FORGIVENESS IN CHILDREN: THE CHILD/ADOLESCENT DISPOSITIONAL FORGIVENESS INVENTORY

By

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A THESIS PRESENTED TO THE GRADUATE SCHOOL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE

UNIVERSITY OF FLORIDA

2006
ACKNOWLEDGMENTS

I first wish to thank my family and friends who continually offer me support and have never failed to believe in me. They mean more to me than they know.

I am extremely grateful to my mother, Brenda Leever, for her dedication and helpful coordination efforts with this project. I would also like to thank my advisor, Dr. Ken Rice, for all of his time and wealth of statistical knowledge without which this project could not have been accomplished.
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August, 2006

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The current study investigated dispositional forgiveness in the child and adolescent population. Specifically, the factor structure, internal consistency reliability, and validity of a modified version of the Heartland Forgiveness Scale (HFS), entitled the Child/Adolescent Dispositional Forgiveness Inventory (CADFI), were examined in a sample of children and adolescents. Reliability coefficients were found to be adequate with this sample, and relationships with constructs of validity were found to be solid as well. In particular, the relationship of forgiveness with depressive symptoms (as measured by the Child Depression Inventory-Short Form; CSI-S), attributional style (as measured by the Children’s Attributional Style Questionnaire Revised; CASQ-R), and social desirability (as measured using the Lie Scale of the Revised Children’s Manifest Anxiety Scale) was explored. Results support relationships in the expected directions between forgiveness and the chosen measures. Internal consistency reliabilities were
reported for all scales and factor structure was also examined and a proposed two factor model provided. Directions for future research are included.
CHAPTER 1
INTRODUCTION

Though no clear-cut consensus exists among researchers as to the definition of forgiveness, most definitions include a key component of renouncing anger and resentment. Forgiveness of another does not necessarily involve reconciliation, though that may occur as part of the process (see Thompson & Snyder, 2003 for descriptions). McCullough et al. (1998) assert that forgiveness must include pro-social changes in motivation, and they provide criteria for distinguishing when these changes have occurred. Thus, they consider the important aspect to be forgiveness as a process involving interpersonal relationships. Thompson and Snyder (2003) and Thompson et al. (2005) emphasize that a forgiver relinquishes the negative attachment to a transgression, transgressor, or sequence of events involved in a transgression. Negative thoughts, feelings, or behaviors are all contained within the concept of negative attachment, with the eventual goal of forgiveness being a more positive or at least neutral reframing, which results in a weakening of the attachment. Hargrave and Sells’ (1997) conceptualization provides support within itself for the restorative, healthy component of forgiveness; they describe it as an effort to restore love and trustworthiness for relationships in order for victims and victimizers to put an end the cycle of destructive entitlement. Finally, Hill (2001) offers what seems to be one of the most encompassing and noteworthy descriptions, effectively articulating the essential depth of the forgiveness construct and the beneficial nature of forgiveness by describing it as being more of a discovery rather than an act of will.
Within the realm of dispositional measures, only one covers what appears to encompass the three main aspects of the forgiveness construct: the Heartland Forgiveness Scale (HFS), measuring Forgiveness of Self, Forgiveness of Others, and Forgiveness of Situations. These authors use a definition of forgiveness in which forgiveness occurs primarily through a weakening of the negative attachment to a transgressor, transgression, or some compilation of the two (Thompson & Snyder, 2003; Thompson et al., 2005). The negative attachment may then transform into positive or neutral, providing a mechanism for the forgiveness process to unfold.

A review of current forgiveness literature reveals that most researchers view forgiveness as adaptive (e.g. Mauger et al., 1992; McCullough, 2000; Thompson & Snyder, 2003; Thompson et al., 2005). Forgiveness has been linked to psychological health and well-being in general (e.g. Mauger et al, 1992; Enright, 2000; Scobie & Scobie, 2000; Worthington, Sandage, & Berry, 2000; Ripley & Worthington, 2002; Thompson & Snyder, 2003), while unforgiveness has been correlated with higher psychopathology (e.g. Mauger et al., 1992; Maltby, Macaskill, & Day, 2001; Worthington, Mazzeo, & Klewer, 2002). At the theoretical and philosophical level, forgiveness has been seen as evidence of one’s objectivity, a demonstration of acceptance of one’s embeddedness in the world and of freedom, with it forgiveness and self-forgiveness come (Cavell, 2003). Unforgiveness has not been clearly defined but typically has been thought of as a lack of forgiveness. Unforgiveness has been attributed to a lack of letting go of negative attachment to events, exemplified by behaviors such as repeated ruminations, or a pervasive negative affect. Attempts to reduce unforgiveness, often due to repeated ruminations, can lead to the presence of addictive behaviors and
psychological defense mechanisms. Unforgiveness, as part of a person’s internalized negative affect, may become detrimental both by causing addictive behaviors as well as by being a result of such addictive behaviors (Worthington et al., 2002). Contrarily, a handful of researchers believe forgiveness may not be beneficial because it may leave the forgiver open to further victimization or victim-blaming (e.g. Bass & Davis, 1994; Katz, Street, & Arias, 1997). However, the forgiving of others is not the only aspect of forgiveness argued to be beneficial. Witvliet, Ludwig, and Bauer (2002) demonstrated the powerfully beneficial aspects of being forgiven by a victim as well. After imagery conditions in which the subjects imagined being forgiven, significant improvements were reported by participants in basic emotions such as anger and sadness, moral emotions such as guilt, shame, gratitude and hope, as well as perceived interpersonal forgiveness (Witvliet et al., 2002). Discrepancies as to the beneficial nature of forgiveness exist mainly due to differences in the conceptualizations and definitions of forgiveness chosen.

Current research thoroughly conveys the multidimensionality of the construct of forgiveness. The typical notion that forgiveness only occurs from one person to another (interpersonally) has lead to a predominance of research examining transgression specific forgiveness, or the extent of one’s forgiveness specifically toward another person (e.g. Hargrave & Sells, 1997; Enright, Freedman, & Rique, 1998; Tangney et al., 1999; McCullough, 2000; McCullough et al., 2000; Witvliet et al., 2000; Wade & Worthington, 2003). Transgression specific forgiveness relates to a particular event, and therefore may not necessarily be predictive of a person’s willingness to forgive across situations and contexts. On the other hand, dispositional forgiveness measures attempt to remedy this limitation by emphasizing that the development of a forgiveness measure holding
predictive qualities remains key. Knowledge as to a person’s willingness to forgive across various circumstances and events reveals more about the presence of that trait within an overall person, viewing forgiveness more expansively.

Assessing dispositional forgiveness across contexts (e.g., Berry et al., 2001) provides a beneficial alternative to transgression specific assessments. Scores on measures of dispositional forgiveness tend to be specifically related to mental health and well-being, whereas scores on transgression specific measures do not tend to be (Thompson & Snyder, 2003). Furthermore, measures of forgiveness that are dispositional in nature, rather than event specific, provide a better basis for comparison with psychological correlates of the forgiveness construct (Thompson & Snyder, 2003). Dispositional forgiveness, as opposed to transgression specific forgiveness, offers a broader window into forgiveness as a whole, since it gives due credence to the multifaceted nature of the forgiveness.

The dispositional forgiveness construct falls within differing domains, or subscales. Forgiveness may occur *inter*personally, as exemplified through the transgression specific model, as well as *intra*personally, as revealed through one’s willingness to forgive oneself. More recently, interest has begun to arise in a third area of forgiveness, that of forgiveness of situations. Forgiveness of situations has been introduced as specifically a dispositional aspect of the forgiveness construct and has been assessed along with the previously established interpersonal and intrapersonal domains. Measures with reliable scores have been created to include forgiveness of oneself (Mauger et al., 1992; Worthington et al., 2002; Macaskill, Maltby, & Day, 2002) and forgiveness of others,
along with forgiveness of situations beyond the control of either self or others (Thompson & Snyder, 2003).

