits (focused on what's wrong with people; Park & Peterson, 2009). Although some have taken a prescriptive approach to character strengths development in children suggesting that strengths need to be instilled, others have viewed strengths as innate capacities that can be nurtured in all (Linkins et al., 2015; Park & Peterson, 2009). The latter is more consistent with a PYD approach and therefore also with this project.

Positive psychologists initially identified a lack of common language or taxonomy to describe character strengths. There are a few existing taxonomies and associated assessment tools to conceptualize and measure strengths (e.g., Clifton Strengths, Strength Assessment Inventory [SAI], Values in Action [VIA]). The VIA classification of character strengths developed by Peterson and Seligman (2004) is the most comprehensive classification of human character strengths to date used to describe an individual's character, and was therefore the one selected for this research. Regarding its development, the VIA classification was conceptualized over a three-year period with the contributions of 55 social scientists who reviewed diverse fields

of literature (e.g., psychological, philosophical, theological) to identify ostensibly universally valued traits across cultures, time, and belief systems (Dahlsgaard et al., 2005; McGrath, 2015; Park et al., 2006; Peterson & Seligman, 2004). The VIA classification consists of 24 character strengths organized theoretically within six broad virtues (i.e., wisdom, courage, humanity, justice, temperance, and transcendence; see Table 1).

The virtue of *wisdom* refers to cognitive strengths that involve acquiring and using knowledge (e.g., thinking of novel ways to do something), and can be achieved through character strengths of creativity, curiosity, judgment, love of learning, and perspective (Park & Peterson, 2008; Peterson & Seligman, 2004). The virtue of *courage* refers to emotional strengths that involve motivation to accomplish goals despite adversity, and consists of character strengths of bravery, perseverance, honesty, and zest (Park & Peterson, 2008; Peterson & Seligman, 2004). The virtue of *humanity* comprises interpersonal strengths (e.g., valuing close relationships), and can be achieved through character strengths of love, kindness, and social intelligence (Park & Peterson, 2008; Peterson & Seligman, 2004). The virtue of *justice* is defined as civic strengths that are important for community life, and consists of strengths of teamwork, fairness, and leadership (Park & Peterson, 2008; Peterson & Seligman, 2004). The virtue of *temperance* includes character strengths that help monitor and manage emotions and behaviour, and can be achieved through character strengths of forgiveness, humility, prudence, and self-regulation (Park & Peterson, 2008; Peterson & Seligman, 2004). The virtue of *transcendence* includes character strengths that provide meaning and connection to the world, and consists of character strengths of appreciation of beauty and excellence, gratitude, hope, humour, and spirituality (Park & Peterson, 2008; Peterson & Seligman, 2004).

All 24 character strengths are purported to exist, to varying degrees, in every individual (Park & Peterson, 2005). A number of factors are thought to contribute to character strength development including genes, family, school, peers, and communities at large (Park & Peterson, 2009). Character strengths are believed to contribute to wellbeing, fulfilment, and flourishing of individuals and society (Peterson & Seligman, 2004). A more detailed review is provided in section 1.5.

While they are theorized to be trait-like (i.e., generally stable across time and situations), they are also theorized to be malleable (Peterson & Seligman, 2004) and thus, can be influenced by environmental factors including key relationships (e.g., parent-child relationships; Waters, 2015a, 2015b, 2016), significant life events, and character strengths interventions (Niemic, 2013).

Character strengths are considered to be distinct from talents (i.e., innate abilities; e.g., athletic ability), interests (i.e., area or topic one is passionate about/driven to pursue; e.g., a particular hobby), skills (i.e., competencies/proficiencies developed through training; e.g., computing skills), and resources (i.e., external supports; e.g., social connections; Peterson, 2006). One major way that character strengths differ from talents, skills, and related constructs is that they are theorized to exist within a moral domain (i.e., universally valued by moral philosophers and religious thinkers; Peterson & Seligman, 2004). Character strengths are believed to be the driving force that underpin talents, interests, skills, and resources (Peterson & Seligman, 2004). For example, to pursue a talent, one might use character strengths of perseverance and creativity, and to develop a new skill, one might use the character strength of hope. Similarly, to explore an interest, one might use the character strength of curiosity, and to connect to resources, one might

use character strengths of gratitude and kindness. In addition, talents and skills may be valued for their tangible results (e.g., wealth).

Caregivers, educators, and society at large strive to promote good character and raise virtuous children (Park & Peterson, 2005, 2009). Identifying and fostering individual character strengths has become a significant topic of interest within the fields of developmental and positive psychology, as character strengths are theorized to contribute to optimal human development (Gander et al., 2020; Kumar et al., 2018; Park & Peterson, 2005, 2009; Schutte & Malouff, 2019), PYD (Niemiec, 2013), and flourishing (Keyes, 2002).

1.3.1 Character Strengths Measurement

Two inventories based on the VIA classification of strengths have been developed to assess character strengths among adults (Peterson et al., 2005) and youth (Park & Peterson, 2006b). The inventories were developed to operationalize the 24 character strengths identified and selected in the VIA classification of strengths. Peterson and colleagues (2005) pilot tested many items designed to measure each character strength and removed/replaced items that were poorly correlated until Cronbach's alpha for each scale exceeded .70. The VIA surveys allow for within and between individual comparisons. Upon completing the self-report questionnaires, individuals are provided with information regarding their strengths. The VIA classification of strengths and VIA inventories have been employed in numerous research studies and interventions and are used extensively worldwide by researchers and practitioners (Gander et al., 2020; Hall-Simmonds & McGrath, 2019; Heintz et al., 2019; Niemiec, 2013).

The original VIA Adult Survey was designed as a 240-item self-report questionnaire that comprehensively assessed the 24 character strengths among adults 18 and older using a 5-point Likert scale ranging from 1 (very much unlike me) to 5 (very much like me; Park & Peterson,

2009; Peterson & Seligman, 2004; Peterson et al., 2005). The current VIA Adult Survey that is available for free online consists of a 96-item questionnaire that assesses the 24 character strengths (VIA Institute, 2021). Similarly, the VIA Youth Survey, which was originally developed as a 198-item self-report questionnaire that assesses the 24 character strengths among youth aged 10 to 17 (Park & Peterson, 2006b), has been reduced to 96-items, and has been separated into two versions, one for youth aged 8 to 12, and the second for youth aged 13 to 17 (VIA Institute, 2021). The items consist of behaviours, feelings, attitudes, and perceptions that reflect each character strength. Both measures have established good psychometric properties (Park & Peterson, 2006b; Peterson et al., 2005; Ruch et al., 2014). The versions available online are revised periodically based on the latest research and current state of the field. For example, the current VIA Youth Surveys available online are piloting seven additional questions for a secular definition of spirituality that does not include language about religion or religious faith (VIA Institute, 2021).

1.4 Character Strengths in Young Children

Despite this burgeoning area of research, very little attention has focused on understanding and assessing character strengths in young children (Shoshani & Shwartz, 2018). The capacity for many character strengths is thought to emerge as early as the first year of life, and begin to consolidate around age three (Park & Peterson, 2006a). While the manifestations of character change across time and development, many components of good character are theorized to be present in young children, and individual differences exist (Park, 2004; Park & Peterson, 2005). Character development in childhood is thought to rely on developing social, emotional, behavioural, and cognitive skills (e.g., recognizing other people's perspectives,

engaging in prosocial behaviour; Shoshani & Shwartz, 2018) and thus, childhood may be a particularly dynamic developmental phase in which to better understand character strengths.

Promoting good character among children is a priority for families, schools, and communities at large both because of character strengths' positive associations with desired outcomes (e.g., happiness, school success) and their negative associations with behavioural and emotional problems (e.g., aggression, depression). Understanding early manifestations of character strengths is thus important for forwarding much PYD research and practice. While PYD theory is typically applied to youth aged 10 to 18, given that character strengths are central to PYD, it is crucial to establish a solid foundation for PYD early in life. In order to understand how character strengths form and develop, valid and reliable measures appropriate for young children are needed (Shoshani, 2019). There are a number of obstacles to measuring character strengths in young children including their cognitive abilities, reading level, and partially developed self-awareness (Shoshani & Shwartz, 2018). As noted above, the vast majority of VIA character strengths research has employed self-report inventories to assess character strengths which is a method largely unsuitable for young children.

In an attempt to address this important gap in understanding regarding the development of character strengths in young children, Park and Peterson (2006a) were the first to examine character strengths among children aged 3 to 9 via parent descriptions of their child. In their seminal study, they instructed caregivers to write about their child's personal characteristics and individual qualities and used deductive content analysis to code for the presence of each of the 24 character strengths in the caregivers' written descriptions. Evidence of all 24 character strengths was found in the written descriptions with the most prevalent character strengths in young children being love, kindness, creativity, humour, and curiosity (Park & Peterson, 2006a).

The least prevalent character strengths in young children were honesty, gratitude, humility, forgiveness, judgment, hope, and appreciation of beauty and excellence (Park & Peterson, 2006a).

For many years, this was the only study to assess VIA character strengths in children below the age of 10 (Park & Peterson, 2006a). In 2014, Lottman and Zawaly partially replicated Park and Peterson's (2006a) study in unpublished data¹. In addition, a recent study examining which character strengths were most observed in young children by early childhood teachers found that the strengths of curiosity, love, love of learning, creativity, and kindness were most prevalent (Sop & Bişkin, 2021). In 2018, Shoshani and Shwartz developed a 96-item self-report character strengths inventory for children aged 7 to 12 using the VIA classification. The items were written with developmentally and age-appropriate language. Similar to the VIA questionnaires, the items are rated on a 5-point Likert scale ranging from 1 (not like me at all) to 5 (very much like me; Shoshani & Shwartz, 2018). Shoshani (2019) also recently developed a 96-item parent-report character strengths inventory for children aged 3 to 6. The development of the questionnaire was largely theory driven and began with a pool of 144 items, eliminating and replacing ones that reduced Cronbach's alpha, and ensuring that each of the 24 character strength scales consisted of a single factor (Shoshani, 2019).

Much like the written description in Park and Peterson's (2006a) study, evidence of all 24 character strengths was found on preliminary parent-report questionnaire data of children aged 3 to 6 (Shoshani, 2019). The preliminary studies on the development of character strengths inventory for children aged 7 to 12 (Shoshani & Shwartz, 2018) and of the character strengths inventory for young children aged 3 to 6 (Shoshani, 2019) found support for a four factor model

¹ The only information available publicly from Lottman and Zawaly's (2014) partial replication is a table of the most prevalent strengths found in their sample (included in Table 6).

of character strengths including interpersonal strengths (e.g., love, kindness), intellectual strengths (e.g., love of learning, curiosity), temperance (e.g., self-regulation, forgiveness), and transcendence (e.g., hope, gratitude, humour). However, due to the limited research on character strengths in young children, much information about character development at a young age is unknown (Shoshani & Shwartz, 2018) and research on character strength development in young children remains in its infancy.

1.4.1 Sex Differences

There have been some reported sex differences in the degree of youth's character strengths. While it has generally been difficult to find consistent support for sex differences in the literature, several studies with adults have found females to be consistently higher on strengths of love and kindness than males (e.g., Linley et al., 2007; Miljkovic & Rijavec, 2008; Shimai et al., 2006). Researchers have attributed these differences to sex/gender roles and expectations (Shoshani & Shwartz, 2018). A more recent meta-analysis found that sex differences in character strengths tend to be small, and include females scoring higher on strengths of appreciation of love, kindness, beauty and excellence, and gratitude (Heintz et al., 2019). For children aged 7 to 12, female children were found to have higher ratings on all four strength factors (i.e., interpersonal, intellectual, temperance, and transcendence) than male children using questionnaire methodology (Shoshani & Shwartz, 2018). For children aged 3 to 6, Shoshani (2019) found that caregivers reported higher levels of intellectual strengths in female children than male children. Although some sex differences emerge from these handful of studies, further research is needed to examine sex differences of individual character strengths in young children.

1.4.2 Age Differences

As discussed previously, the dynamic context of development may impact character strengths and consistent with this notion, age differences have also been observed in preliminary research. Specifically, Shoshani and Shwartz (2018) found that children aged 7 to 8 exhibited lower levels of interpersonal strengths (e.g., love, kindness), temperance strengths (e.g., self-regulation, forgiveness), and transcendence strengths (e.g., hope, gratitude, humour) than children aged 9 to 12 and attributed the differences to differences in cognitive and emotional maturity which are known to increase with age. Children aged 5 to 6 exhibited lower levels of intellectual strengths (e.g., love of learning, curiosity) and higher levels of interpersonal strengths (e.g., love, kindness) than children aged 3 to 5 (Shoshani, 2019). Taken together, this research suggests that how character strengths manifest may vary across developmental phases.

Overall, the small number of cross-sectional studies make it difficult to interpret sex and age trends. In general, character strengths seem to follow developmental trajectories, such that character strengths that are relatively less common in young children and more common in adults require more cognitive and emotional maturation (Park & Peterson, 2006a, 2006b, 2006c). However, these trends may also be a function of methodological limitations or a lack of sensitivity to detect character strengths in young children. More research is required to better understand character development. My dissertation aimed to find support for and extend previous research findings using more rigorous methodology and increased scope (described in detail below) to detect character strengths in young children aged 4 to 6 attending full-day kindergarten.

1.5 Outcome Research

In the classification of strengths handbook, Peterson and Seligman (2004) describe positive outcomes associated with each of the 24 VIA character strengths. Overall, character strengths have been found to relate to various positive outcomes including wellbeing, happiness, life satisfaction, positive emotions, and resilience across samples of children aged 3 to 12, (e.g., Park & Peterson, 2006a, 2009; Shoshani, 2019; Shoshani & Shwartz, 2018), adolescents (e.g., Blanca et al., 2018; Gillham et al., 2011; Park & Peterson, 2006b), and adults, (e.g., Baumann et al., 2020; Brdar, 2011; Brdar et al., 2011; Peterson et al., 2007; Wagner, Gander, et al., 2020; Wood et al., 2011). Character strengths have also been found to buffer against negative outcomes including life stressors (e.g., Harzer & Ruch, 2015) and symptoms of psychopathology (e.g., Azañedo et al., 2021; Gander et al., 2013; Huta & Hawley, 2010; Niemiec, 2013) in adult samples.

In addition, character strengths are known to be associated with a range of educational outcomes including academic achievement, school satisfaction, positive relationships at school, positive school functioning, and positive classroom behaviour (e.g., Duckworth, 2016; Shoshani & Slone, 2013; Wagner & Ruch, 2015; Wagner et al., 2020; Weber & Ruch, 2012; Weber et al., 2016). Character strengths of love of learning and perseverance tend to be associated with many educational outcomes, with additional strengths relevant depending on the variables examined. For example, in a study of youth (aged 10 to 14), character strengths of the mind (e.g., self-regulation, perseverance, love of learning) predicted academic achievement (i.e., grades; Weber & Ruch, 2012).

Of most relevance to the current research, character strengths have been associated with positive outcomes in youth aged 10 to 18 including wellbeing indicators, school adjustment, and

prosocial behaviour (e.g., Gillham et al., 2011; Kor et al., 2019; Park & Peterson, 2006b; Ruch et al., 2014; Shoshani & Slone, 2013; Toner et al., 2012; Van Eeden et al., 2008; Weber et al., 2013). The benefits of character strengths have contributed to the development of various programs and interventions to foster character strength development (e.g., Berkowitz & Bier, 2004; Lavy, 2020; Waters, 2011), and to better understand the emergence of strengths in children. Given the nascent state of character strength research with young children, little is known about how character strengths relate to wellbeing and functioning in this population (Shoshani & Shwartz, 2018).

