THREE WISHES: A PROJECTIVE TOOL IN UNDERSTANDING THE EFFECTS OF ADVERSE

CHILDHOOD EXPERIENCES

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Abstract

Asking for "three wishes" is a projective tool commonly used by clinicians with children to assess features of their internal world. Despite its widespread use, research on the meaning of individuals' responses to this tool is limited. Some research has looked at different types of wish responses across demographics such as age and gender; however, no study to date has specifically investigated the relationship of wishes to adverse childhood experiences. Adverse childhood experiences (ACEs), such as neglect and abuse, have been specifically connected to later health problems such as obesity and depression (Felitti et al., 1998). To fill in the gap in current literature, this research conducted two studies using an exploratory sequential mixed-methods approach. One examined the wishes of a foster care population and the other examined wishes in a general adult population across a range of early adverse experiences. Our findings are the beginning of understanding common and differing themes between wishes of children and adults. We explore previously unidentified differences such as the desire for reunification and escape in foster children and the centricity of mortality and money in a general adult population. Additionally, we found one theme common across all populations we researched, the wish for attachment and belonging. We also looked at wishes to examine differences across development and early adverse experiences. Across development, we found wish patterns similar to some of the findings of Erik Erikson (Erikson, 1982). Younger children were associated with more material wishes, latency-age children with more social wishes (attachment and belonging), and adolescents with more future-oriented wishes (achievement). Adults higher in adverse childhood experiences had greater difficulty generating wishes, wanted escape more, reported fewer

wishes for money, and reported more negative feelings after remembering wishes from childhood. We hope this research will help future clinicians pause to contemplate the meaning behind answers to Three Wishes and/or other interventions, to reflect on the evoked feelings, and to notice individuals' resilience and aspirations in the face of adversity. We hope this study helps clinicians see what an individual's wish has in common with wishes of others as well as its unique importance for the individual and their treatment.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

PAGE

CHAPTER I:

INTRODUCTION

HISTORY OF THREE WISHES: A PROJECTIVE TEST

Three Wishes

"If you could have three wishes, what would you wish for?" From genie-in-a-

bottle fables, to fairy tales, poetry, literature, music, TV, and psychotherapy, the concept

of Three Wishes is imbedded in our cultural heritage. Since the beginning of the

psychoanalytic tradition, Freud emphasized the centrality of wishes. "Man, as we know,

makes use of his imaginative activity in order to satisfy the wishes that reality does not

satisfy" (Freud, 1958). According to Freud, wishes played a role in the unconscious

underpinnings of behavior. The definition of a wish in the Merriam-Webster dictionary

is, "to have a desire for (something, such as something unattainable)." From a

classical psychoanalytic perspective, wishes are often discussed in the context of wish

fulfillment. The Merriam-Webster dictionary defines wish fulfillment as "the gratification

of a desire especially symbolically (as in dreams, daydreams, or neurotic symptoms)." In

these definitions, we have the beginnings of a working conceptualization of wishes, inner

human expressions of our desires through fantasy, fantasy that may not be met in reality

but whose existence in our inner worlds can create satisfaction or, alternatively, longing

or some complex combination of both these experiences.

In the psychotherapeutic field, for many decades, clinicians have asked clients

about their wishes as meaningful sources of data. Asking about wishes is, in essence, a

simple yet effective projective test. Responses can be analyzed for the unconscious

expression of elements of personality. Researchers have gone as far as to say that wishes

not only reveal elements of personality but are associated with an individual's deepest

psychological problems or conflicts (Simmons, 1969). On the surface, an individual is

asked a simple question. Projections on this question the wisher can place anything into

their response. Their response signifies a road to their unconscious fantasy life.

Research on Three Wishes

Although the use of wishes as a source of data in both evaluations and

psychotherapy is pervasive in the field, research, particularly in recent decades, is limited.

Most of the studies that exist explore the differences across between demographics.

Wishes are sorted into qualitative categories that attempt to capture general themes in a

given sample. Most research attempts to capture themes across peer groups as a way of

understanding differences across demographics as well as attempting to establish

common and deviant wishes.

Research findings have indicated differences in the content of wishes across age,

gender, social economic status and a variety of other indices. Developmentally, younger

children appear to provide more concrete, material-oriented wishes and as children get

older wishes appear to become more future and socially oriented (Cobb, 1954; Winker,

1949). When comparing children to college age students, young adults have been found

to be more likely to have fewer wishes related to material objects and more wishes

related to vocation, money, and activities. Some studies also found variations across

development as nonlinear, with self-interested wishes higher for young adults and young

children than for latency-age children, and altruistic wishes more prevalent in latency-age

children than in any other developmental period (Wilson, 1938). Regarding gender

differences, early studies indicated that overall boys and girls wishes were more similar than different, although some studies indicated that boys showed more interest in personal achievement and possessions and girls were more concerned with social and family relations (Cobb, 1954; Guarnaccia & Vane, 1979). In literature on early adulthood, one study found that men and women choosing from a preselected group of wishes showed no differences across gender except that men were more likely to select the wish "to have sex with anyone I choose" (Ehrlichman & Eichenstein, 1992). Regarding socioeconomic differences, studies have indicated that children from lower income families are more oriented toward tangible possessions (Guarnaccia & Vane, 1979). Multiple studies found that academically gifted adolescents indicated more altruistic wishes as compared to same-age peers (Chiu & Nevius, 1989; Karnes & Wherry, 1981).

Some research about Three Wishes has explored categories outside of demographics. One study investigated differences in wishes across personality characteristics and socioemotional functioning. Extraversion was related to making more interpersonal wishes; neuroticism was related to wishes for emotional stability; depression was related to making highly idiosyncratic, specific wishes (King & Broyles, 1997). Another study found that children seeing psychiatrists reported more "Real Problems" and reported a more constricted range of themes in wishes than their peers (Winkley, 1982). Another study of boys in a group home for delinquent behavior compared boys who committed theft to boys who committed truancy. The group that engaged in theft expressed greater desire to return home and wanting to engage in

activities whereas the truancy group showed wishes more related to achievement and becoming a person of importance (Speer, 1937).

While various studies have pointed to the need for normative data on the contents of wishes (Schaefer, 1975), a standardized approach to analyzing wishes does not currently exist. Studies vary on the methodology employed for analyzing the content of wishes. Some studies have generated their own categories based on common observable themes (Ables, 1972), while others have used predetermined wish categories (Chiu & Nevius, 1989), categories established from pilot studies (Winkley, 1982), categories established from other researchers (Schaefer, 1975), and categories of multiple other researchers (Wheeler, 1963). Some studies have also used categories from other studies but expanded and adjusted them to fit the unique wishes of different populations of respondents (Karnes & Wherry, 1981). Studies have also used theories such as Maslow's hierarchy of needs or Erik Erikson's developmental hierarchy to categorize wishes (Perry & Despland, 2011). According to Nereo and Hinton (2003), who compiled a comprehensive system of categories derived from past research, previous systems used as few as two categories (concrete vs. abstract) and as many as 27 categories. They combined previous systems that were thematically similar or redundant to create 13 descriptive and varied categories (i.e., (1) Material Goods, (2) Pets/Animals, (3) Activities, (4) Interpersonal/Family, (5) Future/Goal, (6) Personal Attribute, (7) Situational (8) Situational/Health-Related, (9) Altruism, (10) Fantasy, (11) Negative Wishes, (12) No Wishes, and (13) Miscellaneous). Nereo and Hinton (2003) differentiated Situational as a category from Situational/Health-Related, since the population studied was medically ill children and their siblings. Overall, the approaches

of different researchers have varied greatly to categorize wishes and have often differed based on the population studied or research question asked.

Application to Clinical Work: Three Wishes as Interventions

While studies have pointed to the need for more comprehensive criteria and normative data on content for clinical interpretations of wishes, some studies have also extrapolated outside of the wish contents and categorization to the poignancy of the process of sharing a wish and its utility as an intervention. One study looked at the modality of collecting wishes and found that collecting wishes from children orally and in written form did not significantly affect the content of wishes (Speer, 1939). This finding indicates that the intervention may be utilized in written or verbally expressed form. Another study of middle school students administered in schools discussed the students' excitement in sharing their wishes and the lively discussions that followed (Reed & Rossi, 2000). Furthermore, another study found that wishes provided information during interviews that were not provided otherwise and that children reflected deeply on their wishes (Winkley, 1982). For example, one child "wished 'to be a stone' and when asked to expand said 'something not existing'." Additionally, studies have indicated that wishes can provide insight into children's unique emotional conflicts, anxieties, and fears, such as relationship conflicts or family circumstances (Witty & Kopel, 1939). Three Wishes has not yet been studied as an intervention tool with children who have experienced childhood traumas.

ADVERSE CHILDHOOD EXPERIENCES AND PROJECTIVE TESTS

Research Findings on Adverse Childhood Experiences

One population very important to understand is comprised of individuals who have experienced adverse childhood experiences. Adverse childhood experiences such as neglect and abuse have been connected to later physical health and mental health problems. The Adverse Childhood Experiences study (ACEs; cdc.gov) looked at the cumulative impact of 10 aspects of abuse, neglect, and impaired household environment and found association with leading causes of adult death and disability (Felitti et al., 1998). Numerous studies have found a graded relationship: experiencing four or more adverse childhood experiences puts children and adults at much greater risk for a range of poor health outcomes. Due to this association, various studies have evaluated childhood traumatic or stressful experiences together cumulatively in an Adverse Childhood Experiences Score ranging from 0 (no adverse experiences) to 10 (a range of childhood possibly traumatic and stressful events). Studies have found individuals with four or more adverse experiences by age two were more likely to experience learning and behavior problems by age 10 as well as delinquency records, mental health problems, and teenage pregnancies by age 18 (Werner, 1996). Studies have shown that four or more adverse childhood experiences related to a 12-fold increase in risk for alcoholism, drug abuse, depression, and suicide in adulthood, and the individuals who experienced these traumas were more likely to be at risk for poor self-rated health, ischemic heart disease, cancer, stroke, and diabetes (Dube et al., 2003). While individuals who experience maltreatment and disturbances in household environments are at risk for later life pathology, high ACE scores are also common in healthy adults with no medical or psychiatric disorders (Cohen

et al., 2006). This indicates diversity and resiliency in a high-risk population. Since numerous studies have shown the consequences of childhood adversity and trauma, individuals with traumatic and stressful childhood experiences become an important population for psychologists to understand and treat while assessing individual risk and resilience.

<div align="center">Research Findings on Projective Tests and Trauma</div>

Three Wishes is an easily administered projective tool which has never been evaluated in research as an assessment or intervention tool in addressing trauma. Various projective measures have attempted to assess the impact of trauma on different internal qualities as well as to identify features of trauma. The Rorschach, inkblots in which respondents generate responses to images on 10 cards displayed sequentially, has been used to assess different features of trauma. Many studies have connected responses to dissociation (a form of the avoidance-freezing defensive tactic) that can often precede traumas and involves a turning away from internal and external pain. One study pointed to the way that traumatized individuals respond to the ambiguous stimulus of the Rorschach in a fragmentary and incompletely verbalized way (Armstrong, 2002). Studies have also connected codes from the Exner system, a way of analyzing the Rorschach, to markers of trauma such as emotional distancing (Armstrong & Loewenstein, 1990), affective numbing (Levin & Reis, 1996), fantasy production (Lovitt & Lefkoff, 1985; Scroppo, Weinberger, Drob & Eagle, 1998), and avoidance of the nuances of reality (Hartman, Clark, Morgan, Dunn, Fine, Perry, & Winsch, 1990). Other studies have used content in images of the Rorschach to identify features of trauma and trauma histories such as flashbacks (i.e., Sex, Blood, Anatomy, Morbid and Aggressive responses;

Armstrong, 1991) and history of sexual abuse (damaged and fearful sexual images;

Leavitt, 2000).

Some studies have specifically looked at projective measures to assess the impact

of adverse childhood events. Case vignettes of sexually abused children using the

Rorschach indicated contents symbolizing the abuse experienced by children, morbid

responses, perseverations, and Form responses indicating similar avoidance and

guardedness of other trauma survivors as well as possible rigid defenses and intrusive

reliving (Gravenhorst, 2002). Responses to childhood trauma have also been connected in

projective tests to poor reality testing (Armstrong, 2002). Other projective tests

commonly used include the family drawing task and the Thematic Apperception Test

(TAT). In the family drawing test, children are asked to draw their families with each

member engaged in an activity. Using a family drawing test, sexually and physically

abused children were more likely to draw distorted bodies; the human figure was usually

represented devoid of details; and the majority of the abused children excluded their

primary caregiver from the drawings compared to their non-abused peers who included

the primary caregiver. Drawings with these representations have been associated with

higher levels of emotional distress (Piperno, Biasi, Levi, 2007). In another projective test,

the TAT, individuals generate stories from a series of presented images. Trauma has been

associated with various features on the TAT such as interpersonal distance in narratives

and paucity of positive emotions (Pica et al., 2001). A case study also found that trauma-

informed treatment also led to an improvement in interpersonal relationships and self-

insight as indicated by various projective measures including the Rorschach and TAT

(Pica et al., 2001). Dreams have also been used as a projective experience to better

understand features of trauma. One study of children and adolescents living under conditions of enduring interpersonal violence found a higher proportion of aggressive objects in their dream narratives when compared with those of children living in peaceful surroundings (Kamphuis, et al., 2008).

In addition to assessment of childhood trauma, projective tests can also serve as an intervention. One study used the TAT as a therapeutic tool to help process traumas indirectly through stories (Hoffman & Kuperman, 1990). While projective tests can have an intervention and assessment utility in addressing trauma, some measures can be time consuming to administer and score. So, as previously mentioned, Three Wishes, which is an easily administered projective tool, has yet to be evaluated in research as an assessment or intervention tool in addressing trauma.

<center>Gaps in Literature and a Statement of Purpose</center>

Adverse childhood experiences can impact an individual's mental and physical health as well as have a fiscal impact on society in that they are positively associated with a disproportionate amount of health expenditures in later life (Bellis et al., 2017) and negatively associated with adult education, employment, and income potential (Metzler et al., 2017). Treatment and understanding of individuals in this population is critical on an individual and societal level. While some projective tools exist to evaluate the characterological implications of trauma, most involve analysis and can take time to interpret. This research proposes an exploration of a simple projective tool, Three Wishes, that is already used during clinical interviews in the hopes of gaining a better understanding of childhood trauma and the possibility that this tool might be utilized with greater insight.

Very few studies have looked at Three Wishes in a population with high childhood traumas and stressors. Schwartz and colleagues looked at a population of homeless young adults, asking them about Three Wishes. The study looked from a lens of understanding values and concluded that this population's wishes were consistent with mainstream societal values and norms. Most wishes involved a desire for stability, positive family changes, or increased happiness (Schwartz et al., 2008). Outside of this study, a study looking specifically at a population of individuals who had experienced many adverse childhood experiences has not been done. Additionally, despite the utilization of Three Wishes for many decades, no study has looked at wishes in relation to trauma or adverse childhood experiences. While the study of homeless youth indicates themes that may arise in a population with adverse childhood experiences, more research is needed, with a deeper look at what themes might imply.

This study aims to investigate Three Wishes as a projective tool both to refine utility of a common projective measure and to provide some insight into the impact of adverse childhood experiences on fantasy and inner experiences. The study will utilize an exploratory sequential mixed-methods approach. First, features of wishes (wish categories) will be qualitatively explored with a small sample; then these features will be tested out with a second sample. The first phase of the study is a qualitative exploration in which Three Wishes are reported in an open-ended question and are collected from two different populations: (1) children entering the foster care system collected at the Regional Diagnostic Treatment Center (RDTC) in Newark and (2) adults collected online through Amazon Mechanical Turk. From the initial exploration, the qualitative findings will be used to develop a quantitative feature that can be tested with another sample (i.e.,

a second sample of children and adults). In the quantitative phase, Three Wishes are

sorted into previously identified categories from the qualitative study and a measure of

adverse childhood experiences will be collected from the second population of children

and adults online and at the RDTC (see Figure 1).
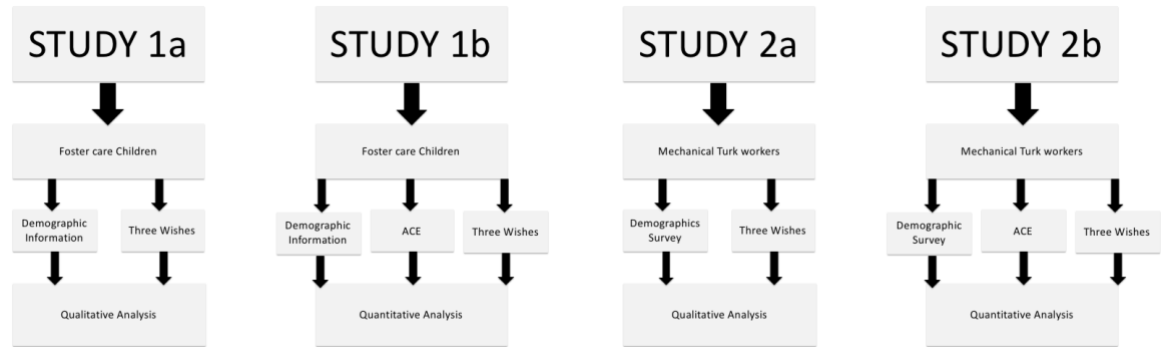
Figure 1. This study utilized a mixed-methods design conducted over two studies
(Study 1 and Study 2), each in two-parts (a and b) with two different population
demographics: foster children (Study 1) and general adult population administered online
(Study 2). The first stage (a) of both Study 1 and Study 2 will be a qualitative analysis
looking at themes across Three Wishes. The second stage (b) of Study 1 and Study 2 will
quantitatively sort wishes into categories from stage a, and then analyze differences
across demographics of age (i.e., developmental stage) and adverse childhood
experiences (i.e., low vs. high).

This study attempted to explore how themes mentioned in Three Wishes helped

explain underlying projective qualities that may differ across age and degree of adverse

childhood experiences. The study aimed to evaluate the themes in wishes, looking at the

features these wishes may imply about a population. We evaluated the wish themes as

quantitative variables to look at possible differences in wishes at different developmental

stages and differing frequency of types of adverse childhood experiences. Answers to

these questions were explored through two studies, looking at two populations—children

in the foster care system and a general adult population.

