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The purpose of the current study was to examine gratitude as a virtue, defined by a benefactor freely giving some kind of benefit to a beneficiary who recognizes the boon, and then freely and intentionally chooses to reciprocate based on the wishes of the benefactor, and its relation to moral obligation, specifically heteronomous versus autonomous obligation in seven to fourteen year olds.

Vignette interviews, an open-ended questionnaire determining expressions of gratitude, and the GAQ showed that there was no significant link between expressions of gratitude and children's and adolescents' justifications for helping a benefactor based on the type of moral obligation expressed. Nor were differences found based on age or gender. However, an unexpected type of obligation, consequences to the benefactor, was related to age such that younger children were more likely to be concerned about the consequences to their benefactors if they did not help them than were older children. Additionally, those children and adolescents who expressed concrete or connective gratitude scored higher on the GAC, as did girls versus boys.

IS AN UNDERSTANDING OF MORAL OBLIGATION  
ASSOCIATED WITH THE MORAL  
VIRTUE GRATITUDE?

by

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Approved by

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Committee Chair

To Anna and Lucas, that they may know it's never too late to follow your dreams;

and

To my husband Joni, for never letting me forget it.

APPROVAL PAGE

This thesis written by SARA ANN ETZ MENDONCA has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	vii
CHAPTER	
I. INTRODUCTION .....	1
Conceptualizations of Gratitude .....	2
II. THEORETICAL FRAMEWORK AND REVIEW OF THE LITERATURE.....	8
Moral Virtue and Moral Obligation .....	8
Moral Development .....	12
Expression of Gratitude .....	15
Cognitive Development .....	18
Current Study .....	21
Research Questions and Hypotheses .....	22
III. METHODS .....	25
Participants.....	25
Procedure .....	26
Measures .....	27
Vignettes .....	27
WAGS.....	30
Gratitude assessment questionnaire .....	31
Analysis.....	32
IV. RESULTS .....	35
Preliminary Findings.....	35
Results of Hypotheses.....	38
V. DISCUSSION .....	43
Limitations .....	50
Conclusion .....	51

REFERENCES .....	54
APPENDIX A. PERMISSION LETTER .....	61
APPENDIX B. GRATITUDE VIGNETTES .....	64
APPENDIX C. WISHES AND GRATITUDE SURVEY .....	66
APPENDIX D. GRATITUDE ASSESSMENT QUESTIONNAIRE .....	67

## LIST OF TABLES

	Page
Table 1. Descriptive Sample Characteristics .....	36
Table 2. General Distribution of Types of Obligation .....	37
Table 3. Distribution of Obligation Type by Age.....	38
Table 4. Age as Predictor of Autonomous Obligation and Connective Gratitude.....	39
Table 5. Obligation as Predictor of Gratitude Type Controlling for Age.....	40



## CHAPTER I

### INTRODUCTION

Gratitude has been positively associated with a plethora of indicators of overall well-being, such as higher self-esteem, happiness, optimism, hope, positive affect and greater life satisfaction (Emmons & McCullough, 2003; Froh, Wilson, Emmons, Card, & Bono, 2011; McCullough, Emmons & Tsang, 2002; Owens & Patterson, 2013; Rash, Matsuba, & Prkachin, 2011). Moreover, gratitude and social integration are said to serially enhance each other in a way that may form and strengthen social bonds and encourage prosocial behaviors (Emmons & McCullough, 2004; Froh, Bono, & Emmons, 2010). Gratitude's apparent link to an overall higher quality of life, various prosocial behaviors, and as a buffer to negative behaviors, inspired researchers to examine gratitude more closely. However, despite the growing interest in the study of gratitude, there is a dearth of research that is developmental in nature and the development of gratitude is still a largely unstudied phenomenon, leaving an important area of ontogenesis unexamined.

Gratitude research is still relatively new in the field of developmental psychology and there is a real need to understand its origins and development. Using a conceptualization of gratitude as a moral virtue and innovative methods, such as vignettes with coded responses to open-ended questions distinguishing among different types of

expressions of gratitude and justifications for obligation to help a benefactor, and a measure that assesses how children feel about the kindness or generosity of a benefactor, the Gratitude Assessment Questionnaire (GAQ, Tudge & Freitas, 2010), I examined what may be precursors to gratitude as a virtue using Piaget's theory of moral development (Piaget, 1932/1960) to inform my research. First, I will chronicle conceptualizations and common measurement tools used in recent gratitude research, then I will define my conceptualization of gratitude and other key concepts used in my measures, followed by a literature review of research similar to my own, and, lastly, I will present the current study.

### **Conceptualizations of Gratitude**

Gratitude has been conceptualized as an emotional state and the disposition toward gratitude as a life orientation characterized by appreciating and being sensitive to the positive aspects of life (Algoe, Haidt, & Gable, 2008; Froh et al., 2011; Hoy, Suldo, & Mendez, 2013). It has also been conceived of as a positive emotional response, such as a feeling of elation or thankfulness, experienced by a beneficiary after receiving from a benefactor a gift or act of benevolence that was freely given by the benefactor (Emmons & McCullough, 2004). The benefactor freely gives this benefit. Beyond being a state characteristic, it has also been conceptualized as a moral barometer, a moral motivator, and a moral reinforcer (McCullough et al., 2001). As a moral barometer, gratitude is an emotional response to receiving benefits from a person who gave those benefits purposefully. As a moral motivator, gratitude inspires prosocial behavior in people and hinders negative behavior after they have been the beneficiary of a prosocial act. As a

moral reinforcer, gratitude reinforces the positive actions of others and motivates them to continue behaving in the same way.

Despite the differences in the conceptualization of gratitude, much of the current research conducted on gratitude has both operationalized and measured gratitude in a uniform way. For example, in one of the most commonly used gratitude scales, the Gratitude Questionnaire-6 (GQ-6: McCullough et al., 2002), items such as “I have so much in life to be thankful for” and “When I look at the world, I don’t see much to be grateful for” are commonly found. It may be that by equating gratitude with a general appreciation for life, researchers are, in part, merely measuring this appreciation, regardless of the conceptualization of gratitude they are referencing (Froh, Kashdan, Ozimkowski, & Miller, 2009). In the GQ-6, there is no attempt to understand whether individuals feel a sense of obligation to the people who may have helped them or to understand what connection may exist between benefactors and beneficiaries. Other measures such as the Gratitude Adjective Checklist (GAC: McCullough et al., 2002) and the Gratitude, Resentment, Appreciation Test-Short Form (GRAT: Watkins, Woodward, Stone, & Kolts, 2003) are similar to the GQ-6, in that they do not make a connection between gratefulness as a result of other people’s actions nor are they interested in whether there is a wish to repay a benefactor. Therefore, these scales do not promote the ability to understand gratitude’s origins. Moreover, the scales commonly used in gratitude research have no way of assessing gratitude the way it is conceptualized by some researchers, for example, when considering gratitude as a moral barometer, motivator, or reinforcer. In contrast to the aforementioned measures, the GAQ assesses

gratitude by not only asking if children are thankful for people who may benefit them in some way, but if it is good to actively reciprocate. The majority of measures used in gratitude research suffer from inconsistency in what is being conceptualized and what is being measured; however, the GAQ demonstrates consistency between conceptualization and measurement.

Contrary to previous research examining levels of gratitude as a positive emotion, it is imperative to examine gratitude as a virtue, and in this way attempt to discover what the precursors to gratitude may be and how gratitude develops with age. The lacuna of gratitude research operationalizing this conceptualization is lamentable (Rash, Matsuba, & Prkachin, 2011) because although many benefits may be derived from experiencing higher levels of state gratitude, as a moral virtue gratitude is valuable in creating strong connections between people. As a virtue, gratitude may be seen as an enduring and stable disposition to act in an estimable way (Annas, 2011), and is manifested by a beneficiary's expression of gratefulness towards the benefactor who helped him or her by not only returning the favor, but also taking into account the other's goals and wishes before doing so (Tudge & Freitas, 2010). Thus, it is a worthwhile characteristic to promote in children. The social nature of gratitude as a virtue fosters connectedness and encourages social ties that may promote social belonging. The concept of gratitude as a virtue is explained more thoroughly below.

Although gratitude is clearly found in adults, it is unrealistic to expect that children or even adolescents will have achieved gratitude as a moral virtue because a virtue is something that develops over time and, in order for it to be present, a person

should be aware of possessing it. Therefore, when it comes to child development, it is important to understand how gratitude develops in children and what mechanisms may engender its inception. With this in mind, it is important to consider the role of age in gratitude's development because with maturation children's social cognition seems to improve, such as the ability to take another's perspective and to reason morally (Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005). When considered as a moral virtue, gratitude's relation to moral obligation, or the duty to repay the benefactor willingly and freely based on the help or gift received from the benefactor, may provide insight as to the ability of the child to reason morally and to experience gratitude. Age is likely to affect this ability. Therefore, I will examine the relation between age, the children's expressions of gratitude and children's ability to recognize a moral obligation and show recognition and gratefulness for a benefactor's actions. Examining children's expressions of gratitude is useful in distinguishing gratitude as a moral virtue from other conceptualizations and the ways gratitude has been operationalized in previous studies because the focus is on reciprocation for the benefit received and not the positive emotion the benefit induced. A clear conceptualization of gratitude will promote a better understanding of what is being examined.

The conceptualization of gratitude in this paper is that of a moral virtue and there are requisite factors before it can emerge. Gratitude occurs in the event that, first, a benefactor has purposely and voluntarily helped or given a beneficiary something; second, the beneficiary perceives and comprehends the benefactor's intended action; and third, the beneficiary, freely and intentionally, chooses to repay with something of value

to the benefactor if such an action is feasible and appropriate (McConnell, 1993). An important characteristic of gratitude as a virtue is that an opportunity for repayment may not occur for a long time, but that when an opportunity does arise, the beneficiary reciprocates. Finally, in order for an individual to possess gratefulness as a trait, grateful behavior must be the typical behavior of the individual, not an occasional way in which the individual may act.

This conceptualization conceives of gratitude as a virtue that creates a moral obligation because under these conditions the beneficiary has a duty to repay the benefactor (McConnell, 2013). However, it is important to note that an obligation of gratitude is not an outwardly enforced duty because it is the actual feeling toward the benefactor that creates a psychological duty to repay (Piaget, 1972). Favors should be returned, although without outside pressure. The origins of the word gratitude help to highlight this difference. Gratitude stems from the Latin *gratus*, meaning pleasing or thankful. Gratitude should elicit positive emotions, although gratitude is much more than just a pleasant feeling, as opposed to the negative emotions often associated with an externally enforced obligation (Watkins, 2014; Watkins, Scheer, Ovnicek, & Kolts, 2006). Therefore, as a moral virtue, gratitude creates a relationship between people. Some researchers (e.g., Watkins, 2014) argue that repaying the benefactor is an obligation that is forced on the beneficiary by social norms, which would imply that reciprocation is based on heteronomous autonomy controlled by social rules. This argument is explored further later, but the focus here is on Piaget and his argument that it

is an autonomous obligation that develops through moral reasoning, on which he elaborated in his theory of moral development (Piaget, 1932/1960).