1.5.1 Character Strengths and Child Functioning

As described in more detail in this next section, my dissertation examined associations with three aspects of child functioning, including happiness, difficulties, and prosocial behaviour. The decision to include these variables was theoretically and empirically informed. Specifically, the dual continuum model of wellbeing purports that mental illness and mental wellbeing are two distinct concepts that merit unique attention (Keyes, 2002). As such, an individual can vary on a continuum of mental health (or wellbeing) and also mental illness (or illbeing; Keyes, 2002). For example, a young child may have high levels of aggression and also demonstrate strong friendships and engagement in their extracurricular activities. Considering aspects of wellbeing and illbeing simultaneously in research design has also been forwarded as an appropriate antidote to prominent criticisms of positive psychology research more generally (e.g., Gruman et al., 2018) which include that positive psychology is too focused on positive qualities at the exclusion of negative ones (Held, 2004; Lazarus, 2003). Therefore, to examine aspects of child functioning that may contribute to both continua, both positive and negative aspects of functioning were included in this dissertation. The functioning variables chosen are

also developmentally appropriate and are consistent with functioning variables that have been explored in the limited previous research on character strengths in young children (Park & Peterson, 2006a; Shoshani, 2019). Specifically, Park and Peterson (2006a) examined happiness, while Shoshani (2019) examined difficulties and prosocial behaviour. Including these variables maintains consistency with previous research, while also building upon it by examining all three variables within one investigation.

1.5.2 Character Strengths and Child Happiness

All character strengths are thought to contribute generally to happiness; however, some character strengths evidence stronger relations with happiness than others (Park & Peterson, 2006a). Among adults and youth, strengths of love, gratitude, hope, and zest have been found to have the strongest relations with life satisfaction (Park & Peterson, 2006b; Park et al., 2004). Happiness is most often associated with strengths of the “heart” (e.g., love, kindness, gratitude), which promote interpersonal relationships, than with strengths of the “head” (e.g., love of learning, curiosity, creativity), which are more intrapersonal in nature (Park & Peterson, 2006b, 2010; Park et al., 2004). The strength of humility has been found to have the weakest relation with life satisfaction (Park et al., 2004; Shimai et al., 2006).

The two studies examining younger children (one of children aged 3 to 6 based on caregiver-report questionnaires, and one of children aged 3 to 9 based on caregiver descriptions) found that particular character strengths relate to young children’s wellbeing most strongly. In the study of children aged 3 to 9, gratitude was associated with happiness, but only for children aged 7 and older (Park & Peterson, 2006a). Most notably, strengths of love, hope and zest were related to happiness in both studies (Park & Peterson, 2006a; Shoshani, 2019), and love of learning was also associated with happiness in the younger sample (Shoshani, 2019).

1.5.3 Character Strengths and Child Difficulties

Character strengths have been negatively associated with internalizing and externalizing difficulties. For example, character strengths of hope, zest, and leadership were found to be related to fewer symptoms of anxiety and depression in a sample of middle school students (Dahlsgaard et al., 2005; Park & Peterson, 2006b). In addition, character strengths of persistence, honesty, prudence, and love were related to fewer externalizing problems such as aggression in a sample of middle school students (Park & Peterson, 2006b). Character strengths of hope, self-regulation, and zest were related to less negative emotions in a sample of 5th and 8th grade students (Park & Peterson, 2006b).

Difficulties such as emotional or behaviour difficulties are evident in many preschool children and have both short- and long-term consequences (e.g., peer rejection, continued difficulties; Hemmeter et al., 2006). Yet, only one study to date has examined the relation between character strengths and difficulties in younger children. Specifically, negative emotions were found to be significantly negatively associated with all character strengths except for perspective, forgiveness, judgment, humility, and honesty (Shoshani, 2019). Similarly, difficulties measured on the Strengths and Difficulties Questionnaire (consisting of emotional, behavioural, and social difficulties) were also found to be significantly negatively associated with all character strengths except for perspective, humility, and honesty (Shoshani, 2019). More research on how character strengths associate with difficulties in young children is needed (e.g., examining how coded character strengths relate to difficulties such as aggression or noncompliance in young children).

1.5.4 Character Strengths and Prosocial Behaviour

Prosocial behaviour generally refers to behaviour that results in benefits for another person. In this dissertation, prosocial behaviour was behaviourally anchored by the questionnaire items used to assess it. Preschool is known to be one of the first places young children learn prosocial skills (Hemmeter et al., 2006). Yet, only one study to date has examined the relation between character strengths and prosocial behaviour in young children. Specifically, prosocial behaviour was found to be significantly positively associated with all character strengths except for bravery, humility, and honesty (Shoshani, 2019).

1.6 Character Strength Assessment in Young Children

Very limited extant research has explored character strengths in young children. As noted previously, only two studies (one of which is unpublished) have attempted to code character strengths in written descriptions of young children (Lottman & Zawaly, 2014; Park & Peterson, 2006a), and one study has developed a questionnaire to capture strengths in this age group (Shoshani, 2019). While caregiver questionnaire ratings can provide some information of value, questionnaires may be most valuable when supported by a solid understanding of the construct on which the items are based to promote construct and face validity in addition to reliability (Flake & Fried, 2020; Lilienfeld & Strother, 2020). To improve the validity of character strength assessment in young children, further understanding of the nuances of how character strengths may manifest in this age group is needed. Such research aims to be informative in its own stead and also to better support future quantitative measure development and practice. Mixed method inquiry which incorporates both qualitative and quantitative approaches is ideally suited to meet this need, because character strengths in young children is a relatively new area of research in which downward extensions from research with adults have been applied. Specifically, the VIA

taxonomy (Peterson and Seligman (2004) was not conceptualized as a developmental model, rather work has been done to apply it to children and adolescents (Park & Peterson, 2006a; Shoshani, 2019; Shoshani & Shwartz, 2018). Such downward extensions may not be as relevant at this developmental stage and require greater construct scrutiny which qualitative research can provide. Relying on caregiver descriptions of their child (vs. questionnaire responses), permits a more nuanced understanding of what character strengths might look like in young children from a naturalistic perspective. Along these lines, caregiver verbal narratives provide a relatively naturalistic way to solicit caregiver-derived descriptions of their children.

Extant qualitative research on character strengths in young children has relied on caregiver descriptions of their children in written form (Park & Peterson, 2006a). Written description methodology poses several challenges related to logistics (e.g., caregivers need to have access to a computer), diversity of sample (e.g., caregivers need to have literacy skills), and methodological issues relating to lack of empirical control (e.g., indefinite variability on how long caregivers have to think of their responses and edit their responses). Collecting speech samples (instead of written ones) would address most of the challenges described above and may advance this area of research by potentially allowing for a more inclusive methodology. Further, the use of speech samples in psychological research is a well-established methodology (e.g., the Five Minute Speech Sample; Magana et al., 1986), that has been adopted by developmental research (e.g., McCarty et al., 2004). Speech samples possess several advantages in that they are relatively simple for caregivers to provide, they are open-ended, brief, and easily adaptable. For all these reasons, I opted to collect descriptions via speech samples for this dissertation. Similar to written samples, the use of speech samples allowed caregivers to speak broadly about their children and describe aspects that were most salient to them. In addition, caregiver descriptions

have the potential to provide a more comprehensive understanding of character strengths in young children than questionnaire methodology has been able to provide.

1.7 Dissertation Overview

Despite the substantial advancement of positive psychology research with older children, adolescents, and adults (Rusk & Waters, 2013; Waters & Loton, 2019), there is a significant paucity of knowledge when it comes to the understanding of character strengths in young children. The minimal extant character strength research with young children has typically considered a broad developmental range from 3 to 9 years old. The social, emotional, and cognitive development occurring within this range is remarkable, and to build a stronger foundational research base, more attention must initially be paid to a narrower span of development. Thus, my dissertation focused on the first two years of public schooling in Canada (i.e., junior and senior kindergarten; spanning ages 4 to 6). These years, during which children transition to school, are typically viewed as an important time for the development of an increasingly autonomous self and greater independence (McClelland et al., 2007). Kindergarten is also a time in which children learn critical social and emotional skills (Coskun, 2019) as well as set a foundation for learning competencies that continue to be drawn upon across development. The broad aim of my dissertation was to develop a better understanding of young children's character strengths, via their caregivers' descriptions, so as to enhance the current empirical understanding while also providing practical knowledge for parents, educators and other stakeholders about considerations for character strength development.

Despite multiple efforts to contact the researchers who have conducted the limited qualitative research in this area in an attempt to build on what they started, information about the specifics of the coding manual used in Park and Peterson's (2006a) study was unattainable. This

unavailability of a detailed coding manual underscored the need to create a coding system to better understand and capture character strengths in young children, and to be widely available to strengthen future research inquiry. While Park and Peterson (2006a) coded for the presence of each character strength from caregiver descriptions of young children, my dissertation also aimed to build upon this research by broadening how strengths were coded in an effort to capture greater depth and nuance regarding caregivers' descriptions of their children's strengths. More specifically, given that individual differences in character strengths vary by degree (Linkins et al., 2014), character strengths must be assessed in ways that allow gradations, in addition to mere presence. Therefore, in addition to coding for the presence of each character strength, my dissertation research introduced coding for frequency and magnitude of each character strength, as well as the intensity of each character strength via the computation of a product variable to capture both the frequency and magnitude of each strength within one variable (more information and examples to follow in the methods section). Capturing variations in degree of character strengths from descriptions was both novel and exploratory. In addition, given that research on character strengths in young children is scarce, exploring associations between character strengths and demographic variables as well as aspects of child functioning were further goals of my research. Overall, my dissertation sought a better understanding of young children's character strengths via their caregivers' descriptions using an exploratory sequential mixed method design.

2 Research Goals, Questions, and Hypotheses

The first research goal of my dissertation was to develop a rigorous coding system for identifying early childhood character strengths from caregiver descriptions and document the coding system to promote replication via a coding manual. As part of this goal, expanding on

coding for presence of strengths to capture individual differences in gradations of strengths was a priority.

The second goal was to find support for and extend the results of the limited extant research on character strengths in young children in this dissertation's sample, with this more rigorous methodology (i.e., detailed coding manual). The research question aligned with this goal was: Which character strengths are most prevalent in kindergarten aged children? In line with previous research, it was expected that caregivers' descriptions would highlight character strengths similar to the ones identified in Park and Peterson's (2006a) study as being the most prevalent in kindergarten aged children including love, kindness, creativity, humour, and curiosity.

The third goal was to explore associations between child character strengths and descriptive characteristics of the sample. Associations between the presence and intensity of character strengths with key participant demographics (i.e., caregiver age, sex, marital status, race, and level of education) were examined. These analyses were descriptive and exploratory; therefore, no formal hypotheses were made.

The fourth goal was to examine how early childhood character strengths associate with childhood functioning. The first research question aligned with this goal was: Which character strengths are associated with happiness in kindergarten aged children? In line with previous research, it was expected that strengths of love, zest, and hope would be associated with happiness (Park & Peterson, 2006a; Shoshani, 2019). The second research question aligned with this goal was: Do character strengths associate with child difficulties in kindergarten aged children? It was expected that higher reported strengths would be associated with better functioning, and therefore character strengths would be negatively associated with child

difficulties. The third research question aligned with this goal was: Do character strengths associated with prosocial behaviour in kindergarten aged children? It was expected that higher reported strengths would be associated with better functioning such that character strengths would be positively associated with prosocial behaviours. Associations between individual character strengths and child difficulties/prosocial behaviour were exploratory; therefore, no formal hypotheses were made.

3 Method

3.1 Research Personnel

A team of 14 research assistants contributed to various parts of this project. One research assistant helped conduct pilot study interviews, a second helped transcribe them, and a third helped compile consent packages. Six research assistants helped conduct the caregiver interviews, and another helped distribute gift cards to the caregivers following their participation. Four research assistants helped transcribe the caregiver interviews (approximately 40 interviews each).

A coding manual development committee consisting of the lead researcher (myself), my advisor, as well as two graduate and two undergraduate students, selected based on their developmental educational and clinical background, also contributed to this project. The two undergraduate students on the committee proceeded to code the transcripts. All research personnel were managed by the lead researcher (myself).

3.2 Pilot Study Data Collection

Caregivers on the parent council board of the Wellington Catholic District School Board were invited to participate in a pilot study in which the caregiver interview questions (see Appendix A) were administered to collect sample data. Convenience sampling within this pool

was utilized. The purpose of the pilot study was to use the data to further refine the character strength coding scheme. Thirteen caregivers participated in the pilot study. The lead researcher and a research assistant conducted the interviews. The audio recordings were then transcribed for the coding manual development committee's use.

3.3 Main Data Collection

3.3.1 Participants

Participants were caregivers of children in full day kindergarten in the Wellington Catholic District School Board, a public school board in Southwestern Ontario, Canada. All data were collected prior to the Covid-19 pandemic. One hundred and forty-seven caregivers completed the caregiver interview in which they provided a description of their child and subsequently answered additional questions that were beyond the scope of the present research (see Appendix A); 122 of them continued on to complete the questionnaire (see Appendix B). Most caregivers completed the questionnaire within a day or two, though some needed multiple reminders to do so ($M = 2.67$ days, $SD = 7.80$). Caregivers ranged in age from 24 to 50 ($M = 36.67$, $SD = 4.30$). Respondents were predominantly female (88.7 percent), married (88.5 percent), educated with a college/university degree or higher (83.7 percent), and had more than one child ($M = 2.32$, $SD = 1.02$).

Results of the demographic questionnaire are shown in Table 2. The children described ranged in age from 4 to 6 ($M = 4.80$, $SD = .71$), of which 56.5 percent were male and 43.5 percent were female. Information on gender was not collected, and thus we cannot be sure whether any of the children described in this study may have been gender diverse or non-conforming. Most children were identified as white (86.1 percent) and did not have a history of serious illness or disability (90.98 percent).

3.3.2 Procedures

Ethics clearance was obtained from the research ethics board at the University of Guelph, and the Wellington Catholic District School Board. The study was funded by a small stipend provided by the lead researcher's advisor and the approximate cost involved was \$1500. A total of 1903 consent packages (which included information about the study and a consent form) were compiled and distributed to the kindergarten teachers across all 18 schools in the board. The teachers then sent the packages home to caregivers via their children. Caregivers interested in participating in the study had the option to return their signed consent forms to their child's teacher or email it directly to the lead researcher.

While 473 caregivers consented to participate in the project (25 percent response rate), many were unable to be reached at the contact number they provided. Caregivers who consented to participate in the study were contacted by a research assistant to complete the caregiver interview by phone. Subsequently, caregivers were asked to complete an online survey including a demographic questionnaire and a self-report measure of their child's wellbeing. While the sequencing may have made it less likely for caregivers to complete the questionnaire, the interview was administered first to ensure that the interview content collected would not be affected by any priming effects from the questionnaire items.

3.3.3 Measures

3.3.3.1 Caregiver Interview. The caregiver interview consisted of five questions which were part of a larger study (beyond the scope of my dissertation; see Appendix A for all five questions). Administration guidelines were informed by the manual for coding the Five Minute Speech Sample using the Family Affective Attitude Rating Scale (Bullock et al., 2005). A complete description of administration instructions for the caregiver interview can be found in

the coding manual (see Appendix C). Caregiver responses were audio recorded, transcribed, and coded, as described below.

Caregivers were given the following general instructions about the interview by the research assistants conducting the interview: “The interview will take about 15 minutes to complete. I will ask you five questions about your kindergarten child (insert name of child). For each question, you’ll have three minutes to respond and you can say anything that comes to mind. Don’t worry if you stumble on your words or make a mistake. It may feel a bit awkward because this is not a conversation, and I will not be saying anything while you share your answers. It would be useful if you can try to speak for as much of the three minutes as possible. If you go beyond three minutes, I will let you know so we can move on to the next question, and if you finish before the three minutes are up, let me know and we’ll move on”.

The first of the five questions was specific to this study. Caregivers were asked to verbally describe their child following the method outlined in Park and Peterson’s (2006a) study. Respondents were given the following verbatim instructions: “Please tell us about your child. We are interested in their personal qualities. Even small details are of interest. If you want, you can share a story about your child that captures what he or she is all about.”

The following guidelines were given to the research assistants for how to address caregiver questions asked before or during the interview:

1. Question: “What do you want me to tell you?”

Response: Repeat the given interview question.

2. Question: “Am I doing okay?”

Response: Yes, please continue.

3. Question: “Do you want me to go on?”

Action: Wait 15 seconds before prompting because they often continue talking on their own. If they do not continue talking, move on to the next question.

4. Question: “How much time do I have left?”

Response: Tell them how much time is left of the three minutes.

The following instructions were given to the research assistants for how to address additional issues or concerns during the interview:

1. Issue: Caregiver stops speaking before the three minutes have elapsed.

Action: Wait 15 seconds before prompting because they often continue talking on their own. If necessary, prompt once by saying, “Please tell me anything about (insert child’s name) for a bit longer”.

