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Altruism in the Human Species: A Meta-Ethnography

A senior thesis submitted to

The Department of Social and Behavioral Sciences College of Health & Human Sciences

In partial fulfillment of the requirements for a Bachelor of Arts degree in Psychology

by

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Abstract

The purpose of this meta-ethnography was to explore the theories surrounding human altruistic behavior. I began by selecting a series of empirical and theoretical sources for review. After reading the empirical materials, I summarized empirical studies within categories such as the observed psychological, biological, and social factors associated with altruism. I then reviewed the theoretical literature and established the similar trends in the discussion about the social application of altruism. The trends that I found were reciprocal altruism, the importance of small-group function in facilitating large-group function, and that group function is imperative for a successful future of humanity. After translating these trends amongst the theoretical sources, I discussed how the various aspects of the empirical review are compatible with the theoretical trends. I contend that reciprocal altruism was the most prominently recurring topic of discussion throughout both the empirical and theoretical reviews. I concluded by arguing that the active employment of altruism in interaction with strangers can have a lasting impact in a community and ultimately in a much larger population.

Keywords: altruism, human species, reciprocal altruism, group-function, traits, behavior

Altruism in the Human Species:

A Meta-Ethnography

Altruism has been the subject of many studies since the beginning of the field of psychology (notably, Freud, 1917 & James, 1917; Hoffman, 1981; Holmes, 1947; O'Gorman, Sheldon, & Wilson 2008). Why do human beings often help those to whom they are not related or may not even know socially? How did this trait arise in the evolution of the species? Some have argued that altruism is a moral law which proves the existence of a divine creator (e.g., Collins, 2006). Others have suggested that the trait established dominance because it is desirable in mates (e.g., Berenson, Ellison, & Clasing, 2017; Goetz, Keltner, & Simon-Thomas, 2010; Hauser, Preston, & Stansfield 2014). My intent with this thesis was to review and synthesize the empirical and theoretical literature on the proposed causes of altruism, and to present a practical application with the knowledge.

Introduction

My inquisition about altruism began in a biology course in which students discussed science and the Christian faith in the spring of 2019. Collins (2006) said that his religious belief comes from his understanding of altruism, which he refers to as the Moral Law. The class discussion leaned in favor of the author's divine explanation as the cause of human altruism. I was not convinced, however. Chief among my reasons were the need for a deity and the promotion of altruism as a special, almost holy behavior.

Regardless, the discussion provided a question that I had never considered before: why does altruism exist? There are numerous conflicting explanations for the behavior;

by comparing them, I can synthesize the comprehensive aspects of the theories. Understanding the origins of altruism likely will not end world hunger, or even allow Democrats and Republicans to eat in the same restaurant again, but the knowledge is nonetheless beneficial. The comprehension of one's own behaviors, whether they be altruistic or otherwise, are important for realizing self-potential. My understanding is that altruistic behavior exists on a spectrum with egoism making up the opposite end.

Among the popular arguments for the development of altruism is one which derives from evolutionary theory. Altruism in this model is a trait which evolved and was selected because altruistic individuals were more likely to survive and pass on their genes. Goetz et al. (2010) and Marshall (2011) argued that altruistic traits help people to form social or romantic bonds. In a similar study, Hauser et al. (2014) noted that people were more likely to help strangers who were happy, attractive, or appealing, before helping those that seemed sad or in pain. Berenson et al. (2017) conducted two studies aimed at determining the desirability of certain personality traits based on age differences. In both studies, the researchers found that younger groups found narcissistic traits more appealing than altruistic ones (Berenson et al., 2017). Even amongst these related studies, there is tension about whether or not the trait is an inherent one because it seems that it becomes more prominent with age. In another explanation of the origins of altruism, Preston (2013) presented a combination of six physical and behavioral factors for demonstrating altruism towards offspring: participation from nonmothers, motor competence, a balance between avoidance and approach, a facilitating role of neonatal vulnerability, salient distress, and rewarding close contact; and four physiological factors:

release of oxytocin, the function of the mesolimbocortical system, the role of the cingulate cortex, and the influences of the orbitofrontal cortex. Preston (2013) argued that these 10 factors developed and worked across time to create ways to solve problems.

Additional topics of study among scholars are whether altruism is a natural trait and if it is self-serving (Freud, 1917). Hoffman (1981) argued that altruism did not emerge on its own, but rather became necessary as a component of, or response to, empathy. Holmes (1945) conducted a similar study and noted that altruism may be a form of self-seeking behavior and, therefore, serves a slightly different internal purpose than often thought. Rachlin (2002) demonstrated that most decisions are made based on which choice is more narrowly preferred, and which choice is less narrowly preferred by the individual; and that altruism may be learned and mastered over time, but there is no need for it to be an inherited mechanism of human nature.

Modern factors such as employment and money have been the subject of altruismcentered research as well. Baer (2009) examined the profession of nursing to see if nurses chose their career to help others or to make money. She found that both factors had an impact on most nurses but that their primary focus seemed to be on helping the sick, because they are more disconnected from the financial logistics than doctors may be. In a study about reciprocal altruism, Gray, Ward, and Norton (2014) subjected their participants to either greedy, equal, or generous distributions of money, labor, and context resources, to assess how the individuals treated others afterwards and found that the ongoing reciprocity of greed was greater than that of equality, and both were more significant than generosity. Gray et al. (2014) hypothesized that people who receive

equality are more likely to rise to their potential and give back to their communities; however, the overwhelming majority exhibited negative reciprocity. There seems to be some conflict amongst the findings of similar studies, but that does not mean that parts of the data cannot be combined to provide a clearer picture.

While extensive research has been conducted into the reasons why altruism exists, there seems to be a lack of between-theory synthesis, as well as discussion regarding the practical application of this understanding. As with any behavior, an increased comprehension of altruism enables it to be used more intentionally and appropriately in daily interactions. A thorough grasp of why altruism occurs might change the way we view others who either exhibit it often or rarely. The study of human development has been a useful tool in helping the scientific community understand that everyone has a different emotional range that varies with personality and life experiences (Berger, 2017). Holding one behavior, such as altruism, at a higher value than others could have the potential to create a harmful attitude towards those who appear to be deficient in it. A synthesized understanding of the popular theories about human altruism can help serve as a useful tool in having compassion for others; this is the objective of my research.

Objective

The purposes of this thesis were to review the existing literature regarding altruism in the human species, present a cohesive synthesis, and provide an application of that understanding. After discussing the various theories about how and why altruism appears in human behavior, I aimed to show why that knowledge is useful for promoting social wellbeing.

Method

Inclusion/Exclusion Criteria

I conducted this study as a meta-ethnography that used both existing primary research and theory-based scholarly works; the design utilized was developed with the guidance of Noblit and Hare (1988) and France et al. (2019). The topic of study was twofold: to define what altruism is and describe why it exists in the human species. Research materials for this study consisted of relevant, theory-driven references and empirical reports; see Appendix. Due to the philosophical nature of the topic, there was no exclusion regarding the date or geographical region of documents. Inclusion criteria included scholarly texts and peer-reviewed studies. The language of all resources was restricted to English. I found studies using a combination of keyword searches such as altruism, human-nature, theory, traits, behavior, personality, and evolution. I linked the keywords together with Boolean terms like *and* and *or*. I used these keywords in the search engines of scholarly journals and when searching for relevant books. Specific search engines I used included the Amazon Book Store, Abe Books, and PsychArticles via ProQuest. The inclusion process followed a typical title, abstract, full-text review process. Upon viewing the search results, the first step in deciding which sources to include was to read the title. If the title had one or more of the specific keywords from the search, then I deemed it relevant to proceed. If a source passed the title test, I reviewed the abstract. My areas of focus in the abstract were mainly whether the source was primary research into a component of altruism or an associated trait, whether it was secondary research such as a meta-analysis, or whether it was a theory-based work.

Exclusion criteria for the content of the abstract were book reviews and empirical works that used self-report survey materials. Theory-based works were excluded if they were not primarily about altruistic behavior. If a source passed the abstract portion of the review, I then moved on to review the whole source for inclusion in this metaethnography. While reading each article, I tracked common trends between various sources that could be synthesized in the later stages of this paper.