Practically, this dissertation has two goals that could be helpful for mental health professions, particularly those working with individuals who have experienced childhood traumas. The first is to provide insight into the utility of a projective tool Three Wishes, aiming to move toward a more standardized way of viewing what individuals are generating and what that could imply. Second, if utility is identified in this projective measure, the study aims to understand the internal qualities and longings common to different ages and trauma histories that the tool may help us better map. This research may then help to provide a fuller picture of the personal features of these different populations that can be utilized clinically.

CHAPTER II:

STUDY 1: A FOSTER CHILD'S WISH

A FOCUSED EXPLORATION: FOSTER CARE

Separation of children from their families is a topic frequently in the news over the past year as many families of asylum seekers and immigrants entering the United States are separated. Many families are arriving in the United States after already experiencing various traumatic experiences in their countries of origin. While speculations on the impact of family separations on children are reported in the media, this impact needs to be studied and much better understood. Three Wishes can provide a window into this experience of family separation. Speer (1937) found that in a population of children removed from their homes for delinquent behavior, many children reported a wish to be home. The experience of asking children about wishes at a time of separation from attachment figures may also provide additional benefits. Barnett and Wilson (2004) conducted a study looking at children's separation from parents during divorce proceedings; although wishes may not dictate outcomes, this study showed that the opportunity for children to put forward their perspective and wishes may empower them to some degree at a time in which they have lost some sense of control.

A common time of separation of children from their caregivers in the United States is when a child is placed in the foster care system. To date, no study has evaluated Three Wishes in a population of children in foster care. One study did a qualitative evaluation of social workers' recommendations for reunification with parents for a

population of Dutch foster care children (Minkhorst et al. 2016). That study found that children might influence the decision-making process of reunification recommendations by stating their wishes. Although this does not provide insight into more general wishes it does indicate that children's wishes in this population when stated to welfare workers can provide actual agency.

The study will evaluate wishes of children who recently entered either foster care or a new foster care placement. This is a population of children who may have experienced a range of adverse childhood experiences as well as undergoing forced separation from caregivers. The unique qualities of wishes from this population will be explored in an attempt to better understand these children's experiences and desires.

STUDY 1: PHASE 1

The Study and Hypothesis

At the Regional Diagnostic Treatment Center (RDTC), Comprehensive Health Evaluations for Children (CHEC) are conducted to assess children's adjustment during transitioning to foster care or transitioning to a new foster care placement. Thousands of children have come through the center over the last 14 years. Interviews are conducted with the caregiver, the Division of Child Protection and Permanency (DCP&P) caseworker, and the child. Assessments are administered, including one projective task, Three Wishes, along with self-report measures, a brief cognitive assessment of intellectual functioning, developmental screening, and a thorough evaluation of the children's biopsychosocial histories.

These reports are used as an archival database to evaluate whether Three Wishes can provide insight into early childhood adverse experiences. This study will try to evaluate this projective tool, Three Wishes, in an exploratory sequential mixed-methods design. The same population cannot be used for both the qualitative and quantitative phases (Creswell & Creswell, 2018). Therefore, the sample was randomly assigned to two groups for Phase 1 (qualitative) and Phase 2 (quantitative).

In Phase 1, for this population of children, what themes arise in wishes? This question will be evaluated qualitatively. Taking a thematic analysis approach, commonalities between reported wishes were cataloged into larger themes. These themes will also be highlighted through case vignettes. Interpretations were made based on themes with attention to implications for therapists working with clients entering foster care and to understanding Three Wishes as a projective tool. We predicted that, compared to previous research with different populations, more wishes would relate to reunification with previous caregivers. Additionally, we predicted that there will be a tendency toward wishes related to getting more basic needs met (e.g., material wishes).

Methods

Participants

Participants included youth (ages 8–16) who were referred for a Comprehensive Health Evaluation (CHEC) due to recently being removed from their home and placed into foster care, and/or transitioning into a new foster home. The evaluations included in this study took place during the years 2014–2016 at the Metropolitan Regional Diagnostic and Treatment Center (RDTC) at Newark Beth Israel Medical Center (part of the RWJ Barnabas Health Care System).

Participant Screening

Youth who were not between the ages of 8–16 were excluded from the study, along with evaluations that took place outside the years of 2014–2016. In addition, any participants that were not able to fully complete the necessary self-report measures and Three Wish" projective test during the evaluation were not included in relevent analysis due to missing information required for the study.

Materials and Procedures

Procedures

Participation in the study required the youth and either their caseworker or foster parent to have completed a Comprehensive Health Evaluations for Children (CHEC) evaluation between 2014–2016, which involved an interview with both the youth and the adult accompanying them to the evaluation, along with completion of the necessary self-report measures and a measure of cognitive functioning. The structured interview for the CHEC evaluation included questions about the child's behavior, recent emotions, current placement, previous placement, the reason for the removal or change in placement, and demographic information.

Prior to the evaluation, the DCP&P caseworker provided consent for the youth to be evaluated, since they were the youth's legal guardian at the time. During the evaluation, the interviewing clinician assessed the youth's experience and level of understanding; this guided the clinician to choose his or her words to maximize the possibility of fostering a sense of cooperation, to promote a feeling of inclusion on the part of the child, and to demonstrate respect for the rights and dignity of the youth. Any youth that was unable, uncomfortable, or unwilling to answer a question (or questions)

during the evaluation process was not required to answer these questions and the interviewing clinician modified questions appropriately to accommodate the youth as clinically indicated. For Phase 1, only demographic characteristics and Three Wishes were evaluated.

Measures

Scores from the following self-report measures and interviews completed by the youth at the time of the evaluation as part of the standard CHEC battery, were included.

Three wishes. During the interview, youth were asked, "If you could have three wishes, what would you wish for?" Answers were imbedded in the body of the CHEC evaluation report. Three Wishes is a common projective tool used in clinical settings with limited research regarding its validity, reliability, and appropriate application.

Demographics. Demographics of age, ethnicity, gender, and race were pulled from CHEC reports to measure the characteristics of participants.

Data collection

All data collected in this study was retrospective. The measures that were used for data collection in this study include the standard measures that were administered as part of the CHEC evaluation, including the Three Wishes and the final written report following the CHEC evaluation which included information pertaining to adverse childhood experiences. All information collected through the evaluations was confidential. There was no identifying information used in the analyses or in any subsequent publication that might arise from the research. Patient information was stored

on a secure electronic database within NBIMC. The final written reports were obtained

from the secure database located at the hospital. All data was de-identified prior to use.

Data Analysis Plan

This study utilized retrospective data from the evaluations. Participants for Phase

1 and Phase 2 were systematically randomly assigned so both groups had a similar age,

gender and ethnicity composite. Data evaluation initially required entry of self-report

survey results collected from both children and legal guardians into a database in a

standard statistical software program, the Statistical Package for the Social Sciences

(SPSS). Nonnumerical variables, including gender and race/ethnicity, were coded and

stored in nominal format. Three Wishes were stored as string variables.

The trial design for this study was a mixed-methods exploratory sequential

design. This study utilized retrospective data from the evaluations conducted in 2014 to

2016, which included a sample size of 91 participants (46 for Phase 1). Descriptive

statistics for sample demographics were reported.

Thematic analysis was utilized to describe and identify patterns the across the

entire set of qualitative data (Braun & Clarke, 2006). A data item was defined as a wish.

The researchers became familiarized with the data (reading and re-reading while noting

initial commonalities in the data). Prevalence was calculated as occurrence of a theme

across data items (wishes). Themes sought to capture the entire data set and were

identified from an inductive, bottom-up approach (Patton, 1990). Data (wishes) were

sorted into subthemes (codes). Each data item could be in more than one subtheme.

Subthemes were constructed by both noting highly prevalent themes and trying to capture

the entire nature of the data. Capturing the entirety of the data was prioritized in order to

answer the research question of what themes occur in the data rather than only equally

occurring themes. Therefore, for wishes that did not fit into larger themes, communalities

were explored to create additional subthemes. Subthemes were then grouped together if

they reflected a larger theme. A semantic approach was taken in which themes were first

identified from patterns in the explicit or surface meanings of the data and later

interpreted in an attempt to theorize the significance of the patterns and their broader

meanings and implications. A thematic map was generated to check themes in relation to

the codes and the data set in its entirety. Once the themes were identified, themes were

then named and defined. Themes were interpreted utilizing a contextualist approach, to

theorize the underlying qualities and potential meaning of each theme. Contextualist

approaches focus on the ways individuals make meaning of their experience as well as

the ways broader social context impinges on those meanings (Braun & Clarke, 2006).

Finally, a selection of "wish" examples was utilized to depict themes and connect back to

the broader research question of utilizing identified themes to understand a population

(i.e., foster children) and a projective tool (i.e., Three Wishes). These themes may relate

to the projective features of the wishes and will be expanded on for clinical utility.

<div align="center">Results</div>

<div align="center">*Demographics*</div>

Of the sample of 46 participants (23 male, 23 female, $M_{Age}=11.48$, $SD=2.52$),

67.5% were African American, 16.7% were Hispanic, or Latino and 8.7% were

Caucasian. Ethnicity was not recorded in the records of four participants and their

ethnicity could not be ascertained from the archival data.

Qualitative Analysis

Thematic analysis was utilized to describe and identify patterns across the entire set of qualitative data. Data (wishes) were sorted into subthemes (codes). Each individual data item could fit into more than one subtheme. A semantic approach was taken to sort subthemes (codes) into themes. A thematic map was generated to check themes in relation to the codes and the data set in its entirety. After combining and refining themes, a final thematic map was created. (*Figure 2*).
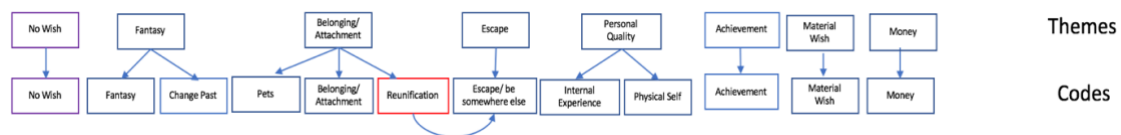
Figure 2. Thematic map of identified codes sorted into themes for thematic analysis.

Once final themes were identified, themes were then named and defined. The following themes were identified: no wish, fantasy, attachment/belonging, reunification, escape, personal qualities, achievement, material wishes, and money.

Themes were interpreted utilizing a contextualist approach to theorize the underlying qualities and potential meaning of each theme. Each theme will be described in greater detail with some details of a case example (participants) who endorsed particular wish theme.

Escape. Nearly half of participants articulated a desire to leave current circumstances (47.8% of participants). This tended to occur in two subthemes. The first were wishes for a vacation or to not be in current circumstances of daily life (e.g. "go to Disneyland," "change everything," "visit anywhere," "to change my school"). The

second was for reunification, the desire to be returned to living with family (e.g., "I wish I could go be with my father," "go back home"). Both subthemes eluded to a desire to escape current circumstances. For example, one participant, a 16-year-old female, was removed from her home after reports of domestic violence, her mother's mental health (bipolar disorder and schizophrenia), neglect (no money for food), and parental substance use. Her wishes, though connecting to various themes (i.e., attachment, fantasy, reunification), a very common thematic overlap across participants, expressed a desire for a change of circumstances and a different past, "to have my life go back to normal," and, "to bring my sister back…she passed away in 2008, she was six months old, she passed away due to medical problems because my mom was using drugs while she was pregnant." Her desire for escape expanded to her own life. She expressed, "Sometimes I want to give up on life and not try anymore," stating, "My mom should have aborted me." She stated that she wouldn't commit suicide because, "I know my family needs me." When asked about what she missed most about living with her family, she stated, "Every time I come home from school we just talk and laugh. I love my mother but I just don't like her behavior." Her comment demonstrates the complicated and conflictual experience many children appear to experience: a desire to escape the circumstance and return to "normal," but where "normal" also represents a reality. In fact reality that didn't actually exist was mostly comprised of things one might want to escape from.

Attachment/Belonging. Many participants wished for connection in various forms (45.7% of participants). This included various subthemes. Some participants wished for pets (e.g., "to have a puppy, especially a chihuahua," "a pet," "10 dogs"); others wished for human companionship in the form of friends, family, or relationships (e.g., "a child,"

"speak to mom," "to find love"); and others wished for reunification, reconnection with family members after being separated in foster care (e.g., "to go home to mom," "go back home"). Some participants also made altruistic wishes for others (e.g., "get my father out of jail," "helping children find their future careers") although this was not very common. For example, one participant, a 14-year-old African-American female, wished for "a child," "to be back with my mother, brothers, and sisters," and "to find love." She was removed from her mother's care and separated from her siblings after her mother was incarcerated for assault of a minor (the participant) and possession of a deadly weapon. Her father was institutionalized many years prior after a severe traumatic brain injury. Her mother had a history of bipolar disorder and an intellectual disability, substance use, and prior allegations due to insufficient food, sleeping arrangements in the home, and physical abuse allegations. The patient had a history of disorderly conduct, sexual acting out behaviors, running away, self-harm, and suicidal ideations. She reported blaming herself for the removal due to a fight between her and her mother. Despite complicated family relations and various instabilities, this participant, like almost half of the other participants, wanted to connect and belong with current and fantasized loved ones. Additionally, with two parents unable to be cognitively present with traumatic brain injury and intellectual disabilities, her yearnings for deep connections with others seems to have been expressed in her wishes.

Reunification. Although reunification (i.e., the desire to be returned to living with family) overlapped with both the themes of escape (i.e., leaving current circumstances) and attachment/belonging (i.e., desire for connection (e.g., "go back home," "to see my little brother live with me," "I wish I could go be with my father," "live with my aunt,"

"to be back with my mother and my brothers and sisters"), this specific theme, reunification, was so prevalent in this population it was also a theme of its own (39.1% of population). For example, one participant, a 13-year old black male, reported the wish, "go home, go home, go home." He had been removed from his mother and placed in a separate home from his siblings after a physical abuse allegation (i.e., his mother hit his brother with a belt, leaving marks) was reported. He explained in the report, that "home" meant living with his mother. However, reunification for this population is not only returning to caregivers. In the case of this boy, separation also includes siblings or perhaps other individuals who provide care and belonging (e.g., peers, grandparents).

   Material Wish. Some participants wished for specific material objects (37% of participants). These wishes in regard to what material object varied from objects used for fun and pleasure (e.g., "I could have a PS4"), to material possessions that might facilitate connection (e.g., "phone"), to material possessions reflecting unmet basic needs (e.g., "I need some more clothes"). For example, one participant was an 8-year-old African-American female who was removed from her mother's custody due to her mother's substance use, chronic mental health (bipolar disorder), and homelessness. The participant wished to go home to her mother and to live in a mansion so that her sister and everyone she loved could live in the mansion with her. Material wishes like this one, can pertain to the relevant parts of someone's life. For example, in this case, after separation and homelessness, she wished for a home and to be reconnected with family members. Another participant, a 9-year-old biracial (Caucasian and Hispanic) male, was on multiple occasions removed from his parents, both of whom had substantial mental health histories. His mother was diagnosed with schizophrenia and, before the removal,

he was under his father's care. He was later removed after his father, who was diagnosed with bipolar disorder and substance abuse, went missing and was unable to be located. He also had substantial neglect allegations, including food being withheld as punishment, and difficulty maintaining personal hygiene. He also wished for a "mansion" but unlike the other participant he did not make additional wishes for attachment figures but wished to be "rich and famous." Notably, all three wishes, not just each wish individually, paint a fuller picture of the 9-year-old's and 8-year-old's underlying desires, revealing more than viewing each wish separately.

Achievement. Participants also expressed future-oriented wishes to achieve academic success (e.g., "to get all A's and be on Honour Roll"), career success (e.g., "To be able to play in the NFL," "to be a math teacher," "be a police officer," "to be in the army") or general success (e.g., "power"). These wishes could best be described as the underlying wish to achieve an identified goal (34.8% of participants). For example, one participant was a 9-year-old girl who was described by her DCP&P case worker as "very pleasant, shy, and inquisitive. Always smiling." The participant was removed from her father's care after he was incarcerated for violating parole. Additional allegations against her parents included substance use, inability to cover the cost of food, physical abuse by her mother, and emotional abuse by her father. Both the participant's father and mother, who had a history of substance, use told the division that they were unable to properly care for the participant. The participant wished for "owning her own modeling company and pets," "becoming a fashion designer," and "helping children find their future careers." She was also able to talk openly about her emotions during the interview. The

participant was future oriented, considering others, and clearly demonstrating resilience despite many adverse experiences.

No Wish. Some participants were unable to generate either any wishes (e.g., "shrugged and did not respond") or unable to generate three wishes (e.g., state one wish and no other wishes, for example, "markers" or "go home"). This theme of "no wishes" occurred in 19.6% of participants. For example, one participant that was unable to generate wishes was a 10-year-old Latino male. The participant had experienced extensive adverse experiences including, but not limited to, his father and mother's separation and witnessing domestic violence. His mother had substance use problems, a suicide attempt, and a history of depression. Various factors appeared to also impact difficulty responding and understanding questions (e.g., "three wishes") including low scores on measures of cognitive functioning and some language-related difficulties (e.g., speaking in both Spanish and English). Additionally, he scored in the clinical range on a measure of fantasy-related PTSD symptoms. Overall, difficulty generating wishes in this example could be connected to various factors such as cognitive difficulty, language difficulties, difficulty engaging in the present reality (e.g., fantasy connected to PTSD), or even the detrimental impact of an extensive history of adverse experiences.

Fantasy. Although all wishes tap into the desire for something outside someone's current reality, this theme captured wishes that could not exist in the current construct of reality in known human experience (15.2%). Wishes tended to fall into themes of more abstract fantasy (e.g., "to have infinite wishes," "a candy world") or a desire to change something that has already occurred in the past (e.g., "to bring back my sister … she passed away in 2008, she was six months old, she passed [away] due to medical problems

because my mom was doing drugs while she was pregnant."). For example, one participant, a 9-year-old white male, wished "to go home to mom, to erase DYFS's (DCP&P) memory, and to erase [his] foster family's memory." The patient was removed from his home after his mother arrived at his school appearing intoxicated and then tested positive in a drug screening for PCP. His father was incarcerated at the time for domestic abuse of his mother, his mother's current boyfriend had allegations of domestic violence, and physical abuse reported by the patient. Measures of depression indicated that the patient may have been depressed at the time of the report. For him, his wish may have served as a way to erase his current reality. Despite at times violent and complicated circumstances at home, there was a desire to undo the reality of his removal from caregivers.