## CHAPTER II

### THEORETICAL FRAMEWORK AND REVIEW OF THE LITERATURE

#### **Moral Virtue and Moral Obligation**

Before examining Piaget's theoretical position on the development of moral reasoning, it is important to be clear on what is meant in this paper when using the expression moral virtue. At its most basic, a moral virtue is defined as conforming one's conduct to good and righteous principles (Aristotle, 1985). Aristotle, considered by many to be one of the fathers of virtue ethics, thought that moral virtues are acquired by habit and practice, as opposed to being innate (Aristotle, 1985). In *Nicomachean Ethics*, Aristotle (1985) posited that it is impossible to abstractly achieve a moral virtue. In order for one to be considered morally virtuous, one must act morally in a social environment. With Aristotle's claim in mind that moral virtues come about through habit and practice, it is important to remember that neither children nor adolescents may be deemed morally virtuous, but it may be possible to study ways of behaving that could possibly lead to the development of a virtue. Aristotle thought that people may achieve happiness by living virtuous lives, although the virtue itself may not be the means to that end, as living in a morally laudable manner brings its own satisfaction. Employing this understanding, if gratitude is considered a moral virtue, then it should not feel that repaying someone for a kindness is an onerous task, because it is in the action of being morally virtuous that one feels gratification



In line with a developmental perspective, Annas (2011), a modern day philosopher following in the tradition of Aristotle, posed the important question of how we are guided to carry out virtuous actions. She suggested that virtuous dispositions are active and developing from their inception; thus in the field of human development, researchers' interest is in how virtue may begin. Research has not examined this question, although research on the development of moral values may be relevant. Values are beliefs that individuals hold that govern their decisions about right and wrong, and moral virtues are dispositions to behave in the right manner; therefore parents' and children's moral values should have a strong influence on what they consider to be moral virtues. This understanding does not preclude moral virtues from influencing moral values, but is not the focus here. Research supports Annas' argument that morality may be active and developing and suggests that parents are influential in the socialization of children's moral values, particularly through the nature of children's experiences in close relationships and the quality and substance of parent-child conversations (Grusec, 2006; Grusec & Hastings, 2007; Thompson & Winer, 2014; Wainryb & Recchia, 2014). In other studies, adolescents' parents' morality predicted adolescents' morality and the predictors had a stronger association with self-transcendence values such as benevolence and universalism, as opposed to self-enhancement values such as power and achievement (Barni, Ranieri, Scabini, & Rosnati, 2011; White & Matawie, 2004). Annas (2011) argued that initially children may accept their parents' definition of honesty as telling the truth and that their parents believe it is the right thing to do, but with maturation and their

own experience with honesty, they may question the meaning given to them and eventually form their own.

Like Aristotle before her, Annas suggested that moral virtue must be practiced to be gained and likens this to learning a skill. This implies that there are beginners and those who are experts. For example, when learning to ski, the expert's knowledge is accepted and there are usually attempts to follow it because there is no way for novices to know otherwise. However, once skill is attained, skiers can gain further insight from their own experiences and understand how to use their newfound, more developed skill to think about weather and slope conditions and change their behavior based on this. Perhaps they will choose to go on a more challenging hill or attempt a jump based on using their acquired expertise joined with their personal desire. Applying this idea to gratitude, for those children who are encouraged to say "thank you" or are required by their parents to write thank you notes, initially they are acting on a partial and passive understanding of gratitude. As they develop and have more experience with gratitude, they may become able to act as someone who experiences gratitude, not someone just following the expert, and may behave based on their own internalized principles. This study is not meant to address parents' socialization of values; however, it is important to establish that moral behavior may be learned. It is also unrealistic to think that children will actually become experts before adulthood and experience gratitude as a moral virtue, yet it may be possible to try and understand the progression towards experiencing gratitude as a moral virtue.

So, then, what does it mean to practice gratitude? The final aspect of gratitude to be addressed before considering a theory of its development is the connection between gratitude and moral obligation. Recall from the definition of gratitude as a moral virtue that a benefactor, acting freely and intentionally, does something for a beneficiary, and the beneficiary, acting freely and intentionally, must repay with something of value to the benefactor if possible. Receiving the benefit from the benefactor creates a feeling of moral obligation in the beneficiary. Considering the definition of moral virtue as acting on righteous principles, and considering that living a virtuous life brings joy, this implies that conducting one's life in a moral way cannot be conceived of as a negative duty. Therefore, gratitude as a moral virtue inherently elicits a moral obligation that creates positive connections between people. It is the sense of connection between the benefactor and the beneficiary that creates gratitude in the beneficiary. The beneficiary may then become the benefactor, creating a constructive cycle of social connectedness and prosocial behavior that encourages positive feelings between individuals, in this case benefactors and beneficiaries.

Some scholars have suggested that feeling an obligation to repay impedes the emergence of gratitude and if gratitude increases, then indebtedness decreases, and vice versa, implying that the two cannot coexist (Watkins, Scheer, Ovnicek, & Kolts, 2006). However, this study was interested in distinguishing whether or not the debt of gratitude is internally generated, as opposed to acting as a form of economic indebtedness. Moreover, Watkins (2014) argued that there are distinct cognitive appraisals leading to indebtedness and to gratitude. Again, it is important to examine the conceptualization of

indebtedness to refute this claim. Research in this area tends to define indebtedness as a form of forced repayment for a favor or other benefit, whereas a moral obligation is repaid freely, without outside pressure. In agreement with the authors, I argue that a debt of gratitude is internally generated, but clearly, based on the definition of a moral obligation generated by gratitude, it cannot be analogous to an economic debt.

Philosophy is not always represented in psychology, but it is only by examining philosophical principles that it becomes possible to understand the essence of gratitude and its emergence. Annas (2011) suggested that in order to examine her philosophical propositions, informed research in psychology would be useful because of the strength of psychological empirical research. It is likely that by using Annas' propositions to support research in human development both parties will benefit, as I hope to demonstrate here.

### **Moral Development**

Piaget's theory of moral development is both instructive and explanatory when examining the ability of children to reason morally. It is imperative to understand the theoretical assumptions that inform changes in moral reasoning in order to understand at what point children may begin to recognize a moral obligation and, therefore, experience gratitude. Piaget's interest in children's moral development was focused on what they think and, therefore, in how they reasoned morally (Mayer, 2005). Using stories with moral themes and listening to children's opinions about the stories, he found that their understanding of rules, moral judgments, and punishment evolved in a progressive manner as they aged. Piaget's stages of cognitive development provide an understanding of how children's cognitive functioning may affect their progression through the stages of

moral development, thereby influencing social cognitive development (Piaget & Inhelder, 1955/1970).

When considering Piaget's developmental stages, it is important to remember that the stages do not correspond precisely with exact ages and changes in individual children and that the appearance of stages varies depending on the child (Piaget, 1972).

According to Piaget, from roughly age two through approximately age seven, children are in the pre-operational stage (Piaget & Inhelder, 1969). It is characterized by egocentric thinking and very early on in the stage children cannot understand the concept of rules. They still have difficulties distinguishing appearance from reality. When responding to questions based on moral dilemmas, most children in Piaget's research were only able to think of material consequences in response to not following the rules, not the intention behind the breach in rule-following (Piaget, 1932/1960). Considering gratitude, children may be instructed by their parents to show thankfulness with a hug or to verbally thank those who have given them something or helped them, but it is likely that they do not have a real understanding of what their actions or words mean and are acting merely by following instructions. In this period, most children only know unilateral respect, that which they have for their parents or other authority figures, and understand that they must conform to their demands (Piaget, 1932/1960). There is no mutuality. Even when children begin to understand rules, they are accepted as immutable and externally created.

As children gradually progress from the preoperational to the concrete operational stage, around age seven, their perspective on what is right and wrong may become more nuanced (Piaget, 1969). As in all of Piaget's stages, this shift does not happen at once

and likely began in the preceding stage. In the case of right and wrong, as change is taking place, children's perspectives may differ based on the context in which they find themselves. One way for the change to occur is through interactions with peers, and children may begin to recognize that rules may be changed by common consent (Piaget, 1972). Cognitively, children begin to reason logically about concrete events, although they still have trouble reasoning about abstract concepts and hypothetical situations. The ability to take others' perspectives helps facilitate their movement in thinking, as does peer interaction that encourages negotiating rules with others based on mutual respect and contemplating their own personal views with regard to right and wrong (Piaget, 1932/1960). It is during this stage that autonomous normative systems are formed (Piaget, 1972). The distinction between unilateral and mutual respect is important and forms part of the basis for obligation. When an obligation is based on duty, the rule or norm that one must follow is understood as already established and is, therefore, heteronomous (Piaget, 1932/1960). In contrast, when a norm is mutually created, the individuals who feel obligated to follow it have autonomously participated in its formation. Further, mutual respect and negotiation with peers encourages children to understand that their perspective may be different from those around them and this promotes a decrease in egocentrism. At this point, gratitude may be expressed spontaneously; however, expressions of gratitude may still be used because of a fear of disapproval and because of the rule-based social expectations associated with gratitude that children may have been taught by parents, family members, teachers, and others with whom the children interact.

According to Piaget, the formal operational stage begins at approximately age 12 and is characterized by an increasing ability to reason abstractly, but, again, this shift likely began in the previous stage (Piaget & Inhelder, 1969). Children become concerned with the hypothetical and the future and are able to create hypotheses and test them. They can think logically about abstract propositions and build theories. They have the potential for mature moral reasoning. These abilities allow adolescents to create hypothetical worlds and decide what behaviors are most desired in them. Contemporary adolescents are exposed to a multitude of influences and many are able to make judgments about what they see. At this stage in development, adolescents for the most part have learned to respect people's differing points of view and feel internal responsibility for their actions (Piaget, 1954/1981). They continue the progression from heteronomous morality to autonomous morality that likely already began in the preoperational stage and are able to construct principles regarding how they believe it is best to act (Piaget, 1932/1960). They are able to build personal relationships based on mutual respect and in this way moral obligations are created between individuals based on positive internal principles, rather than externally enforced ideals.

### **Expression of Gratitude**

Currently, there is scant research examining the development of gratitude as a virtue in children and adolescents. This is ironic considering that Swiss psychologist Baumgartner-Tramer conducted the first study exploring gratitude in children over seventy-five years ago (1938). Her research focused on age-related changes in how children express gratitude, in an attempt to understand its determinant factors, means of

expression, and trajectory of development. Studies conducted by Freitas, Tudge, and a handful of other scholars on the development of gratitude are exceptions and have begun to address this lacuna (Castro et al., 2011; Nelson et al., 2013; Rava & Freitas, 2013; Tudge, Freitas, Wang, Mokrova, & O'Brien, 2015). The methods used in this research are quite different from those used in other gratitude studies. Open-ended vignettes and questions are often employed to get a better understanding of what children think, feel, and understand about gratitude depending on their stage of development. For example, children are asked specifically what they would do for a benefactor who has provided something the child wants or needs in order to examine the virtuous nature of gratitude. Freitas' initial research is informative due to its uniqueness and attempt to examine the actual development of gratitude. In one study, Freitas et al. (2011) were interested in replicating the original 1938 Swiss study on the expression of different types of gratitude among 7- to 14-year-olds, in a different time and context. The analysis showed that expressions of gratitude manifests itself in four types of gratitude that develop sequentially, although it is unclear from results if all types develop in all people. Only the first three types of gratitude will be addressed in this paper because the fourth type was found so rarely that is of no interest in this study.