Inquiry

The two major approaches to inquiry that were used during my research were *holism* and *positivism*. Holism is the belief that all parts of a whole are necessary to produce the result, and therefore all have equal importance in being understood (Noblit & Hare, 1988). This view is supportive for synthesis-type research because the core purpose of synthesizing is to bring different pieces together for one overall concept. My holistic approach was the reason for the minimal restrictions on dates and regions for research materials; it is important to include largely different parts of the whole. Positivism is an epistemological stance that logical intuitions can be explained scientifically (i.e., by methodologically rigorous empirical observation using and/or mathematical proofs), excluding theological or supernatural explanations (Noblit & Hare, 1988). Positivists believe that knowledge synthesis is an important way to connect research and discover information that may not be presented by one study alone. Another key objective of positivists is to develop new theories and laws using syntheses of apparently unrelated empirical data (Noblit & Hare, 1988). For example, positivists may conduct a study about addiction and find that there are chemical influences including nicotine, but also digital

influences such as social media. Nicotine and social media might not be viewed as similar, but now the positivist has the ability to analyze them each in relation to addiction with the goal of learning something from one that can help the other. I used the positivistic lens to synthesize my data in a similar way.

An alternative paradigm by which to conduct a meta-ethnography is interpretivism. Interpretivists attempt to explain social behavior and other phenomena without using scientific theory or universal rules (Noblit & Hare, 1988). As described above, positivists use scientific theories and or laws to explain social affairs (Noblit & Hare, 1988). I chose positivism over interpretivism because I focused on empirical studies and theory to support my research, rather than anecdotal-type accounts. This positivistic approach was the governing factor behind my search for a cohesive synthesis of the theories surrounding human altruism.

Data Collection and Processing

Using the terms and databases presented in the inclusion criteria, I used the *purposeful* approach for my search. According to France et al. (2019), purposeful searches gather resources only until theoretical saturation is achieved. After deduplicating and accounting for articles regarding measurement tools, and book reviews, the final number of sources was 22 journal articles and books.¹ Using the purposeful search approach, I stopped gathering sources when the aforementioned saturation was achieved. The corpus was then divided into two larger review sections: empirical studies, and theoretical works. In the review of empirical studies, I summarized portions of their

¹ I did not include the meta-ethnography resources in this number. See Appendix

methodology and results; while doing this, trends began to emerge that would provide the basis for my later synthesis. While working through my initial literature review, I sought to synthesize the information from the start, but ultimately pivoted to a narrative style review of each source instead. The reasoning for this was that it better suited my writing style, and more importantly, better reflected how I processed the information, which is an important disclosure of my method. Once I completed the empirical reviews, I synthesized the data before continuing on to the theory section. For the theory section, I chose to focus on the social applications discussed by the authors. The reasons for this focus were that I saw a connection between the empirical data and the theoretical application, and encouraging positive social interaction was one of my original objectives. I then performed a synthesis on their related work, and finally discussed the implications of both the empirical and theoretical data.

Organization

I used Microsoft Excel to create a matrix to organize my data. The Y-Axis included my sources, with the source information on the X-axis; see Appendix. I included the author(s), year, type of study, method, participants, recruitment method, purpose, and important notes. By compiling the data in this manner, review of the literature was efficient and well tracked.

Goal

The primary outcome of a meta-ethnography is the systematic comparison of studies by translating them into one another (Noblit & Hare, 1988). Meta-ethnographies are comprised of seven phases:

Table	1

Phase	Purpose	This Paper
1	Establishing a research topic and why it is worth exploring.	Introduction; arguments of discovery and advocacy.
2	Determining what is relevant to the research topic.	Method; inclusion/exclusion criteria and data processing.
3	Reading the studies and observing trends.	Empirical review and Theoretical review.
4	Establishing a connection between the reviewed sources.	Empirical review and Theoretical review.
5a	Synthesize the findings using translations.	Translation of empirical sources.
5b	Synthesize the findings using translations.	Translation of theoretical works.
6	Synthesize the presented translations.	Combined empirical and theoretical translations and discussion
7	Expressing the synthesis.	Thesis defense presentation.

After establishing the theories which have the widest support in academic studies, I synthesized the data. In order to combine the information, I used *translations* to maintain the central themes of each source as they relate to one another within specific trends (Noblit & Hare, 1988). Translations are a tool used to bind information together that is not explicitly the same, but often shares a common theme. The translation is intended to act as an analogy of the data that is being synthesized. While the translation is used like an analogy, it is stricter. Noblit and Hare (1988) stated that "an adequate translation maintains the central metaphors and/or concepts of each account *in their*

relation to other key metaphors or concepts in that account⁷² (p. 28). If two studies have implications about gender and one has a significant note about men and the other about women, the information presented is not the same, but it can be analyzed together for a better understanding. I decided to employ the use of translations because it was the most concise way to synthesize data, and conform to the most heavily cited methodological resource used in framing meta-ethnographies, which is Noblit and Hare (1988). To accomplish this, I first performed a review of the empirical studies, then the theoretical studies, and then a synthesis of the two, translating different concepts together.

Empirical Review

Altruism can be examined in relation to several different factors. Social phenomena including stranger interaction, familial bonds, reproduction, and thoughts or feelings interact with altruism at some level. Biological traits such as age, gender, and affect can have an impact on the amount of altruistic behavior that an individual has in their personality. There also are a number of psychological factors related to altruism involving both positively and negatively associated traits. Positive traits include empathy, compassion, or selflessness. Negatively associated traits can be narcissism, hedonism, and selfishness. In this literature review, I present an overview of the factors that have been studied in relation to altruism. This flow represents the meta-ethnographic method for phases 3 and 4, and is concluded with phase 5a.

² Emphasis present in original quote.

Social Factors Related to Altruism

There are many factors that relate to altruistic behavior in a social context. Actions and emotions are useful tools for studying social interactions regarding altruism. Everyday interactions between strangers are another quality method of studying altruistic behavior. Other topics that can be categorized among social factors are familial bonds and reproduction.

Actions, thoughts, and feelings in social contexts. A common topic of study in social factors related to altruism are the everyday interactions between strangers. Wilson (2015) assigned twofold reasoning for altruism: actions, and thoughts or feelings. In his explanation, Wilson (2015) differentiated between thoughts and feelings as constructs, but paired them together as a joint reasoning that is separate from actions. Behavioral observation between strangers is related to the action component of altruism. The observer can see an individual help an elderly person to cross the street, but he or she only knows that the subject helped, not *why* they helped. The thoughts and feelings of the subject would be responsible for explaining why they behaved a certain way. Wilson (2015) listed a range of six simplified reasons³ for why someone may act altruistically:

(a) I think it's the right thing, (b) I take pleasure in your pleasure, (c) I regard it as my ticket to heaven, (d) I am trying to improve my reputation, (e) I'm trying to put you into my debt, or (f) I'm being paid to do it. (p. 8)

These various thought processes represent both examples of what may typically be considered altruistic, such as (a) or (b); and also examples that most people would likely

³ The author did not specify how he came up with these reasons other than his extensive work in the field.

not consider to be a good motive, like (e), (f), or even (c) if seen as selfish justification. This two-part understanding of altruistic behavior is a crucial lens to use when moving further into the research.

Stranger interaction. Within studies about the interaction of strangers, the topic of what makes a desirable recipient of altruism has been discussed at length (Gray et al., 2014; Hauser et al., 2014; Wilson, 2015). In a study designed to discern which types of recipients were the most favorable, Hauser et al. (2014) performed a test to see how often people held the door open for others, and whether those receiving the kind act were happy, sad, or neutral in their expression. The tendency to help happy people was thought to arise from a desire for potential social affiliation with that individual. Conversely, Hauser et al. (2014) posited that the act of helping sad people was proposed to come from a place of empathy and feeling bad for the individual. To perform their experiment, Hauser et al. (2014) had a confederate stand near a doorway at both a university and a hospital and pretend to be on the phone; as someone approached the door with no distractions, the participant would engage in an either sad, happy, or neutral phone conversation and follow the stranger from about 12 feet away. A second researcher then recorded basic traits about the test subjects and marked whether they walked through the door and did nothing, pretended to push the door open behind them slightly, actually pushed the door behind them slightly, stopped and held the door behind them, or finally, stopped and opened the door letting the first participant pass through ahead of them. These researchers found that in both settings, happy people were assisted more than both sad and neutral, but that sad and neutral had no significant difference. What can be

gathered from the lack of significance between sad and neutral people is that sad people were not actively avoided compared to neutral people. Perhaps happy, smiling people received more assistance because they appeared more likely to exhibit gratitude or reciprocity, as discussed previously with the thoughts and feelings causation of altruism.