2. Issue: Caregiver continues speaking after the three minutes have elapsed.

Action: Allow them to finish their thought and then say, “Thanks, the three minutes are up”.

3. Issue: Caregiver lets you know they have nothing more to say.

Action: Move on to the next question.

3.3.3.1.1 Transcription Procedures for the Caregiver Interview. Four research assistants transcribed the caregiver interviews verbatim from the audio recordings, with the exception of removing any identifying information. More specifically, the children’s names were replaced with a capital X. Similarly, if other people were named in the interviews, their names were replaced with their relation to the child if the relation to the child was known (e.g., mother/father, sibling, friend), or replaced with the letter Y if the relation to the child was not known.

Time stamps indicating the start and end of each response were noted, as well as when the three-minute mark was reached for any responses that exceeded three minutes. All interviews were double transcribed, meaning that they were initially transcribed by one research assistant, and then reviewed and checked for accuracy using the original audio recordings by a second research assistant. In rare cases in which a response segment was inaudible or incomprehensible to the first transcriber, the second transcriber was often able to clarify the part that was unclear.

3.3.3.2 Demographic Questionnaire. Caregivers were asked to provide some demographic information about themselves, including sex², marital status, and level of education, and about their child, including age, sex, and race (see Appendix B).

3.3.3.3 Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). The SDQ is a 25-item caregiver-report questionnaire for children aged 3 to 6. The SDQ is designed to measure general mental health and wellbeing, and is made up of five subscales (i.e., emotional problems, conduct problems, hyperactivity, peer problems, and prosocial behaviours). A total difficulties score is calculated by summing the scores from all scales except the prosocial behaviours scale (higher scores indicate more difficulties). Examples of prosocial behaviour items on the SDQ include being considerate of other people's feelings and sharing readily with other children. The SDQ has been widely used in research (e.g., Goodman, 2001; Mellor, 2004). It demonstrated good validity and reliability for the total difficulties score (*Cronbach's* $\alpha = .81$), and for the prosocial behaviour score (*Cronbach's* $\alpha = .70$) in the current study. Throughout my dissertation,

² There was an error on the demographic questionnaire such that gender and sex were inadvertently conflated by asking about gender and using terms that typically refer to biological sex (i.e., male, female). Given the terms offered as response options and the fact that caregivers were reporting on sex/gender for themselves and their children, I have opted to maintain consistency with the terms provided by referring to the variable as "sex" throughout my dissertation.

“child difficulties” refers to total difficulties measured by the SDQ, and “prosocial behaviour” refers to prosocial behaviour measured by the SDQ.

3.3.4 Coding Manual Procedures

3.3.4.1 Developing a Coding System and Manual (Goal 1). The first goal of my dissertation was to develop a coding system to identify early childhood character strengths from caregiver descriptions, for use in this research as well as to strengthen future child character strengths research. The method used to develop the early childhood character strengths coding manual is described below. The completed manual can be found in Appendix C.

3.3.4.2 Development and Refinement of the Early Childhood Character Strengths Coding Manual. The early childhood character strengths coding manual was created using a deductive approach. This approach entailed utilizing the pre-existing VIA character strength framework to organize the manual and develop codes and contextual exemplars of the 24 VIA character strengths. The overarching aim was to build on previous research on character strengths and extend its application and utility to better capture character strengths in kindergarten aged children. The process of creating the coding manual is described below and was guided by the framework outlined in Chorney and colleagues (2015) for developing and modifying coding schemes.

3.3.4.2.1 Developing a List of Codes. Initial codes were drawn from previous character strength research. The creation of the coding manual began with the operational definitions of each of the 24 character strengths from Peterson and Seligman’s (2004) initial classification of character strengths. As in Park and Peterson’s (2006a) study, the basis of the coding scheme also included the 24 character strength names and obvious synonyms and descriptors. For example, the coding scheme for the character strength of humour included descriptors such as humourous,

funny, hilarious, and playful. Similarly, the coding scheme for the character strength of kindness included descriptors such as compassionate, generous, helpful, and nice.

The coding scheme was expanded to include examples that demonstrated a display of the character strengths, including behaviours that exhibit evidence of the strengths. The use of behavioural exemplars is a standard and expected approach for this type of coding as based on previous research in this area (e.g., Park & Peterson, 2006a). Initial examples were informed by the limited previous research examining character strengths in young children. Specifically, examples were drawn from Park and Peterson's (2006a) study of character strengths in young children and Shoshani's (2019) development of the character strengths inventory for early childhood (CSI-EC). For example, descriptions such as "likes to tell jokes", or "makes others laugh" were included as examples that would get coded as the character strength of humour. Similarly, "loves school" and "loves to read" were included as examples for love of learning, and "likes helping others", "shares toys" and "tries to cheer people up" were included as examples for kindness.

Consistent with Park and Peterson's (2006a) study and the original classification of strengths (Peterson & Seligman, 2004), information that described a negative feature or behavior was listed as exclusion criteria in the coding scheme. For example, a description such as "plays mean practical jokes on others" was not coded as humour.

3.3.4.2 Refining Operational Definitions of Codes. The coding manual development committee was established to further build upon inclusion and exclusion criteria for each character strength. Given the committee's educational and clinical background specializing in child development, the group was particularly well suited for grappling with nuances of various child behaviours and potential caregiver descriptions to elaborate on the coding scheme. The

committee reviewed the inclusion and exclusion criteria and provided feedback that was taken into account to modify the coding scheme as needed. This intensive process unfolded over several months with multiple meetings to discuss and resolve inconsistencies by consensus with respect to the coding criteria.

3.3.4.2.3 Determining the Sampling Strategy. While Park and Peterson (2006a) coded for the presence of each character strength, this study aimed to broaden how strengths were coded to capture more nuance including individual variations in degree of character strengths. More specifically, in addition to coding for the presence of each character strength, the coding manual included guidance for coding frequency and magnitude of each character strength, as well as the intensity of each character strength via the computation of a product variable that captured both the frequency and magnitude of each strength within one variable.

The frequency of each character strength was defined as the number of total mentions (e.g., character strength name, synonym, description, or example of strength) in each caregiver description. The magnitude of each character strength was defined as the depth of the descriptions/behaviours, taking into account qualifiers. For example, a child described as being “extremely funny, always trying to make others laugh” would be given a higher magnitude rating for the character strength of humour than a child described as “sometimes [having] a good sense of humour” (see coding manual for more detail regarding precise response items, Appendix C).

3.3.4.2.4 Piloting and Refining the Coding Manual; Applying Coding Scheme to Sample Observations. A pilot study was conducted in which the questions for the caregiver interview were administered to collect sample data. Caregivers on the schoolboard’s parent council were invited to participate in the pilot study. Thirteen caregivers (12 female, 1 male), with children aged 3 to 8, completed the interview and the audio data were transcribed. Each

member of the coding manual development committee independently coded the data from the pilot study using the preliminary coding scheme, and then reconvened as a group to share results, examples they were unsure of, and questions for further consideration. Many detailed discussions ensued as nuances of descriptions were explored for clarification.

The pilot data were most helpful in adding exclusion criteria examples and descriptions. For example, the committee agreed that a child described as being “in a silly mood” did not capture that character strength of humour, and was therefore listed as an exclusion criterion. Similarly, activities such as “writing” or “singing” were not deemed as the child using the character strength of creativity, unless the context suggested otherwise (e.g., “writing their own songs/stories”, “singing songs they made up”). Further, if a description was ambiguous about which character strength it may have been capturing, it was not coded. For example, a child who was described as being “good at going into new situations” may use a combination of curiosity and social intelligence, but such an example was considered unclear or too limited without further contextual information, and therefore was not coded as a character strength.

3.3.4.2.5 Providing Instructions on Implementation of the Coding Scheme. Detailed instructions for implementing the coding scheme can be found in the coding manual (see Appendix C). Caregiver descriptions of their children were coded from transcribed audio recordings. Coding was completed by two knowledgeable coders using MAXQDA software, and any discrepancies between coders were resolved as a group through discussion until consensus was reached (Campbell et al., 2013; O’Connor & Joffe, 2020).

3.3.5 Character Strengths Coding Procedures

The character strengths coding scheme was applied to the caregiver interview question by two knowledgeable coders. They were involved in the project as members of the coding manual

development committee and were extensively trained and familiar with the coding scheme (see Table 3 for example codes for each character strength). Ten percent of the data were randomly selected to examine inter-rater reliability before coding the entire dataset (Gheyle & Jacobs, 2017; Kaid & Wadsworth, 1989; Wimmer & Dominick, 1991). The entire dataset was then coded by both coders and any discrepancies in coding were resolved as a group through discussion until consensus was reached. Inter-rater reliability for the complete dataset was high (*Cohen's Kappa* = .89).

Coders were instructed to read each transcript in its entirety before beginning to assign codes. They were instructed to code based on only substantive information that was contained within the transcript (i.e., not to make interpretations or inferences about statements). In order to capture information about current displays of character strengths, codes focused on current attributions or behaviours only. Consistent with Park and Peterson's (2006a) approach, historical information was not coded unless the caregiver specifically indicated that the attribution or behaviour described was current or ongoing. General narratives that did not specifically relate or link directly to the child they were describing (e.g., "kids can be so funny") were disregarded. In addition, caregiver reports of how other people view their child (e.g., "his/her teachers say he/she is eager to learn") were not coded in an effort to maintain consistency with Park and Peterson's (2006a) approach.

Character strengths content could be found anywhere in the transcripts. Each sentence could contain zero, one, or multiple pieces of information about a child's character strengths. Similarly, information about more than one character strength could be present in a given sentence. For example, if a child was described as "kind, loving, and creative", each word was coded independently to capture each of the three character strengths listed in the sentence. In

addition, when a caregiver named one character strength, and provided an example that demonstrated a different character strength in the same sentence, each piece of information was coded independently to capture both character strengths. For example, if a caregiver said: “X is so funny, he loves to make up stories”, “funny” was coded under the character strength of humour, and “loves to make up stories” was coded under the character strength of creativity. A single word/idea was not coded as more than one character strength. For example, a description such as “caring” was not coded as both kindness and love, it was coded under the character strength of love, as indicated in the coding manual (see Appendix C).

3.3.5.1 Coding for Character Strengths. To deepen and broaden the detection of character strengths in kindergarten aged children via their caregivers’ descriptions, four aspects of character strengths were coded. This included character strength presence (CSP), character strength frequency (CSF), character strength magnitude (CSM), and character strengths intensity (CSI). Each coding category is described below.

3.3.5.1.1 Character Strength Presence (CSP). As in Park and Peterson’s (2006a) study, each transcript was coded for the dichotomous presence or lack thereof (i.e., not yet observable or unable to determine) for of each character strength. Thus, it was possible for transcripts to contain between zero and 24 different character strengths. To calculate the total number of character strengths present in a transcript, results for each individual character strength were summed. For example, if a transcript mentioned strengths of kindness, humour, and creativity (with no mention of any other strengths), the total number of strengths present in the transcript would be 3.

3.3.5.1.2 Character Strength Frequency (CSF). For each character strength that was present in a transcript, the frequency (i.e., how many times the given strength was mentioned)

was captured. For example, if a child was described as “funny”, and the caregiver went on to explain the child “likes to tell jokes”, the character strength of humour would have a frequency of two occurrences (one for the descriptor, and one for the example). To calculate the total character strength frequency in a transcript, results for each individual character strength were summed. For example, if a transcript mentioned strengths of kindness once, humour twice, and creativity three times (with no mention of any other strengths), the total strength frequency in the transcript would be 6 (1 + 2 + 3).

3.3.5.1.3 Character Strength Magnitude (CSM). For each character strength, the magnitude (i.e., depth of the description) was also captured. The magnitude of each character strength was rated on a three-point scale. Magnitude ratings took into account qualifiers and the number of descriptions or examples provided, as follows.

0. No mention of given character strength.
1. Character strength not named but implied by description of one frequent and enjoyed activity/example OR character strength described with a limiting qualification (e.g., somewhat, occasionally), OR character strength described with no qualification.
2. Character strength not named but implied by description of several frequent and enjoyed activities/examples OR character strength described with an additive qualification (e.g., very, quite) OR character strength explicitly described with a superlative (e.g., extremely; always; unbelievably).

The magnitude rating coding scheme was informed by, and modified from, the scale used to capture child happiness in Park and Peterson’s (2006a) study.

3.3.5.1.4 Character Strength Intensity (CSI). To attempt to capture an overarching sense of how strengths-focused a particular caregiver’s description was in its entirety, a character

strengths product variable was computed, multiplying the character strength frequency score and character strength magnitude score (CSFxCSM). Higher scores on this variable were considered to indicate a combination of higher strengths magnitude and/or frequency. To calculate the total character strength intensity in a transcript, results for each individual character strength were summed. For example, if a transcript mentioned strengths of kindness once with an intensity of 1, humour twice with an intensity of 2, and creativity three times with an intensity of 1 (with no mention of any other strengths), the total strength intensity in the transcript would be 8 ($1 \times 1 + 2 \times 2 + 3 \times 1$).

The use of this variable expands on previous research that singularly examined the presence of character strengths by capturing how much character strengths content appears and the magnitude of the descriptions in one variable. Given that this study aimed to capture the complexity of human experience, this variable allowed for a potentially more nuanced or fine-grained way of examining character strengths in young children.

3.3.5.2 Child Happiness. Consistent with Park and Peterson's (2006a) approach, each transcript was also coded for a rating of child happiness using an eight-point scale, as follows.

0. Unhappy or chronically depressed.
1. No mention or implication of happiness.
2. Happiness not named but implied by description of one frequent and enjoyed activity.
3. Happiness not named but implied by description of several frequent and enjoyed activities.
4. Happiness described with a limiting qualification (e.g., somewhat happy, occasionally happy).
5. Happiness described with no qualification.

6. Happiness described with an additive qualification (e.g., very happy, quite happy).
7. Happiness (joy, cheerfulness) explicitly described with a superlative (e.g., extremely happy; always happy; unbelievably joyful).

Similar to the character strength coding procedure, each transcript was coded for a happiness rating by two coders and any discrepancies in coding were resolved as a group through discussion until consensus was reached. Ten percent of the data were randomly selected to examine initial inter-rater reliability prior to coding the rest of the dataset (Wimmer & Dominick, 1991). Inter-rater reliability for happiness across the entire dataset was high (*Cohen's Kappa* = .84).

4 Results

4.1 Descriptive Analyses for Study Variables (Goal 3)

One hundred and forty-seven caregiver interviews were conducted and transcribed (31 percent of the 473 caregivers that consented to participate). The interviews varied in length from 10 seconds to three minutes (which was the cut off), with a mean of 93.35 seconds ($SD = 45.49$). Similarly, the transcript word counts ranged from 14 to 494 words, with a mean of 198.35 words ($SD = 111.11$). Not surprisingly, there was a strong correlation between response duration and word count (see Table 4). Response duration and word count were not associated with most caregiver demographic variables including age, sex, marital status, and race, however they were associated with caregiver level of education (see Table 4). Specifically, caregivers who completed more education provided longer responses. Speech sample length and word count were also associated with character strengths present, and character strengths intensity, such that longer descriptions had more character strengths content. Caregiver level of education also

associated with character strength presence (marginally), and character strength intensity (see Table 4).

4.2 Expansion of Previous Research on Character Strengths in Young Children (Goal 2)

The second goal of this research was to find support for and extend the limited previous investigation of character strengths in young children with a more rigorous methodology. This dissertation examined which VIA character strengths were most prevalent in kindergarten aged children based on the strengths language caregivers used to describe their children. Speech samples may be a somewhat more accessible method than text data for qualitative analysis as they do not present the barriers that written responses do (e.g., literacy skills required for written responses).

In line with previous research, it was expected that caregivers' descriptions would highlight character strengths similar to the ones identified by Park and Peterson (2006a) as being the most prevalent in kindergarten aged children (i.e., love, kindness, creativity, humour, and curiosity).