Personal Qualities. Some wishes in this foster care population were articulated as a desire for personal traits (15.2% of participants). This slightly less common theme tended to occur in two subthemes. First, some individuals wished for internal qualities in themselves to be different (i.e., "that I can have fun," "to behave good.") while other wishes pertained to the external or physical self to be different (i.e., "to be grown"). Both of these subthemes fit into the larger theme of wanting different personal qualities. For example, one participant, a 14-year-old female, was removed from her family after running away from home. The reason for removal was reported as her parents being unable to manage her behavior. She had a history of cited problems including aggressive behavior, chronic running away, violation of curfew, defiance, marijuana use, self-harm, and a history of depression and suicidal ideation. She wished to "be a makeup artist, be older already, and have a nice body." Another participant, an 8-year-old African-

American female, who was removed from her mother's care due to concerns connected to her mother's cognitive functioning and being able to provide a stable home and meet the basic needs of her children, wished to "always be good." When asked to elaborate, she stated that she has seen "bad stuff on the street" such as "kidnapping" and "smoking" and wanted to avoid these negative experiences. This might be interpreted as a desire to protect herself from the outside world through her internal strength. This wish of personal qualities often seems to assert a desire for self-sufficiency in this population.

Money. Some wishes pertained to money (13% of participants) in both specific (e.g., "10 million dollars") and abstract amounts ("I want to be rich," "money"). Money was differentiated from specific material wishes in that the underlying desire was for a flexible ability to acquire wealth compared to the desire for specific objects in the world. One participant, a 13-year-old African-American male, wished for "money, power, and fame" after removal for environmental neglect. His house was described as in "deplorable conditions." Another participant, a 10-year-old African-American male, also removed for unstable or insufficient housing, wished for "money" and "money again." A third participant, a 9-year-old male, who was described as "emotionally expressive" and "a very caring, warm kid, very giving," was raised by his paternal grandfather who had recently died. His mother was uninvolved and his father, who was living with him, was abusing various "illegal substances." The participant was removed after allegations that his father was trying to gain custody for financial inheritance despite inability to support his son due to his own substance abuse. The participant wished for "10 million dollars." The father hoped to gain financially from the son and the son is now wishing for money. Each example shows that money can serve different meanings; perhaps to one child,

money represents stability, to another power, and to yet a third perhaps the ability to care for or meet the needs of an attachment figure.

Discussion

Through thematic analysis of the wishes of a population of foster care children, nine themes were identified: no wish, fantasy, attachment/belonging, reunification, escape, personal qualities, achievement, material wish, money. In discussing each theme, we shall begin to speculate on the deeper meanings underneath each category.

Three themes—attachment, reunification, and escape—were highly overlapping. Research in the past few decades has pointed to the importance of attachment in development and centricity of attachment yearnings in human experience (Sroufe & Waters, 1977). Desire for a community and connection with others appears aligned with some of our most basic human desires. Attachment wishes appear to arise in areas of love, altruism, parental reunification, and even in the desire for a pet. This desire in the examples of children's wishes for attachment/belonging, appear to form from both disconnection and a desire for reconnection. In many varied forms, these children want deepened connection.

Reunification that falls in the area of attachment appears specific to this population. It was highlighted as a separate theme due to its consistence across the participants. Reunification in this case appears in its underlying meaning to reflect the semantic meaning of reunification. Although the reasons for desired reunification may not be as clear on a surface level, they may perhaps tap into similar themes and desires such as those for connection or to leave current situations. Additionally, as meaningful as the desire for reconnection is despite sometimes excessive exposure to traumatic

circumstances in one's home environment, more than half of children did not wish for reunification. This is not to say that they did not desire reunification, but simply that it didn't appear in one of their three wishes.

Escape, which was often connected to reunification but not always, captured a slightly different experience: the desire to permanently or temporarily leave current circumstances. This also varies from reunification in that sometimes escape is not to return to abusive or neglectful caregivers but in fact to flee the current circumstances in any way. This could vary from the misfit of the child with their school and peer group, to the desire to leave foster care, to an internal desire to escape existence itself. As the participant described in the example above, "my mom should have aborted me." Escape through varied fantasies appears to connect to a desire for something else, a dissatisfaction, a pain, and a hope for something better.

Wishes for personal qualities tended to vary from internal qualities to external parts of the physical self. The three wishes for personal qualities, less common in this population than many of the other themes, appeared to look for a change within rather than a change in the world around them. There was also a quality of self-sufficiency in many of the wishes rather than a desire for turning toward others. While these wishes for personal qualities were not common, wishes for achievement were. Achievement wishes, future-oriented wishes to achieve academic, career, or general success, demonstrated a desire for accomplishing a future goal. Similarly to personal qualities, achievement wishes again tended to show a desire for self-sufficiency as a way of overcoming current life adversities.

Wishes for specific material objects and money wishes were separated. Money was differentiated from specific material wishes in that the underlying desire was for a flexible ability to acquire wealth compared to the desire for specific objects in the world. Thematically, the meaning of the possession of a specific object may have a very different meaning than an abstract ability to utilize a means to get various desired objects or experiences in the world. That said the meanings of these wishes may vary drastically. Material wishes varied from objects used for fun and pleasure, to material possessions that might facilitate connection, to material possessions reflecting unmet basic needs. It was predicted that material wishes might be common in this population due to limited material possessions and basic needs being met in this population. Some wishes did appear to reflect this desire for unmet material needs, such as a house for a child who was homeless. That said, material possessions may also represent something else, such as a phone representing a desire for connection. Additionally, money wishes, as demonstrated through the case examples, can also serve different meanings such as a desire for stability for one, for another a desire for power and control, or, for another, freedom.

Some participants were unable to generate three wishes. As demonstrated from the case example, difficulty generating wishes (i.e., "no wish") could derive from various reasons or combinations of factors including but not limited to cognitive difficulty, language difficulties, or an extensive history of adverse experiences. Difficulty generating any wish might demonstrate a lack of attunement with one's owns needs and desires as well as perhaps a difficulty generating hope. Only generating one or two wishes could also imply a particular focus or fixation on a desire or need, and difficulty expanding to areas outside of that realm.

Fantasy wishes capture wishes that could not exist in the current construct of reality in known human experience. Fantasy wishes vary in this population, from abstractly wishing for something that doesn't exist, to changing the past. In a sense, all wishes encapsulate a fantasy wish, something not existing in *their* reality, so in certain ways, this category might include all wishes. As we are postulating this category, fantasy wishes are wishes that defy the laws of reality and wishes that remove the restrictions of reality from the wisher. As it applies to trauma, fantasy can both be an escape for some from difficult realities and on the converse, fantasy and play can be inhibited and become repetitive in others (Terr, 2003). As the example of the 9-year-old boy who wanted to erase the memory of his foster parents depicted, fantasy can at times "erase" the past, internally, and attempt to combat both external and internal pain.

Themes were compared to common wish themes in the literature in order to understand what appears unique about the population of foster children studied. Nereo and Hinton (2003) identified 13 themes from looking at wish themes across the historic literature when studying wishes. Similar themes identified in this study, as compared to their research findings, include: material goods, personal attributes (similar to personal qualities), fantasy, no wishes, and future/goal (similar to achievement).

Differences were also identified. First, previous literature has often identified a Miscellaneous theme. In the current study, this theme did not arise as all the reported wishes appeared to fit in either one or multiple of the identified themes. This makes the replication of research findings critical, testing if these themes can be identified in a second population. If not, perhaps some wishes may better be understood as miscellaneous. Second, we identified the theme of attachment/belonging. This theme

appears to encapsulate what previous researchers identified as themes such as interpersonal, family, pets, animals, and altruism. We felt that *attachment/belonging* was a better umbrella term in capturing the essence of these wishes, an underlying yearning for connection. One reason why attachment/belonging may not have been posited as a theme in the literature is that the topic of attachment was not as salient as it is today in the field of psychology. Third, we identified the theme of escape. This theme may encapsulate or at least overlap with the themes such as negative wishes, activities, and situational wishes. When looking at specific wishes, escape is often an active desire to move to or leave a place. Additionally, many of the escape wishes had a negative undertone, a desire to NOT have situations be as they were. We felt this theme of escape best encapsulated the yearning of the child, for something different. Finally, Nereo and Hinton (2003)'s research had one theme that was very population specific. They identified situational/health-related wishes in a population of children with health-related concerns. Our research also identified one very common and population-specific theme, reunification. In children in foster care, this theme, a desire for reunification with loved ones, was present in almost half of children's wishes, a theme not mentioned in any previous research on wishes.

STUDY 1: PHASE 2

The Study and Hypothesis

As in the first phase of the study, Comprehensive Health Evaluations for Children (CHEC) reports from the Regional Diagnostic Treatment Center (RDTC), were used to evaluate if Three Wishes can provide insight into understanding of early childhood

adverse experiences. Building on the qualitative identified variables from Phase 1, in

Phase 2, first, using a different sample, we assessed whether wishes fall into similar

categorical variables. Second, we applied these wish category variables to better

understand the qualities of the population. So, given previous research findings, do we

find similar differences in wish themes across age? Third, this is a population of children

who all have experienced at least one adverse childhood experience. Do wish themes

differ if children have experienced varying levels of adverse childhood experiences?

In other words, Study 1, Phase 2 attempts to answer the following questions:

(1) Can wish themes be **generalized to a second sample**? Specifically, do wish

themes sort into the themes identified in Phase 1?

(2) Previous research found differences across age. Therefore, the **relationships**

between wish themes and age (i.e., elementary school (8–10), middle school

(11–13), and high school (14–16)) will be evaluated quantitatively. We predict

similar finding to previous research, i.e., younger children may provide more

materially oriented wishes and, as children get older, wishes may appear to

become more future and socially oriented.

(3) Due to the high number of traumas experienced, an approximate ACE score

will be generated for each child from the data included in the reports. In an

exploratory evaluation, **relationships between wish themes and higher vs.**

lower ACE scores will be evaluated. This is the first study to evaluate Three

Wishes in a population with high levels of adverse childhood experiences.

Interpretations will be made based on thematic differences for understanding

Three Wishes as a tool when working with children with a range of adverse childhood experiences.

Methods

Participants

Participants included youth (ages 8–16) who were referred for a Comprehensive Health Evaluation (CHEC) due to recently being removed from their home and placed into foster care, and/or transitioning into a new foster home. The evaluations that were included in this study took place during the years 2014–2016 at the Metropolitan Regional Diagnostic and Treatment Center (RDTC) at Newark Beth Israel Medical Center (part of the RWJ Barnabas Health Care System).

Participant Screening

Youth who are not between the ages of 8–16 were excluded from the study, along with evaluations that took place outside the years of 2014–2016. In addition, any participants that were not able to fully complete the necessary self-report measures and Three Wish projective test during the evaluation were not included in relevent analysis due to missing information that was required for the study. Participants were not part of Study 1, Phase 1.

Materials and Procedures

Procedures

Procedures were the same as for Phase 1 (see **Study 1: Phase 1**, *Procedures*). For Phase 1, only demographic characteristics and Three Wishes were evaluated. For Phase 2, demographic characteristics, Three Wishes, and ACE scores were collected.

Measures

Scores from the following self-report measures and interviews completed by the youth, at the time of the evaluation as part of the standard CHEC battery, were included in the study.

Three Wishes. During the interview, youth were asked "If you could have three wishes, what would you wish for?" Answers were imbedded in the body of the CHEC evaluation report. Three Wishes is a common projective tool used in clinical settings with limited research regarding its validity, reliability, and appropriate application.

Adverse Childhood Experience (ACE). The ACE measure is a 10-item self-report instrument that assesses categories of childhood abuse, neglect, and household dysfunctions (Felitti & Anda, 2010). This measure is designed for completion by an adult population to capture adverse childhood experiences from birth to age 18. All questions are dichotomously answered as "yes" or "no." Items can be analysed independently, as well as the aggregated sum. In sum scores range from 0 to 10. The 10 items include (1) emotional abuse, (2) physical abuse, (3) sexual abuse, (4) emotional neglect, (5) physical neglect, (6) mother treated violently, (7) substance abuse, (8) parental separation or divorce, (9) household member imprisoned, and (10) suffering a mental illness. Since the ACE measure was not administered at the time of data collection, an estimated ACE score was calculated from information included in the CHEC evaluation. Therefore, some ACE scores may be lower than youths' true scores due to missing information in the reports. Additionally, ACE measures are designed for an adult population and scores may differ from the scores participants might receive by the time they reach adulthood. Based on the literature (Felitti et al., 1998), we dichotomized scores by risk status: children with

4 or more ACEs were assigned to the high-risk group; children with fewer than 4 ACE's were assigned to the low risk group.

Demographics. Demographics of age, ethnicity, gender, and race were included to measure characteristics of participants.

Data Collection

All data collection procedures and handling are the same in Phase II as in Phase 1 (see **Study 1: Phase 1**, **Data collection**).

Data Analysis Plan

This study utilized retrospective data from the evaluations. Data evaluation initially required entry of self-report survey results, collected from both children and legal guardians, into a database in a standard statistical software program, the Statistical Package for the Social Sciences (SPSS). Nonnumerical variables, including gender, race/ethnicity, and trauma history, were coded and stored in nominal format. Three Wishes were stored as string variables.

The design for this study was a mixed-methods exploratory sequential design. This study included a sample size of 91 participants (45 for Phase 2). The qualitatively identified variables from Phase 1, "wish themes," were identified in the Phase 2 sample population. Intercoder agreement (cross-checking) and predetermined codes from Phase 1 were utilized (Guest et al., 2012). "Wish themes" were then evaluated as quantitative variables to understand features of the sample population. Descriptive statistics for all variables and sample demographics were reported. The relationships between wish themes, age, and ACE scores were evaluated using SPSS 25. We compared basic demographics of the population across wish categories and ACE items. If wish themes

differed across age, ACE scores would be evaluated separately for elementary, middle school, and high school children. We compared identified Three Wish variables categorically (i.e., categories of High vs. Low ACE scores (low = below 4; high = above 4) using chi-squared. Fisher's exact analysis was used if a cell had five or less. Multiple comparisons were not conducted because each wish category was viewed as a separate hypothesis to be tested. Categories were not mutually exclusive and individual participants could have multiple wish categories in the same or separate wishes.

Results

Demographics

Of the sample of forty-five participants (22 male, 23 female, M_{Age}=11.93, SD=2.51), 64.4% were African American, 22.2% were Hispanic/Latino, 6.7% were Caucasian, and 6.7% were multiracial (see **Table 1**).

The two groups (high ACE and low ACE) did not differ in terms of age (t (43)=.029, p=.866), gender (χ^2(1)=.573, p=.449, Cramer's V=.113), or ethnicity (χ^2(3)=3.861, p=.277, Cramer's V=.293).

Table 1

Demographic Characteristics Between High and Low ACE Scores

Scale	Low (n=24)		High (n=21)		Type of test	Sig (p)
	M	SD	M	SD		
Age (years)	11.87 2.53		12.00 2.54		*t* = .029	.866
Gender (%) Female Male Other	45.83% 54.17% 0%		57.15% 42.85% 0%		χ_2= .573	.449
Ethnicity (%) African American Hispanic/Latino Caucasian Multiracial	66.67% 16.67% 12.5% 9.52%		61.9% 28.57% 0% 4.12%		χ_2= 3.861	.277

*Note. * p<.05 ** p < .01. *** p < .001.*

    The demographics were also compared of the participants from Phase 1 and Phase 2. The two groups (Phase 1 and Phase 2) did not differ in terms of age ($t(89)$=.718, p=.399), gender ($\chi_2(1)$=.011, *p*=.916, Cramer's V=.011), or ethnicity ($\chi_2(7)$=3.64, *p*=.303, Cramer's V=.205) (See **Table 2**).

Table 2

Demographic Characteristics Between Samples From Phase 1 and Phase 2

Scale	Phase 1 (n=46)		Phase 2 (n=45)		Type of test	Sig (p)
	M	SD	M	SD		
Age (years)	11.48 2.52		11.93 2.51		$t = .718$	.399
Gender (%) Female Male Other	50% 50% 0%		48.9% 51.1% 0%		$\chi^2 = .011$	.916
Ethnicity (%) African American Hispanic/Latino Caucasian Multiracial	67.5% 16.7% 8.7 0		64.4% 22.2% 6.7 6.7		$\chi^2 = 3.640$	.303

*Note. * p<.05 ** p < .01. *** p < .001.*

Interrater Reliability of Variables

Cohen's kappa was run to determine if there was agreement between two raters' judgment on whether reports were endorsing or not endorsing an ACE score. There was almost perfect agreement between the two raters' judgments, $\kappa = .849$ (95% CI, .755 to .943), p < .0005.

Cohen's kappa was also run to determine if there was agreement between two raters' judgment on whether wishes aligned with a particular theme (i.e., wish category). For Phase 1, there was perfect agreement between the two raters' judgments, $\kappa = 1.0$ (95% CI, 1 to 1), p < .001. For Phase 2, there was almost perfect agreement between the two raters' judgments, $\kappa = .962$ (95% CI, .887 to 1).

Quantitative Analysis

Generalizability Wish Categories

Frequency of categorized wishes was calculated for both Phase 1 and Phase 2.

Frequency of endorsed wishes was contrasted between Phase 1 and Phase 2. There was

no significant difference between Phase 1 and 2 in the frequency across all three wishes,

to which wish theme was reported by participants (Table 3). In other words, a similar

proportion of participants reported each wish theme in two separate samples.