The distinction of a construct along interpersonal as well as intrapersonal lines leads to a better understanding of the depth of this construct of interest and a more specific view into its dimensional nature. The construct of forgiveness clearly contains interpersonal as well as intrapersonal components, existing as distinct yet related concepts. As would naturally seem to follow, the psychopathologies associated with forgiveness and unforgiveness appear along similar interpersonal and intrapersonal lines. A distinction in related pathologies exists depending on the type of forgiveness (or lack of) being assessed. Mauger’s Forgiveness of Self (FS) and Forgiveness of Others (FO) scales have been correlated with the Minnesota Multiphasic Personality Inventory (MMPI), revealing a significant association of failure to forgive with negative emotional states, such as depression, anxiety, anger/distrust, and negative self-esteem. Lack of forgiveness has also been specifically linked to eating disorders (Worthington et al., 2002). Personality factors have been found to highly correlate with dispositional forgiveness of both self and others in the expected directions, especially for the category of neuroticism versus emotional stability, in which lower levels of forgiveness related to higher neuroticism (Walker & Gorsuch, 2000). Failure to forgive self has been connected to more intra-punitive pathologies, such as anxiety and depression, while failure to forgive others has been associated with extra-punitive pathologies, such as social alienation, social introversion, depression, and psychoticism (Maltby, Macaskill, & Day, 2001). Mauger and colleagues (1992) also found deficits in forgiveness of self and
others to be related to higher amounts of overt psychopathologies, for example schizophrenia.

As is apparent, depression has been previously found to be a significant related pathology of failure to forgive self and others, and therefore depression may represent a manifestation of both intra- and extra-punitive forgiveness failures. That is, depression appears to be a main component of the ways in which failure to forgive may manifest and influence a person’s psychological well-being, and therefore depression is important to consider, theoretically and practically, in forgiveness research. As will be discussed, researchers who developed the Heartland Forgiveness Scale (HFS) report a similar relationship regarding the association of depression with lack of dispositional forgiveness, manifest as a significant negative correlation. Following this premise, the current study plans to examine correlation of the Child/Adolescent Dispositional Forgiveness Inventory with related constructs of interest such as a child measure of depression.

Developments in adult forgiveness research include broadening the scope of the forgiveness construct to be inclusive of forgiveness of self, forgiveness of others, and forgiveness of situations domains (i.e. Thompson et al., 2005). Evaluation of forgiveness, or lack thereof, has been increasing in emphasis on dispositional factors for measurement rather than specific event examples. The use of a dispositional measure lessens the difficulties and ambiguities of the relationship of forgiveness to similar psychological constructs. Correlations and conclusions made under a transgression specific framework by nature impose stricter circumstances under which forgiveness frequency and behavior may be predicted. Consistent with these trends, a main purpose of the current study was
to create a measure to meet the needs of the younger age range while retaining the integrity of the dispositional forgiveness construct and keeping up with current trends in this area of research. The creation of a dispositional measure of forgiveness appropriate for the child/adolescent population follows in the footsteps of previous adult dispositional measures, allowing for a dynamic insight into the nature of forgiveness across a broad age range. Such a measure is necessary to examine the psychological correlates of forgiveness across a broader age span, as well as to open examination of the possible developmental influences on this construct. The study of forgiveness development as a dispositional trait provides a means to possible illumination of implications this construct may have on later psychological functioning. Future research in this direction is predicated on having a useful dispositional measure of child/adolescent forgiveness available.
CHAPTER 2
LITERATURE REVIEW

Forgiveness and Forgiveness Measures

There has been much debate as to the conceptualization of forgiveness and its aspects. Most consider forgiveness of transgressions interpersonally to be the forgiveness representative. However, approaches to measuring forgiveness range from presenting events of specific transgressions hypothetically committed towards a respondent and asking their propensity to forgive such an event, to more broad statements intended to gauge one’s disposition to forgive things beyond one’s control.

Mauger and colleagues (1992) created the Forgiveness of Self (FS) and Forgiveness of Others (FO) scales, two 15-item scales endorsed as true-false by respondents. These scales provide a solid basis for emphasis and distinction of two different subtypes, which fall under the greater umbrella of the construct of forgiveness. These scales tap the failure to forgive others and failure to forgive oneself, which may more accurately characterize them as measures of unforgiveness than forgiveness. The Forgiveness of Others items revolve around “taking revenge, justifying retaliation and revenge, holding grudges, and seeing other people as apt to cause one hurt,” while forgiveness of self items involve “feelings of guilt over past acts, seeing oneself as sinful, and having a variety of negative attitudes towards yourself” (Mauger et al., 1992). These measures generally take the approach of measuring forgiveness from the negative standpoint, in that they appear to be tapping unforgiveness as indication of one’s lack of forgiveness of self or others, implying unforgiveness and forgiveness would exist on a continuum in which one is said
to have more or less forgiveness regardless of the negative or positive standpoint of the
measure.

In the transgression-specific vein, Enright and his colleagues developed the Enright
Forgiveness Inventory (EFI; Subkoviak et al., 1995) and the Willingness to Forgive scale
(WTF; Hebl & Enright, 1993). Enright subscribed to the mindset that forgiveness is
something that occurs between two people, excluding the idea of forgiveness of
situations. Thus, their definition is “a willingness to abandon one’s right to resentment,
negative judgment, and indifferent behavior toward one who unjustly hurt us, while
fostering the undeserved qualities of compassion, generosity, and even love toward him
or her” (Enright et al., 1998, pp. 46-47). This definition clearly exhibits the necessity for
benevolence in order for forgiveness to occur, and Enright and Zell (1989) also assert
that, “the fruition of forgiveness is entering into loving community with others” (p.99),
suggesting that reconciliation may be a part of forgiveness as well. The focus of this scale
is, again, one specific transgression. Though respondents are asked to respond to
hypothetical as well as one real situation, the narrow focus of a transgression-specific
scale makes the correlation of forgiveness with related psychological constructs.

The EFI consists of 60 items on a 6-point Likert scale assessing six forgiveness
dimensions including positive affect, behavior, and cognitions, and the lack of negative
affect, behavior and cognitions toward the offender. Respondents are supposed to think of
the most recent transgressor or transgression as such when responding to the specific
transgressions. The summed total of scores on the items of the subscales yields an overall
forgiveness score. Relatedly, the WTF is a 16-item scale intended to measure the
effectiveness of forgiveness as a therapeutic interpersonal intervention. The first 15 items
include specific scenarios, while the last item addresses the person’s specific transgression of focus. Respondents choose from ten responses to each scenario, one choice of which is forgiveness. The scale is scored based on how many times forgiveness is selected as a solution for when a person would respond with and prefer to respond with forgiveness to a hypothetical scenario, as well as respond with and prefer to respond with forgiveness to the real scenario.

Barry, Worthington, and colleagues also created the Transgression Narrative Test of Forgiveness (2001), a five scenario scale purported to measure the dispositional tendency to forgive interpersonal transgressions over time and across situations, which they term “forgivingness”. Participants read each scenario and respond using a 5-point Likert scale as to their likelihood of forgiving the transgression were they in that situation. The situations include two intentional transgressions by acquaintances, two negligent transgressions by friends, and one intentional transgression by a relative followed by an apology (Barry et al., 2001).