Baumgartner-Tramer (1938) and Freitas et al.'s (2011) findings were similar, even though the studies were done on two different continents and in two different centuries. Asking participants about their greatest wish, what they would do for the person who granted them their wish, and then coding responses based on what they would do for the person, they found that one type of gratitude was expressed verbally and



was characterized by responding to benefactors with a common expression like “thank you” in response to a gift or an act of kindness. This was found in children of all ages, but it is difficult to know whether its use was based on children’s understanding of social etiquette, or if they were feeling profound gratitude but did not have another way of expressing their deeper feelings. The second type of gratitude was termed concrete gratitude and was conceptualized as occurring when children wanted to repay benefactors by offering something that would have value from the children’s point of view, but that may not have been of any value to the benefactors. Children’s wishing to give adults one of their toys as an expression of thanks is an example of this type of gratitude. This was seen most often in 8-year-old children and infrequently in children over 12 years old. Children understand that reciprocation is called for, but they do not yet have the ability to take the other’s point of view when choosing how to reciprocate, and, therefore, it may make it difficult to know why they are choosing to reciprocate. The third type of gratitude was connective gratitude and was distinguished by the beneficiary’s recognition of the benefactor’s wants or needs as evidenced by the child’s choice of reciprocation. When children expressed connective gratitude, repayment could take the form of an expression of feelings, such as showing affection or appreciation for the benefactors themselves, or giving something of value to the benefactors. Connective gratitude was seen much more often with children aged 11 and above than with those who were younger, and was characterized by the beneficiary appreciating not only the favor, but also the benefactor and the benefactor’s wishes. Although all three kinds of gratitude have a connective element in that any form of gratitude may create a connection with

another person, the important distinction in connective gratitude is that the beneficiary considers the actual needs, wants and desires of the benefactor before reciprocating.

### **Cognitive Development**

Based on research indicating that there is more than one type of gratitude, and that it develops with age, further research has been conducted looking at the development of gratitude from a cognitive perspective to investigate possible causes for the observance of the change noted in gratitude types by age. In an attempt to determine when children can actually comprehend the idea of gratitude, as opposed to merely repeating the words “thank you” based on their parents’ command or learned politeness, different approaches have been used. A team of researchers conducted a longitudinal study spanning two years to determine developmental precursors to children’s early understanding of gratitude (Nelson et al., 2013). Findings indicated that children who better understood emotions and mental states earlier in their development showed a better, but not complete, understanding of gratitude at age five. Specifically, they found that how children reasoned and what they understood about their own and others’ mental states at age four mediated the relation between emotion knowledge at age three and gratitude understanding at age five. Using a different approach to examine the level of cognitive development needed in order to understand gratitude, Freitas et al. (2012) studied theory of mind (TOM) in 5-year-olds to determine if children who perform better on TOM tasks have a better understanding of gratitude. Findings suggested that TOM is positively correlated with a better understanding of gratitude; however, results were inconclusive when looking at TOM as a necessary condition for gratitude. An association between

cognitive development and gratitude has been suggested, but further research is necessary to understand these links more thoroughly.

Multiple studies looking at gratitude from a developmental perspective were conducted in Brazil using morally-themed vignettes and interviews with three different age-groups, 5- to 6-year-olds, 7- to 8-year-olds, and 11- to 12-year-olds. The studies focused on what type of feelings children think another child may have towards a child versus an adult benefactor (Freitas, Silveira, & Pieta, 2009a, 2009b). The responses indicated that younger children focused on the feelings of the beneficiary alone, but some of the older children began to discuss the feelings between the benefactor and the beneficiary. In a similar study with the same three age groups, besides discussing the feelings between the benefactor and the beneficiary, children were asked about the beneficiary's obligation to return the favor or the help received. Then researchers examined if the justifications for whether or not to return the favor or help would vary among the three age groups (Castro et al., 2011). Results suggested that the majority of 5- to 6-year-olds thought the favor should be returned to avoid material or psychological consequences. For example, the children did not want to make their aunt angry by not helping her. A considerable change was noted between the first group and the 7- to 8-year-olds and 11- to 12-year olds. As Piaget (1932/1960) theorized, the majority of the two older groups thought that they should return the favor to avoid a negative judgment for not being willing to help. The authors posited that the children had begun to understand the relational nature of gratitude, but were not concerned as much about the benefactor as they were how the benefactor and others would perceive them. The

majority of the 11- to 12-year olds responded like the 7- to 8-year-olds, but 30% responded that returning the favor was a moral obligation. The results of the older children who responded that returning the favor was a moral obligation suggest that the older children had different perceptions of their obligation to return a favor, and how to return a favor, than did the younger children. These results reinforce the aforementioned research looking at how gratitude develops as children age. This research supports the method of using vignettes in order to learn about children's understanding of gratitude and the benefits are further substantiated by the results showing a differentiation in understanding of gratitude based on age (Freitas et al., 2012; Nelson et al., 2013).

Before presenting the current study, it is important to examine how Piaget's theory of moral development is related to the different types of gratitude that children may express. From the standpoint of research, verbal gratitude does not allow a determination of moral reasoning because it may be used both when gratitude is experienced as a moral virtue, which would imply autonomous morality, and when it is merely a response prompted by an outside source or in accordance with etiquette, which would imply rule-based heteronomous morality. However, the theory is useful when considering that one of the characterizations of concrete gratitude is that the beneficiary wishes to repay the benefactor, but by offering something that would not necessarily have value for the benefactor. The beneficiary understands that reciprocity is called for, but it is not always clear what the impetus of the reciprocity is. This may be based on a feeling of connection to and good will for the benefactor, but it may also be based on rule-based etiquette. Therefore, it is possible that a connection may exist between concrete gratitude

and heteronomous morality. However, connective gratitude seems to suggest that the beneficiary has progressed from heteronomous morality to autonomous morality because the beneficiary is definitely taking the benefactor's wishes and desires into account and demonstrates the ability to independently consider what the best way to repay the benefactor may be. Therefore, this theory may be used to explain how moral obligation may predict types of gratitude and how social-cognitive maturation, or age, may affect the relation between the two.

### **Current Study**

Gratitude is undoubtedly an important area of research that has been discovered relatively recently for the many positive benefits it can bring to people's lives. Scholars researching gratitude point to a critical need to do more research on gratitude in children and adolescents in order to understand both the fundamental base of gratitude and the development of gratitude (Emmons et al., 2003; Froh, et al., 2009). The focus of gratitude as a virtue is on the positive feelings and social ties that are intrinsically linked to the outcomes that are gained from receiving a gift or benefit from another person, rather than the gift or benefits themselves. This creates a cycle of positive feedback and appears to be inherently prosocial.

The present study's aim is to examine whether children's and adolescents' expressions of moral obligation are associated with their expressions of gratitude and their age. I expect that older children compared to younger children will be more likely to express moral obligation and connective gratitude. I also expect that the moral obligation expressed will be linked to type of gratitude expressed.

Examining age differences in expressions of heteronomous and autonomous morality will add to the gratitude literature because if it seems that more older children are expressing autonomous morality, then it suggests that heteronomous morality may need to be encouraged in order to achieve autonomous morality. It may be especially important to discover whether all children demonstrate either heteronomous or autonomous morality because if they do not, its promotion by adults at the autonomous level could be important for development. Additionally, it is unknown if autonomous obligation is intrinsically linked to the type of gratitude that implies the presence of autonomous morality, or if it is possible for one to exist in absence of the other. By examining children's and adolescents' scores on the GAQ, it may be possible to strengthen the argument that if autonomous morality is expressed in one area, such as when justifying why it is important to help someone, it will be expressed in other areas as well, such as when communicating attitudes with regard to gratitude toward those who have been helpful. What is unique about the GAQ is that it is a scale designed to assess children's attitudes regarding gratefulness towards people who have helped them or given them material goods, as opposed to generalized grateful feelings. It also specifically asks children whether helping or doing something nice for those who have given them things or helped them is good to do, and therefore it is a measure well-suited to examine this question and other questions considering gratitude as a virtue.

### **Research Questions and Hypotheses**

1. Are moral obligation, types of gratitude expressed, and scores measured on the gratitude assessment questionnaire (GAQ) related to age?

1.1 Older children will be more likely than will younger children to express autonomous obligation.

1.2 Older children will be more likely than will younger children to express connective gratitude.

1.3 Older children will have higher scores on the GAQ than will younger children.

2. Is moral obligation to repay a favor associated with the expression of connective gratitude, controlling for age?

2.1 Children expressing autonomous obligation in one or both of the vignettes will be more likely than those not expressing autonomous obligation to express connective gratitude, when controlling for age.

2.2 Children expressing heteronomous obligation in one or both of the vignettes will be more likely than those not expressing heteronomous obligation to express concrete gratitude, controlling for age.

2.3 Children expressing no obligation in either of the vignettes will be more likely than those expressing autonomous or heteronomous obligation to express no gratitude.

3. Is there a link between level of gratitude, as expressed on the GAQ, and type of gratitude, as expressed on the Wishes and Gratitude Survey (WAGS)?

3.1 Children expressing either concrete or connective gratitude will score higher on the GAQ than will those not expressing concrete or connective gratitude.

4. Is there a link between level of gratitude, as expressed on the GAQ, and type of obligation, as expressed in the vignettes?

4.1 Children expressing heteronomous or autonomous obligation will score higher on the GAQ compared to those not expressing heteronomous or autonomous obligation.



## CHAPTER III

### METHODS

#### **Participants**

Participants were 59 (45.8% males) children between the ages of 7-14 years ( $M = 9.73$ ;  $SD = 2.16$ ). Children were recruited from five elementary and middle schools in one medium-sized city and from an after school program in a second small city in two States in the Southeastern United States. In the first city, schools were selected in an attempt to capture the first city's socioeconomic and ethnic/racial diversity by using information provided by the school district about percentages of free lunches and ethnic variation in each school. In order to represent the full range of diversity of the first city, children from a local private school were also recruited. In the second city, the after school program was targeted in order to access the population of immigrants who attended the program. Parents' education levels demonstrate the diversity in social class: 5.4% were educated at the elementary level, 10.7% completed some high school, 14.3% graduated from high school, 25% completed some college, 23.2% graduated from college, and 21.4% attained a graduate degree. For the purposes of analysis, one variable for social class was created with those who did not complete college (54.2%), considered working class, those who did graduate from college (42.4%), considered middle class, with 3.4% providing no information. The ethnic distribution of the sample was 24.6%

African American, 10.5% European American, 10.5% Hispanic, 10.5% Bi-racial or “Other,” and 43.9% Brazilian.