4.2.1 Character Strengths Results

Twenty-three of the 24 character strengths were coded at least once in the data set. The number of unique character strengths mentioned per caregiver description varied from zero to eight. The average description contained mention of 2.96 unique character strengths ($SD=1.65$). The total strengths frequency (i.e., the total number of any mentions of character strengths) varied from zero to 23 per description, with a mean of 6.01 ($SD = 4.48$), and when combined with the character strengths magnitude ($M = 4.29$, $SD = 2.54$), the character strengths intensity ($CSFxCSM$) had a mean of 9.86 ($SD = 8.21$).

There was a positive moderate correlation between response duration and the number of strengths captured in caregiver descriptions. Not surprisingly, this correlation also extended to the character strengths intensity variable in the current study; see Table 4). Similarly, as expected, there was a moderate correlation between word count and number of strengths coded (CPS and CSI; see Table 4).

Overall, no significant differences between male and female children were found for total strengths present, $t(145) = -1.27, p = .21$, Cohen's $d = 1.65, 95\% CI = [-.54, .12]$, or for character strengths intensity, $t(145) = -1.13, p = .26$, Cohen's $d = 8.20, 95\% CI = [-.51, .14]$. However, sex differences were found for the presence of some specific character strengths. Results of independent samples t-tests that examined sex differences for the presence of each character strength are included in Table 5. Character strengths of love and creativity were more prevalent in descriptions of female children than male children, while character strengths of humour and prudence were more prevalent in descriptions of male children versus female children.

The strengths that emerged as most and least prevalent in this study were consistent with previous research, supporting Park and Peterson's (2006a) results and Lottman and Zawaly's (2014) unpublished partial replication (see Table 6). Strengths of kindness and love were the two most prevalent character strengths in descriptions of young children across all three studies. The most notable difference among the most prevalent strengths was that zest was more prevalent in this study.

4.3 Associations Between Early Childhood Character Strengths and Child Functioning (Goal 4)

The fourth goal of this research was to examine how early childhood character strengths associate with childhood functioning. This study examined associations between character

strengths and three indicators of child functioning including child happiness, child difficulties, and prosocial behaviour.

4.3.1 Child Happiness

The association between character strengths and child happiness ratings was examined. In line with previous research, it was hypothesized that strengths of love, zest, and hope would be associated with child happiness ratings. Additional exploratory analyses were conducted to further explore associations of individual character strengths and child happiness ratings.

The average happiness rating in this sample was 2.73 ($SD = 1.39$), with 80 percent of the ratings coded as a 2 or higher. This demonstrates that via caregiver descriptions, the large majority of children in this sample could be considered at least somewhat happy. No significant sex differences were found on happiness ratings between female ($M = 2.97$, $SD = 1.45$) and male children ($M = 2.55$, $SD = 1.36$), $t(145) = -1.80$, $p = .073$, Cohen's $d = 1.38$, $95\% CI = [-.87, .04]$. Child age negatively related to happiness, meaning that younger children were described with more happiness indicators than older children ($r = -.19$, $p = .036$, $95\% CI = [-.36, -.01]$).

Correlations were conducted to examine associations between character strengths (CSP and CSI) and child happiness ratings (see Table 7). With regard to character strengths present, child happiness was significantly positively associated with strengths of creativity, hope, and love of learning. With regards to character strengths intensity, child happiness was significantly positively associated with strengths of appreciation of beauty and excellence, creativity, hope, love of learning, and zest.

4.3.2 Child Difficulties

The association between character strengths and child difficulties (i.e., total difficulties score measured by the SDQ) was examined. It was expected that character strengths would be

associated with child functioning. More specifically, it was hypothesized that character strengths presence/intensity would be negatively associated with child difficulties. Exploratory analyses were conducted to further explore associations of individual character strengths and child difficulties.

The average child difficulty score in this sample was 8.56 ($SD = 5.17$), with 86 percent of the children scoring 13 or below. Difficulty scores on the SDQ generally range from 0 to 40, with scores below 13 considered to be average, 14 to 16 slightly high, 17 to 19, high, and 20 to 30 very high. Most children in this study were not reported to have substantial difficulties.

No significant sex differences were found between male children ($M = 9.16$, $SD = 5.44$) and female children ($M = 7.77$, $SD = 4.72$) on the total difficulties scale, $t(120) = 1.48$, $p = .143$, Cohen's $d = 5.14$, $95\% CI = [-.09, .63]$. Most demographic variables were not related to child difficulties including, child age, child sex, child birth order, race, caregiver sex, caregiver age, and caregiver level of education, with the exception of caregiver marital status which was negatively associated with child difficulties. More specifically, caregivers who were married or in a common law relationship, were more likely to rate their children as having fewer overall difficulties than caregivers who were single, separated, or divorced.

Correlations were conducted to examine associations between character strengths (CSP and CSI) and child difficulties (see Table 8). Child difficulties were not related to any character strength present ratings. However, the zest intensity rating was significantly positively associated with child difficulties such that children who were intensely described as being zestful had more reported difficulties.

4.3.3 Prosocial Behaviour

The association between character strengths and prosocial behaviour (i.e., prosocial behaviour score measured by the SDQ) was examined. It was expected that character strengths would be associated with child functioning. More specifically, it was hypothesized that character strengths presence/intensity would be positively associated with prosocial behaviour. Additional exploratory analyses were conducted to further explore associations of individual character strengths and prosocial behaviour.

The average prosocial behaviour score in this sample was 8.52 ($SD = 1.55$), with 78 percent of the children scoring 8 or above. Scores range from 0 to 10, with higher scores indicating more prosocial behaviour. Most children in this study were reported to be quite prosocial.

Female children ($M = 8.85$, $SD = 1.17$) scored higher than male children ($M = 8.26$, $SD = 1.76$) on prosocial behaviour, suggesting that female children in this study displayed more prosocial behaviour than their male counterparts, $t(117.64) = -2.21$, $p = .029$, Cohen's $d = 1.53$, $95\% CI = [-.74, -.02]$. Aside from child sex, none of the other demographic variables were related to prosocial behaviour including, child age, child birth order, race, caregiver sex, caregiver age, caregiver marital status, and caregiver level of education.

Correlations were conducted to examine associations between character strengths (CSP and CSI) and prosocial behaviour (see Table 9). With regard to character strengths present, prosocial behaviour was significantly positively associated with character strengths of kindness, and negatively associated with humour and prudence. With regards to character strengths intensity, prosocial behaviour was significantly positively associated with character strengths of kindness and social intelligence, and negatively associated with prudence.

5 Discussion

While character strengths have been a focus of positive psychology and are known to play an important role in positive youth development for their ability to contribute to positive adjustment indicators including wellbeing, very little attention has focused on understanding and measuring character strengths in young children. My dissertation sought to enhance the current empirical understanding of character strengths among children aged 4 to 6 using caregiver descriptions of their children and a more rigorous mixed-method approach than extant research, and to provide practical knowledge to parents, educators and other stakeholders who engage with young children. Given that research on character strengths in young children is scarce, it was also important for my dissertation to explore character strength associations with demographic variables and aspects of child functioning.

5.1 Coding System Development (Goal 1)

The first goal of my dissertation was to develop a coding system to capture VIA character strengths in early childhood, both for use in the current research, and to strengthen future research on character strengths and child development/functioning. The need to develop a comprehensive coding system was accentuated given that prior coding schemes used in other research was unattainable (i.e., Lottman & Zawaly, 2014; Park & Peterson, 2006a). The development of this coding system had many strengths. A significant benefit was the more extensive conceptualization and coding of character strengths to capture nuance by extending beyond the presence captured in Park and Peterson's (2006a) study. Another significant benefit was the rigor that was used to develop the coding system. An intensive coding manual development process was undertaken across several months and involved several contributing members of the research team. Such a model allowed for the careful consideration of ambiguities

in the data, which were then examined in great detail by the coding manual development committee. This model also allowed for decisions to be reached and coding instructions to be clarified to satisfy the committee. This intensive methodology/process has resulted in a coding manual that can be utilized for building a more consistent body of research and also broadens the ability to detect degree of character strengths present in this developmental period.

Further, the open-ended nature of the qualitative data collected, modelled on a well-established methodology (i.e., the Five Minute Speech Sample, Magana et al., 1986), provided an opportunity for more diverse and caregiver-grounded descriptions and definitions to be considered as opposed to the static and constrained qualities of questionnaire methodology. A further strength of the coding approach used within my dissertation was the expansion of how child strengths were considered. While previous research coded for the presence of each character strength (Lottman & Zawaly, 2014; Park & Peterson, 2006a), my dissertation broadened how strengths were coded to potentially capture greater nuance by examining variations in degree of character strengths with the introduction of computing frequency, magnitude, and intensity ratings (along with clear instructions of how this could be done in future research in this area). Finally, the inter-rater reliability across all coding was high, which is posited to be a function of the rigorous coding manual development and training. A resultant detailed coding manual was developed (see Appendix C) and used to address the additional goals of my dissertation.

5.2 Expansion of Previous Research on Character Strengths in Young Children (Goal 2)

Overall, consistent with theory that character strengths are present in young children, considerable VIA character strength content was detected in caregiver speech samples. This is particularly notable given that caregivers were given *no specific prompting* or psychoeducation

regarding child character strengths. While each speech sample contained an average of 2.96 unique character strengths, when the overall frequency of character strengths per caregiver description was tallied (without limiting the count to one per strength), the descriptions contained a mean of 6.01 strengths ($SD = 4.48$). This suggests that caregivers often elaborated on (i.e., provided additional synonyms or examples) the strengths they mentioned in their descriptions of their children.

The strengths that emerged as most and least prevalent in this study were largely consistent with previous research, supporting Park and Peterson's (2006a) results and Lottman and Zawaly's (2014) unpublished partial replication. The most notable difference was that the character strength *zest* emerged as more prevalent in this study (i.e., noted by 27 percent of caregivers in this study) versus 10 percent in Park and Peterson's (2006a) study. This may be a function of the age range of the current sample versus the wider age ranges used in previous research in this area. It may be that kindergarten aged children are more *zestful* (e.g., energetic, enthusiastic, excited) than their slightly older counterparts (Park and Peterson's [2006a] study included children between the ages of 3 and 9). Similarly, strengths of teamwork, fairness, and spirituality occurred at slightly higher frequencies in Park and Peterson's study, suggesting that these strengths may require a higher level of maturity to be observed than kindergarten aged children typically possess (Park & Peterson, 2006c; Shoshani & Shwartz, 2018).

In addition to confirming previous research findings with caregivers to understand character strengths in children, a recent study examining the character strengths most observed in young children by early childhood teachers found that the strengths of curiosity, love, love of learning, creativity, and kindness to be most prevalent (Sop & Bişkin, 2021). These results again

cohere with my dissertation's findings and provide further support, from a different informant perspective that these strengths may be most prevalent in younger children.

All but one character strength (i.e., humility) were observed in this data set of caregiver interviews. Given that this study's sample size was substantially smaller than that of Park and Peterson's (2006a) study, and that humility was among the bottom three strengths found in their research, it is not particularly surprising that it was not present in the current sample. In addition, humility requires a certain level of maturity that is typically not developed in children aged 4 to 6 (Park & Peterson, 2006b). More specifically, humility requires individuals have an accurate view of themselves (e.g., to be able to assess one's strengths and weaknesses; Van Tongeren et al., 2019) and an awareness of other's needs and wellbeing (Davis et al., 2013), which taken together would be quite a complex developmental process for most young children (Park & Peterson, 2006b).

In fact, several strengths with low frequencies in these data may manifest to greater degrees as development advances. While there is evidence for early manifestation of character strengths in young children, some strengths require functions that develop throughout childhood (e.g., cognitive maturation, emotional maturation, abstract thinking, theory of mind; Shoshani, 2019). For example, theory of mind (i.e., the ability to attribute mental states such as thoughts, emotions, and beliefs to self and others) is known to develop between the ages of 3 and 5 (Leslie, 1987), and would be needed for some strengths (e.g., judgment, social intelligence, perspective).

5.3 Sex Differences in Character Strengths Among Young Children

Male and female children were generally similar in terms of how caregivers described their strengths in this study, with a few minor exceptions. Female children were more likely than male children to be described by their caregivers as loving and creative, while male children

were more likely than female children to be described by their caregivers as humorous and prudent. Though many studies on character strengths have found sex differences, consistent patterns have been difficult to establish from cross-sectional data. Female children being described as more loving may be consistent with sex/gender stereotypes and socialization. More specifically, females tend to be stereotyped as warm, caring, affectionate, supportive, and nurturing (Bem, 1981; Prentice & Carranza, 2002; Williams & Best, 1990). Similarly, nurturing characteristics are known to be encouraged in females beginning at a young age (Brdar et al., 2011) and research with adult samples has demonstrated that women tend to score higher on strengths of the heart, which include love (Brdar et al., 2011).

The finding of creativity being more prevalent in descriptions of female children is consistent with the results of a recent systematic literature review of 133 studies, including ones conducted with children, adolescents, and adults (Nakano et al., 2021). They found more studies in which women scored higher on creativity than men (Nakano et al., 2021). Nonetheless, creativity is a complex construct, conceptualized in many different ways throughout the literature, and sex differences may be impacted by which aspect(s) of creativity is examined (e.g., verbal, visual-spatial, etc.) and the type of measurement used to assess it (Nakano et al., 2021).

The finding that humour was more prevalent in descriptions of male children in this study is consistent with the cultural stereotype that men are funnier (Hitchens, 2007; Shlesinger, 2017), and with the result of a recent meta-analysis of adult samples, which included findings across 28 studies (Greengross et al., 2020). However, developmental research has generally found that early humour is similar for both male and female children, suggesting that any sex differences

that emerge over time may have more to do with environmental factors than biological differences (Bergen, 2020).

Given that a recent study of adolescents found no difference in prudence between males and females (Fairley & Sanfey, 2020), it was surprising that male children were seen as more prudent than female children. However, it is possible that given that males are often more impulsive and injury prone (Schwebel & Barton, 2006), their caregivers may have been more likely to notice and comment when they were prudent. With regards to the sex differences found in my dissertation, it may also be the case that caregivers are socialized to view, and thus describe, particular strengths in their male versus female offspring. Intensive observational research might address this possibility. For example, having researchers observe children at school and/or at home, might allow for more objective observations to be noted, without the added interpretive lens of each caregiver. More research is needed to better understand the sex differences found in this study.

While it was not a primary study objective to identify themes in caregiver descriptions beyond the VIA character strengths, other themes were observed by the coding manual development committee and were coded for their presence. More specifically, many caregivers included comments about their child's skills/abilities (e.g., smart/intellectual, athletic), their general demeanour in social settings (e.g., shy/anxious, outgoing), their level of independence (e.g., likes to do things on their own), their emotional sensitivity (e.g., sensitive child), and their interests (e.g., likes playing sports, likes to perform). Talents, interests, and abilities are distinct from character strengths and are commonly used when describing children (Rawana & Brownlee, 2010) so it makes sense that they were observed in caregiver descriptions in this study. It is also not surprising that caregivers noted information about their child's demeanour in

social settings given that a main task of kindergarten is to interact with others and engage socially. Children are known to gain a sense of independence from their caregivers and begin to take initiative between the ages of 2 and 5 (Erikson, 1950). While independence may not be a universally valued character strength across the lifespan, it seems quite important and relevant in early childhood.

5.4 Caregiver Demographics (Goal 3)

Significantly more mothers participated in this study than fathers, which is a common occurrence in research with caregivers (Leach et al., 2019; Panter-Brick et al., 2014). Caregivers were also more likely to participate in this study if their child was their first born. This may be due to the level of investment caregivers often put into the upbringing of first-born children (Price, 2008).

Caregiver level of education was associated with some other important study variables including speech sample length and word count, character strengths present, and character strengths intensity. Previous research suggests that caregiver education level is related to caregiver reflective function (Sleed et al., 2020; Steele & Steele, 2008). More specifically, Sleed and colleagues (2020) found that the relation between reflective function and caregiver level of education is partially explained by IQ. Thus, caregiver IQ may have been contributing to the relations observed in this study, suggesting that caregivers with higher IQ may be more verbose and have a larger vocabulary. It is also possible that caregivers with higher education levels could be higher achievers, more ambitious, and/or have higher expectations for themselves in sharing descriptions (e.g., more likely to try to speak for as close to three minutes as possible, as the instructions requested). In addition, it is likely that the longer caregivers spoke, and the more words included in their speech samples, the more likely the speech samples would contain

character strength content, both in terms of how many strengths were present, and the intensity of their descriptions.