Others have taken the approach of developing a scale to measure the precise components of their definitions of forgiveness. Similarly to Enright, McCullough (2000) and colleagues (McCullough et al., 1998) conceptualize forgiveness as a construct emphasizing prosocial changes in motivations. Under their definition one specifically experiences decreased motivation to avoid personal and psychological contact with the offender, to seek revenge or to see harm come to the offender, and increased benevolence motivation toward the offender, implying that forgiveness of others is the basic component. Under this framework, again, forgiveness is emphasized as an interpersonal process rather than one that may occur intrapersonally.
McCullough et al.’s measure is the Transgression-Related Interpersonal Motivations Inventory (TRIM; 1998), consisting of 12 items on a 5-point Likert scale, with two subscales measuring two components of their definition, motivations to avoid contact, and motivations to seek revenge or see harm come to the transgressor. It does not however measure motivation toward benevolence, and as such appears to indicate mostly the negative aspects, namely unforgiveness, as representative of one’s lack of forgiveness, which is fairly similar to Mauger’s approach.

Hargrave and Sells (1997) also follow the idea of creating a scale to measure aspects of their specific definition. They offer a definition of forgiveness that includes the component of love, “effort in restoring love and trustworthiness to relationships so that victims and victimizers can put an end to destructive entitlement” (p.43). They assert two broader levels of forgiveness, exonerating (involving insight and understanding) and forgiving (involving the overt act of forgiving as well as giving the opportunity for compensation, meaning the ability for interactions with the transgressor in away perceived by that person as non-threatening and encouraging of emotional bonding).

The Hargrave and Sells (1997) Interpersonal Relationship Resolution scale (IRRS) taps forgiveness of a specific person who has causes hurt to the respondent. It consists of two scales, forgiveness and pain, and has 22 total items and four subscales including insight, understanding, giving the opportunity for compensation, and the overt act of forgiving.

Tangney and colleagues (1999) have developed another measure of forgiveness that does not include the components of love or compassion as necessary for forgiveness. Specifically, their lengthy definition mainly emphasizes that giving up the negative
emotions is what is sufficient to constitute forgiveness. Their measure, the Multidimensional Forgiveness Inventory (MFI), is a scenario-based approach to measuring forgiveness of self and others, which consists of 72 items on a 5-point Likert scale using 16 different transgression scenarios. There are nine subscales, including propensity to forgive others, propensity to forgive self, propensity to ask for forgiveness, time to forgive others, time to forgive self, propensity to blame others, propensity to blame self, sensitivity to hurt feelings, and anger-proneness. This transgression-specific measure attempts to tap many facets of forgiveness and includes both forgiveness of self and forgiveness of others components, creating a much wider scope under which to examine forgiveness through a transgression-specific lens. However, it is still that – transgression specific. Examination of the construct of forgiveness using specific descriptions of events still does not allow for a broader generalizability of forgiveness as attributed to the respondent as well as to be related to other psychological constructs.

The current study argues that the superior approach to measurement of forgiveness is both through a non transgression-specific framework, and is incorporative of the self, others, and situational components of the forgiveness construct, in line with Snyder and Yamhure Thompson’s definition of forgiveness:

We define forgiveness as the framing of a perceived transgression such that one’s attachment to the transgressor, transgression, and sequelae of the transgression is transformed from negative to neutral or positive. The source of a transgression, and therefore the object of forgiveness, may be oneself, another person or persons, or a situation that one views as being beyond anyone’s control (e.g. an illness, “fate”, or a natural disaster). (Thompson & Snyder, 2003, p. 302)

This definition appears as the broadest and most encompassing definition so far in that it includes the possibility of feeling transgressed upon in an impersonal manner, and
thus allows for the forgiveness of situations to exist as a distinct and important aspect of dispositional forgiveness. The authors’ most compelling argument for the understanding of forgiveness as dispositional rather than transgression-specific is the assertion that forgiveness itself occurs only *intra*personally. In other words, the target of forgiveness does not matter; it is the motivation and behavior of the forgiver that exemplify forgiveness dispositionally. This measure created by Yamhure Thompson and colleagues, the Heartland Forgiveness scale (HFS; Thompson et al., 2005) that measures forgiveness of self, others, and situations, is elaborated on in detail later in this section.

**Children and Adolescents**

The current breadth of literature in the area of dispositional forgiveness begs a more balanced examination of the forgiveness construct across a broader age range. The overwhelming majority of research on the construct of forgiveness focuses on adults. Identification of dispositional failures to forgive in adults inevitably points to the important question of developmental implications of forgiveness. In other words, the questions of whether a younger age range will exhibit similar forgiveness trends as adults, as well as how stable the construct may be with age are imperative to understanding how forgiveness develops. Future research in this direction requires a comprehensive scale of dispositional forgiveness appropriate for a younger age range. As well, a focus on children and adolescents using a dispositional, rather than event-specific, lens will help shed light on the developmental nature of the forgiveness construct.

Children’s understanding of the concept of forgiveness under different circumstances has been previously evaluated, and development of the concept of forgiveness is generally considered to occur at a young age. Darby and Schlenker (1982) evaluated children’s understanding of forgiveness and such adult social judgments by examining
child judgments when observing an actor apologizing. Using children’s reactions to apologies, children as young as kindergarten age were shown to be able to comprehend the major factors of importance (e.g., intentions, motives, apologies) for adult-like social judgment involving forgiveness, and younger children were found to exhibit similar judgments to older children (Darby & Schlenker, 1982). These apologies varied with respect to complexity and circumstances (i.e., intentional versus accidental transgression, good or bad motives, and high or low responsibility and consequences).

Though this study helps shed light on children’s abilities to wrap their minds, and hearts, around the construct of forgiveness, the experimental and transgression-specific nature of the study precludes dispositional insights into the children’s constructs of forgiveness in a more predictive sense, and across various dimensions. Forgiveness of others, though overwhelmingly the most frequently studied aspect of forgiveness, does not represent the whole of the forgiveness construct. Furthermore, transgression specificity limits the degree to which examination of the forgiveness construct as a whole can occur.

Park and Enright (1997) proposed and supported a developmental progression of the understanding of forgiveness with adolescents in Korea, using junior high students ages 13-14. Specifically, they outline the development from the most basic level, that of revengeful forgiveness – manifested as words or gestures indicating forgiveness while internal hostility may still exist and be openly expressed, to external forgiveness – in which external gestures indicate forgiveness but awareness exists of inner frustrations and continuing frustrations are suppressed, to the more advanced level, that of internal forgiveness - where one genuinely seeks to understand the motives and perspective of
the other person and reinterprets the event incorporating both perspectives. This last level is again said by the authors to arise out of the principles of beneficence and love. Though beneficence and love are generally articulated in the views of forgiveness, this model also add credence to the argument of Yamhure Thompson and Snyder, that forgiveness at the highest and most comprehensive level occur strictly intrapersonally, regardless of the target of forgiveness. This is to say that unforgiveness as a result of feeling transgressed upon is something that occurs within a person though may be a result of events from one’s self, another person, or a situation. Thus, motivation for forgiveness can only occur from within a person in the same manner. This intrapersonal emphasis seems to be exactly what Park and Enright have supported in their model, although their model focused upon forgiveness of others.

They also report a significant positive correlation between an adolescent’s understanding of forgiveness and age, meaning an adolescents’ understanding of forgiveness was significantly and positively associated with age; older adolescents were more forgiving than younger adolescents. This study also revealed that the higher the level of understanding of forgiveness, the more likely a person was to use a proactive restorative strategy in the actual conflictual relationship in the real life situation. The degree to which the offering of social support was a factor followed a similar pattern, in that the early adolescents appeared to be in transition to this pattern while the later ones seemed either deeply rooted in or transitioning out of social support as a factor. Thus, significance of social support seems to be related to level of understanding attained. Though narrow in scope and sample, this study shows that developmental trends exist in the concept of forgiveness. Developmental knowledge as well as measurement
understanding of forgiveness can in turn provide an important background for working with forgiveness in the clinical settings with any age range.