### **Procedure**

Data collection procedures were uniform across schools and the after-school program. Parental consent forms were dropped off at or sent to each participating institution one to two weeks prior to data collection (Appendix A). Teachers were offered \$2.00 for every parent permission letter returned, regardless of whether the parents gave their consent or not. Upon receiving parental consent and child assent forms, trained research assistants administered a short set of questionnaires during school time. Participants either remained in their classroom with their entire class or were moved to another room in the school with a small group of participants from their class. Research assistants explained to the participants that the project’s interest is in understanding the kinds of things that children like and what they do when they get things that they like. Researchers then read each questionnaire’s instructions aloud to the group and provided assistance to participants who needed additional help. Participants were encouraged to choose the answers that represented their personal preferences and opinions and were assured that there were no wrong answers, nor a time limit in which to complete the surveys. Materialism and gratitude questionnaires were counterbalanced and the entire survey took between 15 to 30 minutes to complete, with younger children taking more time due to their slower reading and writing speeds. Children were monitored to assure that all survey questions were answered and that they were not communicating with one another. Both the WAGS and the GAQ were part of the in-

school measures, but were given as part of the at-home interview to the children in the second city.

As part of the original parent permission letter sent home with the children, parents were asked if they would be willing to participate in home interviews along with the target child. Families who agreed to participate were randomly selected and then contacted by phone or email by a research assistant and invited to participate in an interview. Interviews could be scheduled either in the home or elsewhere, but all participants so far elected to be interviewed in their homes. The overwhelming majority of parent participants were mothers, but one father participated as well. Two research assistants trained in interview techniques worked in teams to interview parents and children. The parent and child were interviewed simultaneously in separate parts of the house to allow for maximum confidentiality and openness in responses of interviewees. Both the parent and the child were recorded with participant consent and later transcribed and coded. As part of the child interview, children were read the vignettes and follow-up questions to the stories.

## **Measures**

**Vignettes.** To determine the child's understanding of moral obligation, in the tradition of Piaget (1932/1960), two vignettes (Freitas, 2007) were used. In this study the stories described typical everyday experiences of children. Each of the stories had a feminine and masculine version depending on the gender of the child. Additionally, different ethnic versions were created with different names used to correspond with

names common in Portuguese and Spanish. The stories focused on two different themes: (a) help in finding a lost pet (cat story) and (b) lending a personal object (sweater story).

Trained research assistants interviewed students individually in their homes as part of a more comprehensive interview examining the development of gratitude and materialism in children and adolescents. After listening to each story, the children were asked to tell it in their own words to confirm comprehension and then structured interviews were conducted with specific questions related to each story. The narrated stories and the questions asked are the following:

*Cat Vignette:* Nicky had a little cat. One day she disappeared. Her Aunt Anne, who was making a cake, said: ‘No problem. I’ll help you find your cat.’ They spent a lot of time looking for the little cat. When it was almost dark, they found her. Aunt Anne had to throw away the half-made cake and start everything again. Can you please repeat the story in your own words? So how did Nicky feel? Did she feel anything else? Did she feel anything about Aunt Anne? Should Nicky help Aunt Anne make another cake? Why? And if Nicky doesn’t help Aunt Anne, is there any problem?

*Sweater Vignette:* One winter’s day Danielle was feeling cold. Jane, a new girl in the class, had a sweater in her back-pack. She lent Danielle that sweater. So that’s the first part of the story. Could you please repeat that back to me in your own words? So how did Danielle feel? Did Danielle feel anything else? Did she feel anything about Jane?

So the story goes on: The following week Jane left her scissors at home. Her teacher had asked everybody to bring scissors that day. Danielle has an extra pair of scissors in her back-pack. Should Danielle lend Jane the scissors or not? Why do you say that? And if Danielle doesn’t lend Jane the scissors, is this a problem? Why would you say that?

Different categories were established to classify children’s responses of gratitude and justifications for their answers. In this study, I focused on responses to three questions from the first vignette: “Should Nicky help Aunt Anne make another cake?

Why or why not? And if Nicky doesn't help Aunt Anne, is there a problem?"

Additionally, I examined the responses to four questions from the second vignette:

"Should Danielle lend Jane the scissors or not? Why do you say that? And if Danielle doesn't lend Jane the scissors, is this a problem? Why would you say that?" The justifications of whether or not the children would help Aunt Anne or Jane allowed me to determine whether there was an expression of moral obligation and whether it was autonomous or heteronomous. The first question children were asked about each vignette, respectively, naturally led to a "yes" or "no" response—the second question does not. The justifications given when answering the second question allowed the children to express what type of obligation they felt towards the benefactor. Their responses were classified into six categories that were established on the basis of earlier research using these vignettes. "No help" was coded when the child responds "no" or "I don't know" or the answer was incomprehensible. "May help" was coded when the justification focused on explanations for why the original beneficiary may help the original benefactor, but does not need to do so (e.g., "If she wants to be nice"). "Consequences to the benefactor" was coded when the justification focused on consequences to the original benefactor (e.g., "If Nicky doesn't help Aunt Anne, Aunt Anne will be sad"). "Heteronomous obligation" was coded when the justification focused on consequences to the self or involved heteronomous obligation (e.g., "If Danielle doesn't lend the scissors her teacher will be cross with her"). "Autonomous obligation" was coded when the justification was that there was an autonomous obligation, which is the same as a moral obligation, to repay the help that was provided

because it is the right thing to do, and it makes no difference whether Jane is liked, whether Nicky wants some cake, or whether Aunt Anne says that repaying the favor is not required (e.g., Aunt Anne helped Nicky a lot, and now he has to do the right thing by helping to make another cake). “Obligation no reason” was coded when it was unclear if the justification given was heteronomous or autonomous (e.g., “She has to help Aunt Anne”). For the purposes of this study, the six categories are referred to as obligation types.

The majority of the vignette interviews were conducted in English, but 20% of the Brazilian immigrant children chose to be interviewed in Portuguese. A bilingual English-Portuguese speaker coded the entire sample’s vignette responses. A second coder, who is a bilingual Portuguese-English speaker, coded 20% of the Brazilian immigrants’ vignette responses. The interrater reliability was excellent for the two coders ( $Kappa = .95, p < .001$ ). A third coder, who is a native-English speaker, coded 35% of the vignette responses that did not include the Brazilian immigrants. The interrater reliability between the first coder and the third coder was also excellent ( $Kappa = .91, p < .001$ ).

**WAGS.** The Wishes and Gratitude Survey (WAGS: Freitas, Tudge & McConnell, 2008) was used to measure children’s gratitude through two of the following four open-ended questions that tapped into wishes, gratitude, and the hypothesized benefactor: “What is your greatest wish? What would you do for the person who granted you that wish? Is there anything else you would do for this person? Who is this person?” (the first two questions were taken from Baumgarten-Tramer, 1938) (Appendix C). The responses to the second question were then classified into 3 main groups: (a) verbal

gratitude (e.g., thank you); (b) concrete (repayment with things important to the children themselves rather than to the benefactor); and (c) connective (taking the benefactor's wishes or needs into account). These groups are referred to as gratitude types. Concrete gratitude is considered more developed and closer to the ideal of gratitude as a virtue than is verbal gratitude because children have begun to recognize that they should repay the benefactor in some way, as opposed to just saying thank you. Connective gratitude is considered more developed than concrete gratitude because children have begun to take the benefactor's wishes or needs into account, thereby autonomously considering how best to repay the benefactor. The inter-rater reliability was good for the two coders ( $\kappa = .71, p < .001$ ).

**Gratitude assessment questionnaire (GAQ: Tudge & Freitas, 2010)** Children's gratitude was measured through a 7-item questionnaire that asked about the extent to which the children felt benefited in some way, and tapped into a range of attitudes regarding gratefulness towards people who have helped them or given them material goods (e.g., "Do you feel thankful to the people who help you do things that are difficult to do by yourself?"). The reciprocal nature of two of the questions is essential to understanding whether children are beginning to consider gratitude as a moral virtue (e.g., "Do you think it's good to do something nice for people who have given you things?"). Only four of the items are considered in this study because they tap into the concrete or connective aspects of gratitude in which children recognize the kindness or generosity of a benefactor and assert the importance of returning the favor. Each item was scored on a 1 = *Never* to 5 = *Yes, Always* scale and the four items were summed to

create a total score with 20 as the maximum possible score. The internal consistency (as measured by  $\alpha$ ) was .66.

### **Analysis**

Preliminary analyses were conducted to determine the demographic make-up of the sample. A series of chi-square tests were run to determine if there were associations among gender, age, ethnicity, social class and the different types of gratitude. A second series of chi-square tests were run to determine if there were associations among gender, age, ethnicity, social class and the different types of obligation. A series of preliminary independent-samples *t*-tests were conducted to compare the effects of gender, ethnic variation, and variation due to social class on the GAQ scores.

Binary logistic regression analyses were used in order to test hypothesis 1.1 and hypothesis 1.2, that the age of the children will predict expression of autonomous obligation and connective gratitude, respectively, in that older children will be more likely than will younger children to express both autonomous obligation and connective gratitude. One dichotomous outcome variable was created for whether autonomous obligation was expressed or not expressed and a second dichotomous outcome variable was created for whether connective gratitude was expressed or not expressed and two separate models were created to test the hypotheses separately. Age, the independent variable, was treated as continuous. If children demonstrated more than one type of obligation, autonomous obligation was considered the most developed and was used in the analysis. If children demonstrated more than one type of gratitude, then connective gratitude was considered most developed and was used in the analysis.



An independent samples *t*-test was used to test hypothesis 1.3, that older children will have higher scores on the GAQ than will younger children. Younger children were considered one group of children aged 7 to 9, older children were considered one group of children aged 10 to 14. In this analysis, the dependent variable was the score (range: 4-20) that children received on the GAQ. This variable was used on all subsequent tests involving the GAQ.

Binary logistic regression was also used to test hypotheses 2.1 and 2.2, whether the type of obligation children expressed could predict the type of gratitude they would express above and beyond the effects of age. For hypothesis 2.1, one dichotomous variable was created to group children into two groups, those who had expressed heteronomous obligation and those who had not expressed heteronomous obligation. For hypothesis 2.2, one dichotomous variable was created to group children into two groups, those who had expressed autonomous obligation and those who had not expressed autonomous obligation. These variables were used in two separate models with age as a covariate as predictors and the respective gratitude type as the outcome variable. Hypothesis 2.3 was not tested because no children demonstrated no gratitude so analysis was impossible.

Lastly, two separate ANOVAs were run in order to test hypotheses 3.1 and 4.1, that those children expressing concrete or connective gratitude and heteronomous or autonomous obligation will have higher GAQ scores. Children were grouped by whether or not they had expressed concrete or connective gratitude, and whether or not they had expressed heteronomous or autonomous obligation, and variables were created to

represent membership in these groups. Each of these variables was used in a separate model with GAQ scores as the dependent variable to test the hypotheses. An ANOVA was chosen for the freedom to create additional models with gender and social class added to each model. This was necessary in order to eliminate the possibility of confounding results because preliminary independent-samples *t*-tests demonstrated significant effects of both of these variables on GAQ scores.