5.5 Character Strengths and Child Functioning (Goal 4)

It was hypothesized that character strengths would be associated with better child functioning. More specifically, it was expected that strengths would be positively associated with child happiness and prosocial behaviour, and negatively associated with child difficulties. While character strengths were not found to be significantly related to the child functioning variables examined in this study, some associations between individual character strengths and child functioning variables were observed and are discussed below.

5.5.1 Child Happiness

In my dissertation, child age was significantly negatively correlated with happiness such that as age increased, happiness decreased. In some ways, this is consistent with Park and Peterson's (2006a) finding that younger children were found to be happier than older children (based on an indirect measure via caregiver descriptions of their child). Park and Peterson (2006a) suggested that younger children may be happier because they were not yet displaced by a younger sibling. However, happiness in this sample was not related to birth order or the number of children in the family. Therefore, it may simply be the case that younger children are described as more carefree, and/or have less demands or expectations placed upon them. Alternatively, it may be that caregivers naturally use more happiness infused language to describe younger children.

Park and Peterson (2006a) found associations between child happiness and strengths of hope, zest, and love. While hope was also associated with happiness in this sample as was zest intensity, love was not associated with happiness in the current study. This result was surprising

given that strengths of the heart (e.g., love, gratitude) have generally been found to be associated with happiness (Park et al., 2004).

One advantage of coding happiness indirectly is that such an approach eliminates some of the inherent bias (e.g., social desirability) inevitable when asking caregivers to rate their child's happiness on a scale. However, there are also disadvantages that may be contributing to the inconsistencies with Park and Peterson's (2006a) findings. Specifically, the range of happiness scores was restricted in that two thirds of the sample were given a happiness rating of two or three, which was rated based on implied happiness from descriptions of frequent or enjoyed activities. Therefore, the indirect method of coding for happiness that was used in this study, may not be capturing happiness as intended because ideally there would be more gradation across the range of happiness ratings. To more fully understand the associations between character strengths and happiness in young children, it will be important for future research to measure child happiness in other ways (e.g., by asking caregivers about it directly, having caregivers and/or other informants provide a subjective rating via a validated quantitative measure). Alternately, given that Park and Peterson (2006a) found that gratitude was only related to happiness in children aged 7 to 9 in their sample (rather than the complete sample ranging in age from 3 to 9), and that they suggest that strengths of the heart may play a more important role in predicting happiness as children get older, is it possible a similar effect is being seen here.

The character strength of hope has been known to correlate with wellbeing throughout life (McDermott & Hastings, 2000; Park et al., 2004) and was found to be associated with happiness in children in Park and Peterson's (2006a) study. It is therefore not surprising that hope and happiness were associated in this study. It is likely that hope and happiness have a

reciprocal relation such that being hopeful can make people feel happier, and feeling happier can reinforce a sense of hope for a good future (Pleeging et al., 2021).

The character strengths of creativity and love of learning map onto the virtue of wisdom, which is generally not as well known for associations with happiness as strengths of the heart (Park et al., 2004). While creativity has been found to associate with wellbeing (Conner et al., 2018), it is possible that in this age group these intellectual strengths (i.e., creativity and love of learning) could be contributing to other variables such as self-confidence or connections with others, which may mediate the relationship between intellectual strengths and happiness. Alternatively, it may be the case that during this developmental period in which children are starting school and creativity is being encouraged, children who love learning and are creative are in more of a flow state with their developmental goals, and therefore happier. More research is needed to help clarify the relations among character strengths and happiness in young children.

5.5.2 Child Difficulties

In this sample, there was a positive association between children's total difficulties and their zest intensity score. It is not surprising that children who were described as having intense zest/energy were also seen as having more difficulties. Recent research has introduced the idea of optimal use of character strengths, suggesting that underuse or overuse of strengths can be related to negative outcomes (Niemi, 2019). The overuse of zest can manifest as being hyper, overactive, and annoying to others (Niemi, 2019), which is consistent with some of the difficulties asked about on the SDQ (e.g., restless/overactive, constantly fidgeting, thinks things out before acting). It is also possible that children with intense zest may have more difficulty fitting into the confines of what society expects of them (e.g., rules and routines at school) and may therefore be seen as having more problems. It is of note that in this sample, the presence of

zest alone was not associated with greater difficulties, rather character strengths intensity, indicating a heightened intensity of zest, did. This is one example underscoring that when considering strengths-related content in interview data, it is important to consider multiple ways to capture such content beyond mere presence considerations.

5.5.3 Prosocial Behaviour

In this sample, there was a positive association between children's prosocial behaviour and their intensity score for strengths of kindness and social intelligence. Children who have a heightened intensity of social intelligence (e.g., awareness of other people's feelings, ability to recognize when help is needed) and a heightened intensity of kindness, may be more likely to demonstrate prosocial behaviours. This connection is also supported in a study of preschool children in which a 12-week kindness curriculum was delivered to preschool children (Flook et al., 2015). The children who received the kindness curriculum showed greater improvements in prosocial behaviour than the children in the control group (Flook et al., 2015).

A negative association between prudence and prosocial behaviour was found such that children with higher prudence ratings had lower scores on prosocial behaviour. While this result is not consistent with Shoshani's (2019) findings, a close examination of the items used to measure prosocial behaviour on the SDQ may help explain this finding. Specifically, three of the five items require some degree of disinhibited behaviour (i.e., "shares readily with other children", "helpful if someone is hurt", "often volunteers to help others"). However, prudence involves restraint (e.g., observes before deciding whether to engage), which would naturally inhibit these behaviours.

A negative association was also found between the presence of humour and prosocial behaviour, which was unexpected. Shoshani (2019) found a positive association between humour

and prosocial behaviour, and other research has linked humour to positive variables such as higher peer acceptance (Wagner, 2018). One possible interpretation is that there could be other intervening variables (e.g., desire to connect with others) that could explain the correlation. Another possible explanation could be that humour is being associated with undesirable behaviours (e.g., silliness that distracts others), and therefore negatively associated with prosocial behaviour. Alternately, it could be a spurious effect. Future research is needed to explore the relation between humour and prosocial behaviour further.

5.5.4 Character Strengths and Child Functioning: Additional Considerations

Some associations between character strengths and child functioning can be seen from an early age. The ones found in this study evidenced small effect sizes. This may be due to a number of possible reasons including the small sample size (i.e., not enough power to detect smaller effects) and limited variability in response range (e.g., happiness ratings). With regards to associations with child difficulties and prosocial behaviours, this study did not show strong relationships which may be a sign of weak convergent validity, limited variability in responses on the questionnaire data, and/or a function of differing method variance (coded data and questionnaire data). The lack of variability on the rating scales (e.g., possibility of ceiling or floor effects with respect to difficulties and prosocial behaviour) was likely the most limiting with respect to detecting associations, but further research is needed to explore such considerations more deeply.

5.6 Applied Implications

Children's homes and schools are the two most important contexts in their lives (Furlong et al., 2014). There are many emerging early childhood positive psychology initiatives and strengths-based programs. Many such initiatives aim to foster wellbeing and improve child

functioning. Much of the focus to date has been on strengths-based education and school programs which help youth identify and employ their character strengths (e.g., Lavy, 2020; Waters, 2011) in an effort to promote an array of positive outcomes (Peterson & Seligman, 2004; Seligman et al., 2009). While temporal associations between character strengths and wellbeing in young children remain unclear, results from this dissertation cohere with at least some tentative associations between character strengths and wellbeing in young children. Therefore, initiatives for young children may wish to target efforts to focus on certain character strengths to foster wellbeing. For example, based on the results of this study, caregivers and educators may wish to focus on character strengths of creativity, hope, and love of learning to help foster wellbeing in children aged 4 to 6.

While a narrow focus on specific character strengths may contribute to fostering general wellbeing, my dissertation results also suggest that a broad focus on all character strengths may be important for honouring individual differences and fostering self-knowledge in children. More specifically, children demonstrate a wide variety of different character strengths and exhibit unique combinations of strengths. For example, two children may share a strength of kindness, while one also has a deep appreciation for beauty, strong social intelligence, and creativity, and the other has strengths of curiosity, perseverance, and bravery. Focusing on the strength of kindness may foster wellbeing in both children, however, focusing more broadly on helping them understand their own unique combination of strengths can foster self-knowledge and understanding that extends beyond their common strength (i.e., kindness). Therefore, ideally, best practice would do both; focus on salient strengths that have prominent relations for many children *and* foster self-knowledge beyond the most prevalent strengths in their age group to understand their own unique, individual-specific combinations of strengths.

More recently, there has been an increased focus on strength-based parenting programs that capitalize on primary caregivers to help identify and develop strengths in youth (Waters, 2017). Such interventions have been found to contribute to positive outcomes for youth (e.g., greater life satisfaction, increased likelihood of employing strengths in the face of challenges, increased perseverance at school/better academic outcomes; Waters, 2015a, 2015b, 2020; Waters et al., 2019). In addition, strength-based parenting benefits have also been shown to extend to families and caregivers (e.g., caregiver positive emotions, caregiver self-efficacy; Waters & Sun, 2016).

While my dissertation did not ask about strengths directly, it is clear that caregivers are able to identify character strengths in their children without any specific prompting or psychoeducation, which is the first important step in order to foster character strengths (Linkins et al., 2014). As is being seen in recent research in both areas of strength-based education and strength-based parenting (e.g., Waters, 2011, 2015a, 2015b), with some psychoeducation, caregivers and educators can learn to identify strengths in themselves and others, which can have a substantial impact on fostering strengths in youth, and potentially increase positive outcomes for all. It is important for caregivers and educators to understand the ripple effects of their efforts to increase their likelihood of engaging in strength-based practices. There is a lot of potential to tap into the power of caregivers and educators to assist in the awareness and promotion of child character strengths, particularly in young children who rely on their caregivers and educators to learn about themselves and to help them practice and apply new information.

While one of the goals of my dissertation was to better understand character strengths in young children via caregiver descriptions, the amount of strengths content captured by caregivers without asking about strengths directly, contributes to a growing understanding of caregiver

perceptions of their children's strengths. There are many exciting areas for research expansion using caregivers, discussed further below, including honing strength-based parenting programs to help develop youth strengths, and examining youth-caregiver agreement regarding youth's strengths.

5.7 Strengths and Limitations

5.7.1 Coding Manual

One of the challenges of creating the character strengths coding manual was the extensive time needed to establish it. It required many revisions and iterations during the code development process, which may have been expedited if access to the coding manual used in earlier research had been obtained. This speaks to the importance of making research data and tools widely available to the research community as has been highlighted by several researchers commenting on the replication crisis within psychology (e.g., Jamieson & Pexman, 2020; Open Science Collaboration, 2015). A related challenge was that it took a considerable amount of time for the coding manual development committee to carefully grapple with the nuances of wording when making decisions about inclusion and exclusion criteria. For example, the committee deliberated for some time about children described as “caring”, considering whether such a description would be best captured by the strength of love or kindness. The committee was divided on this decision until observations of descriptions from the pilot data suggested that the strength of kindness in this age group tends to be qualified by more active behaviours (e.g., helps others, shares toys), at which point consensus was reached that it was best captured by the strength of love. The rigor used to develop the coding system was a significant strength of this dissertation.

Previous qualitative research on character strengths in young children research exclusively coded for the presence of each character strength in caregiver descriptions (Park & Peterson, 2006a). This study aimed to broaden the understanding of character strengths by coding for the frequency and the magnitude of each character strength. Coding for frequency was a simple and natural extension of coding for presence. However, coding for the magnitude of each character strength description was significantly more challenging. A few different ways to capture magnitude were initially considered but were very difficult to apply reliably by multiple coders across the dataset and were thus not used. The method chosen was inspired by the happiness coding (used in this study and previous research) by collapsing anchors from the happiness coding into three categories. The rigor of such an indirect method and well described coding system is the strength of this work and stands to make a significant contribution to the field.

Overall, the methodology employed to develop the character strengths coding manual for young children and to code the data was more rigorous than previous research and further confirms and validates previous findings (Park & Peterson, 2006a), while extending knowledge in this area. While this study was similar to previous research in that it examined presence of character strengths in young children, it also extended and improved on previous research by creating a novel strengths intensity variable that tried to capture both frequency of character strengths and the magnitude (or depth/how elaborate) the character strengths descriptions were. The strengths intensity variable allows for much more variability that is missed by simply looking at presence by examining the broadest range of possible strengths content in descriptions and ultimately better captures the nuances and complexity of human experience in young children.

5.7.2 Benefits and Drawbacks of Using Speech Samples for Caregiver Descriptions

Though Park & Peterson (2006a) elected to gather caregiver descriptions in written form, this study opted to collect descriptions via speech samples. Similar to written samples, the use of speech samples allowed caregivers to speak broadly about their children and describe aspects that were most salient to them. Thus, caregiver descriptions have the potential to provide a more comprehensive and integrated understanding of character strengths in young children than a questionnaire. One main benefit of collecting speech samples versus written samples is that they do not require caregivers to have literacy skills. Although caregiver literacy was generally not a limiting factor in this study, this methodology would be more inclusive to capture an element of diversity in future research.

In addition, caregiver interviews are more convenient and affordable to administer than direct observation. The unstructured, free-flowing nature of the speech samples collected may be more natural than data collection using questionnaires, written samples, or direct observation, and may allow for greater breadth of information about character strengths to be collected.

There were, however, some challenges with using speech samples for caregiver descriptions. More resources (i.e., research assistant time) were needed to conduct and transcribe interviews than collecting written samples. Many caregivers consented to participate but were difficult to reach for data collection. Some caregivers did not answer calls at the phone number they provided on their consent forms, and some phone numbers provided were out of service. Even when caregivers answered their phones, they were not always available to participate immediately. Members of the research team spent considerable time trying to reach caregivers at times that worked best for them to complete the brief interview. In addition, because this study

employed both an interview and a survey methodology, some caregivers needed one or more follow up reminders to complete their questionnaire following their interview.

During the interviews, while caregivers described their children, on average, for just over a minute and a half, they were invited to speak for three minutes, and many spoke for less than one minute. It is not surprising that there was a moderate correlation between how long caregivers spoke for and the number of strengths present in caregiver descriptions. Longer speech samples allowed for richer descriptions that had the potential to capture more breadth and depth of character strength information.

5.7.3 Indirect Method of Capturing Character Strengths and Child Happiness

Following suit from previous research, my dissertation employed an indirect measure of capturing character strengths and happiness by asking caregivers to describe their child. Specifically, caregivers were not asked directly about their child's strengths or happiness, rather they emerged organically and were observed through caregiver descriptions of their child. While there was good reason to maintain consistency with previous research by using the same wording Park and Peterson (2006a) did in their study, different responses may have emerged if caregivers were asked more directly about their child's character strengths. Future research may wish to explore doing so to see how the results may differ.

Notwithstanding, the rigor of the indirect methodology used to assess character strengths in this study is a clear strength. In addition, it was appropriate for young children because it was observational (coded), did not rely on self-report, and addressed the many limitations of survey-based research. Lastly, by not asking about character strengths directly, caregiver descriptions may have captured information about other important developmental variables that may be salient to early childhood development (e.g., independence, self-efficacy). It will be important to

identify other developmental markers of functioning for future research to examine in relation to character strength development.

Correlations were well suited for this study given that character strength research with young children is still in early stages. Character strengths descriptions being somewhat related to coded happiness (small effect size, marginal significance) provides some validity for quantitative research to further examine character strengths and wellbeing in this age group. Future research may wish to test more complex models including, for example, regressing functioning variables across character strengths.

5.7.4 Study Design Limitations

The sample size and homogeneity of the sample may have contributed to a restricted range of responses for some variables (e.g., child happiness ratings) and limited the generalizability of the results. Further, caregivers needed to be quite committed to the process to participate in the study (i.e., available to complete an interview by phone, willing to complete a questionnaire following their interview), which may help explain the low, albeit consistent with similar research, initial consent response rate, and the completion rate. In addition, the sample was mostly homogeneous in nature (i.e., predominantly white, female caregivers, who completed education beyond high school). Examining caregiver descriptions from diverse racial, sex, and socio-economic backgrounds is an important future research endeavour as results may differ from the ones described in this dissertation. For example, differences in effects of oppression due to positionality may have impacted study variables including child strengths observed/described and child happiness. Similarly, it would be important to account for language in future work involving more diverse groups who may not use English at home or as a primary language.