In the realm of clinical practice, models have begun to be established for forgiveness. Worthington and Wade (1999) have set forth a model incorporating forgiveness and its related areas, in which the personal attributes of the participants and of the relationship at hand before a transgression factor into the propensity and likelihood of forgiveness. First the person’s perception of the events take place, and their initial emotional reaction to the events occurs. Then interpersonally active responses such as revenge/retaliation, pro-relationship behavior, and perception of the offender’s response would occur as well as the interpersonally passive response of rumination. Within this model, an emotionally dissonant event may occur that changes one’s initial reaction to the event, leading to emotional dissonance. The authors assert that this aspect is crucial. “Underlying forgiveness is an emotional dissonant event. Thus, a victim’s ability to forgive will be influenced partially by his or her ability to comprehend and successfully resolve incompatible emotions, which is the core of the hypothesized construct of emotional intelligence” (Worthington & Wade, 1999, p. 395).

Other models of forgiveness have also been proposed within the psychotherapeutic context. Rosenak and Harnden (1992) describe a model in which, after an offensive event, victims experience hurt that leads to anger. After the realization and expression of hurt and anger comes an information gathering stage that occurs in therapy in which the client needs to glean more knowledge about the transgressor. This information is thought to promote a better understanding from that person’s perspective, leading to true empathy and in turn true forgiveness.
The Heartland Forgiveness Scale

In developing a dispositional forgiveness measure appropriate for children and adolescents, an existing well-rounded dispositional measure of forgiveness in the adult population was sought. Modeling after a reliable pre-existing adult measure of the same construct appears often as a useful approach to developing a complementary child/adolescent measure for a construct of interest, especially when there is a compelling reason to suspect construct equivalence between children and adults. For instance, in related areas of psychological constructs, the Child Adolescent Perfectionism Scale (CAPS; Flett et al., 2001) was modeled after the Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991) that had been developed for adults, and the Children’s Depression Inventory (CDI; Kovacs, 1985) was patterned after the framework of the Beck Depression Inventory (BDI; Beck & Steer, 1987). Similarly, the measure created in this study, the Child/Adolescent Dispositional Forgiveness Inventory (CADFI) was designed as an age-appropriate modification from the Heartland Forgiveness Scale (HFS), targeted for a younger age range.

The Heartland Forgiveness Scale (HFS; Thompson & Snyder, 2003) was chosen to serve as the model in this study mainly because of its encompassing nature for the construct of forgiveness. Under this framework, someone can be relieved of the negative attachment through transforming the negative cognitions, emotions, and/or behaviors to either neutral or positive, as well as through weakening the attachment by releasing the perception of a strong connection between oneself and the transgressor or transgression (Thompson & Snyder, 2003). This does not necessitate a forgetting of the event, nor preclude the person from taking any actions, legal or otherwise. The emphasis is on the valence of the attachment, and forgiveness is said to occur as long as the motivation does
not involve negative attachment (e.g., vengefulness). Instead, forgiveness is understood as a process “through which people synthesize their prior assumptions and the reality of the transgression into a new understanding of the transgression, transgressor, transgression sequelae, and potentially, of themselves, other people, or the world” (Thompson et al., 2005, p. 318). The authors are therefore unique in their perspective that only the shift from a negative to a neutral attachment is necessary and sufficient to constitute forgiveness, rather than needing empathy or compassion to be demonstrated.

The HFS was developed with adults to assess the dispositional tendency to forgive. The HFS includes 18 items, endorsed on a 7-point Likert Scale ranging from almost always false of me to almost always true of me. Subscales included in the HFS are forgiveness of self, forgiveness of others, and forgiveness of situations. Thus, for the current purposes of developing a multi-dimensional forgiveness measure for children and adolescents, this measure was considered the most comprehensive representational instrument for the dispositional nature of forgiveness. This measure of forgiveness was chosen because of its ability to tap interpersonal as well as intrapersonal forgiveness on a dispositional level across different contexts; the HFS is the only existing forgiveness scale which taps forgiveness of situations, one of the three main aspects of forgiveness (self, other, and situational forgiveness).

Adequate internal consistency reliability of HFS scores has been supported, with Cronbach coefficient alphas on the total scale ranging from .84 to .87, and alphas on the subscales ranging from .71 to .83. Test-retest reliability of the HFS, on the basis of a 3-week follow-up period, was .83 for the total score and ranged from .72 to .77 (Thompson & Snyder, 2003) for the subscales. The psychometric properties of the HFS have been
evaluated and adequately demonstrated with student and nonstudent samples. The HFS has been found to correlate in the expected directions with other dispositional measures of forgiveness as well as measures of related psychological constructs. The HFS shows a large positive correlation with the FS and FO scales, a smaller positive correlation with the WTF scale, and a moderate/medium correlation with the MFI (Thompson & Snyder, 2003). The forgiveness of others subscale of the HFS is significantly negatively correlated with one measure of forgiveness of a specific transgression, the TRIM, which measures forgiveness of a transgression done specifically by another person (higher scores mean higher levels of unforgiveness). The HFS was also found to significantly positively correlate with the EFI transgression-specific measure. The HFS was not significantly correlated with the IRRS, a measure of forgiveness towards a specific person. Overall, the HFS has demonstrated much higher correlation with the dispositional measures of forgiveness than the transgression-specific measures, although positive correlation was found with all measures of forgiveness examined (Thompson, et al., 2005).

The HFS was found to negatively correlate with scores on measures of some related constructs as well. Yamhure Thompson and colleagues (2005) also found moderately large negative correlations of the HFS with the Hostile Automatic Thoughts scale, the rumination subscale of the Response Style Questionnaire (Thompson et al., 2005), and the Beck Depression Inventory (Thompson & Snyder, 2003) as well as the Vengeance Scale (Stuckless & Goranson, 1992), and the negative affect of the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988). Since forgiveness involves transforming mental energy away from negative behaviors and thoughts, it makes logical
sense that such constructs as negative affect, vengeance, and rumination leading to feeling depressed would correlate negatively with the HFS forgiveness measure.

The HFS was also evaluated to determine its predictive power of forgiveness in romantic relationships. Participants were given the HFS as well as measures of hostility, trust, relationship satisfaction, and relationship duration once and again nine months later. Forgiveness as evaluated by the HFS was revealed as a stronger predictor of relationship satisfaction than hostility, and satisfaction was also significantly predicted by how trusting the person was of their partner and their perception of how trusting their partner was of them (Thompson & Snyder, 2003, Thompson et al., 2005). All of these studies support the premise that the HFS is a reliable, valid, and useful measure for evaluating the dispositional tendency to grant forgiveness of self, others, and across situations.

Basing a children’s measure of forgiveness on such a structurally and theoretically supported measure as the HFS, which is defining current forgiveness research trends, provides a sound foundation for examining forgiveness dispositionally with children. Introducing a dispositional measure of forgiveness that is appropriate for children and adolescents, when supported by adequate psychometric characteristics, contributes significantly to the forgiveness literature by permitting future multidimensional, dispositional forgiveness research with participants of a developmentally wider age range than has historically been studied.

Research Questions and Hypotheses

Many parallels between the HFS and CADFI were expected. Specifically, it was expected that the factor structure of the CADFI would reflect the HFS structure because the CADFI will retain item content integrity of the HFS that is simply adjusted to be at a lower, age-appropriate reading level. The underlying constructs of dispositional
forgiveness as evaluated by assessing forgiveness of self, forgiveness of others, and forgiveness of situations were not expected to differ significantly for younger people.

It was expected that acceptable levels of internal consistency reliability and validity would be reached, similar to the range of such alpha coefficients reported for the HFS.