## CHAPTER IV

### RESULTS

#### **Preliminary Findings**

All analyses were conducted using SPSS Version 23.0 (SPSS, 2015). Descriptive sample characteristics are presented in Table 1. The series of chi-square tests run to determine if there were associations among gender, age, ethnicity, social class and the different types of gratitude did not reveal any significant associations. The series of chi-square tests run to determine if there were associations among gender, age, ethnicity, social class and the different types of obligation did not reveal any significant associations. The series of preliminary independent-samples *t*-tests revealed that there were significant differences in scores on the GAQ based on gender and variation due to social class among study participants, but not ethnic variation. There was a significant effect for gender on GAQ scores [ $t(53) = -2.76, p = .008$ ], such that girls ( $M = 19.03$ ) scored higher than boys ( $M = 17.63$ ). There was a significant effect of social class on GAQ scores [ $t(53) = -2.35, p = .023$ ], such that middle class children ( $M = 19.08$ ) scored higher than working class children ( $M = 17.87$ ). These differences are discussed further when discussing hypothesis 3.1.

Brazilians were tested as a separate group in a series of chi-square tests due to their over-representation in the sample. A significant association was found between being Brazilian and social class,  $\chi^2(1, N = 57) = 21.23, p < .001$ . Therefore, all

analyses were run separately for Brazilians and non-Brazilians, but as no significant results were found, being Brazilian was no longer considered in any model. The significant association with social class seemed to be due to the higher number of Brazilians who had finished college versus the rest of the sample. For example, 20 Brazilians had a college degree and 6 did not have a college degree, whereas 5 non-Brazilians had a college degree and 26 did not have a college degree.

*Table 1*

*Descriptive Sample Characteristics*

Variables (N = 59)	Younger Group - 7 – 9 years old (n = 37)	Older Group - 10 – 14 years old (n = 22)
Age (n = 59)	M = 8.27 (.80)	M = 12.18 (1.33)
Gender (n = 59)		
Girls	22	10
Boys	15	12
Social Class (n = 57)		
Middle Class	18	7
Working Class	17	15
Ethnic Group (n = 57)		
European Am.	5	1
African Am.	4	10
Hispanic	5	1
Brazilian	17	8
Other	5	0
GAQ Score (n = 55)	M = 18.29 (2.23)	M = 18.65 (1.50)
Gratitude Types (n = 57)		
Verbal	4	4
Concrete	20	7
Connective	11	8
Obligation Types (n = 59)		
Consequences to Ben.	17	4
Heteronomous	8	9
Autonomous	17	10

*Note.* M = Means, (Standard Deviation)

Additionally, preliminary analyses were conducted on the distribution of obligation types by vignette (see Table 2). This table demonstrated that in both the cat and the sweater vignette consequences to the benefactor (32.2% and 33.9% respectively) and autonomous obligation (30% and 37.9% respectively) were the most frequent responses. Using the results of this analysis, the three most frequently occurring obligation types were cross-tabulated by age and obligation type (see Table 3). The most striking result of this analysis was that all age groups except seven-year-olds expressed autonomous obligation and only one eight-year-old child (out of 10) expressed heteronomous obligation, and even then it was only in one of the vignettes.

*Table 2*

*General Distribution of Types of Obligation*

		<u>Obligation Type</u>				
	No Help	May Help	Consequences to the Benefactor	Heteronomous Obligation	Autonomous Obligation	Oblig. No Reason
Cat Vignette	1 (1.7)	9 (15.3)	19 (32.2)	14 (23.7)	18 (30.5)	7 (11.9)
Sweater Vignette	1 (1.7)	6 (10.2)	20 (33.9)	18 (30.5)	22 (37.9)	1 (1.7)

*Note.* Frequency of response (percentage of total group to express obligation type).

Table 3

*Distribution of Obligation Type by Age*

Obligation Type	AGE OF CHILDREN							
	7 Years (8)	8 Years (11)	9 Years (18)	10 Years (3)	11 Years (5)	12 Years (2)	13 Years (9)	14 Years (3)
Consequences to the Benef.								
Cat	6	6	3	1	1	0	1	1
Sweater	5	6	6	1	1	0	1	0
Heteronomous								
Cat	4	0	4	0	2	1	1	2
Sweater	3	1	4	1	3	1	3	2
Autonomous								
Cat	0	5	5	1	2	1	3	1
Sweater	0	6	8	1	2	1	4	1

*Note.* (total number of children) Frequency of response.

### Results of Hypotheses

Binary logistic regression was used to test hypotheses 1.1 and 1.2 to determine whether age could predict autonomous obligation or connective gratitude. Results were non-significant, demonstrating that neither hypotheses 1.1 nor 1.2 were supported. Therefore, in this study age was not a reliable predictor of whether children may express autonomous obligation or connective gratitude. Results for all non-significant logistic regression equations can be found in Table 4.

Table 4

*Age as Predictor of Autonomous Obligation and Connective Gratitude*

Model	Predictor Variable	Outcome Variable	<i>B</i>	Wald test	<i>p</i>	Exp ( <i>B</i> )
1.1	Age	Overall Autonomous Gratitude	.079	.418	.518	1.082
1.2	Age	Connective Gratitude	.148	1.281	.258	1.159

Note.  $p < .05$

An independent samples *t*-test was conducted to test hypothesis 1.3, whether a statistically significant difference could be found on GAQ scores based on age group (younger: 7-9 vs. older 10-14). There was no significant effect of age group on GAQ scores  $t(53) = .650, ns$ . Therefore, hypothesis 1.3 was not supported.

Binary logistic regression was again used to test hypotheses 2.1, that children's overall expression of autonomous obligation would predict their expression of connective gratitude, controlling for age. The results were non-significant indicating that expression of autonomous obligation was not a reliable predictor of expression of connective gratitude and that the hypothesis is not supported (see Table 5). A second model was used to test hypothesis 2.2 by replacing overall autonomous obligation with overall heteronomous obligation and connective gratitude with concrete gratitude and, again, results were non-significant and hypothesis 2.2 was not supported (see Table 5). There were not enough data to adequately test hypothesis 2.3, that children expressing no obligation would be more likely than those expressing autonomous or heteronomous obligation to express no gratitude. No children in the sample of 59 expressed no

gratitude, and, therefore, it was impossible to run an analysis of this hypothesis based on this variable.

*Table 5*

*Obligation as Predictor of Gratitude Type Controlling for Age*

Model	Predictor Variable	Outcome Variable	<i>B</i>	Wald Test	<i>p</i>	Exp ( <i>B</i> )
2.1	Overall Autonomous Obligation	Connective Gratitude	.076	.018	.895	1.079
2.1	Age (covariate)		.150	1.300	.254	1.162
2.2	Overall Heteronomous Obligation	Concrete Gratitude	.667	1.208	.272	1.947
2.2	Age (covariate)		.143	1.195	.274	.867

*Note.*  $p < .05$

A 2 X 2 X 2 (Gender [boys, girls] X Social Class [working class, middle class] X Expression of connective or concrete gratitude [expressed, not expressed]) ANOVA was conducted to test hypothesis 3.1, whether a statistically significant difference could be found between expression of connective or concrete gratitude on GAQ scores controlling for gender and social class. There was a significant main effect of expression of connective or concrete gratitude found on GAQ scores after controlling for gender and social class  $F(1, 51) = 7.81, p = .007$ . Those children who expressed concrete or connective gratitude scored higher on the GAQ ( $M = 18.75, SD = 1.50$ ) than did those children who did not express concrete or connective gratitude ( $M = 17.09, SD = 3.05$ ). Gender was also a significant predictor, after controlling for gratitude type and social class,  $F(1, 51) = 5.23, p = .026$ ; girls' scores ( $M = 19.03, SD = 1.25$ ) were higher than



were boys' scores ( $M = 17.63$ ,  $SD = 2.46$ ) on the GAQ. However, social class was not significant,  $F(1, 51) = 3.30$ , *ns*. The over-representation of girls in the middle-class group (18 girls versus 7 boys), compared with the number of girls in the working-class group (14 girls versus 17 boys), may be responsible for the positive correlation of social class with GAQ scores and the confounding results.

A 2 X 2 X 2 (Gender [boys, girls] x Social Class [working class, middle class] x Expression of heteronomous or autonomous obligation [expressed, not expressed]) ANOVA was also conducted to test hypothesis 4.1, whether a statistically significant difference could be found between expression of heteronomous or autonomous obligation on GAC scores controlling for gender and social class and no significant main effect was found,  $F(1, 47) = .84$ , *ns*. Moreover, no effects were found for either gender,  $F(1, 47) = .91$ , *ns*, or class,  $F(1, 47) = .403$ , *ns*. An independent-samples *t*-test was conducted with expression of heteronomous or autonomous obligation as the independent variable and GAQ scores as the dependent variable, and the results remained non-significant,  $t(53) = 1.36$ , *ns*.

Due to lack of significant findings when examining heteronomous or autonomous obligation, combined with the chi-square tests that revealed significant associations between age and the expression of obligation coded as “consequences to the benefactor” in the cat vignette,  $\chi^2(7, n = 59) = 14.35$ ,  $p = .05$ , and age groups and “consequences to the benefactor” in the sweater vignette,  $\chi^2(1, n = 58) = 6.82$ ,  $p = .01$ , further post-hoc analyses examined the relation between these variables. Although not hypothesized, age group significantly predicted a response of consequences to the benefactor in the cat

vignette ( $\chi^2 [1] = 8.07, B = -.415, e^B = .660, p = .016$ )—younger children were more likely to justify the need for helping behavior by expressing concern for the benefactor, and in the sweater vignette ( $\chi^2 [1] = .941, B = -.529, e^B = .589, p = .005$ )—again younger children were more likely to justify the need for helping behavior by expressing concern for the benefactor.

## CHAPTER V

### DISCUSSION

An increasing body of literature is examining gratitude in children and adolescents, but there has been a lacuna in research using appropriate measures designed to understand the origins of gratitude and how it may develop. Treating gratitude as a moral virtue allowed for a more in-depth look at its provenance due to the focus on the relationship between a benefactor and a beneficiary. The findings presented here may provide a new understanding of gratitude, particularly as a virtue, and suggest directions for further research that may be fruitful.

Although only one of the hypothesized results was significant, there is much to be learned from study findings, particularly considering both preliminary and post-hoc analyses. For example, the hypothesis that older children would express more heteronomous or autonomous obligation was not supported, yet age was significantly associated with the justification for help based on consequences to the benefactor, demonstrating that younger children showed more of a tendency to use this line of reasoning. Examining the frequencies and distributions of the three major obligation types by age, consequences to the benefactor, heteronomous obligation, and autonomous obligation, it became clear that children nine and younger are still likely to consider consequences to the benefactor as a reason for helping, but children over nine are not. These results support the research conducted in Brazil by Freitas and colleagues (Freitas,

Silveira, & Pieta, 2009a, 2009b) as they also found that younger children were mostly concerned about the feelings of the beneficiary.