Another area of study regarding the interaction of strangers is how people mirror either the positive or negative behaviors shown to them. Gray et al. (2014) conducted a multiple experiment study about generalized reciprocity in the forms of greed, equality, and generosity through the mediums of money and labor. In their first experiment, the researchers gave six dollars to several individuals who then had the task of deciding whether to keep it all, give it all to the next person, or split it in half. When the second person received the money, they were placed into various groups depending upon how much was given. If the second participant received no money, they were assigned to the greed group, half the money placed them in the equality group, and receiving all the money placed them into the generosity group. After being marked with their conditions, the participants then performed the same task of keeping or giving away the money. The researchers discovered that the equality and generosity groups showed the most ongoing generosity, but there was no significant difference. Their hypothesis that greed would incite more greed was shown to be correct. The second experiment that Gray et al. (2014) conducted added social endowment to the first by making the first group roll a die to see if they got the six dollars or not, and then proceeding with the same method discussed above. The die roll was intended to emulate those in society who get an advantage over others by chance, either socially or financially. For this portion, the researchers found

once more that greed was reciprocated more than generosity, and that those who rolled lucky showed less of a tendency to pass on their winnings. These researchers have helped demonstrate once more that the action is influenced by the thoughts and feelings.

In their third and fourth experiments, Gray et al. (2014) performed a similar test but with the use of labor rather than money. Instead of six dollars, participants were given four tasks with two being enjoyable and two being aggravating. Like the money in the first two tests, the receiving participant was asked to redistribute the same four tasks while the proctors recorded the outcomes. The conditions were assigned based upon the number of negative tasks remaining being zero, one, or two; placing participants in generosity, equality, and greedy classifications respectively. The results were the same as the money experiments, Gray et al. (2014) showed that generosity begat generosity but greed was still paid forward the most. The fourth and final test was set up the same as the third but with slight changes. This time, the researchers informed the second participant that they had been given the tasks by another participant rather than being led to believe it was random, then they were asked to complete an affect survey to determine levels of positivity or negativity, and anger; and then continue on as in the previous experiment. Gray et al. (2014) showed that overall, positive affect could predict reciprocated generosity; but negative affect was the best predictor for all three conditions of generosity, equality, and greed. Considering Gray et al.'s (2014) and Hauser et al.'s (2014) findings together, one can conclude that expressions of altruism are strongly associated with positive experiences and interactions, while negative experiences seem to associate with individuals who exhibit less altruism.

Reproduction. The next popular topic of social interactions and altruism is reproduction. In an attempt to trace altruism back to its origination in the species, Holmes (1945) wrote:

When we trace altruistic behavior back to its beginning in the domestic group and interpret parental care as an outgrowth of instincts subsidiary to the basic function of reproduction, we are not deriving altruism from egoism as many critics have contended the evolutionist is compelled to do. This for the reason that reproduction is an essentially altruistic function in that it is primarily concerned, not with the welfare of the individual, but with that of others that arise from it. We may regard it as the basic altruistic activity from which all the others are the lineal descendants. Altruism and egoism are coeval and as old as life itself. (p. 111)

Holmes (1945) went on to propose that egoism and altruism working together fulfill Aristotle's belief that all life revolves around the preservation of the individual and the perpetuation of their race. Holmes (1945) also noted that "The earliest form of overt altruism is found in the care of parents for offspring" (p. 109). These arguments help demonstrate the perceived importance of altruism in facilitating the reproduction, not to mention the evolution, of the human species.

Familial bonds. One of the trending areas of study in relation to altruism and social interaction is how family members interact with one another. A commonly researched subcategory of familial interaction is kin selection. Tifferet, Pollet, Bar, and Efrati (2016) hypothesized that sibling resemblance is positively associated with both

hypothetical and routine investment, and that emotional closeness is the mediator between the sibling resemblance and routine investment. Routine investment represents the real-life relationship between the siblings while hypothetical investment deals with proposed questions about potential life or death scenarios. In order to test their hypothesis, Tifferet et al. (2016) issued two surveys to 80 Israeli college students. The first survey was used to determine the routine investment of the individual and their younger sibling; this included prompts like how often they speak or how much money they spend on gifts for them. The second survey contained two hypothetical questions with life-or-death scenarios about what the participant would do to save their younger sibling. After examining their results, Tifferet et al. (2016) determined that sibling resemblance, both physical and psychological, predicted moderate investment in younger siblings. They also confirmed their hypothesis that resemblance was positively correlated with emotional connection, which in turn created a greater routine investment. The researchers of this study seemed to demonstrate that the potential for altruistic behavior is more prominent between siblings, especially those with more of a psychological or physical bond.

Biological Factors Related to Altruism

The biological factors that can be studied alongside altruistic behavior are more straight forward than the social aspect. Biological factors are limited to concepts like familial bonds, age, and gender.

Familial bonds. Another topic of discussion surrounding kin selection is how altruism was able to persist as a trait throughout evolution. Dawkins (1978) suggested

that altruistic acts are carried out through a gene⁴, and if one were to save a sibling or other family member then they likely also possess the gene, and so the gene will spread more rapidly. Nowak and Highfield (2011) credited John Burdon Sanderson Haldane with the founding of the kin selection theory in 1955. The authors recount how Haldane was asked if he would risk his life to save a drowning man and his response was, "No, but I would do it for two brothers or eight cousins" (Nowak & Highfield, 2011, p. 97). This quote was the inception for the theory that genes can maintain their legacy most efficiently by either producing offspring or by ensuring that relatives with similar genes are able to survive and reproduce (Nowak & Highfield, 2011). However, the authors disagreed that familial bonds are the only way for altruism to persist; they cited the rest of Haldane's quote saying, "On the two occasions when I have pulled possibly drowning people out of the water I had no time to make such calculations" (Nowak & Highfield, 2011, p. 98). Nowak and Highfield (2011) went on to discuss the work of Bill Hamilton, who made a mathematical equation to explain the phenomena that Haldane had discovered. Nowak and Highfield (2011) summarized Hamilton's r > c/b formula as:

If the cost (c) of acting altruistically divided by the benefit (b) to the recipient of cooperation is less than the coefficient of relatedness (r) of the two individuals (the probability that both individuals possess the gene in question), then genes for cooperation could evolve. (p. 100)

The authors continued to discuss the involvement of inclusive fitness in kin selection theory and contested that it is central to the continuation of altruism, and it only requires

⁴ Dawkins' book is written for the layman and scholar alike, so his use of the singular *gene* here seems to be a catchall for the set of genes that would likely account for a behavior.

a social gene to beat out a solitary gene over time (Nowak & Highfield, 2011). From these small examples of the discussion, I inferred that the debate has components which work together and some that are opposed, such as Haldane's contradictory quotes.

Age and gender. Two of the most common factors to consider in any psychological study are age and gender. There is an in-depth review of Cialdini et al.'s (1987) study about selfishness and altruism in the next section, but it is worth noting here that all the participants in their study were women, though the goal of the study was not to address gender differences. Berenson et al. (2017) performed a two-part study aimed at finding the relationship between age and the desirability of narcissism versus that of altruism in peers and potential partners. In the first part, Berenson et al. (2017) recruited 869 participants (M_{age} =33, SD=10.4) and gave them a survey to rate how desirable various personality traits were to them; in the second study, the researchers asked 960 participants (M_{age} =34, SD=10.8) to give their impressions of a fabricated potential mate. As mentioned earlier, they found that younger ages preferred narcissistic behavior over altruistic behavior. They also found that gender had no significant impact on their results; the only notable gender difference was that women consistently rated the targets as higher in altruism and conscientiousness than men did, regardless of their narcissistic traits (Berenson et al., 2017). The finding that the desirability of narcissism declines with age was important as is may support the theories of altruism being a learned trait.

Altruistic behavior in children was the topic of a study nearly 40 years ago. Maruyama, Fraser, and Miller (1982) conducted a study to analyze altruism in children. The researchers conducted their study by using Halloween, a deindividualized

environment, to observe 177 children as they were trick-or-treating. As the children came by the house with the proctors, an adult notified the children that she was out of candy, but that if they wished, they could donate as much candy as they wanted to a sick child in the hospital. She then put one of the kids of each group in charge of supervising, gave them a badge, told them a specific colored box to put their donation into, and then said she would be back shortly (Maruyama et al., 1982). While the first proctor was gone, a second proctor observed the children from an unobstructed location and recorded their behavior, gender if identifiable, and relative age. The researchers classified the data by whether the children gave candy and how much, and group sizes by small being two to three, and large being four or more children. They found that 92% of the children donated one or more candies, with 40% of them donating three or more pieces of candy; they also found that large groups donated two pieces on average while smaller groups donated four (Maruyama et al., 1982). They further divided the groups into age brackets of 4-7, 8-9, and 10-13 and found no significant differences when comparing them (Maruyama et al., 1982). These two studies appear to be contradictory because of the high amount of altruism demonstrated in the latter. However, there are variables to consider such as the group setting and the request to help other children, rather than simply identifying desirable traits on a survey.