Table 3

Frequency Participants Endorsed Wishes in a Category in Phase 1 and Phase 2

Scale	Phase 1 (n=46)		Phase 2 (n=45)		Type of test	Sig (p)
	M	SD	M	SD		
No Wish (%) Yes No	19.6% 80.4%		13.3% 86.7%		χ^2= .642	.423
Fantasy (%) Yes No	15.2% 84.8%		31.1% 68.9%		χ^2= 3.237	.072
Attachment/Belonging (%) Yes No	45.7% 54.3%		55.6% 44.4%		χ^2= .893	.345
Reunification (%) Yes No	39.1% 60.9%		40% 60%		χ^2= .007	.932

Table 3 (Continued)

Frequency Participants Endorsed Wishes in a Category in Phase 1 and Phase 2

Scale	Phase 1 (n=46)		Phase 2 (n=45)		Type of test	Sig
	M	SD	M	SD		(p)
Personal Qualities (%) **Yes** **No**	15.2% 84.8%		8.9% 91.1%		$\chi2= .857$	.354
Achievement (%) Yes No	34.8% 65.2%		35.6% 64.4%		$\chi2= .06$	.9138
Material (%) Yes No	37% 63%		31.1% 68.9%		$\chi2= .346$	.556
Money (%) Yes No	13% 87%		28.9% 71.1%		$\chi2= 3.457$	.063
Escape (%) **Yes** **No**	47.8% 52.2%		40% 60%		$\chi2= .566$	.452

Age and Wish Categories

From Phase 2, three age groups (elementary = 8–10; middle school = 11–13; high school = 14–16) were also compared across wish categories. Wish categories did not differ across age group: No Wish (Fisher's Exact (2, N=45)=3.703 p=.188), Fantasy (Fisher's Exact (2, N=45)=4.388 p=.122), Attachment/Belonging ($\chi_2(2)$=.807, p=.668, Cramer's V=.134), Reunification ($\chi_2(2)$=.089, p=.956, Cramer's V=.045), Escape ($\chi_2(2)$=4.107, p=.128, Cramer's V=.302), Personal Qualities (Fisher's Exact (2,

N=45)=3.076 p=.195), Achievement (Fisher's Exact (2, N=45)=4.663 p=.094), Material

(Fisher's Exact (2, N=45)=.176 p=1.0), and Money (Fisher's Exact (2, N=45)=.996

p=.710).

ACE and Wish Categories

From Phase 2, the two groups (high ACE and low ACE) were compared across

wish categories. Wish categories did not differ in terms of high or low ACE scores: No

Wish (Fisher's Exact (1, N=45) p=.67), Fantasy (χ_2(1)=.896, p=.344, Cramer's V=.141),

Attachment/Belonging (χ_2(1)=.161, p=.688, Cramer's V=.060), Reunification

(χ_2(1)=.729, p=.393, Cramer's V=.127), Escape (χ_2(1)=2.143, p=.143, Cramer's

V=.218), Personal Qualities (Fisher's Exact (1, N=45) p= 1.0), Achievement

(χ_2(1)=.838, p=.36, Cramer's V=.136), Material (χ_2(1)=2.535, p=.111, Cramer's

V=.237), and Money (χ_2(1)=.002, p=.965, Cramer's V=.007).

Discussion

Themes were tested for generalizability of wish categories. As predicted, themes

were generalizable to a second population of foster children. In other words, no

differences were found across two samples: No Wish (19.6–13.3%), Fantasy (15.2–

31.1%), Attachment/Belonging (45.7–55.6%), Reunification (39.1–40%), Escape (47.8–

40%), Personal Qualities (15.2–8.9%), Achievement (34.8–35.6%), Material Wish (37–

31.1%), Money (13–28.9%).

In an exploratory analysis, differences in wish categories were compared across

age and ACEs (high vs. low). No significant differences were found across differing

adverse experiences or age. This difficulty in identifying thematic differences may have

been impacted by study limitations, including limited sample size, possible incomplete

data, and ACEs calculated during childhood (see Limitations and Future Directions).

Therefore, ACEs don't reflect what might later become their lifetime ACE scores. To

address this study's limitations, a second study was conducted with an online adult

population reporting current and retrospective wishes from childhood.

CHAPTER III:

STUDY 2: AN ADULT'S WISH, A CHILDHOOD TRAUMA

STUDY 2: PHASE 1

The Study and Hypothesis

In Study 1, findings may be limited due to the missing data in children's ACE scores, the archival nature of the study, and small sample size. To expand upon the research in Study 1, Study 2 was conducted. Study 2 evaluated the same questions as Study 1, looking at the relationship between Three Wishes and Adverse Childhood Experiences (ACE) but conducted online with an adult population.

As in Study 1, the same population cannot be used for the qualitative and quantitative phase (Creswell & Creswell, 2018). Therefore, this study also had two phases with two different online samples. In Phase 1, wish themes were explored qualitatively. In Phase two, wish themes were validated and evaluated across age (i.e., participants' retrospective memory of wishes at different age points) and across high and low levels of adverse childhood experiences.

Study 2 attempts to answer the following question in Phase 1:

(1) Using thematic qualitative analysis, what **themes arise in reported wishes**? Interpretations were made based on exploring the conceptual implications that may underlie certain wish themes and how they may be applied to clinical understanding.

Methods

Participants

Participants were adults (over age 18) recruited online through Amazon's Mechanical Turk (AMT) (Buhrmester, Kwang & Gosling, 2011). Due to the complexity of the survey questions, the sample was homogenized to a U.S. sample with self-identified proficiency in English.

Participant Screening

To maintain high quality data, two attention checks were used. Participant's data was excluded if they did not pass attention checks (Aust, Diedenhofen, Ullrich, & Musch, 2013). Participants who participated in Phase 1 could not participate in Phase 2; so different sample populations were used.

Materials and Procedures

Procedures

Participants selected through AMT were provided with a link to the survey. The survey was designed using Qualtrics online survey software provided through Rutgers University. The researcher input questions and instructions into the online survey. The survey was anonymous. Participants were first directed to a consent form (APPENDIX A). After reading the consent form, participants who wished to continue and provide consent were presented with screening questions to ensure they met inclusion criteria. Due to the complexity of the survey questions, the sample was homogenized to a U.S. sample with self-identified proficiency in English. Once potential participants met inclusion criteria, they were able to continue to the surveys. Participants completed

questionnaires online through AMT with one attention check. After completion, they were debriefed and informed that their responses were received (APPENDIX C).

Measures

Participants completed questionnaires (e.g., projective measure "Three Wishes", demographics) online through AMT with attention checks.

Three Wishes Questionnaire. As a projective tool, participants were asked open-ended questions about current wishes and past wishes in elementary school, middle school, and high school (APPENDIX F). Questions included: "If you could have three wishes, what would you wish for?" and at each of three time points in the past: "If you were to reflect to the best of your ability on what you would have wished for in [elementary school, middle school, high school], what would your wish have been?" A total of 6 wishes was generated by participants: three in the present, one from each age in the past.

Demographics. Demographics of age, preferred gender, ethnicity, education, and Subjective Social Status (SSS) were measured (Diemer et al., 2013; APPENDIX E). SSS was evaluated on a 10-point ladder, asking participants to evaluate their social status relative to other members of the U.S. population ("1" = low SSS, "10" = high SSS).

Attention Checks. An attention check was used to validate that participants read instructions. Participants were asked what the study was about, but instructions specifically directed participants to select the option "other" in response to this question and then enter "decision making" (for more about these attention checks in AMT samples, see Aust et. al, 2013).

Data collection

Participants' responses were collected and stored in the online Qualtrics system. The researcher had access to number and content of responses through AMT. When a sufficient number of responses was recorded, data was downloaded digitally for the purposes of analysis. All files were kept in an encrypted, password-protected file on an encoded drive on the researcher's home computer.

Data Analysis Plan

Data was gathered online through Amazon Turk. Data was entered into a database in a standard statistical software program, the Statistical Package for the Social Sciences (SPSS) version 25. Nonnumerical variables, including gender and race/ethnicity, were coded and stored in interval-ratio numerical format. Three Wishes were stored as string variables. Descriptive statistics for sample demographics will be reported.

Thematic analysis was utilized to describe and identify patterns across entire set of qualitative data (Braun & Clarke, 2006). Data item was defined as a wish. Themes and data were evaluated separately for current adult wishes and retrospective childhood wishes. The researchers familiarized themselves with the data (reading and rereading while noting initial commonalities in the data). Prevalence was calculated as occurrence of a theme across data items (wishes). Themes sought to capture the entire data set and were identified from an inductive, bottom-up approach (Patton, 1990). Data (wishes) were sorted into subthemes (codes). Each data item could be in more than one subtheme. Subthemes were constructed both by highly prevalent themes and by trying to capture the entire nature of the data. Capturing the entirety of the data was prioritized in order to answer the research question of what themes occur in the data rather than only equally

occurring themes. Therefore, when wishes did not fit into larger themes, commonalities were explored to create additional subthemes. Subthemes were then grouped together if they reflected a larger theme. A semantic approach was taken in which themes were first identified from patterns in the explicit or surface meanings of the data and later interpreted in an attempt to theorize the significance of the patterns and their broader meanings and implications. A thematic map was generated to check themes in relation to the codes and the data set in its entirety. Once the themes were identified, themes were then named and defined. Themes were interpreted utilizing a contextualist approach, to theorize the underlying qualities and potential meaning of each theme. Contextualist approaches focus on the ways individuals make meaning of their experience as well as the ways broader social context impinges on those meanings. Finally, a selection of "wish" examples was utilized to depict themes and connect back to the broader research question of utilizing identified themes to understand a population (i.e., general adults currently and retrospectively reflecting on childhood) and a projective tool (i.e., Three Wishes). These themes may relate to the projective features of the wishes and will be expanded on for clinical utility.

Results

Demographics

From a sample of 100 participants, 10 participants were excluded from analysis because they did not pass the attention checks. Of the final sample of 90 participants (59 men, 30 women, 1 transgender, M_{Age}=33.86, SD=9.36), 10 participants were students and 80 indicated other occupations. With regards to ethnicity, 11.1% identified as African American, 5.6% identified as Hispanic/Latino, 78.9% identified as Caucasian, 1.1%

identified as Asian, 1.1% identified as American Indian/Alaska Native, and 2.2%

identified as Native Hawaiian/Pacific Islander. With regards to Subjective Social Status

(SSS), participants ranged from endorsing two to nine out of ten (M_{SSS}=4.83 SD=1.552).

Qualitative Analysis: Retrospective Childhood Wishes

Thematic analysis was utilized to describe and identify patterns across an entire

set of qualitative data. Data (wishes) were sorted into subthemes (codes). Each data item

could be in more than one subtheme. A semantic approach was taken to sort subthemes

(codes) into themes. A thematic map was generated to check themes in relation to the

codes and the data set in its entirety. After combining and refining themes, a final

thematic map was created (*Figure 3*).

Figure 3. Thematic map of identified codes sorted into themes for thematic analysis.

Once the themes were identified, themes were then named and defined. The

following themes were identified: No Wish, Fantasy, Attachment/Belonging, Global

Wish, Escape, Personal Qualities, Achievement, Material Wishes, and Money. Themes

were then interpreted utilizing a contextualist approach, to theorize the underlying

qualities and potential meaning of each theme. Each theme will be described in greater

detail with some examples of participant wishes.

Attachment/Belonging. The most frequently occurring theme, endorsed in wishes

of almost half the participants, was a desire for connection (46.7% of participants). This

included various subthemes. Some participants wished for pets (e.g., "probably more

pets," "to get a dog,"); others wished for human companionship in the form of

community (e.g., "a lot of friends," "I would have wished for tons of popularity"), family (e.g., "to be a mom," "a family"), or relationships (e.g., "girls to like me," "a hot girlfriend," "love," "a boyfriend who I adored"). Some participants also made altruistic wishes for others (e.g., "my mom had a better life," "happy family and friends," "money or more specifically money so my parents wouldn't be so stressed over bills") or wished for desired changes in their relationships (e.g., "for my parents to love me and not abuse me," "to find a way to remove my siblings and myself from our house to someplace safer").

Money. Many participant's (43.3% of participants) wishes pertained to money in both specific amounts (e.g., "I would have wished for 1 million dollars"), abstract amounts (e.g., "money," "a bunch of money," "wealth"), and impossible amounts (e.g., "unlimited money"). Money was differentiated from specific material wishes in that the underlying desire was for a flexible ability to acquire wealth compared to the desire for specific objects in the world.

Achievement. Over a third of participants (37.8% of participants) wished for future-oriented wishes to achieve academic success (e.g., "to do well in school," "to get into the college of my choice"), career success (e.g., "grow up and be an artist," "to play in the NFL," "to be an archaeologist when I grow up," "to become a weatherman," "to one day become a firefighter," "to be an astronaut," "to be a rock star," "to do well in school," "be a jet pilot"), or general success (e.g., "I want to achieve my goals," "I would have wished to be successful"). These wishes could best be described as the underlying wish to achieve an identified future goal.

Material Wish. Over a third of participants (37.8% of participants) wished for specific material objects. These wishes in regard to what material object varied from objects used for fun and pleasure (e.g., "books," "own house," "a Barbie," " I would have wished to have more toys," "more Hot Wheel cars," "my elementary school self would've wished for a gaming PC because back then I didn't have a good PC to play games," "an Easy Bake Oven," "more Star Wars toys"), material possessions that might facilitate connection (e.g., "phone," "long distance calling cards. Yeah, I'm old"), to material possessions for transit (e.g., "a bike," "skateboard," "new bike").

Personal Qualities. About a quarter of participants (26.7%) described wishes that aligned with a theme of desire for personal traits. This tended to occur in two subthemes. First, some individuals wished for internal qualities in themselves to be different (i.e., "a smarter mind, ability to learn quicker," "to grow up and be happy," "to be free of mental illness") while others wished for their external or physical self to be different (i.e., "to be strong," "skinny," "smell better," "look like a model," "no acne"). Both of these subthemes fit into the larger theme of wanting different personal qualities.

Escape. Some wishes in this population were articulated as a desire to leave current circumstances (23.3% of participants). Wishes were often for vacation or being in a different location (e.g. "a trip to Disneyland," "probably toys, games, and travel," "moving away from Ohio," "to move to Florida") or to not being in current circumstances of daily life (e.g. "other kids stop bullying me," "for school to be over," "I wished I didn't have to live with my dad in order to be away from my step father," "to not be in school anymore," "to get out of my house and never have to return again").

Fantasy. Although all wishes tap into the desire for something outside someone's current reality, this theme captured wishes that could not exist in the current construct of reality in known human experience (28.9% of participants). Fantasy wishes varied. Subthemes included a desire to have an infinite amount of something (e.g., "For more wishes," "immortality"), to have a specific capability (e.g., "superpowers," "to be able to fly," "to have mind control abilities," "I would have wished for the ability to see my future"), to embody the totality of someone nonexistent (e.g., "to be a Pokemon trainer," "to be a superhero"), or to change the past (e.g., "mom was alive").

Global Wish. A few participants reported wishes that pertained to the world on a global level (4.4 % of participants). These wishes all connotated a desire for change in the current world circumstances (e.g., "a world without money," "world peace," "a world without bias").

No Wish. One participant (1.1% of participants) was unable to generate three wishes (e.g., "NA"). Although this theme was infrequent, no wish was emblematic in that if this theme occurred there could be no other equivalent theme. It was unique in its absence of a wish.

Qualitative Analysis: Current Adult Wishes

Thematic analysis was utilized to describe and identify patterns across an entire set of qualitative data. Data (wishes) were sorted into subthemes (codes). Each data item could be in more than one subtheme. A semantic approach was taken to sort subthemes (codes) into themes. A thematic map was generated to check themes in relation to the codes and the data set in its entirety. After combining and refining themes a final thematic map was created (*Figure 4).*

Figure 4. Thematic map of identified codes sorted into themes for thematic analysis. Current Adult Wishes

Once the themes were identified, themes were then named and defined. The following themes were identified: No Wish, Fantasy, Attachment/Belonging, Global Wish, Escape, Personal Qualities, Achievement, Material Wishes, Money, and Mortality. Themes were interpreted utilizing a contextualist approach, to theorize the underlying qualities and potential meaning of each theme. Each theme will be described in greater detail with some examples of wishes.

Money. The most frequently occurring theme in this population was money (67.8% of population). Wishes pertained to money in both specific amounts (e.g., "10 million dollars," "100 billion dollars"), abstract amounts ("more money," "money," "to be rich," "abundant wealth"), impossible amounts (e.g., "infinite money" "unlimited money"), and specified amounts related to specific life circumstances (e.g., "better income," "I wish to be debt free," "to make a bit more money per year," "a larger amount of savings in the bank"). Money was differentiated from specific material wishes in that the underlying desire was for a flexible ability to acquire wealth compared to the desire for specific objects in the world.

Mortality. Almost half of the population (45.6% of participants) generated a wish connected to mortality. Mortality was defined in wishes connected to health for self and other (e.g., "for me and my family to have long healthy lives," "perfect health," "unnaturally long life and robust health for me and my family," "perfect health for my

loved ones"), or attempting to defy the inevitability of death (e.g., "eternal life,"
"immortality for me and my loved ones," "stay young," "never have to experience the
loss of loved ones").

Attachment/Belonging. Many participants wished for connection in various forms
(41.1% of participants). This included various subthemes. Some participants wished for
human companionship in the form of community (e.g., "more social contacts," "a more
supportive friend group," "that all my friends and family would stay healthy," "to be able
to live a bit closer to friends and family"), family (e.g., "that my kids will live happily,"
"to be able to spend more time with my family," "to talk to my father one more time"), or
relationships (e.g., "my relationship situation would be permanently solved," "to be in
love with someone," "meet the love of my life"). Many participants' attachment wishes
were altruistic for the wellbeing of others (e.g., "physical health for my husband," "my
husband wouldn't have to work anymore," "friends get a happy life," "money to help
others").

Personal Qualities. Some wishes in this population were articulated as a desire
for personal traits (38.9% of population). This tended to occur in two subthemes. First
some individuals wished for internal qualities in themselves to be different (i.e., "for me
and my friends to have all of our mental illnesses taken away," "happiness," "wisdom,"
unlimited charisma," "eternal happiness," "I would wish for happiness," "better self-
esteem," "if more wishes is not an option here, to be incredibly talented in my hobbies,"
"to feel confident in myself"), while other wishes pertained to the external or physical
self to be different (i.e., "lose weight," "to be thin," "muscular body," "physical fitness,"

"to be able to walk"). Both of these subthemes fit into the larger theme of wanting

different personal qualities.

Global Wish. Many participants reported wishes that pertained to the world on a

global level (38.9 % of participants). These wishes all connotated a desire for change in

the current world circumstances (e.g., "an end to hunger," "an effective government,"

"wish for an end to suffering," "Donald Trump to be removed from office," "universal

health care," "world safety," "worldwide socialism," "a government that actually works

together," "good world for animals," "healthy earth," "I wish to end poverty for

everyone," "eradication of terrorism," "make all fossil fuels disappear"). Specifically,

many wishes were for world peace (e.g., "world peace," "I would wish for a peaceful

world").

Fantasy. Although all wishes tap into the desire for something outside someone's

current reality, this theme captured wishes that could not exist in the current construct of

reality in known human experience (31.1% of participants). Fantasy wishes varied,

including the desire to trick the process of wishing (e.g., "a million more wishes," "more

wishes," "for none of my wishes to backfire in some unexpected, pedantic, petty, cruel

or otherwise genie-like manner"), to have a specific capability (e.g., "the ability to

stretch my limbs. Like a superpower," "to have mind control abilities," "instant

transport to any continent I choose," "wish for the ability to teleport," "I would wish for

super powers") or to change the past (e.g., "my best friend to be alive again," "have my

brother back, alive and healthy").