In order to better understand this result, it is important to look at the overall study findings. For example, no direct relation was found between heteronomous and autonomous obligation and types of gratitude, nor was age related to heteronomous or autonomous obligation, but age was significantly related to another unexpected obligation type, consequences to the benefactor. Perhaps the issue then becomes what happens as children are moving from one stage, when children are more focused on consequences to the benefactor, to the next stage, when children are focused on heteronomous or autonomous obligation. Clearly the timing of this differs from child to child as can be seen through an examination of the data. It is of note that no seven-year-olds demonstrated autonomous obligation, but some demonstrated heteronomous, or rule-based obligation. Taken alone, this result may not be informative, but considered together with findings that some of the eight-year-olds showed autonomous obligation may mean that an important shift is occurring and some children at this age, in this situation, have already acquired the capacity to demonstrate autonomous morality.

Children at the age of eight already demonstrating autonomous morality may call into question the earlier argument made with regard to Piaget's theory of morality and its connection with cognitive development, but I posit that it is not the case. What will be necessary is to broaden the narrow scope of using one theory to explain the findings to consider other theories that may help to more comprehensively interpret the research. For example, context plays an important role in how the children are responding to all

measures and although I clearly will not re-create the research that has already been conducted, Bronfenbrenner's (2001) bioecological theory and the Process-Person-Context-Time model of how to conduct research may facilitate the interpretation of results. All aspects of the model would be informative, but in the limited space of a discussion, I will focus on the importance of context. In the case of obligation, children are being asked to consider whether and how they should help a benefactor in two different contexts, one between a child and a relative, and the other between two peers. These situations likely elicit empathy, the perception and sharing of another's emotions, and sympathy, feelings of sadness on behalf of another person, and motivate prosocial behavior, actions taken to benefit another's well-being (Hastings, Zahn-Waxler & McShane, 2006). Thus, it is not surprising that the majority of seven-year-olds justified help as being necessary due to consequences to the benefactor. Research has shown that even by age two infants share with others, try and help those who may be in need, even at a cost to themselves, and show care and sympathy for those who appear to be injured (Carlo, 2014). According to Eisenberg, Spinrad and Sadovsky (2006), sympathy, which is seen as a reaction to empathy, may even contribute to both the development and the education of higher order moral reasoning and influence social behavior. Moreover, sympathy may be seen as a moral emotion composed of moral values, reasoning, and behavior. Therefore, in order to understand the research, perhaps the best approach is to consider the synergies that are taking place among all the variables, including prosocial reasoning, which may act as a latent variable.

Returning to the argument that Piaget's theory does not need to be refuted and may be used to inform the present research, context plays an important role, as does the fluidity of movement when children are transitioning from one stage to another (Piaget, 1932/1960). By this I mean that a child does not change from one stage to another from one day to the next. The example of toddlers learning to walk may help illustrate this point. Some children may have mastered walking on a hard surface, but have a very difficult time not falling if moved to sand. Others may be generally quite agile, but if they are sleepy they may become unable to walk in a straight line or to walk at all. Still other children may walk at an older age, but then never fall. It is not possible to visibly observe the changes taking place in the mind of a child, but they may be similar in nature. It is important to recall that when considering the relationship in the unilateral constraint of authority, some children may become autonomous already by eight-years-old, even if it is not the most common age, and if that is the case then the process may well have begun in the preoperational stage. It may be that the kind of situations described in the vignettes may be more salient in promoting a more advanced level of moral reasoning for some children than may be seen in other research, such as when examining different types of gratitude. Eisenberg, Fabes, and Spinrad (2006) support this argument claiming that within their cognitive-developmental capacity, children may exhibit diverse levels of prosocial moral reasoning. Differing capabilities in various levels of prosocial moral reasoning may be one of the reasons why there was no direct connection found between moral obligation and types of gratitude.

Excerpts from the interviews will serve well to highlight the different responses of various children based on age and reasoning behind their justifications. The following responses are based on a follow-up question of why a beneficiary should help a benefactor after the children have already affirmed that the benefactor should be helped. The following 7-year-olds justified help based on consequences to the benefactor.

Participant # BR 023 – Brazilian boy: Because if he doesn't have any scissors or didn't bring any scissors, he would maybe get in--maybe get in trouble . . . . (b)ecause the teacher said to everybody to bring a scissors to school.

Participant # BR 036 – Brazilian girl: Uhm because she might feel lonely and just have to start the cake all over again and it might be really later like you uhm like there's like five. [Of the cake? So do you mean it takes a long time to make the cake that many layers?] Mhmm.

With the following 8-year-olds, who justified help based on autonomous obligation, it is possible to see the difference in reasoning from the 7-year-olds.

Participant # 1003 – European American girl: Because uhmm well Jen gave her the sweater to borrow so she should give her the scissors to borrow. It's the nice thing to do. Because Jen was uhmm offering things and sharing things and then Danielle should do something nice back.

Participant # 1007 – European American girl: Because she helped her, so it's pretty much the golden rule, if you tr--treat others the way you want to be treated . . . she helped her, so she should help her re-make the cake because she helped her find her cat. Because it wouldn't be very nice if one person helps somebody but they don't help them when they really need help.

The following 13-year-old also justified help based on autonomous obligation elaborating in his reasoning.

Participant #977 – African American boy: Always--If somebody helps you with something it's always good to do something in return once they've helped you with something that maybe is hard or something that you might needed. Help others and then give in return is two good things mixed together. If--if you give--if somebody helps you with something you should always be kind enough to do something back for them or a favor.

Lastly, it is possible to compare the former responses with first a 7-year-old and then a 9-year-old who justified help based on heteronomous obligation.

Participant # 747 – African American boy: 'Cause uhmm if you don't give something back, I mean like do something back for someone, and they did something for you, then uhmm they might not give you anything.

Participant # BR 022 – Brazilian boy: Because um Nick's aunt did something nice um--um--to--for Nick, so if Nick doesn't do something nice to his aunt--um..Nick's aunt won't do anything else nice for Nick.

When looking at past research chronicling types of gratitude that children express, most results appear to point to age as being an important definer of the type of gratitude that children and adolescents may be capable of using. When considering age's relation to moral obligation, it seems more important in the younger years, but it is not clear what may distinguish whether children or adolescents move from a concern with consequences to the benefactor to either heteronomous or autonomous morality. A justification of consequences to the benefactor suggests that children are concerned about the well-being of the benefactor, which further suggests the feeling of empathy or sympathy directed towards the person or the person's situation. Heteronomous obligation does not suggest the same concern and is instead helping that is rule-based. On the other hand, autonomous obligation is helping because it is the right thing to do in order to help or



show appreciation for someone who has helped you, which implies empathy or sympathy. What then differentiates those children who have moved past the stage of merely focusing on the benefactor due to empathy and those who are more likely to help based on heteronomous obligation versus autonomous obligation? It may be that there is no direct link between heteronomous and autonomous obligation to concrete and connective gratitude because there is an unseen mediator in the equation, a latent variable such as prosocial moral reasoning. It may be that there is an important cognitive shift that occurs with age, but perhaps it is the way in which the two areas of moral reasoning synergize and the mechanism behind the synergy that will determine later behavior. More research is needed to investigate this possibility.

Interestingly, the lack of significant results in hypothesis 4.1, that heteronomous-autonomous obligation may be associated with higher test scores on the GAQ, strengthens the previous argument in that moral obligation in the vignettes is founded on helping situations where the benefactor is actually in need, and, therefore, may tap into a different kind of moral reasoning than when considering how to express gratitude. There is only one question from the GAQ that is about helping people who have helped you, but there are two about feeling thankful to people who have given you something or helped you, and one about doing something nice for people who have given you things. Significant findings supporting hypothesis 3.1 suggest that children who have expressed concrete or connective gratitude have higher scores on the GAQ. This in turn supports the argument that there may be different mechanisms responsible for the moral reasoning involved in determining concrete and connective gratitude as opposed to heteronomous

and autonomous obligation. This makes sense considering that gratitude responses are focused on feeling thankful based on receiving from a benefactor something that was wished for, but in the vignettes, both benefactors are in a situation of need.

Turning the focus to the last results to consider, prosocial reasoning may again play an important role. A significant difference in GAQ scores was found between girls and boys, such that girls had higher scores than did boys. In understanding this result, it is necessary to look back at the classic argument posited by Gilligan (1982) that girls and women have different moral orientations and they develop what has been termed a morality of care that involves responsibilities to others. There has been much controversy in research surrounding this claim, but Jaffe and Hyde (2000) found support for Gilligan's argument in a meta-analysis such that girls and women scored higher than did boys and men on prosocial moral reasoning. Moreover, Fabes, Carlo, Kupanoff and Laible (1999) conducted a meta-analysis examining gender differences in prosocial behaviors and found that girls demonstrated greater prosocial behaviors than did boys as they age, and these differences were greatest between childhood and early adolescence. In light of previous findings, it is not surprising that girls were found to score higher on the GAQ.

### **Limitations**

There were various limitations to this research. Lack of prior literature addressing gratitude as a moral virtue combined with moral obligation made it more difficult to hypothesize results; however, the novelty of the study means that the results make an important contribution to the gratitude literature. The small sample size was a major

limitation and may be the reason that more of the hypotheses were not supported by significant test results, particularly the lack of uniformity in sizes of age groups. There were also some limitations associated with the measures used in the study. Although using measures that involved vignettes and interviewing participants allowed for a much more in-depth look at how children felt about gratitude and what they were thinking, it may have been more difficult for some of the participants, especially the younger children, to understand the stories they were told in the way they were intended to understand them. Another limitation with regard to the vignettes and the interview process was that the interviewers may not have always been adept at understanding the children's questions with regard to the vignettes and provided them with coherent answers. Additionally, more follow up questions may have been needed in certain instances in order to really understand what justification the child was giving for helping the benefactor and, therefore, some responses needed to be coded as obligation no reason, which is not useful from the standpoint of research. Despite certain limitations, this research adds important knowledge in an emergent field of research.

## **Conclusion**

The results of the study highlight the importance of studying gratitude, not as a level of appreciation for or disposition towards the positive things in life, but as a virtue and, additionally, the importance of using measures that are appropriate for assessing what has been conceptualized. By addressing what children think and feel about gratitude with suitable measures, I was able to uncover what may be a latent variable and further explore the relation between the gratitude one feels to a benefactor and the moral

obligation one feels towards a benefactor. In this way I discovered that those feelings likely vary based on whether the benefactor manifests an immediate need, with whom and where the situation is taking place, and may even vary based on gender. The small size of the sample and the limited geographic location make it impossible to generalize the findings of the study; however, the results generate new theories about how gratitude as a virtue may interact with moral reasoning and future directions for research, particularly those investigating the links between gratitude, empathy, and prosocial reasoning.