Psychological Factors Related to Personality Traits, Mood States, and Attitudes

Psychological factors related to altruism can be divided into personality traits that are positively associated with altruistic behavior, and personality traits that are negatively associated with altruistic behavior, as well as mood states. These first two subcategories

can be further delineated with the positively associated traits being empathy, selflessness, kindness, honesty, and compassion, and the negatively associated traits being narcissism, selfishness, hedonism, and self-gratification.

Traits positively associated with altruism. Differentiating between traits such as kindness, selflessness and compassion can be challenging. They seem to overlap or be more distinct based on the perspective of the scholar discussing them. Barber (2004) used three examples to showcase these behaviors and their relationships with altruism: blood donation, Holocaust rescuers, and the average tax-paying citizen.⁵ He discussed the shifting characteristics of the typical blood donor and noted that there is not a specific type that gives the most, but certain demographics consistently give less (Barber, 2004). He presented several different reasons that people usually give blood, noting a small amount of self-gratification, but the overall reason was that people felt they had a duty or that they were doing the right thing. One factor that he mentioned for increasing blood donations was an emotional response. On a small scale, the emotional response could be an individual whose spouse got into a car accident and required blood to survive surgery. On a larger scale, an emotional response could be tens of thousands of people lining up outside of their local donation centers after the September 11th attacks. The root of both emotional responses would appear to be kindness, empathy and selflessness, making up a holistic act of altruism.

The focus of Barber's (2004) second example about Holocaust rescuers was their personality traits and the statistics of rescuers compared to non-rescuers. He based his

⁵ While these three examples have largely different perceived costs, I believe the author intended to show that altruism still had an important role in each.

research off a 1988 study by Samuel and Pearl Oliner of Humboldt State University. The original study was about Christians who had rescued and hidden Jews in Nazi-Europe. The two most prominent points of interest that Barber (2004) emphasized from the Oliners' 1988 study was that the rescuers did not see what they did as miraculous or extraordinary, and that the non-rescuers had in fact assisted the Jews in many circumstances. He noted that the testimonies of the non-rescuers could not be verified but the regularity with which they claimed to have helped Jewish families or served in the resistance gave the Oliners' the impression that it was a more widespread phenomenon than they had previously believed. One specifically interesting note about the nonrescuers was that 86% of them claimed to have felt empathy the first time they saw a Jewish person with a yellow star on their chest (Barber, 2004). That number did not differ significantly from the 92% of rescuers who said the same thing. Barber (2004) used those percentages to suggest that helping behavior was more common than not, and this was perhaps part of the reason why the rescuers did not feel as if they had behaved in a special manner. He attributed a certain amount of the rescuers personality and whether they helped to their upbringing and said that if they were raised in a household with empathetic, selfless parents, then the individual was more likely to be in the rescuer category. This idea of emulating kindness and generosity is similarly displayed in the study discussed earlier by Gray et al. (2014) when their participants tended to reciprocate positive behaviors, though not as significantly as negative ones.

The third example given by Barber (2004) was that of the honest taxpayer. He noted that the majority of people do not cheat on their taxes when they have every

opportunity to. One obvious reason to file taxes honestly is to avoid an audit from the Internal Revenue Service. However, the author maintained that even though it is a legal obligation, paying taxes is still a form of altruism as it works by transferring personal resources to strangers.⁶ He also noted that honesty in taxpaying is indicative of other actions, for instance, corporate executives who cheat on company taxes are more likely to cheat on their personal taxes, and even games of golf. Barber (2004) went on to infer that conversely, individuals who are honest about taxes are more likely to conform to shared expectations of a culture, such as tipping your server. These examples may not be a common lens through which to view altruism, but socially expected actions can be largely altruistic.

Traits negatively associated with altruism. The three examples that Barber (2004) used to demonstrate positive traits associated with altruism also work to demonstrate negative traits such as selfishness and self-gratification. He stated that approximately 50% of people will need to receive blood in their lifetime, and that only five percent of the eligible U.S. population gives blood. He cited various common reasons for people to avoid giving blood, like fear of needles, lack of free time, convenience of location, and the most prominent factor of believing the system does not need any more donations. Interestingly, many of the reasons that individuals had for wanting to give blood were based in selfishness rather than kindness or empathy. Barber (2004) listed reasons such as boosting one's employment prospects, exposure to possible

⁶ It may be argued that actions mandated by law are not altruistic. However, I felt it relevant to give the author's argument the way he presented it. If disobeying the law is inherently selfish, then obeying it should count for something.

new employers, meeting potential friends or romantic partners, or being interested in perks and rewards. For the Holocaust example, the overwhelming majority of people were non-rescuers who acted in their own best interest, not to be oversimplified as simply being selfish in the same way a child is with their toys, because there was a myriad of factors that could have deterred someone from sheltering a refugee. Regardless of their specific reasoning, by the researchers' classification of altruistic behavior, the nonrescuers behaved on the narcissistic end of the spectrum (Barber, 2004). The selfish representation in the tax paying analogy was mentioned earlier in the form of the greedier executives who cheat on both individual and corporate taxes when given the opportunity.

The concept of altruism being selfishly motivated has been a popular area of study within behavioral research. Cialdini et al. (1987) performed a test to determine whether altruistic behavior was more closely aligned with empathy or selfishness. Their study consisted of two experiments. In the first, participants were randomly assigned to either an easy-escape or difficult-escape rule set for the test. Each participant completed the test individually with a proctor and a controlled subject who received fake electric shocks. The conditions of the easy-escape group were that they had to only observe the first two of 10 learning trials by the fake shock subject, and they were directed to pay attention to the information about the situation they were viewing and not to worry about the subject.⁷ The difficult-escape conditions were that they had to watch all 10 trials and not pay attention to the information so much as to try and take the perspective of the subject (Cialdini et al., 1987). After the first two trials, each participant saw the pain

⁷ The information they were asked to pay close attention to was the setting, and the types of questions the subject was being asked in her trial.

experienced by the subject and was offered the chance to switch places with them for the remainder of the trials. If the easy-escape group declined, they were free to go as per their conditions, but if a difficult-escape member declined, they were still required to stay and watch the rest of the procedure. By comparing the high versus low levels of empathy in participants, and the amount of sad experiences observed during the trials⁸, the researchers were able to support their hypothesis that the relief of personal sadness from seeing someone in distress outweighs the motivation to simply help the other person for their sake.

In their second experiment, Cialdini et al. (1987) sought to find out whether an individual who is empathetically motivated helps a sufferer for selfish reasons. The method of this experiment was similar to the first in that participants were randomly assigned two different types of instructions to follow while listening to a tape about a student who experienced a terrible car accident and needed help in her studies. One type of instruction was to listen to the tape objectively, and the other was to put themselves in the shoes of the girl telling her unfortunate story. The students were given a mood assessment before hearing the tape, along with a placebo drug that they were told improves information processing. After hearing the tape, the students completed the mood questionnaire again, as well as a survey to determine the level of empathy they felt for the girl on the tape. They were then told that the drug they took is actually designed to prolong mood, so whatever they felt right now would continue for approximately 30 minutes. The final step was to give each participant a sealed envelope that contained a

⁸ Empathy and sadness were measured using an emotional-response questionnaire that was completed after the experiment.

request for academic help from the student who was in the accident. The first test result that Cialdini et al. (1987) relayed was that the instructions to be either objective or personal while listening to the tape had a significant effect on the level of empathy that was experienced. The women in the objective group had lower levels of empathy than those in the group that were asked to take the subject's perspective. The next result was that the participants in the high-empathy group reported much higher levels of sadness than those in the low-empathy group (Cialdini et al., 1987). There was a significant difference in the amount of help that high-empathy, high-sadness students were willing to give compared to all other categories. Using the results from both experiments, the researchers asserted that altruistic actions are primarily motivated by an individual wanting to reduce their own negative emotional state, rather than their desire to elevate another person in need of help. These findings are consistent with those of the study mentioned previously from Baumann et al. (1981) that proposed altruism and selfgratification being functionally equivalent behaviors.