Material Wish. Some participants wished for specific material objects (22.2% of

population). These wishes in regard to what material object varied from material

possessions for transit (e.g., "a new vehicle," "new car") to practical material wishes for daily living (e.g., "a new roof on my house," "a house," "bigger bed," "own apartment," "to be able to buy new tires").

Achievement. Participants also wished for future-oriented wishes which involved at times career success (e.g., "I would wish for a fulfilling career," "stable work flow income for whatever I am passionate about," "a decent job") or general success (e.g., "success"). These wishes could best be described as the underlying wish to achieve an identified future goal (17.8% of population).

Escape. Some wishes in this population were articulated as a desire to leave current circumstances (13.3% of participants). Wishes were often for vacation or being in a different location (e.g. "more opportunities to travel," "move back to Brazil," "to go to Disney world," "travel"), to not be in current circumstances of daily life (e.g. "retire early," "unlimited money so I never have to work again"), or to escape internal experiences for the self and others (e.g., "take away pain for everyone," "for me and my friends to have all of our mental illnesses taken away.")

Discussion

In a population of adults reporting their wishes online, nine wish themes were identified in their retrospective childhood wishes (No Wish, Fantasy, Attachment/ Belonging, Escape, Personal Qualities, Achievement, Material Wish, Money, Global Wish), and 10 themes were identified in their current adult wishes through thematic analysis (the same nine themes with the addition of Mortality). Adults remembering their childhood wishes most commonly reported themes of attachment and belonging, achievement, material wishes, and money, whereas in their current wishes the most

common themes were attachment and belonging, global wishes, personal qualities, money, and mortality. In discussing each theme, we shall begin to speculate on the deeper meanings underneath each category and how these categories slightly differ in childhood retrospective wishes and adult wishes.

The most frequent occurring theme for retrospective child wishes were attachment wishes, the desire for connection. Attachment wishes were similarly common in adult wishes, although adults had wishes related to themes of mortality and money even more frequently. Attachment wishes in adults were often more complex, wishing for others or encapsulating more specified wishes about or in relationship to others. For example, adult wishes such as "to be able to spend more time with my family," or "to talk to my father one more time" compared to childhood wishes such as "a family" or "a hot girlfriend." Not only is this theme central but as people reflect on the older versions of themselves the intricacy of desires from attachment relationships appears to become more complicated.

Material and money-related wish themes also differed in content from retrospective childhood wishes to current adult wishes. Current adult wishes were more practical and did not include items for pleasure, such as toys. Current adult wishes for more money were firstly their most frequent wish, unlike childhood wishes. In part this may have been population specific, in that this was a group of adult participants being paid online for their participation. That said, these adults wished for money less than in their retrospective childhood wishes. As adults, their wishes for money were at times subscribed to paying off specific things such as a car payment or debt in a way that child wishes for money were not.

Wishes for personal qualities tended to occur in two subthemes: internal qualities in themselves to be different, or external or physical self to be different. While this sense of desire for change in the self varied from person to person, very common wishes were for happiness, improved intellect, strength, and weight. While the meanings of each of these differ from individual to individual and may represent a general desire for change in the self, someone can also understand these themes in a societal context. Commonly desired personal-quality wishes may also reflect personal qualities that are held as important by current society in the United States today. Further research would need to investigate what these themes mean to the individual and what they represent in terms of societal expectations of appearance, or internally desired characteristics by society of happiness and intelligence.

Achievement wishes described a theme of a future- and goal-oriented nature of desire for accomplishment. In adult current wishes, achievement wishes had fewer references to specific jobs than retrospective childhood wishes and more of a desire for success in job that would make them happy or financially secure. Overall, in current adult wishes, there was often a more explicit connection to money or internal experience explicitly stated as part of what would arise from achievement (e.g., "stable work flow and income for whatever I am passionate about"). While this theme connects to a desire for success, in adulthood this finding may demonstrate that success is perhaps seen as more complicated and connected to differing things for individuals rather than accomplishing a more fantasized dream job (e.g., "to be an astronaut" or "to be a rock star"). Perhaps goals themselves become more realistic and specifically attached to internal or financial outcomes.

Fantasy wishes related to the desire for something that could not exist in the current construct of reality in known human experience. Fantasy wishes varied slightly from adult current to retrospective child wishes, but both groups' fantasy wishes included the desire to trick the process of wishing, to have a specific capability, or to change the past. Retrospective child wishes also sometimes demonstrated a desire to embody the totality of someone nonexistent, such as a superhero. This shift may reflect a developmental change from a younger more future-oriented idea of becoming someone else compared to a later acceptance of the reality of being oneself and then wishing for change in the context of who one is.

Escape, unlike in the foster care population, which was often connected to reunification, related to the desire to permanently or temporarily leave current circumstances. Wishes were often for being in a different location, or to not be in current circumstances of daily life ranging from a vacation, to not wanting to be at school, to wanting to leave one's home and family. Adult current wishes differed in that escape also expanded to a desire to escape internal experiences for the self and others (i.e., taking away pain or mental health problems). This reflects again a developmental shift into greater introspection of what someone wants changed. Rather than become another person (e.g., a superhero), parts of the self could be developed or changed.

No Wish, the absence of a wish, was very rare in this population but was unique and important in the sense that not every participant was able to and wanted to generate three wishes. One might speculate on the meaning but future research might investigate what was difficult about generating a wish or why someone may choose to not generate three wishes. For example, someone may not remember their childhood wishes, may feel

that there is nothing they want to change in their lives, or may find the task of wishing difficult and too open ended or abstract.

Two themes were present that were not present in Study 1: Global Wish and Mortality. In current adult wishes, global wishes were more expansive and varied, connected to government, humans, and the world. Although one participant reported retrospective child wishes that reflected a desire for varied global changes, the rest of the wishes were for world peace. The commonality or meaning of "world peace" would have to be explored to understand the meaning for individuals. On a societal level, it is thematically representing a perhaps greater societal goal. We live in a society in which many people want, wish for, and protest on the streets for, peace. Mortality was the one theme present in the adult current wishes and not the retrospective childhood wishes. Mortality was defined in wishes connected to both health for self or other, or attempting to defy the inevitability of death. The specific commonality of this wish occurring only in current adult wishes speaks to the developmental change and focus in adulthood to facing and dealing with death and individuals' fear of that certainty.

Similar to Study 1, themes of both current adult and retrospective child wishes were compared to common wish themes in the literature in order to understand what appears unique about the population of adults studied, as well as how themes arise when using thematic analysis. As previously mentioned, Nereo and Hinton (2003) identified 13 themes from looking at wish themes across the historic literature when studying wishes. Similar themes identified in this study as compared to their research findings included: Material Goods, Personal Attribute (similar to Personal Qualities), Fantasy, No Wishes, and Future/Goal (similar to Achievement).

Additionally, some differences were identified. First, previous literature has often identified a Miscellaneous theme. In the current study, as in Study 1, this theme did not arise as necessary, as all wishes appeared to fit in either one or multiple of the identified themes. Second, also as in Study 1, we identified the theme of Attachment/Belonging. As previously mentioned, this theme appears to encapsulate what previous researchers identified as themes such as Interpersonal, Family, Pets, Animals, and Altruism. Third, as in Study 1, we identified the theme of Escape. As previously mentioned, this theme may encapsulate or at least overlap with the themes such as Negative Wishes, Activities, and Situational Wishes. We felt this theme of escape best encapsulates the yearning and hope for something different. Fourth, the research by Nereo and Hinton (2003) had one theme that was very population specific—Situational/Health wishes in a population of children with health-related concerns. Our research also identified one very common and population-specific theme in current adult wishes—Mortality. It appears that this concern or preoccupation with facing health-related issues (a previously identified theme) may better be understood and described in adult wishes as Mortality, which covers a broader range of wishes and connects to the underlying meaning and reality of death's inevitability, i.e., a reality perhaps for the most part less commonly confronted in childhood. Finally, one other more population-specific wish was Global Wishes, a wish that could be connected to altruistic wishes in the literature. Some studies have previously identified global wishes as a theme (Guarnaccia &Vane, 1979). That said, the commonality of this wish appears more preoccupying for an adult-specific population and connects not only to altruism, but also to political, environmental and war-related global themes.

Overall, adult wishes were more complex and layered than the retrospective wishes of childhood selves. They tended to encapsulate multiple themes. For example, "money, or more specifically, money so my parents wouldn't be so stressed over bills" and "for the ability to be able to retire with enough money to travel and really enjoy life." Although the same adult individuals both generated retrospective child wishes and their current adult wishes, their adult wishes often had an element of logic and explanation, providing insight as in the previous examples into the utility of a wish.

STUDY 2: PHASE 2

The Study and Hypothesis

In Phase 1, wish themes were explored qualitatively and coded. In Phase two, wish themes were validated and evaluated across age (i.e., participants' retrospective memory of wishes at different age points) and across high and low levels of adverse childhood experiences.

Study 2, Phase 2 attempted to answer the following questions quantitatively:

(1) Can wish themes be **expanded to a different sample**? Specifically, do wish themes sort into the themes identified in Phase 1?

(2) Second, previous research found differences across age. The **relationships between wish themes and age** were evaluated. Adult current wishes were compared to adult's retrospective wishes at elementary school, middle school, and high school ages. As demonstrated by previous literature, we expected younger retrospective versions of participants to provide more concrete, material-oriented wishes and as children got older, wishes to become more future and socially

oriented. Since previous research has found variations across development as nonlinear, we also predicted more socially oriented wishes during latency age than in other developmental periods. We also expected current adult wishes to have fewer wishes related to material objects and more wishes related to money.

(3) Third, participants completed an ACE measure. The **relationships between wish themes and higher and lower ACE scores** were evaluated.

(4) To expand from the content of a wish to the experience of sharing a wish, participants were asked: "How does it feel to share your wish?" This was an exploratory question, and answers were analyzed assessing common emotions reported and looking at **differences in reported feelings after remembering wishes in higher and lower ACE score participants.**

Methods

Participants

Participants were adults (over age 18) recruited online through Amazon's Mechanical Turk (AMT) (Buhrmester, Kwang & Gosling, 2011). Due to the complexity of the survey questions, the sample was homogenized to a U.S. sample with a self-identified proficiency in English.

Participant Screening

To maintain high quality data, two attention checks were used. Participants' data was excluded if they did not pass attention checks (Aust, Diedenhofen, Ullrich, & Musch, 2013) Participants could not participate in Phase 2 if they participated in Phase 1.

Materials and Procedures

Procedures

Participants selected through AMT were provided with a link to the survey. The survey was designed using Qualtrics online survey software provided through Rutgers University. The researcher input questions and instructions into the online survey. The survey was anonymous; participants were first directed to the consent form (APPENDIX B). After reading the consent form, participants who wished to continue and provided consent were presented with screening questions to ensure they met inclusion criteria. Due to the complexity of the survey questions, the sample was homogenized to a U.S. sample with self-identified proficiency in English. Once potential participants met inclusion criteria, they were able to continue to the surveys. Participants completed questionnaires online through AMT with two attention checks. After completion, they were then debriefed, thanked, and informed that their responses were received (APPENDIX D).

Procedures were identical for Phase 1 and Phase 2 except for the content of the survey questions. In Phase 1, participants were only asked wishes and demographic questions. In Phase 2, participants also completed the ACE measure.

Measures

Participants completed questionnaires (e.g., adverse childhood experiences questionnaire, projective measure, demographics) online through AMT with two attention checks.

Three Wishes Questionnaire. As a projective tool, participants were asked open-ended questions about current wishes and past wishes in elementary school, middle

school, and high school (APPENDIX F). Questions included: "If you could have three wishes, what would you wish for?" and at each of three time points in the past: "If you were to reflect to the best of your ability on what you would have wished for in [elementary school, middle school, high school], what would your wish have been?" A total of 6 wishes were generated by each participant, three in the present, one from each age in the past. Participants were then asked, "How does it feel to share your wishes?"

Adverse Childhood Experience (ACE). The ACE measure is a 10-item self-report instrument that assesses categories of childhood abuse, neglect, and household dysfunctions (Felitti & Anda, 2010; APPENDIX G). This measure is designed for completion by an adult population to capture adverse childhood experiences from birth to age 18. All questions are dichotomously answered as "yes" or "no." Items can be analysed independently, as well as the aggregated sum. In sum, scores range from 0 to 10, with higher scores indicating more endorsed adverse childhood experiences. The 10-items include (1) emotional abuse, (2) physical abuse, (3) sexual abuse (4) emotional neglect (5) physical neglect, (6) mother treated violently, (7) substance abuse, (8) parental separation or divorce, (9) household member imprisoned, and (10) suffering a mental illness. This measure was used to evaluate participants' adverse childhood experiences. Based on the literature (Felitti et al., 1998), we dichotomized scores by risk status: scores of 4 or more ACEs were assigned to the high-risk group; scores of fewer than 4 ACE's were assigned to the low risk group.

Demographics. Demographics of age, preferred gender, education, and Subjective Social Status (SSS) were measured (Diemer et al., 2013). SSS was evaluated on a 10-

point ladder, asking participants to evaluate their social status relative to other members

of the U.S. population ("1" = low SSS, "10" = high SSS) (APPENDIX E).

Attention Checks. Two attention checks were included. The first validated that

participants were paying attention to questions during completion of questionnaire items.

Participants were asked on one item of a questionnaire: "Please select 'Always.'" The

second validated that participants read instructions. Participants were asked what the

study was about, but instructions specifically directed participants to select the option

"other" in response to this question and then enter "decision making" (for more about

these attention checks in AMT samples, see Aust et. al, 2013).

Data Collection

Data collection procedures were the same as Study 2, Phase 2 (see **Data**

Collection).

Data Analysis Plan

This study utilized data gathered online through Amazon Turk. Data evaluation

initially required entry of data into a database in a standard statistical software program,

the Statistical Package for the Social Sciences (SPSS). Nonnumerical variables, including

gender and race/ethnicity, were coded and stored in nominal format. Three Wishes were

stored as string variables.

The qualitatively identified variables from Study 2, Phase 1 (i.e., "wish themes")

were identified in the Phase 2 sample population. Intercoder agreement (cross-checking)

and predetermined codes from Phase 1 were utilized (Guest et al., 2012). "Wish themes"

were then evaluated as quantitative variables to understand features of the sample

population. Descriptive statistics for all variables were reported.

The relationships between wish themes, age, and ACE scores were evaluated using SPSS 25. We compared basic demographics of the population across wish categories and ACE items. ACE scores were evaluated separately for adult current wishes and retrospective wishes from childhood (i.e., elementary, middle school, and high school.) We compared identified Three Wish variables (i.e., categories and high vs. low ACE scores (low = below 4; high = above 4) using chi-squared. Fisher's exact analysis was used if cells have had five or less. Multiple comparisons were not conducted because each wish category was viewed as a separate hypothesis to be tested. Categories were not mutually exclusive and individual participants could have multiple wish categories in the same or separate wishes.

Results

Demographics

From a sample of 200 participants, 10 participants were excluded from analysis because they did not pass the attention checks. Of the final sample of 190 participants (121 men, 68 women, 1 transgender, M_{Age}=34.70, SD=9.928), 25 participants were students and 165 indicated other occupations. With regards to ethnicity, 6.8 % identified as African American, 7.4% identified as Hispanic/Latino, 76.0% identified as Caucasian, 1.1% identified as Biracial, 6.3% identified as Asian, .5% identified as other, 1.1% identified as American Indian/Alaska Native, and .5% identified as Native Hawaiian/Pacific Islander. With regards to Subjective Social Status (SSS), participants ranged from endorsing one to 10 out of 10 (M_{SSS}=5.17 SD=1.695).

The demographics were compared of the participants with high vs. low ACE scores. The two groups (high ACE and low ACE) did not differ significantly in terms of

age (t (188)=.156, p=.693), gender (χ_2(2)=5.578, p=.061, Cramer's V=.171), Subjective

Social Status (t (188)=.002, p=.962), current education status (student or nonstudent;

(χ_2(1)=.504, p=.48, Cramer's V=.052), or ethnicity (χ_2(7)=5.38, p=.614, Cramer's

V=.168) (See **Table 4**).

Table 4

Demographic Characteristics for High ACE and Low ACE Scores

Scale	Low ACE (n=141)		High ACE (n=49)		Type of test	Sig (p)
	M	SD	M	SD		
Age (years)	34.53	10.03	35.18	9.705	t = .156	.693
Subjective Socioeconomic Status (self-rating 1–10)	5.17	1.51	5.18	2.17	t = .002	.962
Occupation (%) Student Not-Student	14.18% 85.82%		10.20% 89.80%		χ_2= .504	.478
Ethnicity (%) African American Hispanic/Latino Caucasian Multiracial Asian Other American Indian/Alaska Native Native Hawaiian/Pacific Islander	7.8% 6.38% 75.18% 0.71% 7.8% 0.71% 0.71% 0.71%		4.08% 10.20% 79.59% 2.04% 2.04% 0 % 2.04% 0%		χ_2= 5.379	.614
Gender (%) Female Male Other	32.62% 67.38% 0%		44.90% 53.06% 2.04%		χ_2=5.58	.061

The demographics were also compared of the participants from Phase 1 and Phase 2. The two groups (Phase 1 and Phase 2) did not differ significantly in terms of age ($t(278)=.458$, $p=.499$), gender ($\chi_2(2)=.431$, $p=.806$, Cramer's V=.039), Subjective Social Status ($t(178)=2.595$, $p=.108$), current education status (student or nonstudent; ($\chi_2(1)=.234$, $p=.629$, Cramer's V=.029), or ethnicity ($\chi_2(7)=8.33$, $p=.305$, Cramer's V=.172) (See **Table 5**).