The HFS has been positively correlated with scores from the Cognitive Flexibility Scale (Martin & Rubin, 1995), the Dyadic Trust Scale (Larzelere & Huston, 1980), and the distraction subscale of the Response Style Questionnaire (Nolen-Hoeksema & Morrow, 1991). These measures are appropriate for adults but would not be appropriate for children. Fortunately similar instruments have been developed for the childhood age range and were targeted for validity purposes in the current study. Specifically, the Children’s Attributional Style Questionnaire-Revised (CASQ-R; Kaslow & Nolen-Hoeksema, 1991) was used to assess the relation of the CADFI to styles of cognitive attribution or explanation of positive and negative events, and the Children’s Depression Inventory (CDI; Kovacs, 1985) measuring depressive symptoms was also administered as an expected negative correlate of CADFI scores.

Though the dimensions of the CASQ-R (global-specific, internal-external, and stable-unstable) differ from the adult measure, higher levels of depression have been found for those whose scores reflect a higher depressive attributional style, which on the CASQ-R appears as more frequent endorsement of internal, stable, and global items for negative events, and external, specific, and unstable items for positive events (Gladstone & Kaslow, 1995; Thompson, Kaslow, Weiss, & Nolen-Hoeksema, 1998). In fact, Gladstone and Kaslow (1995) report a negative correlation between the CASQ-R and the Vanderbilt Depression Inventory (VDI) in non-clinical samples, indicating that the higher the
depressive symptoms reported the more depressive the attributional style. It was therefore expected in the current study that higher scores on the CDI would correlate similarly with depressive attributional style, as well as lower levels of forgiveness (low scores on the CADFI).

Sex differences were not expected to differ significantly with regard to CADFI scores.

**Social Desirability**

As was introduced by Crowne and Marlowe (1960; Marlowe & Crowne, 1961), a tendency exists for respondents to report more socially desirable responses as a result of being influenced by other factors besides the content of measures administered. Initially, the bulk of the social desirability research fell within the adult age range. Crandall, Crandall, and Katkovsky (1965) expanded social desirability research by developing the Children’s Social Desirability (CSD) questionnaires for a younger age range, targeting children and adolescents. Social desirability has also been incorporated into measure of other psychological constructs as well. Specifically, the Children’s Manifest Anxiety Scale (CMAS; Castenada, McCandless, & Palermo, 1956) and the Revised Children’s Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1978) exemplify self-report measures developed with the intent of measuring characteristics and manifestations of anxiety in children, and include a Lie subscale specifically intended to address social desirability.

Social desirability measures were established to evaluate increased predictability that a respondent would endorse a higher degree of socially desirable responses on a measure. Younger children, girls, non-white children, and less intelligent children have previously been found to endorse socially desirable responses more frequently (Crandall et al., 1965;
Shriberg, 1974). These findings have been replicated and validated by Klein, Gould, and Corey (1969), who found that younger children of both sexes had higher social desirability scores than older children, and that this tendency was most marked when respondents were younger than 11 years old. Moreover, they suggested this pattern reflects an emergence of adult approval motivations in children beginning as young as 11 years old (Klein, Gould, & Corey, 1969).

Considering these variables, especially the finding that younger more than older children report socially desirable answers, the inclusion of a social desirability measure in the current study was necessary in order to ascertain whether answers regarding dispositional forgiveness, as well as depression and attributional style, may be influenced by factors other than substantive content. The current study employed the Lie subscale of the RCMAS in order to address social desirability, while also keeping the number of total items in the battery within reasonable length for efficient administration.
CHAPTER 3
METHODS

Participants

The total sample (N = 96) of participants consisted of boys and girls ages 8-17, with the majority of the sample falling between the ages of 9 and 11 years old (77% of the sample). The distribution of ages consisted of one 8-year old, twenty-one 9-year olds, thirty 10-year olds, twenty-three 11-year olds, five 12-year olds, one 13-year old, two 14-year olds, five 15-year olds, three 16-year olds, and one 17-year old (four participants failed to report age). Sixty-five percent of the sample was female; ethnic background of the sample was approximately 49% White, 20% Hispanic, 16% Asian, and 11% African American. Consent forms were distributed to children attending public elementary schools in a southern Florida county (approx. 86% of the sample), as well as a private school within a central Florida County (approx. 14% of the sample). Response rate was approximately 48%. The majority of the sample was representative of the population sampled; the majority of the participants (73%) came from the fourth and fifth grades of an elementary school with the following population demographics for those grades: 44% male, 65% White, 11% African American, 10% Hispanic, and 2% Asian.

Rationale for inclusion of children and adolescents was twofold. Focus on children/adolescents a) helps balance the level of attention given to forgiveness research between adults and children, considering the comparative dearth of child/adolescent research in the area, and b) provides context for future exploration of conception and dispositional expression of the forgiveness construct with age.
Given that a predetermined theory existed, confirmatory factor analysis (CFA) was initially utilized and the sample size guidelines for such analysis were targeted. Thompson (2004), asserts that CFA necessitates a participant pool of 10-20 people per measured variable, with no less than five per variable (Gorsuch, 1983). Eighteen measured variables existed for the CADFI, therefore the necessary sample size needed to be at least 90 (Bentler, 1990; Thompson, 2004).

Procedure

Recruitment of participants occurred from public schools, as well as after school programs in two Florida communities. Testing occurred in small groups within the school settings. For the purposes of paralleling administration method of the CADFI with the HFS, as well as for higher internal consistency in the study, the items of the measure were not read aloud to the participants, but were distributed for self-evaluation. Every participant was given sufficient and similar amounts of time to complete the measures, and most finished within 20-30 minutes. In order to avoid sequencing effects, the measures included in the battery were counterbalanced, resulting in four different sequences of forms. Lastly, a small sub sample of participants was briefly interviewed for qualitative responses to questions indicative of forgiveness (see Appendix B). Respondents were selected due to interview availability (i.e. were accessible in after-school program or otherwise), were asked all questions and prompts, and their responses were recorded.

Measures

The CADFI consists of 18 items, the CDI-S consists of 10 items, and the CASQ-R includes 24 items. Therefore, there will be a total of 52 items administered for all three scales included in the study to assess the reliability and validity of the new measure. The
Lie scale of the RCMAS (9 items) was included in order to address social desirability concerns, bringing the total number of items in the battery to 61.

Child/Adolescent Dispositional Forgiveness Inventory (CADFI)

This measure was based upon the content of the adult HFS items, tailored to meet the readability and developmental needs of the younger child/adolescent population. This inventory contained three (3) subscales: Forgiveness of Self, Forgiveness of Others, and Forgiveness of Situations. Six (6) items comprised each subscale, for a total of 18 items. The same number of negatively worded items remained as in the HFS (nine). The HFS has a general readability level of 6.3 (Flesch-Kincaid), meaning it is most appropriate for those with at least a sixth grade reading level, and a reading Ease rating of 73.0. The CADFI measure has a readability level of 4.8, with an ease rating of 81.9.

Children’s Attributional Style Questionnaire-Revised (CASQ-R)

The CASQ-R (Kaslow & Nolen-Hoeksema, 1991) evaluates a child’s causal associations for positive and negative life events. Twenty-four forced choice response items consist of presentation of a hypothetical situation followed by two statements regarding why the event happened, and children are asked to choose which of the statements they feel represents how they would typically respond. An equal number of items address both positive and negative events. Three dimensions are reflected within the measure: internal-external, stable-unstable, and global-specific. Composite, negative, and positive scores are calculated, and a lower composite score reflects a more depressive attributional style. The CASQ-R taps attributional style in children, a construct found to relate to forgiveness and negative affect as examined using the Response Styles Questionnaire (Nolen-Hoeksema & Morrow, 1991) for adults.
The CASQ-R is a condensed version of the Child Attributional Style Questionnaire (CASQ; Seligman, Peterson, Kaslow, Tanenbaum, Alloy & Abramson, 1984), which originally contained 48 items. Understanding that the CASQ was often being used as part of a larger battery of measures, the authors responded with the CASQ-R, a scale of more practical utility considering its general use with children, who often have shorter attention spans (Thompson, et al., 1998). The scale is appropriate for an age range of 9-12 years. Through extensive psychometric analysis, Thompson et al. (1998) revealed adequate internal consistency reliability; being reliable for both boys (alpha = .58) and girls (alpha = .63), as well as older (12-14 years old; alpha = .58) and younger children (9-11 years old; alpha = .64). No significant differences were found in criterion related validity among boys and girls or among younger and older children (Thompson et al., 1998).