Mood state. An individual's mood or emotional state is thought to be influential on their potential for altruistic behavior. Baumann, Cialdini, and Kendrick (1981) performed a study designed to demonstrate that altruistic behavior and self-gratification have the same function in adults. The researchers used three core arguments to test their theory. The first argument was that adult altruism increased with the induction of both positive and negative mood states; therefore self-gratification should yield the same results. Their second argument was that negative mood had a significant impact on helping behavior and the same relationship should exist between negative mood and self-

gratifying behavior. The third and final argument presented in this study was that positive mood states would have differing results between altruistic and self-gratifying behavior. To accomplish their objective, Baumann et al. (1981) developed a two-part test using human participants. The participants were told that the tests would be about memory and perception. In the first test, the subjects were randomly assigned to one of three groups and then asked to spend five minutes recalling either a positive, negative, or neutral memory. The neutral group was asked to think about the route they took to school that day, while the other two were asked to reflect on a happy or sad experience they had. The purpose of this first portion was to establish a controlled mood state in the participants before the behavior test.

The second part of Baumann et al.'s (1981) study was presented to the participants as a perception test. The three mood state groups were brought back together and then randomly assigned to either an altruistic task, or a non-altruistic task. Members of the altruistic task group were told that they were helping to test out a new technology for people who are going blind to better experience their surroundings. Participants in the non-altruistic group were asked to take a similar stimulus impairment test, but they were told that it was to help the researchers "better understand how individuals learn to observe the world about them" (Baumann et al., 1981, p. 1042). Upon completion of their respective test, each participant was given the opportunity for compensation in the form of tokens, which were redeemable for a prize. The maximum number of tokens available was seven, and the proctors set no specific limit within that range. The independent

variables were twofold with mood state and type of task, and the dependent variable was the number of tokens taken at the end.

Regarding Bauman et al.'s (1981) first argument about positive and negative moods leading to more increased self-gratification than neutral moods, they found their predicted significant difference (p<.06). The first test was done by comparing both positive mood groups and both negative mood groups to both neutral mood groups. They simultaneously tested their second argument that negative mood states in combination with an altruistic act would produce a greater tendency to self-gratify, and their third argument about positive mood having no impact on self-gratification, post altruistic act (Bauman et al., 1981). In order to test these hypotheses, the researchers compared the results from the non-altruistic task positive and non-altruistic task negative mood groups as well as the altruistic task positive mood group, to the results of the negative mood altruistic task group and both neutral mood groups. The results were significant (p<.02). Baumann et al.'s (1981) overall results support their initial statement that adult altruism and self-gratification are functional equivalents.

Translation of Empirical Works

This section will serve as Phase 5a of the meta-ethnography process: *translating the studies into one another* (Noblit & Hare, 1988). This phase exists to take all the individual empirical sources from the reviews of Phases 3 and 4 and blend the associative parts together. The translation process is limited by who is conducting the study and what they find to be relevant in the literature. The reader should be prepared to draw

connections between the material that has been presented in the previous section. I will explain why I chose the trends that I did and how the broader categories work with them.

The first trend that I chose to highlight was stranger interaction. There were numerous studies that observed the way that altruistic behavior correlates with interactions between strangers. While I reviewed this topic under the subcategory of social factors related to altruism, it appeared in other sections as well, such as psychological factors. In Baumann et al.'s (1981) study about mood state, the task of the participants involved helping a stranger or group of strangers. While their study was focused on mood states and not stranger interaction, their method hinged on that factor. Similarly, in Cialdini et al.'s (1987) experiments, they were analyzing whether altruistic behavior is more influenced by empathy or selfishness. Again, their methods were structured around the participants' interaction with strangers. After observing the consistency of stranger interaction-based experiments, it occurred to me that the majority of altruistic behavior in everyday life would likely be between strangers. Personally, I spend more time driving near strangers on the road, interacting with them at work, school, bars, concerts, et cetera, than I do with my wife or friends. I think it is safe to generalize this experience to a significant portion of the population in busy cities like Portland. I will return to stranger interactions in the next phase of this meta-ethnography.

Other trending topics that emerged during my empirical review were mood states and traits negatively associated with altruism. There was additional crossover between the trends related to these topics. For example, in their study about stranger interaction, Hauser et al. (2014) found that people who appeared happy were more likely to have the

door held open for them than a person with a neutral or sad mood state. This study clearly incorporated both stranger interaction and mood states as they applied to altruistic behavior. In Gray et al.'s (2014) experiment, they also found that generalized reciprocity was more prominent when dealing with greed, as opposed to equality and generosity. These results relate to stranger interaction, mood state, and negatively associated traits like selfishness. These examples are what seemed the most relevant and significant to my meta-ethnography due to their recurrence and harmonic way of working together.

The purpose of this review of empirical literature was to establish an understanding of the way that altruism is studied, and the types of variables that are considered when attempting to predict the behavior. The three primary factors for analyzing altruistic behavior are social, biological, and psychological. Important areas of study within these categories are stranger interaction, mood, and negatively associated traits like selfishness and self-gratification. With this foundation in place regarding scientific studies in factors and behaviors associated with altruism, the reader should be prepared to properly comprehend and ponder the theoretical studies in the following section.

Theoretical Review

While reading the theoretical works that emerged subsequent to my inclusion/exclusion process, the application of altruism in group functioning emerged as an important implication of the research. This section continued to serve as a combination of Phases 3 and 4 of the meta-ethnography process; reading the literature and determining how it is related. I conclude this section with a brief translation of the applications

discussed within (phase 5b), and then move on to synthesize the themes of both the empirical studies and the theoretical ones (phase 6, commonly titled the discussion section in APA format).

Application of Altruism in Group Function

The role that altruism has in group organization and group function has been discussed by various scholars (Barber, 2004; Nowak & Highfield, 2011; Wilson, 2015). Group organization is important to overall function and altruism can be a key component of both. People who exhibit altruistic tendencies are more beneficial to communities on any scale (Barber, 2004; Nowak & Highfield, 2011; Wilson, 2015). In this section, I present several arguments for why altruism is important to the success of the human species; then I highlight all the similarities and objectives between the various proposals.

Mechanics of cooperation. In their book *Super Cooperators*, Nowak and Highfield (2011) concluded with five mechanics of cooperation related to altruism: *repetition*, or direct reciprocity; *reputation*, or indirect reciprocity; *spatial selection*, or what an individual's social network looks like; *multilevel selection*, which is how groups are effected by selection; and *kin selection*, dealing with the likeliness of altruism to persist between family members. Repetition is represented by the idea of quid pro quo, meaning that the act of altruism hinges on what the receiving party can do for the altruist, and vice-versa. According to the authors, this form of cooperation using direct reciprocity is only likely to happen when "the probability of another encounter between the same two individuals exceeds the cost-to-benefit ratio of the altruistic act" (Nowak & Highfield, 2011, p. 270). An example of this sort of cooperative altruism would be the common

practice of helping a friend move to a new house and expecting that in the future they will assist with the same arduous process and gain a favor.

The reputation mechanic describes indirect reciprocity, meaning that the altruist does not get any direct reward from the recipient, but the altruistic act boosted their chance to receive help in the future from another party. The condition of this form of cooperation that was presented by Nowak and Highfield (2011) was that "the probability of knowing someone's reputation exceeds the cost-to-benefit ratio of the altruistic act" (p. 271). An example of this could be someone giving money to a homeless person while walking with a group of friends, but not when by themselves. A converse example would be a group member who is kind and welcoming in one-on-one environments, but who joins in on ridiculing weaker members when around additional people. Humans seem to have a tendency to behave differently in groups where their social standing is at stake, so this phenomenon can certainly be present in altruistic behavior.

Spatial selection is about how similar people are likely to network with one another. If a series of individuals who are more cooperative than average form a group, the members of that group should hypothetically be more successful than a group of noncooperative people. The authors rule for this mechanic is that "the benefit-to-cost must exceed the average number of neighbors per individual" (Nowak & Highfield, 2011, p. 271). Similarly, the multilevel selection mechanism was used to suggest that groups who work together and sacrifice for each other will pass down those altruistic tendencies. The authors' rule for multilevel selection was that it works primarily with many small groups rather than a few large ones. The fifth and final mechanism of cooperation presented by

Nowak and Highfield (2011) was kin selection. This is possibly the simplest concept; individuals are more likely to help those that they share a genetic bond with. The rule for kin selection stated by the authors was that "the coefficient of relatedness must exceed the cost-to-benefit ratio of the altruistic act" (Nowak & Highfield, 2011, p.272). An example here would be a person saving their brother or sister from a burning apartment building before considering assisting strangers. This type of altruistic act seems easy to imagine as most people have at least one other person that they would put before anyone else, especially a stranger.