Table 5

Demographic Characteristics Between Sample From Phase 1 and Phase 2

Scale	Phase 1 (n=90)		Phase 2 (n=190)		Type of test	Sig (p)
	M	SD	M	SD		
Age (years)	33.86	9.36	34.70	9.93	$t = .458$	.499
Subjective Socioeconomic Status (self-rating 1–10)	4.83	1.55	5.17	1.7	$t = 2.595$	.108
Occupation (%) Student Not-Student	11.1% 88.9%		13.2% 86.8%		$\chi_2 = .234$	.629
Ethnicity (%) African American Hispanic/Latino Caucasian Biracial Asian Other American Indian/Alaska Native Native Hawaiian/Pacific Islander	11.1% 5.6% 78.9% 0% 1.1% 0% 1.1% 2.2%		6.8% 7.4% 76.3% 1.1% 6.3% .5 % 1.1% .5%		$\chi_2 = 8.329$	.305
Gender (%) Female Male Other	33.3% 65.6% 1.1%		35.8% 63.7% .5%		$\chi_2=.431$	.806

Interrater Reliability of Variables

Cohen's kappa was also run to determine if there was agreement between two raters' judgment on whether wishes aligned with a particular theme (i.e., wish category). For Phase 1, child retrospective wishes, there was almost perfect agreement between the two raters' judgments, $\kappa = .875$ (95% CI, .756 to .994), $p < 001$. For Phase 1 adult wishes, there was almost perfect agreement between the two raters' judgments, $\kappa = .836$ (95% CI, .709 to .963), $p < 001$. For Phase 2 child retrospective wishes, there was almost perfect agreement between the two raters' judgments, $\kappa = .833$ (95% CI, .673 to .993). For Phase 2, current adult wishes, there was almost perfect agreement between the two raters' judgments, $\kappa = .82$ (95% CI, .648 to .992).

Quantitative Analysis: Retrospective Childhood Wishes

Generalizability Wish Categories

Frequency of retrospective childhood wishes by categorized wish themes were calculated for both Phase 1 and Phase 2. Frequency of endorsed wishes was contrasted between Phase 1 and Phase 2. There was no significant difference between Phase 1 and 2 in the frequency that each wish theme was reported by participants (Table 6). In other words, a similar proportion of participants reported each wish theme in two separate samples.

Table 6

Frequency Participants Endorsed Retrospective Childhood Wishes in a Category in Phase

1 and Phase 2

Scale	Phase 1 (n=90)	Phase 2 (n=190)	Type of test	Sig (p)
No Wish (%) Yes No	1.1% 98.9%	3.2% 96.8%	Fisher's Exact	.435
Fantasy (%) Yes No	28.9% 71.1%	21.6% 61.2%	$\chi^2 = 1.793$	.181
Attachment/Belonging (%) Yes No	46.7% 53.3%	40% 60%	$\chi^2 = 1.113$	.291
Global Wish (%) Yes No	4.4% 95.6%	2.1% 97.9%	Fisher's Exact	.275
Escape (%) **Yes** **No**	23.3% 76.7%	22.1% 77.7%	$\chi^2 = .053$	.818
Personal Qualities (%) **Yes** **No**	26.7% 73.2%	24.7% 75.3%	$\chi^2 = .120$	.729
Achievement (%) Yes No	37.8% 62.2%	32.1% 67.9%	$\chi^2 = .877$	.418

Table 6 (Continued)

Frequency Participants Endorsed Retrospective Childhood Wishes in a Category in Phase

1 and Phase 2

Scale	Phase 1 (n=90)	Phase 2 (n=190)	Type of test	Sig (p)
Material (%) Yes No	37.8% 62.2%	39.5% 60.5%	χ^2= .074	.786
Money (%) Yes No	43.3% 56.7%	35.3% 64.7%	χ^2= 1.691	.194

*Note. * p<.05 ** p < .01. *** p < .001.*

Age and Wish Categories

From Phase 2, wishes at retrospective ages (elementary, middle school, high school) were also compared across wish categories.

Younger selves (elementary school wishes) were associated with more material wishes ($\chi_2(2) = 14.009$, $p =.001$, Cramer's V=.157) and fewer wishes related to personal qualities ($\chi_2(2) = 9.308$, $p=.010$, Cramer's V=.128), than middle or high school selves. Middle school selves were associated with fewer achievement wishes ($\chi_2(2) = 10.254$, $p= .006$, Cramer's V=.134) and more attachment/belonging wishes ($\chi_2(2) = 10.123$, $p=.006$, Cramer's V=.113) than endorsed in elementary or high school wishes. High school selves were associated with fewer material wishes ($\chi_2(2) = 14.009$, $p =.001$, Cramer's V=.157) and more wishes for achievement ($\chi_2(2) = 10.254$, $p= .006$, Cramer's V=.134) than younger selves. High school wishes also trended toward fewer fantasy wishes then younger selves, although this difference was not quite significant ($\chi_2(2) =$

5.812, p = .055, Cramer's V=.101). The remaining wish categories did not differ in terms of retrospective age group: No Wish ($\chi_2(2)$=.129, p=.938, Cramer's V=.015), Global Wish ($\chi_2(2)$=1.614, p=.446, Cramer's V=.053), Escape ($\chi_2(2)$=1.138, p=.566, Cramer's V=.045), and Money ($\chi_2(2)$=4.694, p = .096, Cramer's V=.091).

ACE and Wish Categories

From Phase 2, the two groups (High ACE and Low ACE) were compared across retrospective child wish categories. No Wishes (Fisher's Exact (1, N =190), p =.039) and Wishes for Escape ($\chi_2(1)$=8.207, p=.004, Cramer's V=.208) were associated with high ACE scores. Other wish categories did not differ in terms of high or low ACE scores: Fantasy ($\chi_2(1)$=.957, p=.328, Cramer's V=.071), Attachment/Belonging ($\chi_2(1)$=2.218, p=.136, Cramer's V=.108), Global Wish (Fisher's Exact (1, N =190), p=.574), Personal Qualities ($\chi_2(1)$=.114, p=.736, Cramer's V=.025), Achievement ($\chi_2(1)$=.203, p=.652, Cramer's V=.033), Material ($\chi_2(1)$=1.286, p=.257, Cramer's V=.082), and Money ($\chi_2(1)$=3.357, p=.067, Cramer's V=.067).

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Quantitative Analysis: Current Adult Wishes

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Generalizability Wish Categories

Frequency of categorized current wishes were calculated for both Phase 1 and Phase 2. The frequency of endorsed wishes was contrasted between Phase 1 and Phase 2. There was no significant difference between Phase 1 and 2 in the frequency of each wish theme reported by participants except Global Wishes (Table 7). In other words, a similar proportion of participants reported the same wish themes in the two separate samples except with respect to Global Wishes. Participants in the first sample (Phase 1) reported a

significantly greater proportion of Global Wishes ($\chi_2(1) = 12.831$, $p < .001$, Cramer's

V=.214).

Table 7

Frequency Participants Endorsed Current Wishes in a Category in Phase 1 and Phase 2

Scale	Phase 1 (n=90)	Phase 2 (n=190)	Type of test	Sig (p)
No Wish (%) Yes No	0% 100%	1.1% 98.9%	Fisher's Exact	1.0
Fantasy (%) Yes No	31.10% 68.9%	26.3% 73.7%	χ_2= .699	.476
Attachment/Belonging (%) Yes No	41.1% 58.9%	47.9% 53.1%	χ_2= 1.132	.287
Global Wish (%) Yes No	38.9% 61.1%	18.9% 81.1%	χ_2= 12.831	.001***
Escape (%) **Yes** **No**	13.3% 86.7%	15.3% 84.7%	χ_2= .182	.670
Personal Qualities (%) **Yes** **No**	38.9% 61.1%	35.3% 64.7%	χ_2= .347	.556
Achievement (%) Yes No	17.8% 82.2%	21.1% 78.9%	χ_2= .409	.522

Table 7 (Continued)

Frequency Participants Endorsed Current Wishes in a Category in Phase 1 and Phase 2

Scale	Phase 1 (n=90)	Phase 2 (n=190)	Type of test	Sig (p)
Material (%) Yes No	22.2% 77.8%	25.8% 74.2%	$\chi2$= .418	.518
Money (%) Yes No	67.8% 32.2%	69.5% 30.5%	$\chi2$= .082	.775
Mortality (%) Yes No	45.6% 54.4%	51.6% 48.4%	$\chi2$= .8861	.346

*Note. * p<.05 ** p < .01. *** p < .001.*

ACE and Wish Categories

The two groups (high ACE and low ACE) were compared across current adult wish categories. Wishes for Money ($\chi2(1) = 4.734$, $p=.030$, Cramer's V=.158) were associate with low ACE Scores. Other wish categories did not differ in terms of high or low ACE scores: No Wishes (Fisher's Exact (1, N=190 $p=.450$), Fantasy ($\chi2(1)=.114$, $p=.736$, Cramer's V=.024), Attachment/Belonging ($\chi2(1)=.024$, $p=.876$, Cramer's V=.011), Wishes for Escape ($\chi2(1)=.492$, $p=.483$, Cramer's V=.051), Global Wish ($\chi2(1)=.014$, $p=.904$, Cramer's V=.009), Personal Qualities ($\chi2(1)=.357$, $p=.550$, Cramer's V=.043), Achievement ($\chi2(1)=2.246$, $p=.134$, Cramer's V=.109), Material ($\chi2(1)=.385$, $p=.535$, Cramer's V=.045), and Mortality ($\chi2(1)=.008$, $p=.928$, Cramer's V=.007).

Quantitative Analysis: Current Adult and Retrospective Childhood Wishes

Retrospective childhood wishes were also compared to current adult wishes across wish categories. More Attachment/Belonging ($\chi_2(1) = 3.828$, $p=.05$, Cramer's V$=.142$) and Money wishes ($\chi_2(1) = 7.767$, $p=.005$, Cramer's V$=.202$) were associated with adult wishes than retrospective child wishes. Mortality wishes were more prominent in adult than child wishes; in fact, mortality wishes were not identified as a theme in child wishes and were therefore not compared quantitatively. Other wish categories did not differ in terms of age group: No Wish (*Fisher's Exact(1, N=190)*, $p=.062$), Fantasy ($\chi_2(1)=1.653$, $p=.199$, Cramer's V$=.093$), Global Wish (*Fisher's Exact(1, N=190)*, $p=.163$), Escape ($\chi_2(1)=3.045$, $p=.081$, Cramer's V$=.127$), Personal Qualities ($\chi_2(1)=.023$, $p=.881$, Cramer's V$=.011$), Achievement ($\chi_2(1)=1.449$, $p=.229$, Cramer's V$=.087$), and Material ($\chi_2(1)=.813$, $p=.367$, Cramer's V$=.065$).

In Post Hoc Analysis, the differences in the subthemes of Attachment/Belonging were analyzed to better understand the differences in adult compared to childhood wishes. While in adult wishes 24.7% of participants endorsed altruistic wishes (51.64% of participants with attachment wishes), in retrospective wishes 4.2% of participants endorsed altruistic wishes (10.53% of participants with attachment wishes).

Emotion of Remembering Wishes and ACEs

The emotions individuals endorsed after experiencing a wish were: (1) coded categorically and (2) analyzed across high and low ACEs.

Feelings after remembering a wish were sorted into the following categories: Negative (e.g., "I feel sad because I had so little that my wishes weren't for much"), Positive (e.g., "wonderful"), Nostalgic (e.g., "nostalgic"), Weird/Strange/Funny (e.g.,

"weird"), Neutral (e.g., "not much feeling at all, really"), Reflective (e.g., "very interesting to reflect on"), and Other (e.g., "feels surprising, honestly"). Some individuals reported experiencing more than one of the categories when remembering wishes (e.g., "I feel nostalgic and nice").

After remembering wishes, 27.9% of participants endorsed positive feelings, 20% of participants endorsed negative feelings, 21.1% of participants endorsed a sense of nostalgia, 12.1% of participants endorsed feeling weird, strange, or funny, 15.3% of participants endorsed neutral emotions, 25.8% of participants either endorsed a sense of being reflective or reflected and reported on their past, and 5.8% of participants endorsed other feelings not otherwise mentioned.

Individuals with high ACEs were significantly more likely than individuals with low ACEs to report negative feelings after remembering their wishes ($\chi_2(1)$=4.648, p=.031, Cramer's V=.156). Individuals with high ACEs were significantly less likely than individuals with low ACEs to report a broader range of other feelings not otherwise categorized after remembering their wishes ($\chi_2(1)$=4.058, p=.044, Cramer's V=.146). There was no other significant difference in feelings endorsed after remembering wishes between individuals with high and low ACEs.

Post Hoc: Foster Care in Online Participants

In a post hoc analysis, 11 participants endorsed being in foster care or kinship care at some point while growing up. This population was analyzed separately and compared to non-foster care population.

From a sample of 11 participants (six male, five female, M_{Age}=31.73, SD=8.486), two participants were students (18.2%) and nine (81.8%) indicated other

occupations. With regards to ethnicity, 9.1% identified as African American, 81.8% identified as Caucasian, 9.1% identified as Asian. With regards to Subjective Social Status (SSS), participants ranged from endorsing 1 to 10 out of 10 (M_{SSS}=5.82 SD=2.786).

The demographics were compared of the participants from foster care vs. non-foster care. The two groups (foster care and non-foster care) did not differ in terms of age (t(188)=1.047 p=.307), gender (χ_2(2)=.519, p=.771, Cramer's V=.052), Subjective Social Status (t(188)=1.693, p=.195), current education status (student or nonstudent; (χ_2(1)=.258, p=.612, Cramer's V=.037), or ethnicity (χ_2(7)=1.504, p=.982, Cramer's V=.089).

The high ACE vs. low ACE scores were compared of the participants from foster care vs. non-foster care. Participants that endorsed being in foster care were significantly more likely to have high ACE scores (4 or above) than individuals who were not in foster care (χ_2(1) =25.871, p<.001, Cramer's V=.369).

Post Hoc: Retrospective Childhood Wishes and Foster Care Wishes

Retrospective childhood wishes (Study 2 Phase 2) were also compared to foster care child wishes (Study 1 Phase 2) across wish categories. The foster care population endorsed significantly more wishes for escape (χ_2(1) = 6.128, p=.013 Cramer's V=.161), and more no wishes (χ_2(1) = 7.774, p = .005, Cramer's V = .182), and fewer wishes for personal qualities (χ_2(1)=5.378, p=.020, Cramer's V=.151), than in retrospective childhood wishes in a general population. The remaining wish categories did not differ in terms of population: fantasy (χ_2(1)=1.844, p=.174, Cramer's V=.089), attachment/ belonging (χ_2(1)=3.592, p=.058, Cramer's V=.124), achievement (χ_2(1)=.197, p=.657,

Cramer's V=.029), material (χ_2(1)=1.081, p=.298, Cramer's V=.068), and money

(χ_2(1)=.658, p=.417, Cramer's V=.053).

Discussion

Generalizability of Wish Categories

Themes were tested for generalizability of wish categories. As predicted, themes

were generalizable to a second population of adults reporting retrospective childhood

wishes. In other words, no differences were found across the two samples in the

following categories: no wish (1.1–3.2%), fantasy (28.9–21.6%), attachment/belonging

(46.7–40%), global wish (4.4–2.1%), escape (23.3–22.1%), personal qualities (26.7–

24.7%), achievement (37.8–32.1), material wish (37.8–39.5%), money (43.3–35.3%).

Additionally, themes were generalizable to a second population of adults reporting

current wishes in the following categories: no wish (0–1.1%), fantasy (31.1–26.3%),

attachment/belonging (41.1–47.9%), escape (13.3–15.3%), personal qualities (38.9–

35.3%), achievement (17.8–21.1%), material wish (22.2–25.8%), money (67.8–69.5%),

mortality (45.6–51.6%). There was one exception, global wishes (38.9–18.9%), which

significantly differed across samples. This indicates that global wishes may be a more

variable theme in frequency of wishes in a given population. The reason might be

explored in future research, but possible hypothesis may include the occurrence of

significant world events or perhaps time of day (e.g., individuals reading news in

morning connecting to more global wishes). Overall, themes identified in wishes were

mostly generalizable and, even given the significant difference in frequency, global

wishes remained a common theme in both samples of adults.

ACE and Wish Categories

Unlike the foster care population, in the second sample we found differences in wish themes across early adverse experiences. In retrospective child wishes, the inability to generate three wishes and wishes for escape were associated with higher ACEs. Current adult wishes for money were also associated with less adverse childhood experiences. The meaning of these difference cannot be fully known, but we can begin to speculate to reasons for fewer money wishes, more wishes for escape, and difficulty generating wishes in a population with more adverse childhood experiences. The inability to generate wishes may imply greater hopelessness or loss of desire. Escape, a desire to leave reality behind, is a central theme in trauma. Escape aligns with many symptoms people experience after trauma, such as avoidance of thoughts, feelings, and situations, as well as dissociation. Therefore, the theme of escape in retrospective wishes may be directly reflective of the experiences of childhood trauma. With regards to money wishes, when people experience adverse experiences, while there may be a similar desire for success or material things or even to achieve, the practicality of wanting and thinking about finances may be a less directly considered desire.

Age and Wish Categories

There were various differences across age of retrospective wishes. Younger children were associated with more material wishes and fewer wishes for personal qualities. This is reflective of a normative developmental difference, less of a sense of self in earlier childhood. Latency-age wishes were associated with more attachment/ belonging wishes than elementary or high school wishes. Both peers and family appear central for latency age children who are forming their individualized identities.

Adolescent wishes trended toward less fantasy wishes (though not quite significant), fewer material wishes, and more wishes for achievement than younger selves; for adolescents, there is a goal orientation toward success and the future and less toward the short-term gain of specific material items. This is consistent with previous literature which found that younger children appear to provide more concrete, material-oriented wishes (Cobb, 1954; Winker, 1949).

Thematic differences were also compared between child (retrospective) and adult (current) wishes. More attachment/belonging and money wishes were associated with adult wishes than retrospective child wishes. In adulthood, there appears to become a greater desire for financial stability. Participants appear to wish for money, an abstract construct compared to the immediacy of material objects. This is also consistent with previous literature which found that when comparing children to college age students, young adults have been found to be more likely to have fewer wishes related to material objects and more wishes related to money (Wilson, 1938). With regards to more attachment wishes, this may have related to differences in the nature of the attachment/belonging wishes in retrospective child compared to adult wishes. Adult attachment wishes are generally more altruistic. Wish content is less focused on the self and often related to children or other loved ones. A shift has occurred from caring about the self as life's purpose to caring about others. This is also consistent with prior research showing that, as children get older, wishes appeared to become more socially oriented (Cobb, 1954; Winker, 1949).

Emotion of Remembering Wishes and ACEs

We also found that adults who experienced high ACEs reported significantly more negative feelings after remembering their childhood wishes. Through remembering wishes, individuals with more adverse experiences in childhood may have connected to their unlived wishes, painful places in themselves, and possible unresolved longing (see General Discussion).