I began the discussion of moral virtue with one great philosopher and perhaps it is fitting to end with the ideas of another. Hume posited that sympathy in all its forms, including empathy, is one of the main motivators for benevolent actions and is one of the main foundations of human morality. Despite the present study not detecting direct simple links between moral obligation and gratitude as a moral virtue, results revealed what may be a more complex relation between autonomous morality and gratitude, a relation that may be mediated, or at least affected, by empathy and the moral reasoning that accompanies it. This is an important discovery in the field of gratitude research and may help move the field forward in considering what synergistic networks may be operating together to create autonomous morality that may help lead to gratitude as a virtue. This discovery is also consequential in considering what types of interventions may be designed to promote gratitude as a virtue and autonomous morality in children. It is clearly not enough to just remind a child to say thank you when given a gift or help, as then it is easy for a child to only focus on the rules espoused by authority figures. Based

on the findings, what may be most important is to build a sense of empathy in children so they can fully appreciate the actions of others and the emotions behind those actions. In this way, they may build on natural feelings of helping and caring for others developing those feelings into a way of behaving that leads to a virtuous life so that when they are the beneficiary of a gift or act of kindness, they are sure to respond with more than thank you.

## REFERENCES

- Algoe, S. B., Haidt, J., & Gable, S. L. (2008). Beyond reciprocity: Gratitude and relationships in everyday life. *Emotion, 8*, 425-429. doi:10.1037/1528-3542.8.3.425
- Annas, J. (2011). *Intelligent virtue*. Oxford, UK: Oxford University Press.
- Aristotle (1985). *Nicomachean ethics* (T. Irwin, Trans.). Indianapolis, IN: Hackett.
- Baumgarten-Tramer, F. (1938). "Gratefulness" in children and young people. *Journal of Genetic Psychology, 53*, 53– 66.
- Barni, D., Ranieri, S., Scabini, E., & Rosnati, R. (2011). Value transmission in the family: Do adolescents accept the values their parents want to transmit? *Journal of Moral Education, 40*, 105-121. doi: 10.1080/03057240.2011.553797
- Bronfenbrenner, U. (2001). The bioecological theory of human development. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences* (Vo. 10, pp. 6963-6970). New York, NY: Elsevier.
- Carlo, G. (2014). The development and correlates of prosocial moral behaviors. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2<sup>nd</sup> Ed., pp. 208-234). New York, NY: Psychology Press.
- Castro, F. M. P., Rava, P. G. S., Hoefelmann, T. B., Pieta, M. A. M., & Freitas, L.B.L. (2011). Should one return a favor? Gratitude and symbolic debt in childhood. *Estudos de Psicologia, 16*, 75-82. doi:10.1590/S1413-294X201100010

- Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial development. In W. Damon & R. M. Lerner (Series Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 646-718). New York: John Wiley.
- Eisenberg, N., Spinrad, T. L., Sadovsky, A. (2006). Empathy-related responding in children. In M. Killen & J. G. Smetana (Eds.), *Handbook of Moral Development* (pp. 517-549). Mahwah, NJ: Lawrence Erlbaum Associates.
- Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology, 84*, 377-389. doi: 10.1037/0022-3514.84.2.377
- Emmons, R. A., & McCullough, M. E. (2004). *The psychology of gratitude*. Oxford: Oxford University Press.
- Fabes, R. A., Carlo, G., Kupanoff, K., & Laible, D. (1999). Early adolescence and prosocial/moral behavior I: The role of individual processes. *The Journal of Early Adolescence, 19*, 1, 5-16.
- Freitas, L. B. L., O'Brien, M., Nelson, J. A., & Marcovitch, S. (2012). The understanding of gratitude and theory of mind in 5-year-olds. *Psicologia: Reflexão e Crítica, 25*, 330-338. doi: <http://dx.doi.org.libproxy.uncg.edu/10.1590/S0102-79722012000200015>

- Freitas, L. B. L., Pieta, M. A. M., & Tudge, J. R. H. (2011). Beyond politeness: The expression of gratitude in children and adolescents. *Psicologia: Reflexão e Crítica*, 24, 757-764. Doi:10.1590/S0102-79722011000400016
- Freitas, L. B. L., Silveira, P. G., & Pieta, M. A. M. (2009a). Um estudo sobre o desenvolvimento da gratidão na infância [A study about the development of gratitude in childhood]. *Revista Interamericana de Psicologia [Interamerican Journal of Psychology]*, 43(1), 22-29.
- Freitas, L. B. L., Silveira, P. G., & Pieta, M. A. M. (2009b). Sentimento de gratidão em crianças de 5 a 12 anos [The feeling of gratitude in 5- to 12-year-old children]. *Psicologia em Estudo [Studying Psychology]*, 14(2), 243-250.
- Froh, J. J., Kashdan, T. B., Ozimkowski, K. M., & Miller, N. (2009). Who benefits the most from a gratitude intervention in children and adolescents? Examining positive affect as a moderator. *The Journal of Positive Psychology*, 4, 408-422. doi: 10.1080/17439760902992464
- Froh, J. J., Sefick, W. J., & Emmons, R. A. (2008). Counting blessings in early adolescents: An experimental study of gratitude and subjective well-being. *Journal of School Psychology*, 46, 213-233. doi: 10.1016/j.jsp.2007.03.005
- Froh, J. J., Wilson, J. A., Emmons, R. A., Card, N. A., & Bono, G. (2011). Gratitude and the reduced costs of materialism in adolescents. *Journal of Happiness Studies*, 12, 289-302 doi:10.1007/s10902-010-9195-9
- Gilligan, C. (1982). *In a different voice*. Cambridge, MA: Harvard University Press.



- Grusec, J. E., & Hastings, P. D. (2007). *Handbook of socialization: Theory and research*. New York: Guilford Press.
- Grusec, J. E. (2006). The development of moral behavior and conscience from a socialization perspective. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 243-265). Mahwah, NJ: Lawrence Erlbaum Associates.
- Hastings, P. D., Zahn-Waxler, C. & McShane, K. (2006). We are, by nature, moral creatures: Biological bases of concern for others. In M. Killen & J. G. Smetana (Eds.), *Handbook of Moral Development* (pp. 517-549). Mahwah, NJ: Lawrence Erlbaum Associates.
- Hoy, B.D., Suldo, S. M., & Mendez, L. R. (2013). Links between parents' and children's levels of gratitude, life satisfaction, and hope. *Journal of Happiness Studies, 14*, 1343-1361. doi: 10.1007/s10902-012-9386-7
- Hume, D. (1740). *A Treatise of Human Nature*. Retrieved from <http://www.davidhume.org/texts/thn.html>
- Jaffe, S. & Hyde, J. S. (2000). Gender differences in moral orientation: A meta-analysis. *Psychological Bulletin, 126*(5), 703-726.
- Mayer, S. J. (2005). The early evolution of Jean Piaget's clinical method. *History of Psychology, 8*, 362-382. doi: 10.1037/1093-4510.8.4.362
- McConnell, T. (1993). *Gratitude*. Philadelphia: Temple University Press.
- McConnell, T. (2013). Gratitude. In H. LaFollette (Ed.), *International Encyclopedia of Ethics*. New York: John Wiley & Sons. doi: 10.1002/9781444367072.wbiee325

- Nelson, J. A., Freitas, L. B., O'Brien, M., Calkins, S. D., Leerkes, E. M., & Marcovitch, S. (2013). Preschool-aged children's understanding of gratitude: Relations with emotion and mental state knowledge. *British Journal of Developmental Psychology, 31*, 42-56. doi:10.1111/j.2044-835X.2012.02077.
- McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: a conceptual and empirical topography. *Journal of Personality and Social Psychology, 82*, 112-27. doi: 10.1037/0022-3514.82.1.112
- McCullough, M. E., Kilpatrick, S. D., Emmons, R. A., & Larson, D. B. (2001). Is gratitude a moral affect? *Psychological Bulletin, 127*, 249-266. doi:10.1037//0033-2909.127.2.249
- Owens, R. L., & Patterson, M. M. (2013). Positive psychological interventions for children: A comparison of gratitude and best possible selves approaches. *Journal of Genetic Psychology, 174*, 403-428. doi: 10.1080/00221325.2012.697496
- Piaget, J. (1960). *The moral judgment of the child* (M. Gabain, Trans.). Glencoe: The Free Press (Original work published 1932).
- Piaget, J. (1981). *Intelligence and affectivity: Their relationship during child development*. Palo Alto, CA: Annual Reviews. (Original work published in 1954).
- Piaget, J. (1972) *Problèmes de psychologie génétique*. Paris: Gallimard retrieved from: [http://www.fondationjeanpiaget.ch/fjp/site/textes/VE/JP62-72\\_temps\\_et\\_dvp\\_extrait.pdf](http://www.fondationjeanpiaget.ch/fjp/site/textes/VE/JP62-72_temps_et_dvp_extrait.pdf)

- Rash, J. A., Matsuba, M. K., & Prkachin, K. M. 2011. Gratitude and well-being: Who benefits the most from a gratitude intervention? *Applied Psychology: Health and Well-Being*, 3, 350-369. doi: 10.1111/j.1758-0854.2011.01058.x
- Rava, P. G. S., & Freitas, L. B. L. (2013). Gratidão e sentimento de obrigatoriedade na infância. [Gratitude and the feeling of obligation in childhood] *Psico-USF*, 18, 383-394. doi: 10.1590/S1413-82712013000300005
- Thompson, R. A., & Winer, A. C. (2014). Moral development, conversation, and the development of internal working models. In C. Wainryb & H. E. Recchia (Eds.), *Talking about right and wrong: Parent–child conversations as contexts for moral development* (pp. 299–333). Retrieved from:  
<http://dx.doi.org/10.1017/CBO9781139207072>
- Tudge, J. R. H., & Freitas, L. B. L. (2010). *Gratitude assessment questionnaire*. Unpublished scale.
- Wainryb, C., & Recchia, H. E. (2014). Parent–child conversations as contexts for moral development: Why conversations, and why conversations with parents? In C. Wainryb & H. E. Recchia (Eds.), *Talking about right and wrong: Parent–child conversations as contexts for moral development* (pp. 3–18). Retrieved from:  
<http://dx.doi.org/10.1017/CBO9781139207072>
- Wang, D., Wang, Y. C., & Tudge, J. R. H. (2015). Expressions of gratitude in children and adolescents: Insights from China and the United States. *Journal of Cross-Cultural Psychology*. DOI: 10.1177/0022022115594140

Watkins, P. C. (2014). *Gratitude and the good life: Toward a psychology of appreciation*.

Retrieved from:

<http://link.springer.com.libproxy.uncg.edu/book/10.1007%2F978-94-007-7253-3>

Watkins, P., Scheer, J., Ovnicek, M., & Kolts, R. (2006). The debt of gratitude:

Dissociating gratitude and indebtedness. *Cognition and Emotion, 20*, 217-241.

doi: 10.1080/02699930500172291

Watkins, P. C., Woodward, K., Stone, T., & Kolts, R.L. (2003). Gratitude and happiness:

Development of a measure of gratitude, and relationships with subjective wellbeing. *Social Behavior and Personality, 31*, 431–452.