Altruism and modern individualistic culture. According to Barber (2004), there is an inverse relationship between a country's wealth and the altruistic behavior of its children.⁹ More importantly, he argued that urban, individualistic societies have had a negative impact on overall altruistic behavior in the population. The author stated that most modern urbanites have spatially dispersed social networks, instead of networks localized with near, well-known friends, family, and neighbors. An anecdotal example of this modern social network would be that the two people I talk to the most aside from my wife, are my friends from high school who live more than a thousand miles away. Barber (2004) also stated that throughout the majority of human history people have been closer to those that are physically near them, thus behaving more altruistically towards their community. Along with this point he also claimed that humans function most effectively in small groups over large ones.

⁹ Barber used money as a specific cause of the downfall of altruistic societies throughout his argument. I did not find it to be entirely necessary to his point or to my thesis, as it felt like more of a personal agenda from the author.

The other important argument from Barber's (2004) conclusion is that he understands altruism as an evolutionary adaptation, but that the environment determines how active it can be. He used the example of a Nigerian tribe called the Igbo, who made it nearly to 1970 without a monetary economy. Their society functioned around reciprocal altruism and a collective purpose. Prior to the incorporation of paid wages for labor, the Igbo people had set responsibilities to their communities but also lived comfortably knowing that they would receive assistance if and when it was needed. The Igbo tribe is an example of the altruism adaptation thriving in an environment that helped foster it. Barber (2004) argued that modern individualistic culture is an environment that does not support a need for altruism. Using an analogy of the giraffe neck being useless in a vast meadow with no trees, he stated that "having a capacity to engage in reciprocal altruism is useful only if it occurs in a social environment that is full of cooperators" (Barber, 2004, p. 379). I found this last point to be very prudent to the application of my synthesis because it unearthed the new problem of group environment fostering altruistic behavior. Altruistic behavior appears to be persistent in the human species but fails to thrive in an individualistic culture.¹⁰

Planetary altruism. After defending the existence of altruism in his book *Does Altruism Exist*, Wilson (2015) presented the argument that the behavior is crucial to group functional organization, which is in turn necessary for a better world. He

¹⁰ Even in an individualistic culture, I would argue that altruism is still more likely to flourish in small groups over large ones.

approached the discussion from the angle of managing group-function on a large-scale.¹¹ In order to accomplish this planetary goal, he suggested starting by coordinating positive action and minimizing self-serving behavior at lower social organizational levels. He suggested accomplishing this goal by trying new social arrangements, monitoring variation that occurs naturally, and adopting successful platforms cautiously; summarizing with "we need to become wise managers of variation and selection processes" (Wilson, 2015, p. 146). The more difficult part would be implementing said practices on a larger scale, across diverse cultures and religions.¹² Wilson (2015) used the analogy of biological organisms and their regulatory systems that self-organize but do so because of selective processes that have occurred. He posited that researchers and consumers of altruism research can help play the role of the selective process in the selforganization of overall society by promoting altruistic behaviors that serve the group (Wilson, 2015). This association with multicellular organisms on a microscopic level seems fitting to be applicable on a macro level, as many different parts of life often share remarkably similar foundations.

Translation of Theoretical Works

This section will serve as phase 5b of the meta-ethnography process: *translating the studies into one another* (Noblit & Hare, 1988). This phase exists to take all the

¹¹ Wilson's premise is that the next big step in human evolution is creating functional organization on a global scale; since we cannot wait for natural selection, we must manage group function on our own, using science.

¹² He noted that progressive regulation should be rooted in evolutionary science rather than faith or opinion based beliefs.

individual theoretical sources from the reviews of phases 3 and 4 and blend the associative parts together.

Amidst these applications of altruism in social contexts, there were a series of likeminded concepts. The first was that group organization is a key component of successful functioning for that group, and that successful group function is imperative to a healthy society. This should be a familiar concept to anyone who has ever had a management position. One example that came to mind for me was my time spent operating the front desk in a helicopter mechanic shop. If I had 30 workers available with 15 aircraft on the flight line and 50 total work orders for the day, organization was crucial to the success of the overall group functioning. Assigning a person to a job when they lacked the proper skills could result in wasted time on a good day, and loss of life on the worst one. This same idea can be applied to the overall population; ideally, if everyone had the proper role then things would run smoother.

The next recurring topic of discussion was that small groups function more effectively than large ones, but their practices can be implemented on a large-scale. A common reason given for this was that it is more likely for individuals to be interconnected and share common goals when they live and work in closer proximity to one another. Expanding on my previous anecdote, military deployments are a phenomenal example of both small and large-scale group function. While on the 31st Marine Expeditionary Unit, I was aboard a ship with 3,000 people on it that was able to operate efficiently due to the makeup of the smaller sub-groups. The day shift in my shop only had seven people on it, but our function contributed to the overall success of the

ship's mission, as did every other unique crew. The same concept could potentially work on a global level as discussed by Wilson (2015) by encouraging common group goals and collectivism.

The final trend that was highlighted frequently was the occurrence of reciprocal altruism. In a collectivist group, reciprocal altruism seemed to be a core practice. The more people who are working hard and filling in different roles to make everything function properly, the better everything appeared to operate. While the group is working in this manner, individuals are free from worrying about tasks that do not concern them, because they trust it will get done. Similarly, it was brought up that the knowledge of everyone in a community playing a useful part generally gives the individuals there a healthier outlook of one another. Conversely, people who live in areas with bigger socioeconomic gaps are more likely to have a negative outlook on *the other*. This type of behavior can be seen in wealthy people who complain about the sight of homeless encampments, or lawmakers who blame drug users for their addiction. Larger groups seem to foster disparities and a lack of perspective taking among diverse populations. An increase in everyday reciprocal altruism could possibly do a lot for strangers that struggle to understand each other's circumstances.

The three primary translations about the application of altruism in group function across these studies were reciprocal altruism, small groups working more effectively than large groups, and that efficient group functioning is crucial for human progress. Reciprocal altruism is important because it builds and maintains trust within a community. Small group organization is useful to study because the prominent practices

can be applied to larger scale action. Both preceding points are the building blocks of the overall concept that group function is the key to a healthy future for humanity. Global cooperation could end starvation, poverty, lack of health care, environmental concerns, and possibly even the need for currency.

Combined Empirical and Theoretical Translations and Discussion

This section is considered phase 6 of the meta-ethnography: *Synthesizing translations* (Noblit & Hare, 1988). I will combine the translations from both the empirical and theoretical reviews and argue for several claims about the implications. This process incorporates the holistic lens of inquiry that I used in my meta-ethnography.

Of the topics discussed in this thesis, one of the most recurring, and important in my opinion, was reciprocal altruism. The importance of reciprocal altruism is my first synthesis claim. The notion that people are more likely to behave altruistically when receiving that type of behavior themselves is entirely understandable. Reciprocal altruism also relates to another concept that arose often in my research: altruistic behavior being ultimately self-serving (Freud, 1917; Wilson, 2015). Helping those who help you is a great practice to incorporate. However, similar to the study about holding doors open for those who were happy and more likely to be of social use, reciprocal altruism can be done out of self-interest. When I began my research, I thought that acting out of self-interest perhaps made altruism less of a praise-worthy trait; now I believe that there are contexts where being self-serving can be good, as it benefits another. While acting in one's own best interest can commonly be seen as negative, if doing so benefits another person and that cycle continues, I would consider that positive. With that explanation in

mind, my second synthesis claim is that altruism can be self-serving on a reactionary level. This is the lens through which I am viewing my third and final synthesis claim: that altruism has a social application in group function. If the person who had the door held for them in turn pays for a stranger's coffee, and that stranger continues the pattern, hypothetically all the people in that community could feel the results of someone else's altruistic behavior by the end of that day.