Previous research has revealed the relationship of attributional and response styles with rumination and depressive symptoms. In terms of concurrent validity, comparisons between scores on the CASQ-R and measures of depression have indicated that children reporting greater numbers of depressive symptoms tend to attribute events to internal causes, and consider them to be fairly stable over time, as well as generalizable across situations (Gladstone & Kaslow, 1995; Thompson, et al., 1998). On the CASQ-R this is reflected as higher scores on the internal rather than external (e.g. would respond to the statement “You get a bad grade in school” with “I am not a good student”, rather than “Teachers give hard tests”), stable rather than unstable (e.g. “You do not get your chores done at home” would elicit the response “Many days I am lazy” rather than “I was lazy that day”), and global rather than specific dimensions (e.g. “You go to an amusement
park and you have a good time”, would elicit “I usually enjoy myself in many activities” instead of “I usually enjoy myself at amusement parks”), respectively.

**Children’s Depression Inventory-Short form (CDI-S)**

The CDI-S (Kovacs, 1985, 1992) has 10 items, each consisting of three response choices. The child/adolescent will be instructed to select one of the three sentences for each item that best describes him or her over the past two weeks. Higher scores indicate higher levels of depressive symptoms. The CDI-S is a short form measure that includes 10 of the 27 items of the original CDI, intended to assess depressive symptomatology under circumstances when the time with a child may be limited or a quick screening measure is desired. The CDI-S correlates at the .89 level with the long version of the CDI (Kovacs, 1992), which has demonstrated adequate internal consistency (α = .71 to .89), test-retest reliability (r = .74 to .83), and convergent and divergent validity (Kovacs, 1992). The CDI is appropriate for children 7-17 years of age.

The CDI was selected specifically because of its construct equivalence and item similarity with the Beck Depression Inventory (BDI) for adults. The BDI was found to negatively correlate with the HFS, a dispositional measure of willingness to forgive. Thus, the CDI-S was expected to yield similar negative correlations with the CADFI.

**Lie Scale from the Revised Children’s Manifest Anxiety Scale (RCMAS)**

The 9 items from the Lie subscale of the RCMAS (Reynolds & Richmond, 1978, 1985) were used to measure social desirability. The Lie subscale was developed from the original CMAS subscale called the What I Think and Feel (WITF) subscale (Castaneda, McCandless, & Palermo, 1956). These items are self-report format in which children are asked to respond to a series of statements regarding themselves (e.g., “I am always kind”, or “I never get angry”) with either “Yes” or “No”. High scores on the Lie scale indicate
higher social desirability (7 or above is considered high), or a higher tendency to present oneself in a favorable light. As was asserted by Reynolds and Richmond (1985), and has been confirmed using extensive factor analysis, the Lie scale constitutes its own factor (or two related factors distinct from the anxiety factors according to Reynolds & Paget, 1981), apart from the anxiety factors onto which the rest of the items load (Stark & Laurent, 2001). The concurrent validity of the RCMAS lie scale has also been examined and supported by relationship with the Marlowe-Crowne Social Desirability Scale (Hagborg, 1991a) and has been subsequently used as a measure upon itself of social desirability (Hagborg, 1991b). The RCMAS has impressive test-retest reliability estimates as well, as confirmed by Pela and Reynolds (1982) (\( r = .94 \) for the Lie scale).

The current study included only the items from the Lie scale for use in assessing socially desirable response tendencies. Like most other social desirability measures, Lie scores of the RCMAS have been found to be higher for younger rather than older children (Pina, Silverman, Saavedra, & Weems, 2001). No significant sex differences were generally found for the Lie scale (Dadds, Perrin, & Yule, 1998; Pina, et al., 2001).
CHAPTER 4
RESULTS

Instrument

The Child/Adolescent Dispositional Forgiveness Inventory (CADFI) was modeled after the HFS. The items of the CADFI consisted of modified wording of the HFS items in order to reach appropriate reading level for children as young as fourth grade, thus the same number of total items as well as items within each subscale was retained. The same numbers of positively and negatively worded items were represented in the CADFI as are within the HFS; nine of each valence.

Descriptive Statistics

In the current sample, scores on the CDI-S ranged from 0 to 15, $M = 3.5, SD = 3.49$. Scores on the CASQ-R positive composite ranged from 0 to 24, $M = 15.86, SD = 4.00$, from 0 to 16 for the negative composite, $M = 7.6, SD = 3.57$, and -8 to 24 on the overall composite, $M = 8.22, SD = 7.06$. Scores on the CADFI ranged from 30 to 68, $M = 47.2, SD = 8.2$ for the total score, 8 to 30, $M = 21.4, SD = 4.4$ for the positively worded CADFI scale, and 8 to 38, $M = 22.1, SD = 6.37$ for the negatively worded CADFI scale. Lie scale scores ranged from 0 to 9, $M = 3.09, SD = 2.55$. Eleven participants scored 7 or greater on the Lie scale, considered high scores by the scale’s authors (Reynolds & Richmond, 1985).

Analyses

Factor analysis was used to examine the proposed model. Cronbach’s coefficient alphas were determined and reported for all scales and subscales of the measures. To
examine discriminant validity, correlation analyses were used to assess the relationship of the CADFI scores to other measures known to relate to forgiveness: namely, the CDI-S, the CASQ-R, and the Lie scale of the RCMAS.

Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) was proposed with this study for three main purposes: to test the overall adequacy of the specified measurement model; to determine the adequacy with which items indicate intended factors, and to empirically inform any decisions regarding scale revisions or further analyses. According to Thompson (2004), CFA proves more useful when there is a presupposed theory and a model exists because (a) the theory is directly tested in CFA analysis, and (b) the degree of the model fit can be quantified in a variety of useful ways. The set of factor scores generated through CFA remains useful in subsequent analyses of data and constructs regardless of the outcome of the analyses. Although confirmatory factor analysis requires having a theoretical model at hand, in this case a proposed three factor structure, it is generally asserted that the testing of rival models in CFA remains a necessary step, as the possibility exists that several models could fit a given data set (Thompson, 2004).

The proposed model in which three factors were specified (self, others, and situations) using the corresponding items for each subscale proved to be less than adequate. Confirmatory factor analyses revealed poor fit indices (e.g. Comparative Fit Index = .51), and did not meaningfully converge on an interpretable model. Given that significant problems were encountered in attempting to fit the initial solution and no clear indication of the best direction for item or factor revision was available, exploratory factor analysis was selected as most appropriate for these data.
Exploratory Factor Analysis

In order to examine the suitability of the sample data for factor analysis, the correlation matrix was scanned for the presence of correlations at .30 or greater, and Bartlett’s test of sphericity was determined (which should be significant at \( p < .05 \)), and the Kaiser-Meyer-Olkin (KMO) value found (should be .6 or above if suitable). In the current sample, correlations of .30 or higher were found, Bartlett’s test of sphericity was significant (\( p = .000 \)), and the KMO value equaled .627, therefore the suitability of the data for factor analyses was supported.

In each analysis, principal axis factoring was performed and oblique rotations using the Promax procedure were conducted. Promax factoring allows for the model factors to be correlated, and was chosen because it was expected that each of the underlying factors would be related to the overall factor of forgiveness and so would be correlated. Eigenvalues and pattern coefficients were examined to determine factor and item retention, looking for ‘simple structure’ in which each of the variables loads strongly on only one factor and each factor is represented by a number of strongly loading variables (Thurstone, 1947). Items were retained if pattern coefficients were .30 or greater for no more than one factor, and item-total correlations were positive. Subsequent factor analyses were conducted after item deletions until the criteria for retention was upheld for all factors and the eigenvalues of retained factors were at least 1.0 as recommended by Kaiser (1960). Subscales were identified using all items remaining for each factor.