## APPENDIX A

### PERMISSION LETTER



THE UNIVERSITY of NORTH CAROLINA  
**GREENSBORO**

School of Health and Human Sciences  
*Department of Human Development and Family Studies*

248 Stone Building  
P.O. Box 26170, Greensboro, NC 27402-6170  
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<http://www.uncg.edu/hdf>

Project Title: **The development of gratitude and materialist values in children and adolescents**

Project Director: **Professor Jonathan Tudge**

The aim of the research project is to study the development of character among children and adolescents. The research team plans to explore this by conducting a study in schools and at home in Greensboro. There are two parts to the study. You can agree for your child to participate in one or both parts of the study, or you can decline to give your consent to both parts. ***If you return this form to your child's teacher we will provide \$2 for the classroom, whether you consent or not!***

**Part 1:** For the first part of the study we would like to ask your child to provide written answers to four simple questions: *"What is your greatest wish?" "What would you do for the person who granted you this wish?" "Is there anything else you should do for the person who granted you this wish?" "Who is this person?"*

**We will also ask** your child to complete three short questionnaires, one about gratitude that consists of seven questions asking children the extent to which they feel helped by others and how much they appreciate or try to repay others who have helped. Another questionnaire, about materialist values, consists of five questions asking children about things that they might like to have, the type of job they would like when they are grown up, and so on. The third questionnaire asks children about what they would do if they gained \$100. (This part of the study will take place at school, and will take 20 to 30 minutes. We will choose a time that fits the teacher's schedule.)

***You may consent to allow your child just to participate in Part 1 or to participate in Parts 1 and 2, but of course you don't need to consent to either if you'd prefer not to.***

**Part 2:** For the second part of the study we would like to interview your child and a parent, at home. The parental interview will involve filling in four questionnaires about your child-

rearing values, including gratitude and materialist values, and we also ask you questions about your child's feeling and expression of gratitude. This interview will take approximately 30 minutes, and will be recorded.

We would also like to interview your child. During this interview we will tell your child two stories in which a child receives some help or gets a gift from someone else and then has the opportunity to help that person. Your child will then be asked some questions, including about the characters involved, and the decisions that they made. He or she will also be asked questions about gratitude and materialism. This interview will take approximately 30 minutes, and will also be recorded.

The risks encountered in both parts of this study are not more than would be encountered in everyday life, although just reading or listening to the questions could be emotionally arousing, as could the process of being recorded. You and your child are free to choose not to answer any or all of the questions.

*There are some potentially exciting benefits of this project. There is evidence, at least with older adolescents, that individuals who feel and express gratitude for what they have feel better about themselves, their families, and their schools than individuals who do not. In addition, adolescents and adults who feel grateful for what they have, tend to be less materialistic than those who do not. We will find out whether the same is true for children and young adolescents. Our goal is then to produce materials, based on what parents and children say, that can be used by teachers and parents to encourage children to feel and express gratitude. They will feel better about themselves and it will discourage the type of excessive materialism (children forever wanting more and never being satisfied with what they have) that is bad for them and their families.*

There are no costs to you or your child as a result of participation in this study. However, to encourage you to return the consent form to the school (whether or not you grant permission), the participating classrooms will be given a gift certificate, the quantity based on the number of consent forms returned to your child's teacher, \$2 for each returned form (regardless of whether or not permission is granted).

All information collected from you and your child will be labeled by number only and will remain confidential. The data will be locked in a file cabinet in the lead researcher's office and will be accessed only by him and his research team in the Department of Human Development and Family Studies, UNCG. Because your voice will be potentially identifiable to anyone who hears the recording, your confidentiality for things that we record cannot be guaranteed, although we will limit access to the recordings as follows. The audio recordings will be identified only by identification number and not by name, and the recordings will be destroyed once analysis of our findings is complete. No reference will be made in any oral or written reports that will connect your child in any way to this study. All information obtained in this study is strictly confidential unless disclosure is required by law. You have the right to refuse to allow your child to participate or to withdraw him or her from the study at any time, without penalty. If you or your child does withdraw, it will not affect you or your child in any way. If you or your child chooses to withdraw, you may request that any data that has been collected be destroyed unless it cannot be identified. If significant

new information relating to the study becomes available which may relate to your willingness to allow your child to continue to participate, this information will be provided to you.

The Guilford County School District is neither conducting nor sponsoring this research, although it has approved it. The building of character is something that is of obvious educational relevance, and we therefore are interested in understanding how parents encourage this and how children develop a sense of gratitude. All copies of the materials that we will use for the interviews at home (Part 2 of this project) are available to you to look at (please ask at the main office at your child's school). All findings will be provided to the school after we have completed the research and, if teachers and parents would like, we will be happy to talk to you about those findings.

If you have any concerns about your child's rights, how they are being treated or if you have questions, want more information or have suggestions, please contact the Office of Research Integrity at UNCG toll-free at (855) 251-2351. Questions about this project or your benefits or risks associated with being in this study can be answered by Jonathan Tudge who may be contacted at (336) 223-6181 or by email at [jrtudge@uncg.edu](mailto:jrtudge@uncg.edu).

By signing this consent form, you are agreeing that you have read it or it has been read to you, you fully understand the contents of this document, and consent either to your child participating in Part 1 of this study or to you and your child participating in both Part 1 and Part 2. All of your questions concerning this study have been answered. By signing this form, you are agreeing that you are the legal parent or guardian of the child who wishes to participate in this study described above.

***Please keep this letter for your own records, but please return the permission pages to your child's teacher. You may sign for your child to be only included in Part 1 of the study or for both Parts 1 and 2, or you may not sign it at all. If you do not sign it, this means that you do not give your permission and your child will not be included in the study.***

***But it is important that you return the slip with your child's name, the teacher's name, and the school, because your child's classroom will receive a gift certificate with a value of \$2 for each letter we receive back, whether parents have given permission or not.***

Thank you very much for your help—we are most grateful!

Jonathan Tudge  
Professor

## APPENDIX B

### GRATITUDE VIGNETTES

Freitas (2007)

The children will be read the following two stories, and then will be asked a series of questions after each story. After both stories, there are further questions (see next page).

***Cat vignette.*** “Nicky had a little cat. One day she disappeared. His/her Aunt Anne, who was making a cake, said: ‘No problem. I’ll help you find your cat.’ They spent a lot of time looking for the little cat. When it was almost dark, they found her. Aunt Anne had to throw away the half-made cake and start everything again.”

[Ask the child to repeat the story in his/her own words. If the child hasn’t remembered everything or is wrong, question the child or re-tell part of the story until it’s clear that the child has understood and can re-tell it.]

How did Nicky feel? Why? Did he/she feel anything else? Did he/she feel anything about Aunt Anne? Why? Should Nicky help Aunt Anne make another cake? Why or why not? And if Nicky doesn’t help Aunt Anne, is there any problem?

***Sweater vignette.*** “One winter’s day Danielle (or David) was feeling cold. Jane (or John), a new boy/girl in the class, had a sweater in his/her back-pack. He/She lent David/Danielle that sweater.”

[Ask the child to repeat the story in his/her own words. If the child hasn’t remembered everything or is wrong, question the child or re-tell part of the story until it’s clear that the child has understood and can re-tell it.]

Immediately afterwards, ask: “How did Danielle feel? Why? Did she feel anything else? Did she feel anything about Jane? Why?”

After they have responded to these questions, continue: “The story goes on…” “The following week Jane left her scissors at home. Her teacher had asked everybody to bring scissors that day. Danielle has an extra pair of scissors in her back-pack.”

The children will then be asked: “Should Danielle lend Jane the scissors or not? Why or why not? And if Danielle doesn’t lend Jane the scissors, is this a problem?”



Gratitude Questions  
Tudge and Freitas, 2011

Did you enjoy those stories?

Has anything similar to that happened to you? For example, have you lost something really nice or important and has someone helped you find it? If “no,” continue...can you remember any time when someone lent you something really helpful? If “no,” move on to the next question.

If “yes,” what happened? How did you feel? Did you have a chance to do something nice for that person? If so, what did you do? If not, and suppose you had a chance to do something for that person in the future, would you? How do you feel about that person? Did you feel different about that person after he/she helped you in that way?

Do nice things happen to you quite often, or not very often? What sorts of things happen? Who are the people who are most likely to do those things for you? When [this person] does [this thing] for you, how do you feel about [this person]? Is there anything that you try to do for him/her? Is this the usual way you feel when people do these sorts of things for you?

I was talking to one boy/girl of about your age and he/she said that one time a kid in his/her class, who s/he didn't like at all, did something really nice for her/him. How do you think this boy/girl felt and what do you think he/she should have done? What would you do in that sort of situation?

APPENDIX C

WISHES AND GRATITUDE SURVEY

First and last name: \_\_\_\_\_

Homeroom Teacher: \_\_\_\_\_

Your age: \_\_\_\_\_ What month is your birthday? \_\_\_\_\_

Boy: \_\_\_\_\_ Girl: \_\_\_\_\_

**What is your greatest wish?**

**What would you do for the person who granted you this wish?**

**Is there anything else you should do for the person who granted you this wish?  
Why?**

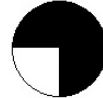
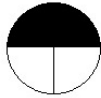
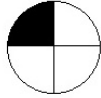
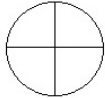
**Who is this person?**

APPENDIX D

GRATITUDE ASSESMENT QUESTIONNAIRE

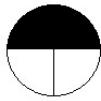
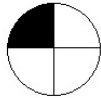
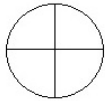
GAQ

**1. Do nice things happen to you?**



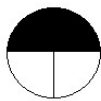
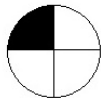
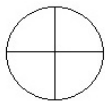
Never; Yes, but just a little; Yes, sometimes; Yes, most of the time; Yes, always

**2. Do people help you to get the things you want?**



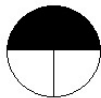
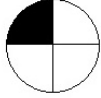
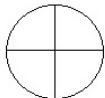
Never; Yes, but just a little; Yes, sometimes; Yes, most of the time; Yes, always

**3. Do you feel thankful to the people who help you get those things?**



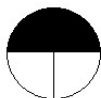
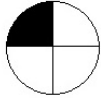
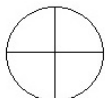
Never; Yes, but just a little; Yes, sometimes; Yes, most of the time; Yes, always

**4. Do people help you to do things that are difficult to do by yourself?**



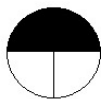
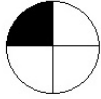
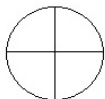
Never; Yes, but just a little; Yes, sometimes; Yes, most of the time; Yes, always

**5. Do you feel thankful to the people who help you do things that are difficult to do by yourself?**



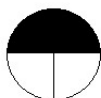
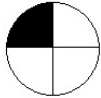
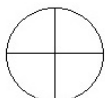
Never; Yes, but just a little; Yes, sometimes; Yes, most of the time; Yes, always

**6. Do you think it's good to do something nice for people who have given you things?**



Never; Yes, but just a little; Yes, sometimes; Yes, most of the time; Yes, always

**7. Do you think it's good to help people who have helped you?**



time;      Never;      Yes, but just a little;      Yes, sometimes;      Yes, most of the  
                 Yes, always