Post Hoc: Foster Care

Finally, we found that adults in the online study (Study 2) who reported being in foster care as children were significantly more likely to have high ACE scores (4 or above) than individuals who were not in foster care. This finding is consistent with what we would predict; foster care children are a high-risk population for adverse childhood experiences. Children are often placed in foster care after a serious, abusive adverse childhood experience occurs.

Childhood wishes were also compared across studies. Retrospective childhood wishes (Study 2 Phase 2) were compared to foster care child wishes (Study 1 Phase 2) across wish categories. The foster care population reported significantly more wishes for escape, more difficulty generating three wishes, and fewer wishes for personal qualities. This finding is similar to what we saw as the differences between high and low ACE score populations in retrospective childhood wishes. As in a high ACE score population, the foster care population appears to have difficulty generating three wishes and a desire to escape circumstances. Additionally, the foster care population has fewer wishes for personal qualities than the general population (retrospective wishes). Personal qualities indicate a wish for a change in the self, which involves a certain level of agency and is

also associated with later stages of development (adulthood). In Maslow's hierarchy, a pattern of motivations and needs are described. The desire for change of self rather than desire for more physiological or safety needs appears to reflect a higher order need. Children in this foster care population appear to more frequently wish for basic needs.

CHAPTER IV:

GENERAL DISCUSSION

SUMMARY

Asking for Three Wishes is a projective tool commonly used by clinicians with children to assess features of their internal world. Despite its widespread use, research on the meaning of individuals' responses to this tool is very limited. Some research has looked at different types of wish responses across demographics such as age and gender; however, no study to date has investigated the relationship of wishes to adverse childhood experiences. Adverse childhood experiences (ACEs), such as neglect and abuse, have been specifically connected to later health problems such as obesity and depression (Felitti et al., 1998). To fill in the gap in current literature, this research conducted two studies using a mixed-method design: One examined the wishes of a foster care population and the other examined wishes in a general adult population across a range of early adverse experiences.

Practically, this research had three goals. The first goal was to provide insight into the utility of a common projective tool, asking for Three Wishes, with two populations —foster children and a general adult population—aiming to move toward a more standardized way of viewing what wishes individuals are generating and what those wishes could imply. Second, through the projective measure, the study aimed to better understand the internal qualities and longings common to different ages and trauma histories that the tool may help us better map. This research attempted to provide a fuller picture of the personal features of these populations that can be utilized clinically.

Finally, the goal of this research was to better understand how to utilize Three Wishes as a clinical intervention moving forward, both as an assessment tool and as a means of providing clinical insight to facilitate therapeutic change.

This discussion will consolidate the findings of the two research studies. First, we will go through what we can understand from Three Wishes about the two populations studied—foster children and an online adult population. Second, we will reflect on the findings related to what the wishes imply about development and adverse childhood experiences. Third, we will address Three Wishes as an intervention and how we might use our findings to approach utilization of this tool differently. We will conclude with a discussion of the studies' limitations and of the future directions that could build on the current findings. Overall, wish themes will be connected back to the broader research question of utilizing identified themes to understand a population (i.e., foster care children and general adults currently and retrospectively reflecting on childhood) and a projective tool (i.e., three wishes) with special attunement to trauma and development. These themes will be related to the projective features of the wishes and will be expanded to improve use of the Three Wishes question by clinicians.

THEORETICAL CONTRIBUTIONS

Foster Care Children's Wishes

In the foster care population, we first predicted that, compared to previous research with different populations, more wishes would relate to reunification with previous caregivers and getting more basic needs met (e.g., material wishes). As predicted, common themes that arose were wishes for reunification and material

possessions. This is consistent with prior research that found that in a population of

children removed from their homes, many children reported a wish to be home (Speer,

1937). Additionally, common themes that arose included wishes for

attachment/belonging, a desire for escape, and a wish for achievement. Other wish

themes that arose but were less common included fantasy, personal qualities, money, and

inability to generate three wishes (i.e., no wish).

One can only begin to speculate on why some themes may appear more

commonly in this population. The five most common themes were attachment/

belonging, reunification, escape, achievement, and material wishes. First, a desire for

material possessions in a population with often-limited resources fits what we would

predict and aligns with Maslow's hierarchy. Basic needs (e.g., physiological, safety) are

prioritized before higher order needs (e.g., esteem, self-actualization). Second, many

children wished for achievement. This desire for success demonstrates the hope and

resilience in this population from the more practical to the more fantastical goals. Despite

adverse experiences, many children wished for future successes. Finally, wishes for

reunification, attachment/belonging, and escape highly overlapped in this population.

Most wishes for reunification indicated a desire for a particular person or persons in their

life, and to leave their current circumstances (i.e., escape) and return "home." This central

desire for reconnection with attachment figures after separation appears a primary

longing in children recently removed from their parents. Despite sometimes excessive

trauma at the hands of caregivers, some children want to return to those caregivers while

others do not. This speaks to the individualized experience and unique internalization of

adverse experiences. Additionally, prior literature has indicated that wishing for

reunification can play a role in influencing the decision-making process and provide an internal sense of empowerment and control (Barnett & Wilson, 2004; Minkhorst et al. 2016). Therefore, this wish for reunification (and even the choice not to wish for reunification) may not only play a role in highlighting longing and desire but also provide a sense and lived experience of agency. Overall, although individuals in foster care might be facing some hopelessness, there were still many wishes and desires that demonstrated hope. Participants wished for achievement, which shows a desire for a way out of difficult situations, and escape, reflecting a hope for change in current circumstances. Finally, foster children, despite sometimes painful separations, maintained a desire for human connection and wished for attachment and belonging.

We also asked about foster care history in our online adult study. Findings indicated that the foster care population had significantly higher ACE scores than the general population of adults. This highlights the substantial early adverse experiences undergone by this population that put them at risk for negative health and mental health outcomes. Furthermore, the retrospective childhood wishes from the general population (Study 2) were compared to those of the foster care population (Study 1). The foster care population reported significantly more wishes for escape, more difficulty generating three wishes, and fewer wishes for personal qualities. These common wish themes in the foster care population indicate a possible lack of internal agency in changing the self (personal quality) and a lack of attunement to their own needs and desires (difficulty generating any wish). Additionally, while they may at times struggle to generate hope (difficulty generating any wish), at other times they may hope for something better and a way out of difficult circumstance (escape). This finding is similar to what we saw in high ACE score

populations in retrospective childhood wishes. This again highlights that foster youth are reflective of a high ACE population even in the content of their wishes.

Adult Wishes

In the adult population surveyed online, we first predicted that, similar to previous research with adult populations, fewer wishes would relate to material objects and more wishes would relate to money than in childhood. As predicted, the most common theme that arose was money. Additionally, common themes that arose included wishes for attachment/belonging, wishes related to mortality, global wishes, and personal qualities. Other wish themes that arose but were less common included fantasy, achievement, escape, material objects, and inability to generate three wishes (i.e., no wish).

One can only begin to speculate on why some themes may appear more commonly in current adult wishes. The five most common themes in current adult wishes were money, mortality, attachment/belonging, personal qualities, and global wishes. A wish for change in personal qualities highlights the desire for change in self. This change could be a desire for change to fit into a social world that one is more attuned to and aware of than in childhood, as well as a greater focus on a more self-actualized or higher esteemed version of being, a greater emphasis on a developed personhood. Two of the most common themes, global wish and wishes related to mortality, were not common enough to be identified as themes in the foster care population. Global wishes were present in retrospective childhood wishes but much less frequent than in current adult wishes. Global wishes appear to be more preoccupying for adults as a central issue. These wishes all connote a desire for change in the current world circumstances from politics, to the environment, to world peace. Mortality was defined in wishes connected to both

health for self or other, or attempting to defy the inevitability of death. As Ernest Becker (1973) said, "of all things that move man, one of the principle ones is his terror of death." The specific commonality of this wish occurring only in current adult wishes speaks to the developmental change and focus in adulthood to facing and dealing with death and individuals' fear of mortality.

Money wishes were the most frequent in this adult online population. In adulthood, there appears to be a greater desire for financial stability. Participants wish for money, an abstract construct compared to the immediacy of material objects. Finances are an important area that, when limited, lead to significant distress. For many people finances are a very sensitive area of discussion. Money can be connected to a general desire for safety and stability. Another factor to consider is that the specific adult population surveyed was participating in the study for a small amount of money and was predominantly male. Perhaps due to the small amount of money received in Amazon Turk, individuals completing the study were particularly focused on current lack of money or gaining money. Future research is needed to assess whether this frequency of money-related wishes would be as high for a different adult population.

Finally, wishes for attachment and belonging appear central in not only adulthood wishes but as a common theme in current adult, retrospective child, and foster children wishes. As we consider attachment in adulthood, we see more altruistic and other-centred wishes. Although attachment wishes appeared more commonly in adults in this study than in childhood, the longing and desire for connection appears the most central human wish across populations. The wish for attachment and belonging is a central human wish.

Wishes Across Development

We predicted that, in consonance with previous research, in retrospective wishes, younger children would provide more concrete, material-oriented wishes and, as children got older, wishes would become more future and socially oriented. Since previous research also found variations across development as nonlinear, we predicted more socially oriented wishes during latency age than in other developmental periods in the foster care population across age. This could reflect that this population is more similar to one another in terms of central wishes and adverse trauma experiences than a population following a typical developmental trajectory. In the general population, similar to predication and consistent with previous literature, younger children were associated with more material wishes, latency-age children with more social wishes (attachment and belonging), and adolescents with more future-oriented wishes (achievement).

These findings across development can also be mapped in part to the work of Erik Erikson. Younger children were associated with more material wishes and less wishes for personal qualities. Erikson describes an emergence of identity that occurs in latency and adolescence from both a child's identifications and from society. This focus on the material rather than personal qualities reflects the less fully formed sense of identity formation. Latency-age children were associated with more social wishes (attachment and belonging). Erikson describes the development of competency during latency years and the connection between competency in adjusting to new social roles. This is a very social period of development in which children balance family life, which is still central, and the newly emerging peer space. According to Erikson, unresolved feelings of inadequacy or inferiority among peers during this stage of development could create

problems in later self-esteem. This understanding of social importance in latency development aligns with the frequency of wishes for attachment and belonging during this stage. Adolescents were associated with more future-oriented wishes (achievement). This could be reflective of gearing up for more adult roles and a formulation of one's own identity as an individual and as a member of society (Erikson, 1982). Finally, adult attachment wishes were more common than in childhood and generally more altruistic. This again reflects individuals' developmental growth. According to Erikson, individuals' areas of concern broaden throughout the life span, becoming more encompassing; caring for and being cared for by others, and securing a sense of belonging, becomes even more important (Erikson, 1982).

Overall, when compared to childhood, adult wishes paint a slightly different picture of desires and longings. Many stories and fairy tales encapsulate both the difficulties and what is lost in creativity and play, as well as the benefits of aging such as thinking about the broader, greater good outside of the self. In *Peter Pan*, the characters encapsulate both sides. Captain Hook says, "Growing up is such a barbarous business, full of inconvenience… and pimples." Peter's mother, Mrs. Darling, speaks to another side of growing up and adulthood, "There are many different kinds of bravery. There's the bravery of thinking of others before one's self." With regard to the current adult wishes described in this research, there was a complexity and at times logic and reality basis of wishes as compared to the wishes remembered from childhood. For example, the current adult wishes for material items were more practical and did not include items for pleasure, such as toys, and wishes for achievement were often connected to practical financial success rather than a dream job (e.g., "to be a rock star"). This adult population

also appears more attuned than those at younger stages of development to concerns with

mortality and the inevitability of death. Adults' other common wishes appear to involve a

desire in life for security and safety (money), a more self-actualized self (personal

qualities), and a broader and more expansive sense and care for the world outside of the

self (global wishes and more altruistic wishes) than wishes generated in childhood.

Finally, as in humans across all stages of development, there is a deep and important

desire for connection.

Wishes and Trauma

Until this study, Three Wishes has not been researched as an assessment or

intervention tool in addressing and understanding trauma. Other projective measures,

often more cumbersome to use, were used to study trauma and, clinically, for the

treatment of trauma. Previous studies of projective measures have revealed common

defenses (e.g., avoidance, poor reality testing, guardedness, emotional and interpersonal

distancing, affective numbing, fantasy production, and avoidance of the nuances of

reality) and central themes in individuals' traumas (i.e., sexual themes in sexually abused

children) (Armstrong & Loewenstein, 1990; Levin & Reis, 1996; Lovitt & Lefkoff, 1985;

Scroppo, Weinberger, Drob, & Eagle, 1998). This study has looked specifically at

adverse childhood experiences (ACEs), since four or more adverse experiences puts

children and adults at much greater risk for a range of poor health and mental health

outcomes. In a foster population we did not find differences across ACE scores (possibly

due to various study limitations and the high level and acuity of trauma in this population

as a whole), however, significant differences were found in high and low ACE

populations in the adult study.

As previously mentioned, for the adults surveyed regarding retrospective childhood wishes, the inability to generate three wishes and wishes for escape were associated with higher ACEs. While the meaning of this difference cannot be fully known, the inability to generate wishes may imply greater hopelessness or loss of desire. By not wishing, the self may be protected from a need that might not be met. We can also begin to speculate on the connection between escape and adverse childhood experiences. Escape, a desire to leave reality behind, is a central theme in trauma. Escape aligns with many symptoms people experience after trauma, such as avoidance of thoughts, feelings, and situations as well as dissociation. Avoidance plays a role in the development of post-traumatic stress symptoms following a traumatic event (Pineles et al., 2011). How one escapes, the adaptiveness of that escape, and the experience of that escape for individuals with trauma might be important in understanding their unique experiences in coping and dealing with adverse experiences.

These findings are consistent with previous research which has found "no wish" and escape-related themes in both populations of children with significant emotional distress and populations that have a likelihood of high ACEs. In a population of homeless youth, wishes involved a desire for stability and positive family changes (Schwartz et al., 2008). This population, which likely possesses high ACE scores, appears to also be wishing for changes in their circumstances. Furthermore, another study of children with learning or emotional difficulties reported significantly more "no wish" responses as well as more wishes to leave school and for world improvement than children without difficulties (Guarnaccia & Vane, 1979). In some ways this is similar to our findings. "No school" and "a changed and better world" could be identified as reflecting a desire to

escape current circumstances. While we did not look at the emotional difficulties of our population, adverse experiences have been connected to learning and emotional difficulties (Porche, Costello, & Rosen-Reynoso, 2016). Escape and difficulty generating wishes may be reflective of something even bigger than high ACEs and may connect to an internal experience of pain as well.

Current adult wishes for money were also associated with fewer adverse childhood experiences. In other words, those with more adverse childhood experiences had fewer wishes for money. Previous literature demonstrated a relationship between ACEs and adult socioeconomic status (i.e., education, employment, and income). Those reporting four or more ACES were more likely in adulthood to report high school non-completion, household poverty, and periods of unemployment (Metzler et al., 2017). This could imply that when people experience adverse experiences, while there may be a similar desire for success or material things or even to achieve, the practicality of wanting and thinking about finances may be a less directly considered desire. Their focus may be on other needs which take precedence in their desires. This could impact poverty in individuals with trauma; those with the least financial resources may have the highest rates of adverse childhood experiences.

Previous research has identified a paucity of positive emotions in projective tests of individuals who have experienced trauma (Pica et al., 2001). Similarly, we found that adults who experienced high ACEs reported significantly more negative feelings after remembering their childhood wishes. Through remembering wishes, individuals with more adverse experiences in childhood may have connected to their unlived wishes, painful places in themselves, and possible unresolved longing. Literature on longing has

shown that higher levels of life longings are related to lower well-being and a global desire for change in life (Scheibe, & Baltes, 2007). Wishing is not just generative of hope or positive feelings. While some felt joy or nostalgia in remembering wishes, there was also a grief or sadness that came with contacting potentially unmet desires and longings. Additionally, being asked to remember stages of childhood may also have connected participants with painful memories of the past, bringing to mind child selves who were in the midst of bad times.

PRACTICAL IMPLICATIONS

Practically, a wish can be conceptualized as a central source of emotional pain when assessing and intervening in a therapeutic framework. Research has referred to wishes as similar to an individual's most common worries and as an underpinning of behavior (Zeligs, 1942). Additionally, other research has gone even further, saying that wishes not only reveal elements of personality but are associated with an individual's deepest psychological problems (Simmons, 1969). In this projective test, we have asked participants to state their inner human expression of desire, a wish that can create satisfaction or, alternatively, longing, or some complex combination of these. We will now consider how we can learn from this study to better utilize this powerful intervention—requesting perhaps someone's greatest worry, the underpinning of their behavior, and their deepest psychological struggle.

First, now that we have a better sense of themes in various populations, we can have a greater understanding of a more typical and common human yearning or a wish that falls outside of the more typical response for a given population. For example, we

can now understand attachment wishes as both common and central in approaching and discussing a patient's problems. In working with a foster child, we might not be surprised by wishes for reunification and can also look for wishes that imply resilience, such as achievement and ability, to imagine a way out of the pain. If a wish for reunification is not present or a patient has difficult generating three wishes, we may become curious about the reason why. In working with adults, we might pay closer attention to common concerns and their importance such as fears of mortality and financial worries. We also might take note when individuals have wishes that are less typical for their developmental stage. For example, if the wishes of a young child have themes of mortality or altruistic wishes for others, this may imply an atypical level of maturity. Conversely, if an adult has more material, nonpractical wishes, we may want to watch for a characteristic lack in developmental maturity. Additionally, if we notice wishes with themes of escape or a difficulty generating three wishes, we might wonder more about possible adverse childhood experiences potentially being present. Overall, discovering themes in wishes can ground us in what might be expected from wishes, thematic content of patients in a given population, and what themes might appear as less typical.

Asking about wishes can also provide important information that is sometimes absent from other diagnostic approaches in initial intakes with a patient. One study found that wishes provided information during interviews that were not provided otherwise (Winkley, 1982). For example, in our studies many wishes reported reflected real and preoccupying problems in both the foster care population and the online sample. Some wishes spoke to real life problems (e.g., "for my parents to love me and not abuse me;" "to find a way to remove my siblings and myself from our house to someplace safer;" "I

wished I didn't have to live with my dad in order to be away from my step father;" "have

my brother back, alive and healthy;" "to talk to my father one more time;" and "to bring

my sister back…she passed away in 2008, she was six months old, she passed away due

to medical problems because my mom was using drugs while she was pregnant"). Asking

for wishes led to understanding difficult and painful parts of these individuals'

experiences.