Further research with more diverse samples is needed to better understand possible nuances and implications for less represented or comparatively oppressed identities/families.

This study was cross-sectional by design which did not allow for any information about the temporal sequencing of character strengths and measures of wellbeing/child functioning to be observed. While character strengths predict future happiness in samples of youth and adults (e.g., Brdar, 2011; Niemiec, 2013; Park et al., 2004), that may not be the case for young children. Further research is needed to better understand the relations between character strengths and wellbeing in young children.

5.8 Implications and Directions for Future Research

The character strengths coding manual developed in this study provides a useful resource for future research on character strengths and child development. It aims to better capture the nuances and complexity of examining character strengths in young children, especially for presence and frequency of character strengths. Given that this was the first study to code the frequency and magnitude of character strength descriptions and subsequently use the frequency and magnitude ratings to create the character strengths intensity variable, it would be interesting to apply this coding methodology to future datasets to gain more information about its utility. It is possible that the intensity may help capture individuals' most essential strengths in future qualitative research of young children. It is recommended that future research consider wording the task instructions to yield longer descriptions more consistently to see if this has an impact on the nature of the content captured in terms of strengths (presence, frequency, intensity), and child happiness.

Studying how character strengths manifest in young children is important for implementing suitable strategies to measure strengths and capitalize on their benefits. Character

strengths in young children exist and can be seen across settings. Young children are known to use character strengths in play (e.g., pretend play; Lottman et al., 2017), which creates opportunities for character strengths to be examined through observation. While developmental research often relies on caregiver reports as this study did, future research may wish to gather information about character strengths through other methods (e.g., direct observation, questionnaires), and other informants including teachers and the children themselves. Teachers often spend more time than caregivers observing children in the context of social interactions that reveal early character strengths and have often take a child development class/have more experience observing child development. The incorporation of teacher observations would support the mission of this research and would be a pathway for future research. It would also be interesting to teach young children about character strengths and see which ones resonate most with them (e.g., which ones they identify as ones they use most). Additionally, it would be informative and advance this field of research to compare and contrast information about child character strengths collected through multiple methods and multiple informants.

The presence of some character strengths (e.g., kindness, love, creativity) is quite prevalent in kindergarten aged children, while other character strengths (e.g., humility) may require more cognitive and emotional maturation to develop or may be more difficult for caregivers to observe. Longitudinal research to better understand how and when character strengths develop, and their temporal associations with wellbeing/child functioning as they develop will be an important future research endeavour. In addition, research with larger samples, more heterogeneous and diverse samples, and younger children would be an asset. Larger samples would also allow future research to extend beyond correlational inquiries to multivariate considerations.

6 Conclusion

Overall, the rigor of the mixed method approach employed to develop the character strengths coding manual for young children and to code the data further supports and validates previous findings, while extending knowledge about character strengths in young children. By broadening how strengths were coded, greater depth and nuance regarding variations in degree of character strengths present in caregivers' descriptions was captured. The level of thought and detail that went into developing the character strengths coding manual is a strength of this dissertation and also stands to make a significant contribution to the field as a useful resource for future research.

Findings regarding the most and least prevalent character strengths that emerged from caregiver descriptions were generally consistent with previous research. Associations between character strengths and descriptive characteristics of the sample as well as childhood functioning variables were explored.

Taken together, this dissertation confirms and advances knowledge about character strengths in young children, underscoring the utility of the VIA framework and the early indication of character strengths for this developmental stage.

Table 1

VIA Classification of Character Strengths

Virtues	Character Strengths and Definitions
Wisdom – Cognitive strengths that entail the acquisition and use of knowledge	Creativity: Original, adaptive, ingenuity, seeing and doing things in different ways Curiosity: Interest, novelty-seeking, exploration, openness to experience Judgment: Critical thinking, thinking through all sides, not jumping to conclusions Love of Learning: Mastering new skills & topics, systematically adding to knowledge Perspective: Wisdom, providing wise counsel, taking the big picture view
Courage – Emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, external or internal	Bravery: Valor, not shrinking from threat or challenge, facing fears, speaking up for what’s right Perseverance: Persistence, industry, finishing what one starts, overcoming obstacles Honesty: Authenticity, being true to oneself, sincerity without pretense, integrity Zest: Vitality, enthusiasm for life, vigor, energy, not doing things half-heartedly
Humanity – Interpersonal strengths that involve tending and befriending others	Love: Both loving and being loved, valuing close relations with others, genuine warmth Kindness: Generosity, nurturance, care, compassion, altruism, doing for others Social Intelligence: Aware of the motives and feelings of oneself and others, knows what makes others tick
Justice – Civic strengths that underlie healthy community life	Teamwork: Citizenship, social responsibility, loyalty, contributing to a group effort Fairness: Adhering to principles of justice, not allowing feelings to bias decisions about others Leadership: Organizing group activities to get things done, positively influencing others
Temperance – Strengths that protect against excess	Forgiveness: Mercy, accepting others’ shortcomings, giving people a second chance, letting go of hurt Humility: Modesty, letting one’s accomplishments speak for themselves Prudence: Careful about one’s choices, cautious, not taking undue risks Self-Regulation: Self-control, disciplined, managing impulses, emotions, and vices

Transcendence – Strengths that forge connections to the larger universe and provide meaning

Appreciation of Beauty and Excellence: Awe and wonder for beauty, admiration for skill and moral greatness

Gratitude: Thankful for the good, expressing thanks, feeling blessed

Hope: Optimism, positive future-mindedness, expecting the best & working to achieve it

Humour: Playfulness, bringing smiles to others, lighthearted – seeing the lighter side

Spirituality: Connecting with the sacred, purpose, meaning, faith, religiousness

Table 2*Demographic Characteristics of the Sample*

Variable	<i>n</i>	<i>Percentage of sample</i>
Respondent		
Father	16	11.3%
Mother	126	88.7%
Age of child		
4	45	36.9%
5	56	45.9%
6	21	17.2%
Sex of child		
Male	83	56.5%
Female	64	43.5%
Race of child		
White	105	86.1%
African American	2	1.6%
Asian American	2	1.6%
Latino/a	2	1.6%
Arab	1	.8%
Biracial	10	8.2%
Child history of serious illness or disability		
Yes	11	9.02%
No	111	90.98%
Birth order of child		
First	64	52.5%
Second	37	30.3%
Third	16	13.1%
Fourth or higher	5	4.1%

Note. *N* = 147

Table 3*Character Strengths Coding Examples*

Character Strength	Example(s)
Appreciation of Beauty and Excellence	Loves nature; stops to observe beautiful flowers
Bravery	Stands up for others; speaks up if someone is being mean to others
Creativity	Has creative ideas; makes up stories
Curiosity	Inquisitive; likes to know how things work
Fairness	Makes sure everyone is included; insists on equal treatment
Forgiveness	Forgives quickly; willing to give others another chance
Gratitude	Feels grateful; expresses gratitude
Honesty	Keeps promises; tells the truth
Hope	Optimistic outlook; generally assumes good things will happen
Humility	Modest; doesn't show off
Humour	Likes to tell jokes; knows how to make others laugh
Judgment	Open to other people's opinions; thinks things through
Kindness	Considerate of others; likes to help others
Leadership	Likes to be in charge; has a positive influence on other children
Love	Loving family member; affectionate
Love of Learning	Loves school; enjoys learning something new
Perseverance	Doesn't give up; determined
Perspective	Wise beyond years; mature view on life
Prudence	Cautious kid; likes to observe first
Self-Regulation	Good at following rules; capable of waiting
Social Intelligence	Empathetic toward others; makes friends easily
Spirituality	Faith oriented; enjoys praying
Teamwork	Good teammate; cooperates when playing in a group
Zest	Wakes up full of joy/enthusiasm; full of energy

Table 4*Correlations Between Study Variables*

Variable	1	2	3	4	5	6	7	8
1. Response duration								
2. Word count	.94*** [.91, .95]							
3. Caregiver age	.10 [-.08, .28]	.14 [-.04, .31]						
4. Caregiver sex	.01 [-.16, .17]	-.01 [-.17, .16]	-.24** [-.40, -.07]					
5. Caregiver marital status	.04 [-.14, .22]	.08 [-.10, .25]	.19* [.01, .36]	.11 [-.07, .28]				
6. Child race	-.15 [-.32, .03]	-.12 [-.29, .06]	-.08 [-.26, .10]	-.07 [-.25, .11]	.04 [-.14, .22]			
7. Caregiver level of education	.33*** [.17, .48]	.37*** [.20, .51]	.15 [-.03, .32]	.27** [.10, .43]	.26** [.08, .42]	.05 [-.13, .23]		
8. CPS	.51*** [.38, .62]	.49*** [.35, .60]	.11 [-.07, .24]	.08 [-.09, .24]	.08 [-.10, .26]	-.20* [-.36, -.02]	.16 [-.02, .33]	
9. CSI	.53*** [.40, .64]	.54*** [.41, .64]	.19* [.01, .35]	.08 [-.09, .24]	.12 [-.06, .29]	-.12 [-.29, .06]	.25** [.07, .41]	.71*** [.62, .79]

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, $N = 147$

Table 5*Character Strength Prevalence and Sex Differences*

Character Strength	CSP Total Sample (%)	CSP (Male <i>n</i> = 83) (%)	CSP (Female <i>n</i> = 64) (%)	<i>t</i> (145)	Cohen's <i>d</i> 95% CI [LL, UU]	CSI Total Sample
Kindness	73 (50)	37	36	-1.40	.50 [-.56, .09]	287
Love	64 (44)	30	34	-2.08*	.49 [-.67, -.02]	272
Creativity	57 (39)	22	35	-3.61**	.47 [-.93, -.27]	299
Love of Learning	40 (27)	23	17	.15	.45 [-.30, .35]	115
Zest	39 (27)	22	17	-.01	.45 [-.33, .33]	98
Curiosity	34 (23)	18	16	-.47	.42 [-.40, .25]	98
Humour	32 (22)	23	9	2.00*	.41 [.00, .66]	91
Social Intelligence	26 (18)	14	12	-.30	.38 [-.38, .28]	48
Perseverance	13 (9)	7	6	-.20	.29 [-.36, .29]	40
Self-Regulation	11 (8)	8	3	1.13	.26 [-.14, .51]	12
Leadership	10 (7)	4	6	-1.09	.25 [-.51, .15]	21
Bravery	8 (5)	5	3	.35	.23 [-.27, .39]	26
Prudence	8 (5)	8	0	2.60*	.22	11

					.10, .76]	
Appreciation of Beauty and Excellence	5 (3)	2	3	-.75	.18 [-.45, .20]	11
Honesty	3 (2)	1	2	-.81	.14 [-.46, .19]	3
Teamwork	3 (2)	2	1	.36	.14 [-.27, .39]	4
Hope	2 (1)	2	0	1.25	.12 [-.12, .53]	4
Perspective	2 (1)	0	2	-1.63	.12 [-.60, .06]	2
Fairness	1 (1)	1	0	.88	.08 [-.18, .47]	1
Forgiveness	1 (1)	1	0	.88	.08 [-.18, .47]	4
Gratitude	1 (1)	1	0	.88	.08 [-.18, .47]	1
Judgment	1 (1)	1	0	.88	.08 [-.18, .47]	1
Spirituality	1 (1)	1	0	.88	.08 [-.18, .47]	1
Humility	0 (0)	0	0	N/A	N/A [NA, NA]	0

Note. * $p < .05$, ** $p < .001$, $N = 147$

Table 6*Comparison of Prevalent Character Strengths Across Three Studies*

Current Study		Park & Peterson (2006a)		Lottman & Zawaly (2014)	
Character Strength	Prevalence Rank	Character Strength	Prevalence Rank	Character Strength	Prevalence Rank
Kindness	1	Love	1	Love	1
Love	2	Kindness	2	Kindness	2
Creativity	3	Creativity	3	Curiosity	3
Love of Learning	4	Humour	4	Humour	4
Zest	5	Curiosity	5	Perseverance	5
Curiosity	6	Love of Learning	6	Creativity	6
Humour	7	Perseverance	7	Love of Learning	7
Social Intelligence	8	Self-Regulation	8	Social Intelligence	8
Perseverance	9	Social Intelligence	9	Bravery	9

Table 7*Correlations Between Character Strengths (CSP & CSI) and Child Happiness*

Character Strength	CSP		CSI	
	<i>r</i> with happiness	95% CI [LL, UU]	<i>r</i> with happiness	95% CI [LL, UU]
Appreciation of Beauty and Excellence	.12	[-.05, .27]	.19*	[.03, .34]
Bravery	-.11	[-.26, .06]	-.09	[-.24, .08]
Creativity	.29***	[.14, .43]	.19*	[.03, .34]
Curiosity	.01	[-.15, .17]	.01	[-.16, .17]
Fairness	.02	[-.15, .18]	.02	[-.15, .18]
Forgiveness	-.04	[-.20, .12]	-.04	[-.20, .12]
Gratitude	.02	[-.15, .18]	.02	[-.15, .18]
Honesty	-.01	[-.17, .16]	-.01	[-.17, .16]
Hope	.28***	[.12, .42]	.27***	[.12, .42]
Humility	.00	NA	.00	NA
Humour	-.01	[-.17, .16]	-.05	[-.21, .11]
Judgment	.02	[-.15, .18]	.02	[-.15, .18]
Kindness	-.06	[-.22, .11]	.00	[-.16, .16]
Leadership	.01	[-.15, .17]	-.02	[-.18, .14]
Love	.00	[-.16, .16]	.04	[-.13, .20]
Love of Learning	.19*	[.03, .35]	.20*	[.04, .35]
Perseverance	-.11	[-.27, .05]	-.03	[-.20, .13]
Perspective	.15	[-.01, .30]	.15	[-.01, .30]
Prudence	-.08	[-.24, .08]	-.04	[-.20, .12]
Self-Regulation	.04	[-.13, .20]	.04	[-.13, .20]
Social Intelligence	.01	[-.15, .17]	-.08	[-.24, .09]
Spirituality	.02	[-.15, .18]	.02	[-.15, .18]
Teamwork	-.04	[-.20, .12]	-.02	[-.18, .14]
Zest	.10	[-.07, .25]	.26**	[.10, .40]

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, $N = 147$

Table 8*Correlations Between Character Strengths (CSP & CSI) and Child Difficulties*

Character Strength	CSP		CSI	
	<i>r</i> with difficulties	95% CI [LL, UU]	<i>r</i> with difficulties	95% CI [LL, UU]
Appreciation of Beauty and Excellence	.03	[-.15, .20]	-.07	[-.25, .11]
Bravery	.04	[-.14, .21]	.09	[-.09, .27]
Creativity	.08	[-.10, .25]	-.04	[-.22, .14]
Curiosity	.00	[-.18, .18]	-.05	[-.23, .13]
Fairness	-.08	[-.26, .10]	-.08	[-.26, .10]
Forgiveness	.06	[-.12, .24]	.06	[-.12, .24]
Gratitude	-.08	[-.26, .10]	-.08	[-.26, .10]
Honesty	.10	[-.08, .27]	.10	[-.08, .27]
Hope	-.06	[-.24, .12]	-.06	[-.24, .12]
Humility	.00	NA	.00	NA
Humour	.08	[-.10, .25]	.04	[-.14, .21]
Judgment	-.08	[-.25, .10]	-.08	[-.26, .10]
Kindness	-.14	[-.31, .04]	-.09	[-.26, .09]
Leadership	-.11	[-.28, .07]	-.11	[-.28, .08]
Love	.03	[-.15, .21]	.08	[-.10, .25]
Love of Learning	-.10	[-.28, .08]	-.16	[-.33, .02]
Perseverance	-.05	[-.22, .13]	-.08	[-.25, .10]
Perspective	-.05	[-.22, .13]	-.05	[-.22, .13]
Prudence	-.10	[-.28, .08]	-.09	[-.27, .09]
Self-Regulation	-.15	[-.32, .03]	-.15	[-.32, .03]
Social Intelligence	-.07	[-.24, .11]	.00	[-.18, .18]
Spirituality	-.05	[-.22, .13]	-.05	[-.22, .13]
Teamwork	-.03	[-.20, .15]	-.05	[-.23, .13]
Zest	.13	[-.05, .30]	.21*	[-.03, .37]