The concept of reciprocal altruism coupled with the understanding that altruistic behavior is often done out of self-interest can be applied in group functioning. If there is an incentive to behave altruistically in workplaces, schools, sporting events, town hall meetings, etcetera, then people would likely be more kind to one another. The incentive could hypothetically be the obtainment of a healthier, more trusting community because the members think more positively of each other. An example of this in a neighborhood setting would be recently when my neighbor knocked on the door and asked if I had noticed anyone stealing building materials from the side of his property parallel to mine. I told him that I had not, but he described the truck he believed responsible from his security cameras and I told him I would keep an eye out. At the same time I asked if he had issues with his mail getting stolen because my wife and I do consistently. He mentioned that it does not happen often and that he has another camera which captures my mailbox in the background so I could reach out to him if it happened again. This might seem like a causal interaction but neither of us inherently owed each other the surveillance we offered. To bridge that example with my claims, the reciprocal altruism would be represented by each of us maintaining a diligent watch for the offenders, with

the self-interest being our desire for more information about who is stealing from us; and the social application of group function is that we both gained more trust for one another. The simple conversation that I had with my neighbor potentially strengthened the community, if even a minute amount.

Interactions with strangers can be a significant part of our lives. From getting cut off on the freeway, to witnessing a cruel exchange of words, or someone throwing trash on the ground, these interactions can be disparaging. As I discussed regarding the study about wealth distribution, equality, and greed, people were more likely to reciprocate greed and equality than generosity. While reciprocating equality is preferable to greed, the potential of more generosity is intriguing. By applying altruistic behavior in situations where we may normally wish to respond negatively, there could be a positive ripple effect. As difficult as it may be to imagine, a society where strangers trust one another because the culture is built upon altruistic practices may be achievable. By consciously attempting to behave more altruistically in our own lives, we can theoretically make the behavior more dominant in our social circles and outward further.

Conclusion

The purpose of this thesis was to review existing literature regarding altruism in the human species and present a cohesive synthesis, as well as an application of that understanding. I followed the meta-ethnography guidance of Noblit and Hare (1988) and used seven phases to conduct my research. The majority of my thesis is represented by Phases 3, 4, and 5; reading the literature, deciding how it relates to each other, and translating the studies into one another. I argued for three claims in Phase 6, synthesizing

the translations. My claims were that reciprocal altruism is important to the understanding of altruistic behavior, that altruism can often be self-serving, and that altruism can be applied socially to improve group functioning.

Limitations of my study were the lack of reference studies. The majority of my search results regarding meta-ethnographies was research suggesting that the methodology is not sound. After completing my study, I would agree that the format does not provide for rigorous organization as there are many ways to do it. However, the loose structure was useful in allowing me to see the research and emerging trends in ways that I may not otherwise have. For instance, the ending synthesis was not something I could outline early in my research, but rather it grew out of phases three and four and gathering feedback. Future directions of research could observe altruistic behavior among friend groups, or highly organized groups like the military, and see how acting in the benefit of others is directly responsible for group success. These studies could also examine ways to promote altruistic behavior on first a micro-level, then larger.

I believe that altruistic behavior exists on a spectrum with egoism comprising the opposing end. This belief hinges on my understanding of behavioristic traits being closely tied to internal drives. Internal drives can be anything from hunger and thirst to sex drive or emotions (Berger, 2017). Every action is justified by the beliefs and needs of the individual; and everyone is capable of any behavior given the right catalyst. The summary of this viewpoint is that the more understanding of individual behaviors a person has, the more freedom they have to move about a range of behaviors in any given situation. Therefore, the occurrence of what is considered socially poor behavior is due to

a lack of self-awareness and not to intentionally do harm to or offend others. In brief, people are not bad, or selfish, on purpose; nor are they good, or altruistic, on purpose; these behaviors are two sides of the same coin, determined by individual life experiences.

When my research started, I was interested in how altruistic behavior came to exist in the human species. Throughout my reading and progressing I became more interested in how altruism can be used to make the world a slightly better place. There are many theories for the origins of altruism and how it has been able to persist throughout our evolution. Some of the academic discussion is philosophical and some of it is regarding empirical studies that have focused mainly on *predicting* altruistic behavior, not *explaining* it. The complex nature of the discussion and potential explanations drove my interest in the social application instead. I likely will not be able to figure out the explanation of human altruism in my undergraduate senior thesis. I can however use the data to suggest that if we all gave others the benefit of the doubt a little more often and reacted with our second or third response rather than our first, the social impact has the potential to spread a vast distance.

References

- Barber, N. (2004). *Kindness in a cruel world: The evolution of altruism*. Amherst, NY: Prometheus Books.
- Baer, E. D. (2009). "Do trained nurses . . . work for love, or do they work for money?"
 Nursing and altruism in the twenty-first century. *Nursing History Review; New York*, 17, 28–46.
- Baumann, D. J., Cialdini, R. B., & Kendrick, D. T. (1981). Altruism as hedonism:
 Helping and self-gratification as equivalent responses. *Journal of Personality and Social Psychology*, 40(6), 1039–1046. doi:10.1037/0022-3514.40.6.1039
- Berenson, K. R., Ellison, W. D., & Clasing, R. (2017). Age differences in the desirability of narcissism. *Journal of Individual Differences*, 38(4), 230–240. doi:10.1027/1614-0001/a000240
- Berger, K. S. (2017). *The developing person through the life span.* 10th edition. New York, NY: Worth Publishers.
- Cialdini, R. B., Schaller, M., Houlihan, D., Arps, K., Fultz, J., & Beaman, A. L. (1987).
 Empathy-based helping: Is it selflessly or selfishly motivated? *Journal of Personality* and Social Psychology, 52(4), 749–758. doi:10.1037/0022-3514.52.4.749
- Collins, F. S. (2006). *The language of God: A scientist presents evidence for belief.* New York, NY: Free Press.

Dawkins, R. (1978). The selfish gene. Ney York, NY: Oxford University Press

France, E. F., Cunningham, M., Ring, N., Uny, I., Duncan, E. A. S., Jepson, R. G., ... Lewin, S. (2019). Improving reporting of meta-ethnography: The eMERGe reporting

guidance. *BMC Medical Research Methodology; London, 19*, 1-13. doi:10.1186/s12874-018-0600-0

Freud, S. (1917). The libido theory and narcissism. Standard Edition 16: 412-430.

- Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin*, *136*(3), 351–374.
 doi:10.1037/a0018807
- Gray, K., Ward, A. F., & Norton, M. I. (2014). Paying it forward: Generalized reciprocity and the limits of generosity. *Journal of Experimental Psychology: General*, 143(1), 247–254. doi:10.1037/a0031047
- Hauser, D. J., Preston, S. D., & Stansfield, R. B. (2014). Altruism in the wild: When affiliative motives to help positive people overtake empathic motives to help the distressed. *Journal of Experimental Psychology: General*, 143(3), 1295–1305. doi:10.1037/a0035464
- Hoffman, M. L. (1981). Is altruism part of human nature? *Journal of Personality and Social Psychology*, 40(1), 121–137. doi:10.1037/0022-3514.40.1.121
- Holmes, S. J. (1945). The reproductive beginnings of altruism. *Psychological Review*, 52(2), 109–112. doi:10.1037/h0060511
- James, W. (1917). *The Varieties of Religious Experience: A Study in Human Nature*. New York, NY: Longmans, Green, and Co.
- Marshall, J. A. (2011). Ultimate causes and the evolution of altruism. *Behavioral Ecology and Sociobiology*, 65(3), 503–512. doi:10.1007/s00265-010-1110-1

- Maruyama, G., Fraser, S. C., & Miller, N. (1982). Personal responsibility and altruism in children. *Journal of Personality and Social Psychology*, 42(4), 658–664. doi:10.1037/0022-3514.42.4.658
- Noblit, G. W., & Hare, R. D. (1988). *Meta-ethnography: Synthesizing qualitative studies*. London: Sage Publications.
- Nowak, M. A., Highfield, R. (2011). *Super cooperators: Altruism, evolution, and why we need each other to succeed.* New York, NY: Free Press.
- O'Gorman, R., Sheldon, K. M., & Wilson, D. S. (2008). For the good of the group? Exploring group-level evolutionary adaptations using multilevel selection theory. *Group Dynamics: Theory, Research, and Practice*, *12*(1), 17–26. doi:10.1037/1089-2699.12.1.17
- Preston, S. D. (2013). The origins of altruism in offspring care. *Psychological Bulletin*, *139*(6), 1305–1341. doi:10.1037/a0031755
- Rachlin, H. (2002). Altruism and selfishness. *Behavioral and Brain Sciences; New York*, 25(2), 239–250; discussion 251-96.
- Tifferet, S., Pollet, T., Bar, A., & Efrati, H. (2016). Predicting sibling investment by perceived sibling resemblance. *Evolutionary Behavioral Sciences*, 10(1), 64–70. doi:10.1037/ebs0000035
- Wilson, D. S. (2015). Does altruism exist? Culture, genes, and the welfare of others.London, UK: Yale University Press.