     Another important finding in this study was that in each theme, while a certain

meaning can be speculated, often there may be a deeper meaning or meanings for the

wisher that differs from the surface meaning. Follow-up questions are needed for more

accurate interpretation. Prior research has shown that children have the capacity to reflect

deeply on their wishes (Winkley, 1982). As previously discussed, a wish can have a

different and deeper meaning than it may appear. A material wish, such as "a house" for

child who was homeless, could represent stability while for another the house could

represent escape from living with their family. As another example, "a car" may imply

the desire to escape and flee circumstances for one person, demonstrate status for

another, or be a means to get oneself and siblings to school safely for a third. Inquiry is

needed to explore the meanings for individuals. Additionally, money wishes can serve

different meanings, such as for one person a desire for stability, for another a desire for

power and control, and for another freedom. In one of the case examples, follow-up

questions were asked, shifting the understanding of the wish. An 8-year-old African-

American female in foster care wished to "always be good." When asked to elaborate,

she stated that she has seen "bad stuff on the street" such as "kidnapping" and "smoking"

and wants to avoid these negative experiences. Being good was a way to protect herself

from difficulties in the outside world through her internal strength. This would have been impossible to understand without the follow-up inquiry.

Finally, not only are follow-up questions needed for understanding the meaning of wishes but asking about the emotion of sharing a wish can also be critical in understanding what these wishes bring up for our patients. As previously mentioned, when patients were asked about their emotions after remembering their wishes, participants had a range of feelings: positive feelings, negative feelings, a sense of nostalgia, feeling weird, strange, or funny, a neutral emotion, a sense of being reflective or reflected feelings about their past, and, for a small percentage, a broader range of feelings. This indicates that therapeutically, reflecting on the emotions after asking about wishes can also help tap into affects about some of patients' other possible central worries or problems. A question about wishes can also bring on a reflective stance into one's self and past from this affective place.

Overall, asking about wishes can alert clinicians to their patients' central worries and problems. Additionally, through understanding the literature and more typical themes about wishing, one can begin to interpret and become aware of where the themes that arise might be expected from a developmental and trauma-informed perspective. Finally, by asking additional questions about the meaning of a wish and the emotion experienced in reflecting on the wish, Three Wishes can become a richer source of data and a more clinically useful tool.

GENERALIZABILITY

This research project utilized an exploratory sequential mixed-methods approach to generalize themes across two populations: foster children and adults who reported current and retrospective childhood wishes online. In a foster care population, themes were tested for generalizability of wish categories. As predicted, themes were generalizable to a second population of foster children. In other words, no differences were found across two samples. In an online United States adult population, themes of current and retrospective childhood wishes were tested for generalizability of wish categories. As predicted, themes were generalizable to a second population of adults reporting retrospective childhood wishes. In other words, no differences were found across two samples with one exception, global wishes in current adult wishes which significantly differed across samples. This indicates that global wishes may be a more variable theme in regard to wishes. Overall themes identified in wishes were mostly generalizable and, even given the significant difference in frequency, global wishes remained a common theme in both samples of adults.

While themes were identified across these two populations, we also found that not all themes were generalizable to different populations (adult vs. child; child retrospective vs. foster care children). This indicates that while we might see certain themes more commonly across populations (i.e., no wish, fantasy, attachment/belonging, escape, personal qualities, achievement, material wishes, and money), certain wish themes may arise more commonly in population specific ways. For example, we identified mortality-related wishes for adults, reunification wishes in foster care children, and global wishes as a theme in the online population but not for foster care children. Furthermore, wishes

may also be impacted by the era and nation in which the population lives. Global wishes and wishes related to mortality may be generated more often by a population living in a Trump presidency and in a world more clearly impacted than ever before by climate change. Previous research has also identified at times population-specific themes. Therefore, while the identified themes in this research may be generalizable and reflective of the studied populations, future research would be needed to understand the unique themes of any particular population.

LIMITATIONS AND FUTURE DIRECTIONS

In Study 1, looking at a population of foster care children using archival data, there were various limitations. First, sample size was limited which resulted in low power for comparing age or ACE differences. Second, data may have been incomplete. ACEs were generated from archival reports which did not explicitly provide an ACE measure to those completing the reports. Some reports also may have left out information if it was unknown by the child, division of protective services worker, or foster care placement (e.g., (1) emotional abuse, (2) physical abuse, (3) sexual abuse (4) emotional neglect (5) physical neglect, (6) mother treated violently, (7) substance abuse, (8) parental separation or divorce, (9) household member imprisoned, and (10) suffering a mental illness). Third, ACEs are typically calculated after individuals turn 18. Therefore, the children's current ACEs don't reflect what might later become their lifetime ACE scores.

In Study 2 looking at a population of adults currently in the United States, studied online, there were also differing limitations. First, the sample was online. Although various studies have shown the validity of performing online studies, this area of research

is still relatively new. Although various attention checks and data-cleaning methods were utilized, the circumstances to which individuals were completing the questionnaires and consistency of setting in which data was collected cannot be guaranteed. Additionally, the sample was comprised mostly of white men; this is a very different sample from the population of foster children in the first study, which were equally male and female identified and mostly non-white. Finally, childhood wishes were retrospective. While there was variety in subjects' responses across retrospective ages that align with previous differences in wishes across developmental stages, these retrospective wishes cannot be seen as equivalent to wishes expressed in current time. The retrospective wishes can best be understood as the participants' internal representations of themselves at various ages.

Since this is the first study to evaluate Three Wishes while considering trauma, ACEs, a foster care population, and an online adult population, there are many directions for future research. First, we evaluated ACEs cumulatively. Future research might look at individual components of the ACE, such as neglect or sexual abuse, and look for specific wishes within populations of diverse kinds of trauma. Prior research has also looked at the impacts of trauma through other projective measures. It would be interesting to compare Three Wishes to other projective measures (e.g. compare an individual's first memory, TAT, or Rorschach) with the same participant's Three Wishes to understanding the differing results and utility of the different measures. Limitations in the nature of the data and the specific populations could also be improved by follow-up studies. Our study only looked at children in archival data. Evaluating children in foster care currently might lead to a more complete data set (not missing ACE information) which might lead to different results. Additionally, if participants could be followed longitudinally, not only

retrospectively, we might gain a better understanding of the development of wishes over time. Further, the specific adult population studied was rewarded financially for responding online; due to the high frequency of wishes for money, it would be important to assess if the same findings were discovered in a non-Amazon Turk population with differing demographics of race and gender (i.e., fewer Caucasian males). Finally, future research could draw on the current findings to investigate the use of Three Wishes clinically. For example, future research could evaluate the meaning and emotions reported after subjects make wishes, and produce case examples of how the answers might be utilized clinically. While we can speculate on the meanings underlying wishes, future research is needed to investigate how individuals understand and interpret the meaning behind their own wishes.

CONCLUSIONS

Our findings are only the beginning of understanding common and differing themes in wishes. Our results point to previously unidentified differences such as the desire for reunification and escape in foster children, and the importance of mortality and money in adulthood. We also hope clinicians will stay attuned to individuals' concerns regarding attachment and belonging, the one theme that was found to be common across populations. Practically, for clinicians, we hope this research will indicate the value for future practitioners to pause and contemplate the meaning behind answers to Three Wishes or any intervention, to reflect on the evoked feeling, and to pay attention to an individual's resilience and aspirations in the face of adversity. We hope that, in the light of this study, future clinicians will pay attention to what a person's wish has in common

with the wishes of others as well as the unique importance of a wish for the individual
and their treatment.

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APPENDIX A.

CONSENT FORM (PHASE 1)

You are invited to participate in a research study that is being conducted by Caitlin O'Donnell, who is a graduate student in the Graduate School of Applied and Professional Psychology at Rutgers University. The purpose of this research is to determine common themes in wishes and the experience of remembering a wish. You will be asked to complete some questionnaires with some demographic questions, some "yes" or "no" questions, and a few brief open-ended questions. This survey should take about 10 minutes.

This research is anonymous. Anonymous means that I will record no information about you that could identify you. There will be no linkage between your identity and your response in the research. This means that I will not record your name, address, phone number, date of birth, etc. If you agree to take part in the study, you will be assigned a random code number that will be used on each questionnaire. Your name will not be collected. Therefore, data collection is anonymous.

The research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, the results are presented at a professional conference, or data sharing is need for future research or publications, all data will remain anonymous. All study data will be kept for at least three years.

There are no foreseeable risks to participation in this study. In addition, you may receive no direct benefit from taking part in this study.

To reduce distress, surveys are short. Volunteers can leave the study at any time by closing their browser. Volunteers can contact the researcher with any questions or concerns. If you do experience any distress, volunteers can use the APA locator to find a mental health provider in their area at http://locator.apa.org or call the national Suicide Prevention Lifeline (800-273-8255).

Participation in this study is voluntary. You may choose not to participate, and you may withdraw at any time during the study procedures. In addition, you may choose not to answer any questions with which you are not comfortable.

If you have any questions about the study or study procedures, you may contact myself or my faculty advisor:

Caitlin O'Donnell, Psy.M, M.Sc.　　Karen Riggs Skean, Psy.D.
Principal Investigator　　　　　　　Faculty Advisor
Rutgers University, GSAPP　　　　　Rutgers University, GSAPP
152 Frelinghuysen Rd　　　　　　　152 Frelinghuysen Rd
Piscataway, NJ 08854-8085　　　　　Piscataway, NJ 08854-8085
Email: Caitlin.odonnell@gsapp.rutgers.edu　　Email: kskean@connect.rutgers.edu

If you have any questions about your rights as a research subject, please contact an IRB Administrator at the Rutgers University, Arts and Sciences IRB:

Institutional Review Board
Rutgers University, the State University of New Jersey
Liberty Plaza / Suite 3200
335 George Street, 3rd Floor
New Brunswick, NJ 08901
Phone: 732-235-2866
Email: human-subjects@ored.rutgers.edu

Please retain a copy of this form for your records. By participating in the above-stated procedures, then you agree to participation in this study.

If you are 18 years of age or older, understand the statements above, and will consent to participate in the study, click on the "I Agree" button to begin the survey/experiment. If not, please click on the "I Do Not Agree" button with which you will exit this program.

APPENDIX B.

<u>CONSENT FORM</u> (PHASE 2)

You are invited to participate in a research study that is being conducted by Caitlin O'Donnell, who is a graduate student in the Graduate School of Applied and Professional Psychology at Rutgers University. The purpose of this research is to determine the relationship between adverse childhood experiences and wishes. You will be asked to complete some questionnaires with some demographic questions, some "yes" or "no" questions, and a few brief open-ended questions. This survey should take about 10 minutes.

This research is anonymous. Anonymous means that I will record no information about you that could identify you. There will be no linkage between your identity and your response in the research. This means that I will not record your name, address, phone number, date of birth, etc. If you agree to take part in the study, you will be assigned a random code number that will be used on each questionnaire. Your name will not be collected. Therefore, data collection is anonymous.

The research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, the results are presented at a professional conference, or data sharing is need for future research or publications, all data will remain anonymous. All study data will be kept for at least three years.

Some questions may be reminders of past adverse childhood experiences which may cause some distress. In addition, you may receive no direct benefit from taking part in this study. To reduce distress, surveys are short. Volunteers can leave the study at any time by closing their browser. Volunteers can contact the researcher with any questions or concerns. For any distress, volunteers can use the APA locator to find a mental health provider in their area at http://locator.apa.org or call the national Suicide Prevention Lifeline (800-273-8255)

Participation in this study is voluntary. You may choose not to participate, and you may withdraw at any time during the study procedures. In addition, you may choose not to answer any questions with which you are not comfortable.

If you have any questions about the study or study procedures, you may contact myself or my faculty advisor:

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Liberty Plaza / Suite 3200
335 George Street, 3rd Floor
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Please retain a copy of this form for your records. By participating in the above stated procedures, then you agree to participation in this study.

If you are 18 years of age or older, understand the statements above, and will consent to participate in the study, click on the "I Agree" button to begin the survey/experiment. If not, please click on the "I Do Not Agree" button with which you will exit this program.

APPENDIX C.

Debriefing Statement (PHASE 1)

Thank you for participating in our study!

Our survey assessed various wishes at different points in your life and your experience of remembering your wishes. From genie-in-a-bottle fables, to fairy tales, poetry, literature, music, TV, and psychotherapy, the concept of Three Wishes is imbedded in our cultural heritage. In the psychotherapeutic field, for decades, clinicians have asked clients about their wishes as meaningful sources of data. Asking about wishes is, in essence, a projective test. Responses can be analyzed for the expression of individuals' inner worlds. Although the use of wishes as a source of data is pervasive in the field, research, particularly in recent decades, is limited. Research findings have indicated differences in the content of wishes across age, gender, social economic status, and a variety of other indices. While various studies have pointed to the need for normative data on the contents of wishes, a standardized approach to analyzing wishes does not currently exist. This is a qualitative study and will research the themes in wishes, what these wishes might mean, and how remembering wishes from earlier stages of development is experienced.

If you are currently experiencing distress on completion of this study, you can use the APA locator to find a mental health provider in your area at http://locator.apa.org or call the national Suicide Prevention Lifeline (800-273-8255). Volunteers can also contact the researcher with any questions or concerns.

If you have any questions about this study or study procedures, you may contact myself Caitlin O'Donnell, Psy.M., M.Sc. (510-847-2112, Caitlin.odonnell@gsapp.rutgers.edu). You may also contact my faculty advisor, Karen Riggs Skean, Psy.D. (732-247-7489, kskean@connect.rutgers.edu).

If you have any questions about your rights as a research subject, please contact an IRB Administrator at the Arts and Sciences Institutional Review Board, Rutgers University by phone: 732-235-2866 or by email: Human-subjects@ored.rutgers.edu.

APPENDIX D

Debriefing Statement (PHASE 2)

Thank you for participating in our study!

Our survey assessed various wishes at different points in your life and your experience of adverse childhood experiences.

From genie-in-a-bottle fables, to fairy tales, poetry, literature, music, TV, and psychotherapy, the concept of Three Wishes is imbedded in our cultural heritage. In the psychotherapeutic field, for decades, clinicians have asked clients about their wishes as meaningful sources of data. Asking about wishes is, in essence, a projective test. Although the use of wishes as a source of data is pervasive in the field, research, particularly in recent decades, is limited. Research findings have indicated differences in the content of wishes across age, gender, social economic status, and a variety of other indices.

Despite its widespread use, no study to date has investigated the relationship of wishes to adverse childhood experiences. Adverse childhood experiences (ACEs) such as neglect and abuse have been specifically connected to later health problems such as obesity and depression. Understanding this easily accessible and already used projective tool, "Three Wishes," could be helpful for understanding the internal fantasy world of a population at risk for many later-life health and mental health problems. We then plan to evaluate the wish themes to look at possible differences in wishes at different developmental stages and differing frequency of types of adverse childhood experiences.

If you are currently experiencing distress on completion of this study you can use the APA locator to find a mental health provider in your area at http://locator.apa.org or call the national Suicide Prevention Lifeline (800-273-8255). Volunteers can also contact the researcher with any questions or concerns.

If you have any questions about this study or study procedures, you may contact myself, Caitlin O'Donnell, Psy.M., M.Sc., (510-847-2112, Caitlin.odonnell@gsapp.rutgers.edu). You may also contact my faculty advisor, Karen Riggs Skean, Psy.D. (732-247-7489, kskean@connect.rutgers.edu).

If you have any questions about your rights as a research subject, please contact an IRB Administrator at the Arts and Sciences Institutional Review Board, Rutgers University by phone: 732-235-9806 or by email: humansubjects@orsp.rutgers.edu.

APPENDIX E

Demographics

Age:

[▾]

Gender
○ Male
○ Female
○ Other
[   ]

Ethnicity
○ African-American
○ Asian
○ Caucasian
○ Hispanic/Latino/Spanish origin
○ Native Hawaiian/Pacific Islander
○ American Indian/Alaska Native
○ Arab
● Other
[   ]

Occupation
○ Student
○ Non-Student
[   ]

What is your social status relative to other members of the US population?
("1"=low social status "10"=high social status)

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

APPENDIX F

"If you could have three wishes, what would you wish for?"

1) _____
2) _____
3) _____

"If you were to reflect, to the best of your ability, on what you would have wished for in elementary school, what would your wish have been?"

_____

_____

"If you were to reflect, to the best of your ability, on what you would have wished for in middle school, what would your wish have been?"

_____

_____

"If you were to reflect, to the best of your ability, on what you would have wished for in high school, what would your wish have been?"

_____

_____

"How does it feel to remember your wishes?"

_____

_____

APPENDIX G.

Adverse Childhood Experience (ACE) Questionnaire
Finding your ACE Score ra hbr 10 24 06

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household **often** …
   Swear at you, insult you, put you down, or humiliate you?
   or
   Act in a way that made you afraid that you might be physically hurt?
   Yes   No   If yes enter 1   _____

2. Did a parent or other adult in the household **often** …
   Push, grab, slap, or throw something at you?
   or
   Ever hit you so hard that you had marks or were injured?
   Yes   No   If yes enter 1   _____

3. Did an adult or person at least 5 years older than you **ever**…
   Touch or fondle you or have you touch their body in a sexual way?
   or
   Try to or actually have oral, anal, or vaginal sex with you?
   Yes   No   If yes enter 1   _____

4. Did you **often** feel that …
   No one in your family loved you or thought you were important or special?
   or
   Your family didn't look out for each other, feel close to each other, or support each other?
   Yes   No   If yes enter 1   _____

5. Did you **often** feel that …
   You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?
   or
   Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
   Yes   No   If yes enter 1   _____

6. Were your parents **ever** separated or divorced?
   Yes   No   If yes enter 1   _____

7. Was your mother or stepmother:
   Often pushed, grabbed, slapped, or had something thrown at her?
   or
   Sometimes or often kicked, bitten, hit with a fist, or hit with something hard?
   or
   Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?
   Yes   No   If yes enter 1   _____

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
   Yes   No   If yes enter 1   _____

9. Was a household member depressed or mentally ill or did a household member attempt suicide?
   Yes   No   If yes enter 1   _____

10. Did a household member go to prison?
   Yes   No   If yes enter 1   _____

   Now add up your "Yes" answers: _____   This is your ACE Score

Additional Question: 11. Were you ever in foster care?