Note. * $p < .05$, $N = 147$

Table 9*Correlations Between Character Strengths (CSP & CSI) and Prosocial Behaviour*

Character Strength	CSP		CSI	
	<i>r</i> with prosocial behaviour	95% CI [LL, UU]	<i>r</i> with prosocial behaviour	95% CI [LL, UU]
Appreciation of Beauty and Excellence	-.09	[-.26, .09]	-.04	[-.21, .14]
Bravery	.05	[-.13, .23]	.05	[-.13, .22]
Creativity	-.00	[-.18, .18]	-.01	[-.19, .16]
Curiosity	-.04	[-.21, .14]	-.02	[-.19, .16]
Fairness	.03	[-.15, .21]	.03	[-.15, .21]
Forgiveness	.03	[-.15, .21]	.03	[-.15, .21]
Gratitude	.09	[-.09, .26]	.09	[-.09, .26]
Honesty	-.13	[-.30, .05]	-.13	[-.30, .05]
Hope	-.09	[-.26, .09]	-.09	[-.26, .09]
Humility	.00	NA	.00	NA
Humour	-.19*	[-.35, .01]	.02	[-.16, .19]
Judgment	.03	[-.15, .21]	.03	[-.15, .21]
Kindness	.30***	[.13, .45]	.27**	[.09, .42]
Leadership	.07	[-.11, .24]	.06	[-.12, .24]
Love	.17	[-.01, .33]	.15	[-.03, .32]
Love of Learning	-.05	[-.23, .13]	-.14	[-.31, .04]
Perseverance	.07	[-.11, .24]	.05	[-.13, .23]
Perspective	.09	[-.09, .26]	.09	[-.09, .26]
Prudence	-.22*	[-.38, -.04]	-.25**	[-.41, -.08]
Self-Regulation	.07	[-.11, .24]	.07	[-.11, .24]
Social Intelligence	.11	[-.07, .28]	.18*	[.00, .35]
Spirituality	.09	[-.09, .26]	.09	[-.09, .26]
Teamwork	-.02	[-.20, .16]	.02	[-.16, .20]
Zest	-.02	[-.20, .15]	-.03	[-.21, .15]

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, $N = 147$

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Appendix A: Caregiver Interview Questions

1. Please tell us about your child. We are interested in their personal qualities. Even small details are of interest. If you want, you can share a story about your child that captures what he or she is all about. (3 minutes)
2. Tell us about a situation in which your child had to adjust to changes. For example, you can talk about your child's transition to school. (3 minutes)
3. Describe a situation in which your child really surprised you by the way he or she acted. (3 minutes)
4. Tell us about a time when your child overcame a difficult situation. (3 minutes)
5. Tell us about a time when your child went above and beyond your expectations. (3 minutes)

Appendix B: Demographic Questionnaire

Please indicate your date of birth (MM/YYYY) _____

Gender: M F Other, please specify: _____

Marital Status:

- Married
- Divorced
- Separated
- Widowed
- Never

Level of Education Completed:

- Some high school
- High school diploma
- Some college
- College degree
- Some university
- University degree
- Some graduate
- Graduate degree
- Post graduate

Occupation: _____

Current Employment:

- Employed full time or more
- Employed part time
- Self-employed
- In school full time
- Homemaker
- Unemployed
- Retired or disabled

Number of hours of work per week: _____

Child's Age: _____

Child's Gender: M F Other: _____

Child's history of serious illness or disability? _____

Child's School: _____

Child's birth order: 1st _____ 2nd _____ 3rd _____ 4th _____ other _____

Number of children in the household: _____

Ethnicity:

- Aboriginal/First Nations/Métis
- White/European
- Black/African/Caribbean
- Southeast Asian (e.g., Chinese, Japanese, Korean, Vietnamese, Cambodian, Filipino. etc)
- Arab (Saudi Arabian, Palestinian, Iraqi, etc)
- South Asian (East Indian, Sri Lankan, etc)
- Latin American (Costa Rican, Guatemalan, Brazilian, Columbian, etc)
- West Asian (Iranian, Afghani, etc)
- Other (please specify) _____

Appendix C: Manual for Coding VIA Character Strengths from Caregiver Descriptions of Young Children

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Introduction

Understanding character strengths among young children is an important endeavour. Research has shown that character strengths contribute to many positive outcomes (e.g., life satisfaction, academic achievement), and buffer against negative outcomes (e.g., psychological problems) for youth and adults.

The Values in Action (VIA) Adult and Youth Surveys are self-report questionnaires designed to assess character strengths. Given that self-report questionnaires are not suitable for young children, one way to explore character strengths among young children is through caregiver descriptions. Caregivers possess a wealth of information and examples about their children, which can be collected and coded for character strength content.

This manual outlines guidelines for administering, transcribing, and coding caregiver interviews to capture information about character strengths in young children.

To deepen and broaden the detection of character strengths in kindergarten age children via their caregivers' descriptions, four aspects of character strengths were included in this coding manual. Character strength presence (CSP) is the dichotomous presence or lack thereof (i.e., not yet observable or unable to determine) for each character strength. Character strength frequency (CSF) is the number of times each character strength was mentioned. Character strength magnitude (CSM) is a measure of the depth of the description for each strength mentioned. Character strengths intensity (CSI) is a product variable, computed by multiplying character strength frequency and character strength magnitude (CSF \times CSM) to capture an overarching sense of how strengths-focused a particular caregiver's description was in its entirety. Each coding category is described in more detail below.

The character strengths definitions included in this manual are supported by/borrowed from the VIA model (Peterson & Seligman, 2004). Initial examples were informed by the limited previous research examining character strengths in young children. Specifically, examples were pulled from Park and Paterson's (2006a) study of character strengths in young children and Shoshani's (2019) development of the character strengths inventory for early childhood (CSI-EC). Synonyms and examples were further elaborated from caregiver descriptions collected for this project.

Caregiver Interview Administration

The following instructions are recommended for administration of the caregiver interview. The guidelines are informed by the manual for coding the Five Minute Speech Sample using the Family Affective Attitude Rating Scale (Bullock, Schneider, & Dishion, 2005).

Setting

- The interviewer should be alone in a quiet room.
- The interviewer should encourage the caregiver to minimize distractions and interruptions in their setting.
- If there is a major distraction during the interview, stop and make note of it.
- If there is a minor distraction during the interview, just continue.

Equipment/Materials Needed

- Phone
 - Interviewer may use their cell phone (ensure caller ID is blocked for privacy) or a lab phone.
- Recorder
 - Interviewers may use an approved app (selected for recording by cell phone; locally stored files to ensure data protection), or an external tape recorder.
 - If an external tape recorder is being used, interviewer would need to conduct the interview over speaker phone and place the tape recorder as close to the phone as possible.
 - Do not move the recorder around once the interview has begun.
- Timer/stopwatch
 - Use one that does not beep or sound an alarm.
- Spreadsheet
 - Use to record attempts to reach caregiver, which caregiver completed the interview, date of interview, and interviewer ID.

Instructions for the Interviewer

- Begin recording at the start of the call.
- Do not leave a message if you are unable to reach a caregiver for an interview.
- If a parent asks you to call back at another time:
 - Try to schedule a time you can accommodate
 - If you cannot accommodate their request, email the team of RAs with the caregiver's availability and ask someone else to complete the interview.
- Read the caregiver interview script and interview questions verbatim.
- Do not say anything while the caregiver is responding to the interview questions.
- Do not follow the caregiver's responses nonverbally (i.e., do not make sounds such as "mm-hmm").
- Do not use leading prompts (e.g., "Could you tell me more about your child's strengths").

General Instructions to the Caregivers

"The interview will take about 15 minutes to complete. I will ask you five questions about your kindergarten child (insert name of child to ensure they know which child you are referring to).

For each question, you'll have three minutes to respond and you can say anything that comes to mind. Don't worry if you stumble on your words or make a mistake. It may feel a bit awkward because this is not a conversation, and I will not be saying anything while you share your answers. It would be useful if you can try to speak for as much of the three minutes as possible. If you go beyond three minutes, I will let you know so we can move on to the next question, and if you finish before the three minutes are up, let me know and we'll move on."

Verbatim Interview Question for the Caregivers

"Please tell us about your child. We are interested in their personal qualities. Even small details are of interest. If you want, you can share a story about your child that captures what he or she is all about."

Dealing with Caregiver Questions Asked Before or During the Interview

1. Question: "What do you want me to tell you?"
Response: Repeat the given interview question.
2. Question: "Am I doing okay?"
Response: Yes, please continue.
3. Question: "Do you want me to go on?"
Action: Wait 15 seconds before prompting because they often continue talking on their own. If they do not continue talking, move on to the next question.
4. Question: "How much time do I have left?"
Response: Tell them how much time is left of the three minutes.

Dealing with Issues and Concerns During the Interview

1. Issue: Caregiver stops speaking before the three minutes have elapsed.
Action: Wait 15 seconds before prompting because they often continue talking on their own. If necessary, prompt once by saying, "Please tell me anything about (insert child's name) for a bit longer".
2. Issue: Caregiver continues speaking after the three minutes have elapsed.
Action: Allow them to finish their thought and then say, "Thanks, the three minutes are up".
3. Issue: Caregiver lets you know they have nothing more to say.
Action: Move on to the next question.

Transcribing Instructions

1. Transcribe each response verbatim as spoken in the audio recording, with the exception of the child's name, which you should replace with a capital X. If the caregiver names other people, replace the name with the relation to the child if known (e.g., mother/father, sibling, friend), or replace with the letter Y if the relation to the child is not known.
2. If any part of a response is really hard to make out, take your best guess and highlight the part you are unsure of in yellow.
3. Note the time stamp that each response starts at in the recording, and the time stamp each response ends at.
4. If a parent speaks for longer than the allotted three minutes, note when they reach the three-minute mark by adding the words "three minutes" in brackets where three minutes was reached.

Character Strength Coding Guidelines

General Guidelines

- Read the entire transcript in its entirety before beginning to assign codes.
- Code based on substantive information that is contained within the transcript – do not make interpretations or inferences about statements.
 - Inferences or interpretations pose a serious threat to inter-rater reliability.
- Codes must focus on current attributions or behaviours only. Historical information should not be coded unless the caregiver specifically indicates that the attribution or behaviour being described is current or ongoing.
- Disregard general narratives that do not specifically relate or link directly to the child they are describing (e.g., “kids can be so mean”).
- Do not code caregiver reports of how other people view their child (e.g., “his/her teachers say he/she is eager to learn”).

Identifying Strengths Content

- Each sentence may contain zero, one, or multiple pieces of information about a child’s character strengths.
 - There may be information about more than one character strength in each sentence.
 - Two consecutive words/ideas may be coded as different character strengths. Each word may be coded independently if more than one strength is captured by consecutive words/ideas.
- Do not double code a single word/idea as more than one character strength (e.g., do not code “she is caring” as both kindness and love).
- Caregivers sometimes name one character strength and continue to provide an example that is most consistent with a different character strength. Code each piece of information separately.

Character Strength Presence (CSP)

Code each transcript for the dichotomous presence or lack thereof of each character strength.

- It is possible for transcripts to contain between 0 and 24 different character strengths.
 - To calculate the total number of character strengths present in a transcript, sum the results for each individual character strength.
 - For example, if a transcript mentioned strengths of kindness, humour, and creativity (with no mention of any other strengths), the total number of strengths present in the transcript would be 3.
-

Character Strength Frequency (CSF)

Code each transcript to capture the frequency of each character strength (i.e., how many times each strength occurs in each transcript).

- In theory, this number can range from 0 to infinity for each character strength.
- Code each unique synonym/descriptor and example as separate occurrences.
 - For example, if a child is described as “funny”, and the caregiver goes on to explain the child “likes to tell jokes”, the character strength of humour would have a frequency of 2 (one for the descriptor, and one for the example).
- If a caregiver repeats an identical descriptor, only code it once.
 - For example, if a caregiver mentions that their child is “funny” twice in the transcript, only code the first unique occurrence.
- To calculate the total character strength frequency in a transcript, sum the results for each individual character strength.
 - For example, if a transcript mentioned strengths of kindness once, humour twice, and creativity three times (with no mention of any other strengths), the total strength frequency in the transcript would be 6 (1 + 2 + 3).

Character Strengths Coding – Used for Presence and Frequency

Appreciation of Beauty and Excellence [awe, wonder, elevation]: Noticing and appreciating beauty, excellence, and/or skilled performance in various domains of life, from nature to art to mathematics to science to everyday experience

Synonyms (code)

- Admiring (admiration for beauty/excellence)
- Awe/wonder (in the presence of beauty)
- Captivated
- Enthralled
- Enraptured
- Fascinated

Exclusions (do not code)

- Perfectionistic

Examples

- Notices and values the world's beauty and/or people's skills
- Is enthusiastic about the beauty of nature/the natural world (e.g., loves nature, enjoys looking at nature, into nature things, enjoys going on nature walks)
- Stops to observe beautiful things around him/her (e.g., flowers, butterflies, landscapes); points out details on trails (e.g., beautiful flowers); notices beautiful things around him/her
- Enjoys good music (e.g., listens to classical music)
- Enjoys beautiful works of art (e.g., loves looking at paintings); likes going to art exhibits or performances

Bravery [valor]: Not shrinking from threat, challenge, difficulty, or pain; speaking up for what is right even if there is opposition; acting on convictions even if unpopular; includes physical bravery but is not limited to it

Synonyms (code)

- Brave
- Courageous
- Daring
- Faces fears
- Fearless
- Heroic

Exclusions (do not code)

- Overconfident
- Reckless
- Risk taking (dangerously)
- Tough (unless context indicates bravery)

Examples

- Acts with mental, moral, or physical strength even when he/she knows things are difficult or scary
- Not afraid to do things, not afraid of anything
- Stands up for beliefs/what is right, stands up for himself/herself, stands up for others/situations (e.g., stepped in to make sure that kid who was bullying his friend stopped, speaks up if he/she sees someone being mean to others, sticks up for others when they're being treated unfairly)
- Has a lot of courage to try new things

- Does something even when he/she is scared if it is the “right” thing to do
- Confronts adversity

Creativity [originality, ingenuity]: Thinking of novel and productive ways to conceptualize and do things; includes artistic achievement but is not limited to it

Synonyms (code)	Exclusions (do not code)
- Artistic	- Eccentric, odd
- Creative	- Enjoys writing/singing (unless context indicates creativity e.g., writes own songs/stories)
- Imaginative (good/active imagination)	- Gymnastics
- Innovative	- Theatrical
- Inventive	- Tells stories
- Original (original thinker)	

Examples

- Comes up with new and original ways to think about and do things
- Has creative ideas
- Enjoys dance (e.g., likes tap lessons)
- Musical; Enjoys drums, piano, guitar, writes his/her own songs
- Likes art, colouring, crafts, drawing
- Likes building/playing with lego/blocks
- Likes inventing/creating new things (e.g., always devising something remarkable to make out of found objects, created zoo out of blocks and animals)
- Makes up stories, comes up with intricate stories
- Elaborate imaginative play, plays make believe

Curiosity [interest, novelty-seeking, openness to experience]: Taking an interest in ongoing experience for its own sake; finding subjects and topics fascinating; exploring and discovering

Synonyms (code)	Exclusions (do not code)
- Curious, natural curiosity	- Adventurous (code as zest)
- Exploratory/explorer	- Good at going into new situations
- Intrigued	- Intrusive
- Inquisitive	- Nosy
- Investigative	
- Probing	

Examples

- Likes exploration and discovery
- Interested in everything
- Always asks questions/likes asking a lot of questions
- Excited to trying new things
- Likes figuring out how things work/to know how things work (e.g., how the dishwasher works, how the fridge keeps things cold)

Fairness: Treating all people the same according to notions of fairness and justice; not letting personal feelings bias decisions about others; giving everyone a fair chance.