Three Factor Model

In the first analysis of the complete 18 item CADFI, seven factors meeting Kaiser’s criterion of eigenvalues greater than one emerged, and combined to account for 69% of the variance. These eigenvalues ranged from 3.41 to 1.04. Catell’s scree test (Catell,
1966) was also used, which recommends looking for a point at which the shape of the curve changes to become more horizontal, then retaining only factors before that change (or elbow) as they are considered to contribute most to the explanation of variance. The elbow in the current plot appeared to occur at the three factor mark, and this three factor model accounted for 41.8% of the variance. The results of an oblique rotation yield both a Factor Structure matrix, indicating the correlation between each of the measures and the factors extracted, and a Factor Pattern matrix, indicating the independent relationship between each measure and the factors, similar to typical regression coefficients where factors are used as predictors of each measure (Russell, 2002). The pattern coefficients were used in making item retention decisions, given that they are the most useful in interpreting the meaning of factors (Russell, 2002). In examining the pattern coefficients, item retention criteria consisted of loading .30 or greater onto one factor and a positive item-total correlation. In the first run, for example, item 11 did not load more than .30 on any of the three factors, so was selected for deletion and item 12 loaded more than .30 on factor one and two, and so was selected for deletion as it was considered nondistinct.

Several factor analyses were conducted using the criteria for item retention, resulting in items 1, 8, 11, and 12 being selected for deletion. Three factors were indicated in this model, having eigenvalues of 1.38, 2.32, and 3.09, accounting for 48.4% of the variance. However, the items within these three factors were not clearly delineated along lines of self, others, and situations. Factor one consisted of items 2, 4, 6, 15, and 17, which reflected forgiveness of self with three of the items but also included two situation items. The second factor contained the most items (3, 5, 10, 14, 16, and 18), and included items initially considered to be situations items as well as two forgiveness of self items. The
third factor consisted of three items total, items 7, 9, and 13. Two of these items reflected forgiveness of others, but the other reflected forgiveness of situations. Given that this three factor model was inexplicable along theoretical lines, parallel analysis was conducted to explore the meaningful factors to support.

Parallel Analysis

Many have called into question the traditional Kaiser’s eigenvalue-greater-than-one criterion for factor retention, asserting that it often retains too many factors (i.e. Lautenschlager, 1989; Russell, 2002). Monte Carlo parallel analysis, initially put forth by Horn (1965) as an adaptation to Kaiser’s criterion has as its rationale that “meaningful” components from actual sample data should have eigenvalues greater than those of random data generated to be similar to the sample data in size and number of variables (Lautenschlager, 1989). Due to the importance of examining disconfirmability in confirmatory factor analysis, parallel analysis was utilized in the current sample as a comparison for suggested factor retention.

Using the Monte Carlo parallel analysis program, simulated eigenvalues were generated for random data with similar sample size and number of variables as the current sample data set. Simulated eigenvalues generated by parallel analysis ranged from 1.83 to 0.39, while actual sample eigenvalues ranged from 3.41 to 0.25. Parallel analysis suggests factor retention when actual eigenvalues of factors are larger than the simulated eigenvalues, essentially indicating the meaningful factors to retain. In the current sample, parallel analysis suggested retention of two significant factors (simulated values were 1.83 and 1.66, while actual eigenvalues were 3.41 and 2.70). Following the parallel analysis a two factor model was then examined with the current data set using the same criteria as before indicated.
Two Factor Model

The first factor analysis using the two-factor model resulted in eigenvalues of 3.41 and 2.69 for the two factors, and accounted for 33.9% of the variance. Item 1 again was selected for deletion due to a negative correlation, and item 11 was not found to load significantly onto any of the factors so was also selected. When items 1 and 11 were deleted, the eigenvalues of the two factors were 3.25 and 2.44, accounting for 35.6% of the variance. Item 12 did not have a value of .3 or higher for either factor, so was not retained. Next factor analysis included all items except items 1, 11, and 12 and accounted for 36.7% of the variance. Item 8 then did not load significantly onto either factor and so was not retained. The final factor analysis included all items except 1, 8, 11, and 12, and accounted for 38.6% of the variance (see Appendix A for pattern coefficients).

Upon examination of retained items and factors, it became apparent that the factors were clearly representing the underlying item valence for positively and negatively worded items. Items 2, 4, 6, 7, 9, 13, 15, and 17 represented the factor of negatively worded items in this model, or items that have been suggested to tap unforgiveness aspects (Thompson et al., 2005), while items 3, 5, 10, 14, 16, and 18 represented a factor of positively worded items, tapping forgiveness itself. The simple structure of this two-factor model, the clarity provided by the underlying factor distinction based on the valence of the item wording, and the strong parallel analysis support of two factors all contributed to the strength and acceptability of this model. Both the two and three factor models suggested the same problematic items, lending further support for item deletions. The two-factor model was more clearly reported and explained due to the clear delineation of factors along the lines of item wording valence and was retained as the strongest model of the current data.
Pilot label descriptors for the factors and corresponding scales found above in the two-factor model suggested qualitative differences as well. The factor comprised of negatively worded items suggested labels of unforgiveness, harsh expectations/standards, high expectations for perfection, and unrealistic expectations for environment, whereas the factor comprised of positively worded items suggested a label of forgiveness, life lessons, and acceptance of lack of control over events. Label suggestions for the concept that embodies the negatively worded items appears not to simply be the lack of the embodiment of the positively worded factor items, as would be anticipated if the items reflected merely opposing points on the same continuum.

Internal Consistency

Cronbach’s coefficient alpha was calculated to measure the internal consistency of the final CADFI scale score (see Appendix A) and each of the subscale scores. Alpha levels for the HFS were .84-.87 for the total scale and .71-.83 for the subscales (Yamhure Thompson & Snyder, 2003). Coefficient alphas for the current sample were .71 for the total CADFI, .74 for the unforgiveness (negatively-worded items) subscale, and .67 for the forgiveness (positively-worded items) subscale. Alphas for all other scales fell within acceptable range; α = .82 for the CDI-S, α = .80 for the Lie scale, and K-R 20s for the CASQ-R positive and negative composite scores were .72 and .65, respectively.

Convergent, Discriminant, and Construct Validity

Convergent and divergent validity of CADFI scores were examined using correlation analyses. Correlation with child measures previously found to have a relationship with the HFS offered the best options for validity examination with the CADFI. Previous research has found the HFS to be significantly negatively correlated with the Hostile Automatic Thoughts scale (Snyder, Crowson, Houston, Kurylo, & Poirier, 1997), the
rumination subscale of the Response Style Questionnaire (Nolen-Hoeksema & Morrow, 1991), and the Beck Depression Inventory (Beck & Steer, 1987).

The current study examined the relationship of forgiveness, as represented by CADFI scores, with depressive symptoms using the CDI-S, negative (or depressive) attributional response style using the CASQ-R, and social desirability using the Lie scale of the RCMAS. It was expected that the CADFI would negatively correlate with the CDI-S, as well as the negative composite score of the CASQ-R, measuring depressive attributional style. Both were found to significantly and negatively correlate with CADFI scores, \( r = -.58 \) and \( r = -.52, p < .001 \), respectively. It was also expected that the CADFI would positively correlate with the positive composite of the CASQ-R, as well as the total CASQ-R, which reflects healthy (rather than depressive) attributional style. Scores on the CADFI were indeed found to be significantly positively related to the positive composite of the CASQ-R, \( r = .41 \), as well as the total CASQ-R, \( r = .50 \), with \( p < .001 \) for both (see Table 1 for all correlations). Interestingly, the correlation of CADFI scores for the forgiveness (positively-worded items) and unforgiveness (negatively-worded items) subscales did not reach significance, \( r = .11, p < .30 \), indicating the subscales appear as distinct constructs rather than as significantly related to each other.