Does Altruism Evist? Culture, Genes, and the Welfare of Others	Predicting Sibling Investment by Percieved Sibling Resolution	Al rraism and Selfshness	The Origins of Almism in Offspring Care	For the Good of the Group? Exploring Group-Level Evolutionary Adaptaions Using Multilevel Selection Theory	Super Cooperators: Altruism Evolution, and Why we Need Each Other to Succeed	Personal Responsibility and Alzuism in Children	Utimete Causes and the Evolution of Atrahen	The Varieties of Religious Experience : A Study in Human Nature	The Reproductive Beginnings of Attruism	lsAlmism Part of Human Nature?	Altruism in the Wild: When AQBative Matives to Help Positive People Overack Enquilite Motives to Help the Distnessed	Paying it Forward: Generalized Reciprocity and the Limits of Generasity	Compasson: An Evolutionary Analysis and Empirical Review	The Selfish Gene	The language of God: A scientist presents evidence for belief	Bupulo Based Helping, 's it Sollendy or Solfably Maturat'	The Developing Person through the Life Span	Age Differences in the Destrubility of Narcissism	Arnusmas Hedonism: Helping and Self-Gratification as Equivilent Responses	Do trained nurseswork_for love, or do they work_for money?	Kindness in a Cruel World: The Evolution of Altruism	Source Title
Wilson, D.S.	Tifferet, S., Pollet, T., Bar, A., Efrati, H.	Rachin, H.	Peston, S.D.	O'Corman, R., Sheldon, K.M., Wilson, D.S.	Nowak, M.A., Highfield, R.	Maruyama, G., Fraser, S.C., Miller, N	Mary Iwill, J. A.	James, W.	Holmes, SJ.	Hoffman, ML.	Hauser, D.J., Preston, S.D., Stansfield, R.B.	Gay, K., Ward, A.F., Norton, M.I.	Geez, J.L., Kelmer, D., Simm-Thomas, E.,	Dawkins, R	Collins, F.S.	Caklin, R.B., Schalter, M., Rouffun, D.A.yus, K., Fulz, Z., Hearman, A.L.	Benger, K.S.	Beenson, K.R., Ellison, W.D., Clasing, R	Baumann, D. J., Cialdini, R.B., Kendrick, D.T.	Baer, E.D.	Barber, N	Author(s)
2015	2016	2002	2013	2008	1102	1982	100	1917	1945	1981	2014	2014	2010	1978	2006	1987 1	2017	7102	1861	2009	2004	Year
Theoretical	Empirkal	Empleical	Empirical	Empirical	Theoretical	Empirical	Implecal	Theoretical	Both	Both	Empirical	Empirical	Empirical	Theoretical	Theoretical	Imperial	Both	Empletical	Empirical	Empirical	Theoretical	Empirical or Theoretical
English	English	Baglich	English	English	English	Englis h	The glin h	English	English	English	English	Englis h	English	English	English	lang ten h	English	Tag lik h	English	English	English	Language
Academic book; review of theories	ques tionnaire	Analysis	Analysis	Application of theory	Academic book; review of theories	Esperine nt; manipulation	Analysis	Series of lectures in book format	meta-analys is	meta-analys is	Studies 1-3: field experiments ; observation. 4: Survey on hypothetical interactions	5 experiments: all using human participants	Analysis	Academic book; review of theories	Academic book; review of theories	Study J: opeoficient; manipulation Study J: opeoficient; manipulation	Textbook		Experiment; mood manipulation, interpolated task, oppostunity to self- gratify	Narrative Literature Review	cbook; review of	Method
Discuss the existence of altrusim in human beings	present the relations hip between sibling resemblance and routine and hypothetical investments.	explore the relationship of altrais mand selfabrases in group interaction	combine existing views of altruism through biological bases of <i>altruisic</i> <i>responding</i>	using mulitlevel-selection theory to explain how group-beneficial traits can evolve	Demonstrate why cooperation depends on altruis mand how it is important to human success	test the deindividuation model on determining pro-social behavior in groups of trick-or-treaters	attempt to establish a general framework for the evolution of pro- social behavior in humans; PKee equation	to educate about the different types of religious experiences and various perspectives	present that altruism of ginated from parental care of offspring	Combine evidence from biology and psychology in regard to altruis mbeing a part of human nature	Determine whether percieved positive people receive more help than those who appear dis tressed	determine how people be have towards others a her receiving a certain type of rreatment themse lves	to present a functional analysis of compassion review associated evidence	present the impact that genes have on human behavior	Present a coheænt synthesis of se ænce and the Christian religion	hypothesis compatity-ba ed altraism for a needy other occurs to relieve oute's feeding of classes, rather than to help the needy person	Instruction of human development	Study 1: determine selationship between age/gender and des irability of marcissis m Study 2: determine qualities that older and younger participants associate with marciss ism	test hypothes is that alruis mand self- grafification are functional equivilants in adults	Indentify whether nusses chose their profession for finacnial or altruistic purposes	Explore concrete examples of altruistic behavior and present implications	Purpose
NA	80 (58% women)	V.N.	WA	N/A	N/A	177 children (89m, 72f, 16 unslentifiable)	×/	NA	NA	N/A	Studies 1-3: 823 Study 4: 158f	Study 1:100(511,48m) Study 2:100(501,50m) Study 3:60(121,48m) Study 4a:96(661,33m) Study 4b:165(881,77m)	N/A	NA	NA	sundy 1: 877 Sundy 1: 877	NA	Study 1: 8 <i>89</i> (449f, 420m) Study 2: 960 (480f, 420m)	80 (33m, 47))	NA	N/A	# of Participants
N'A	University Campus	N/A	NA	WA	ŃA	Children who were trick-or-treating	N.N.	NA	NA	NX	Studies 1-3: passers-by Study 4: Mechanical Turk	Study 1-4a; subway stations and high traffs areas Study 4b; Mechanical Turk	WA	NA	NA	Inter to Ps year course	N/A	Study 1: Mechanical Turk Study 2: Mechanical Turk	Inno to Psych course	Ń	N/A	Recruitment Method
functional organization is impensive for the success of the species; we must become planetary altruists	percieved sibling assemblance prediced routine investment in a younger sibling with a moderate effect size.	because each selfsh decision is individually pe ferred to each altruistic decision, people can benefit from altruistic behavior ontly when they are committed to an a latistic pattern of acts and refuse to make decisions on a case -by-case basia	Identified 10 factors providing evidence for homology between altruistic #esponding and offspring retrieval	Individual differences can produce group-level changes	Mechanics of cooperation: repitition, reputation, spatial selection, multilevel selection, kin selection	individuals in large groups are not affected by procedures that attempt to increase boost countribution by making thempers onally responsible	The ultimate cause underlying the evolution of altraist appendix and positive fitness costs and benefits, are positive encounter of a latustice labor positive deviations from addirece fitness effects when multiple altraists fitness effects when the inheritance of altraivic waters		reproduciton and caretaking may be seen as the most basic form of a knuis m that all others arose from	atruistic behavlor is not always an attempt to gain approval, is sometimes imputs ive. Alruis mean be explored more than philosophically	people are driven to help happy individuals out of social affiliation motives; helping distressed individuals is empathy-based	generosity paid forward less than both greed and equality. Equality and greed both reproduce themselves but only equality can foster true generosity	Compass ion arises from distince apprasial processes and exhibits distinct dis play behaviors and experiences	a dominant set of genes foster alruis tic behavior among populations	Altruism can be attributed to the Moral Law set in place by some deity.	study 1: "it appeared to be presonal actives rathest than emposite concern mat accounts for the tensored. Beiping motivation of our empathically oriented subjects." Study 2: empathic subjects were more heplit if and expanded by the were more heplit if and the presonal accounts plots be that the presonal security possible that the presonal and a could be fined of helping."	" used as reference for explaining basic concept of behavioral traits	Study 1: younger ages = increased desire for narcissistic trails: more in females Study 2: Otler and younger had different pecceptions of narciss ism and conscientiousness	A self-ganfication increased in happy and sad moot. B sad moot a hunistic as cance led increased self-grafification. C happy moot a lamistic act did not cancel self- grafification.	Nurses who work out of love and compassion are common, but they are often restriced by hospital logistics.	Altruistic behavior thrives best in smaller groups of people rather than large-scale communities	Notes

Appendix: Source Matrix