Synonyms (code)	Exclusions (do not code)
- Care/justice based	- Uncaring justice
- Even-handed	
- Just	
- Principled	

Examples

- Approach situations with an unbiased mindset; treat everyone with respect
- Makes sure everyone is included
- Insists on equal treatment (e.g., when candies or treats are handed out, ensures that everyone gets an equal share)
- Gives everyone a chance; gives everyone an equal chance to be involved
- Assists others (e.g., friends, sibling) to remember rules
- Relates to other children fairly
- Champions equal opportunity for all

Forgiveness: Forgiving those who have done wrong; accepting the shortcomings of others; giving people a second chance; not being vengeful

Synonyms (code)	Exclusions (do not code)
- Forgiving	- Compassionate (code as kindness)
- Gracious	- Kind-hearted (code as kindness)
- Merciful	- Permissive, too lenient or soft

Examples

- Forgives those who have done wrong
- Doesn't hold a grudge (e.g., does not stay angry at friends or siblings), does not seek revenge, let's go of hurt when wronged
- Gives second chances, willing to give others another chance, gives other chances when they apologize
- Forgives quickly
- Always forgives regardless of how unkind someone else (e.g., sibling) has been
- Accepts shortcomings

Gratitude: Being aware of and thankful for the good things that happen; taking time to express thanks

Synonyms (code)	Exclusions (do not code)
- Appreciative	- Ingratiated
- Grateful	
- Thankful	

Examples

- Thankful for good things that happen
- Expresses gratitude, always says thank you
- Feels grateful
- Appreciates things (e.g., food prepared for him/her, gifts that he/she receives, says thank you for the gifts from Santa)

Honesty [authenticity, integrity]: Speaking the truth but more broadly presenting oneself in a genuine way and acting in a sincere way; being without pretense; taking responsibility for one's feelings and actions

<u>Synonyms (code)</u>	<u>Exclusions (do not code)</u>
- Authentic (to others)	- Inconsiderate
- Genuine	- Rude
- Honest	- Self-righteous
- Real	
- Sincere	
- Trustworthy	
- True to oneself	
- Truth sharer/seeker	

Examples

- Speaks the truth
- Presents self genuinely/sincerely
- Always tells the truth (even when it means he/she will not get what they want)
- Gives honest feedback
- Keeps promises
- Tells us if he/she is doing something they shouldn't be
- Does not have a tendency to lie

Hope [optimism, future-mindedness, future orientation]: Expecting the best in the future and working to achieve it; believing that a good future is something that can be brought about

<u>Synonyms (code)</u>	<u>Exclusions (do not code)</u>
- Hopeful	- Blind optimism
- Inspiring	- Unrealistic
- Optimistic	
- Positive/positive expectations	

Examples

- Expects the best from the future; Positive outlook about the future
- Always looks on the bright side (e.g., when faces new situations, he/she generally assume good things will happen)
- Optimistic outlook (e.g., when things are hard, believes they will work out in the end)
- Remains hopeful even when bad things happen

- When he/she doesn't succeed, he/she believes they will do better next time
- Confidence in goals/future

Humility [modesty]: Letting one's accomplishments speak for themselves; not regarding oneself as more special than one is

Synonyms (code)	Exclusions (do not code)
- Down to earth	- Self-deprecating
- Humble	- Withholding about oneself
- Modest	
- Unassuming	
- Unpretentious	

Examples

- Doesn't seek the spotlight
- Let's their actions speak for themselves
- Let's others shine
- Doesn't show off; Doesn't brag/boast about accomplishments/achievements
- Doesn't come across as better than others
- Clear view of self

Humour [playfulness]: Liking to laugh and tease; bringing smiles to other people; seeing the light side; making (not necessarily telling) jokes

Synonyms (code)	Exclusions (do not code)
- Amusing	- Giddy
- Clown/class clown	- Silly mood, too silly
- Comedian/comical	- Socially inappropriate
- Funny	- Mean practical jokes
- Goofy, silly side, silly personality	- Tasteless/offensive
- Hilarious, humorous, hysterical	
- Laughter/joy with others	
- Lighthearted, playful	
- Witty	

Examples

- Likes to laugh
- Good sense of humour
- Likes to be funny/goofy; knows he/she is being funny
- Likes to tell jokes/make jokes/play jokes on others; likes to tell funny stories
- Likes to bring smiles to other people; Makes me/others laugh; knows how to make others laugh
- Tries to lighten the mood
- Makes goofy faces, silly comments
- Sees lighter side

Judgment [open-mindedness; critical thinking]: Thinking things through and examining them from all sides; not jumping to conclusions; being able to change one’s mind in light of evidence; weighing all evidence fairly

Synonyms (code)	Exclusions (do not code)
- Analytical	- Indecisive
- Critical thinker	- Rigid
- Detail oriented	- Narrow-minded
- Logical	
- Open-minded	
- Rational	
- Reasonable	
- Sensible	

Examples

- Examines things from all sides; Considers all the angles, open to other people’s opinions
- Doesn’t jump to conclusions
- Thinks things through, puts a lot of thought into what he/she does
- Weigh pros and cons; weighs options before making a decision
- Has good reason for decisions
- Likes to analyze situations, analyzes everything

Kindness [generosity, nurturance, compassion, altruistic love, “niceness”]: Doing favors and good deeds for others; helping them; taking care of them

Synonyms (code)	Exclusions (do not code)
- Compassionate, Considerate	- Caring (code as love)
- Kind; Kind-hearted	- Sweet (unless context indicates kindness)
- Friendly	- Worried/concerned about others
- Generous	- Makes sure everyone has a good time
- Heart of gold	- Doesn’t like when others are sad or left out
- Helpful	- Overly focused on others
- Inclusive	
- Mother hen	
- Nice	
- Thoughtful	
- Understanding	

Examples

- Enjoys doing good deeds for other people; Enjoys doing favours
- Likes/wants/tries to help others (e.g., helps out around the house)
- Tries to cheer people up, goes out of his/her way to cheer up people who appear down
- Considerate of others
- Volunteers to help when he/she sees someone in need
- Generous to others; Does nice things for others
- Kindness is active (e.g., shares toys, gives hug, helps with laundry/baking)

Leadership: Encouraging a group of which one is a member to get things done and at the same time maintain good relations within the group; organizing group activities and seeing that they happen.

Synonyms (code)	Exclusions (do not code)
- Encouraging	- Authoritarian
- Inspirational	- Bossy
- Leader	- Controlling
- Motivational	
- Organizer	
- Trailblazer	

Examples

- Inspires people to do their best
- Is an alpha toddler
- Other children follow his/her lead
- Has good leadership skills; takes on leadership role, likes to be in charge, likes to be the person who's leading
- Likes to get others to follow along, Likes demonstrating, likes teaching
- Leader in games/athletic activities/in classroom when it comes to prayer time/with other children
- Positively influences other children
- Organizes groups

Love: Valuing close relations with others, in particular those in which sharing and caring are reciprocated; being close to people

Synonyms (code)	Exclusions (do not code)
- Affectionate	- Lovable; Loved
- Big heart; Huge heart	- Has close friends, has some best friends
- Caring	- Friends are important to him/her
- Committed (with loving context)	- Sugary sweet/touchy feely
- Dedicated	
- Devoted	
- Loving; Loves hard	
-Warm	

Examples

- Loving family member (e.g., is devoted to younger sibling, is a Daddy's girl, the best big sibling, momma's boy/girl, loves his brother/sister/friends/family); family oriented
- Snuggly, cuddly, likes affection
- Demonstrates warmth/love toward others; tells others he/she loves them
- Loves animals, cares about creatures, cares for/loves pet
- Caring toward other children
- Reciprocal warmth

Love of Learning: Mastering new skills, topics, and bodies of knowledge, whether on one’s own or formally; obviously related to the strength of curiosity but goes beyond it to describe the tendency to add systematically to what one knows

Synonyms (code)	Exclusions (do not code)
- Likes/loves learning	- Excelling at school
- Likes/loves school	- Intelligence (e.g., impress us with reading/writing abilities)
- Studious	- Know-it-all
- Information seeking	

Examples

- Likes mastering his/her own topics on his/her own or in school
- Loves to hear how things go together and how they work
- Enjoys reading, books, math, counting, words, sentences, writing, numbers, science, workbooks
- Interested in learning, eager to learn, enthusiastic about learning something new, loves learning a new skill, jumps into learning something new, gets excited when there’s something new to learn
- Enjoying kindergarten, likes going to school (unless context indicates otherwise)
- Loves talking about what he/she learned at school
- Likes when we sit and read together at night; interested in writing everybody’s name

Perseverance [persistence, industriousness]: Finishing what one starts; persisting in a course of action in spite of obstacles; “getting it out the door”; taking pleasure in completing tasks

Synonyms (code)	Exclusions (do not code)
- Committed (with perseverant context)	- Fixated
- Determined, strong determination	- Stubborn (unless context indicates otherwise)
- Gritty	- Strong-willed (unless positive context surrounds it)
- Go getter	- Struggles to let go
- Hardworking	
- Industrious	
- Perseverant	
- Persistent	
- Stubborn in a good way	

Examples

- Completes what he/she starts despite obstacles
- Works hard at things
- Finishes what he/she starts, likes to see/bring things to completion, follows through on tasks/responsibilities
- Doesn’t give up, doesn’t quit before a task is done, keeps trying and trying until he gets it right (e.g., a couple of weeks ago he was shooting up on a basketball net and would not stop trying until he could get a basket in the net)
- Rises to challenges he/she’s faced with

Perspective [wisdom]: Being able to provide wise counsel to others; having ways of looking at the world that make sense to oneself and to other people

Synonyms (code)	Exclusions (do not code)
- Insightful	- Arrogant
- Mature	- Overbearing
- Old soul	
- Sage	
- Wise	

Examples

- Wise beyond years
- Mature view on life
- Will try to help problem solve when someone’s in conflict, settles disputes among friends
- Integrates viewpoints beyond one’s own

Prudence: Being careful about one’s choices; not taking undue risks; not saying or doing things that might later be regretted

Synonyms (code)	Exclusions (do not code)
- Careful	- Passive/reserved
- Cautious/Wisely cautious	- Shy, takes time to warm up to others
- Planful	- Timid
- Sensible	

Examples

- Makes careful choices
- Doesn’t leap into things quickly, hesitant to try new things, not much of a risk taker
- Wants to observe first when getting to know a situation, observes before he/she does anything, observes a situation before deciding whether to engage
- Knows how to avoid situations that could endanger him/her

Self-Regulation [self-control]: Regulating what one feels and does; being disciplined; controlling one’s appetites and emotions

Synonyms (code)	Exclusions (do not code)
- Composed	- Inhibited/constricted
- Disciplined	- Polite
- Even keeled; Even tempered	- Respectful
- Poised	- Wants to please
- Self-control	- Well behaved; Well mannered

Examples

- Has the ability to control emotions/behaviours
- Thinks before he/she acts
- Follows rules well, rule abider, compliant

- Makes good behaviour choices when upset
- Doesn't throw tantrums, doesn't have outbursts, doesn't lose control (generally)
- Learning to take control of emotions, has good patience
- Self-regulates by going off on own and coming around later; when angry goes off by self for a bit
- Capable of waiting, even if he/she wants something right now
- Good self-control even when angry

Social Intelligence [emotional intelligence, personal intelligence]: Being aware of the motives and feelings of other people and oneself; knowing what to do to fit into different social situations; knowing what makes other people tick

Synonyms (code)	Exclusions (do not code)
- Attuned	- Good at going into new situations
- Emotionally intelligent	- Over-analytical
- Empathetic	- Overly sensitive
- Sympathetic	

Examples

- Aware of other people's thoughts and feelings
- Good at reading others' feelings, always knows how I am feeling
- High levels of empathy for others
- Good social skills - has a lot of friends/big group of friends, good at engaging with friends, gets along with everybody, doing well socially, makes friends easily
- Sensitive to people's emotions, concerned about people and how they're feeling, knows what to say to make others feel good
- Notices when another kid is feeling left out, in tune with what's going on with his/her friends, recognizes if someone is struggling in grocery store

Spirituality [faith, purpose]: Having coherent beliefs about the higher purpose and meaning of the universe; knowing where one fits within the larger scheme; having beliefs about the meaning of life that shape conduct and provide comfort

Synonyms (code)	Exclusions (do not code)
- Connected (to what's sacred)	- Preachy
- Faith oriented	
- Spiritual	
- Purposeful	

Examples

- Has beliefs about the meaning of life and his/her life purpose
- Seeks to be part of something greater than himself/herself
- Loves God
- Says prayers regularly, reminds family to pray
- Celebrates her faith, incorporates faith into daily living

- Has a sense of purpose doing God’s work
- Enjoys praying before dinner
- Is drawn to spiritual practices (e.g., prayer, meditation)
- Feels connected to a higher power
- Pursuing life meaning

Teamwork [citizenship, social responsibility, loyalty]: Working well as a member of a group or team; being loyal to the group; doing one’s share

Synonyms (code)	Exclusions (do not code)
- Collaborative	- Dependent
- Good teammate	
- Loyal	
- Participative	
- Team player	

Examples

- Cooperates well as a member of a group or team (e.g., with playmates), cooperative when playing in a group, contributes to group efforts
- Loyal group/team member
- Dedicated to helping team achieve its goals
- Interested in team sports, likes to do things as a team

Zest [vitality, enthusiasm, vigor, energy]: Approaching life with excitement and energy; not doing things halfway or half-heartedly; living life as an adventure; feeling alive and activated

Synonyms (code)	Exclusions (do not code)
- Adventurous	- Is active/likes being active/overactive
- Boisterous	- Hyper
- Busy bee	- Likes moving
- Charismatic	- Likes running
- Eager	- Likes playing outside
- Energetic, ball of energy, lot/ton/full of energy, full of life	- Likes to stay busy
- Enthusiastic	- Doesn’t sit around for long
- Excited	
- Exuberant	
- Feisty; Firecracker	
- Fun loving	
- Joyful	
- Lively	
- Rambunctious	
- Spirited; Spunky; Upbeat	
- Vibrant; Vivacious	
- Zest for life	

Examples

- Approaches life with excitement/energy
- Always moving (if context suggests it can't be contained, bursting out)
- Go go go all the time
- Explosive when it comes to his/her energy
- From the moment he/she wakes up he/she's going
- Would never sleep if it were up to him/her
- From the time he/she wakes up to the time he goes to bed he/she's on go mode
- Wakes up full of joy and enthusiasm for the day

Character Strengths Magnitude (CSM)

This coding scale is based on global impressions for the magnitude (or depth) of each character strength. A unique magnitude rating is given for each of the 24 character strengths mentioned per transcript.

The magnitude rating coding scheme was informed by, and modified from, the scale used to capture child happiness in Park and Peterson's (2006a) study. Magnitude ratings take into account qualifiers and the number of descriptions or examples provided.

Ratings of magnitude are made on a three-point scale.

0. No mention of given character strength.
1. Character strength not named but implied by description of one frequent and enjoyed activity/example OR character strength described with a limiting qualification (e.g., somewhat, occasionally), OR character strength described with no qualification.
2. Character strength not named but implied by description of several frequent and enjoyed activities/examples OR character strength described with an additive qualification (e.g., very, quite) OR character strength explicitly described with a superlative (e.g., extremely; always; unbelievably).

General Guidelines

- Pay particular attention to qualifiers and superlatives for character strength names and synonyms of character strengths (examine the words right before and after mention of a particular character strength).
 - Do not take into account qualifiers for examples of character strengths.
- When assigning a magnitude rating to a particular character strength, do not take into account any information coded as any other character strength.
- Assign a rating of 2 when a character strength (or synonym of a character strength is named) *and* one example is provided.
- Do not differentiate between “likes” and “loves” when deciding between a rating of 2 versus 3.

Character Strength Intensity (CSI)

To capture an overarching sense of how strengths-focused a particular caregiver's description was in its entirety, compute the character strengths intensity by multiplying the character strength frequency score and character strength magnitude score (CSFxCSM) for each character strength. This variable allows for a more nuanced or fine-grained way of examining character strengths in young children.

- Higher scores on this variable are considered to indicate a combination of higher strengths magnitude and/or frequency.
- To calculate the total character strength intensity in a transcript, sum the results for each individual character strength.
 - For example, if a transcript mentioned strengths of kindness once with an intensity of 1, humour twice with an intensity of 2, and creativity three times with an intensity of 1 (with no mention of any other strengths), the total strength intensity in the transcript would be 8 ($1 \times 1 + 2 \times 2 + 3 \times 1$).