No significant effects emerged for measurement sequence or sex differences. However, a moderately significant negative correlation, \( r = -.26, p < .05 \), was found for CADFI scores with age, in that younger participants reported higher total forgiveness levels.

It was expected that findings would hold when controlling for social desirability, indicated by scores on the Lie scale of the RCMAS. Lie scale scores were found to be
significantly positively correlated with scores on the CADFI, indicating higher social desirability was related to higher forgiveness scores, $r = .31, p < .001$. Correlations remained significant at the $p < .001$ level in the expected directions when controlling for social desirability, $r = -.54$ for CDI-S, $r = -.46$ for negative CASQ-R, $r = .34$ for positive CASQ-R, and $r = .43$ for overall CASQ-R scores, demonstrating moderate to medium effect sizes (Cohen, 1988) for all relationships examined.

Table 1
Correlations Between All Scale and Subscale Scores

<table>
<thead>
<tr>
<th></th>
<th>CDI-S</th>
<th>CASQ-R</th>
<th>Negative CASQ-R subscale</th>
<th>Positive CASQ-R subscale</th>
<th>CADFI Total</th>
<th>CADFI Negatively worded items</th>
<th>CADFI Positively worded items</th>
<th>Lie Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDI-S</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CASQ-R</td>
<td>- .59**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative CASQ-R subscale</td>
<td>.60**</td>
<td>- .93**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive CASQ-R subscale</td>
<td>-.51**</td>
<td>.94**</td>
<td>-.74**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CADFI Total</td>
<td>-.58**</td>
<td>.50**</td>
<td>-.52**</td>
<td>.41**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADFI Negatively worded items</td>
<td>.53**</td>
<td>-.46**</td>
<td>.45**</td>
<td>-.41**</td>
<td>-.84**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADFI Positively worded items</td>
<td>-.32**</td>
<td>.26*</td>
<td>-.31**</td>
<td>.19</td>
<td>.63**</td>
<td>.11</td>
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<td>-.42**</td>
<td>.38**</td>
<td>.31**</td>
<td>-.27**</td>
<td>.20</td>
<td>1.00</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

**Qualitative Responses**

Nine children selected at random provided qualitative answers to questions on forgiveness (see Appendix C for responses) of self, of others, and of situations. Of these
nine respondents, three of them scored 7 or higher on the Lie scale (top 11% of sample), indicating social desirability may significantly influence their responses. Two of the respondents scored a 10 or higher on the CDI-S (top 6% of the sample), and those same two participants scored 6 or below on the CASQ-R (lower 42% of sample).

Of the nine respondents first asked, “Is it hard for you to accept yourself when you mess up?” three said no, four stated that sometimes it was, and one definitely said yes. When next asked “Do you stay upset with others who have hurt you?” four indicated “No” outright, one said “Not Really,” two said “Sometimes” and one said “Yes.” Finally, when asked “Is it hard for you to accept negative things that are not anyone’s fault?” four stated unequivocally no, one indicated a qualified yes by saying “It’s kinda hard,” and three said yes outright—that it was hard to accept.

Interestingly, though the words “forgive” or “forgiveness” were intentionally not used in the qualitative questions and prompts, two of the respondents used such words in their responses, both when asked what they do when hurt by others. One respondent who answered “Forgive them” correspondingly scored in the top 8% on the CADFI scale, zero on the CDI-S (lower 20%), and only one on the Lie scale (lower 35%). The other respondent clearly stating “I forgave them” scored in the upper 36% on the CADFI, the top 20% on the CASQ-R, and the lower 48% on the CDI-S, but scored in the top 2% on the Lie scale, indicating fairly significant social desirability influence.

Respondents typically could and would provide an example for forgiveness of self, others, and situations when asked, however one participant exhibited high reluctance to give examples, instead offering “Yes” or “No” as sufficient responses. This respondent was one of the two who also scored especially high on the CDI-S scale (and low on
CASQ-R) and also scored in the lower 13% for the CADFI. This respondent scored a zero on the Lie scale. This respondent is also the only one to answer “yes” to all questions asking whether it was hard to forgive, be it self, others, or situations, pointing to the speculation that the hesitation in sharing may be due more to the difficulty experienced in such situations involving forgiveness.
CHAPTER 5
DISCUSSION

Given the various approaches to defining forgiveness and differing aspects emphasized among previous researchers, an efficient and compositional definition of forgiveness was sought for developing a child/adolescent forgiveness measure to fill a current gap in the literature. The current study investigated the relationship of dispositional forgiveness with depressive symptoms, and depressive attributional style, in children. Also, the utility and factor structure of the CADFI, a version of the HFS modified for use with a younger age range, was examined.

Though the initial three factor structure of self, others, and situations was not confirmed, exploratory factor analyses revealed a clear and highly explainable two factor structure within the current sample, along the lines of valence of item wording. Parallel analyses also suggested a strong two factor structure. Given that these two factors were revealed to be highly uncorrelated, indicating they may in fact be two distinct entities, this study introduces the idea of unforgiveness as distinct from forgiveness itself. In other words, in children it may be more useful to think about the disposition for forgiveness as a general propensity for ‘forgiveness’ (as revealed through positively worded items) and ‘unforgiveness’ (negatively worded items). The measurement of forgiveness, as a construct, by emphasizing forgiveness as well as unforgiveness aspects is of course not unprecedented. For example, Mauger’s (1992) Forgiveness of Others and Forgiveness of Self scales, as well as McCullough’s TRIM scale (1998), actually tap unforgiveness as a means of looking at forgiveness with adults. The current study provides emerging
evidence that such scales measuring unforgiveness may not merely be measuring the lack of forgiveness, but a qualitatively distinct construct of unforgiveness. Though theoretically related, empirically these two constructs in children and adolescents do not appear to be significantly correlated.

When considered in the context of children’s psychological understanding of persons (Flavell, 2004), it is possible that younger children may not clearly understand or be capable of precise differentiation among perspectives of forgiving self, forgiving others, and forgiving situations. The ability to clearly understand one’s relationship to self, to others, and to situations beyond anyone’s control could be a pre requisite to clear distinctions (and decisions) of forgiveness along the same dimensions, which may not be as highly attuned among children and young adolescents. Indeed, through the brief qualitative interviews, evidence of a lack of concrete understanding between what is considered a situation beyond anyone’s control and what might be considered an accident (i.e. participant 305’s response). Given that measures used with children often employ a format of forced-choice among two generally opposing options, the positive or negative valence (reinforcing ‘either/or’ ways of thinking) may prove more salient with younger children because of its structural simplicity. Further research able to replicate these results with children of various populations would lend more strength to the two-factor item valence model, as well as provide important insight into the relationship between forgiveness and unforgiveness as possibly separate and distinct constructs.

Despite the difference in factor structure found in the current sample, the relationship of forgiveness with constructs of well-being was found to hold strong. Forgiveness levels significantly related to lower levels of depressive symptoms as well as lower depressive
attributional styles. Those children who typically attributed positive events to internal, stable, and global aspects, and attributed negative events to external, unstable, and specific dimensions correspondingly had higher levels of overall forgiveness. Those with higher depressive symptoms and the opposite attributional style showed lower forgiveness levels, indicating a highly positive relationship between healthy attributional styles and forgiveness. Future research might consider the implications of this relationship for counseling interventions, in that ways of increasing forgiveness could lead to lower levels of depressive symptoms and depressive attributional style, or that a reduction in depressive attributions and symptoms may lead to increased levels of forgiveness.

Given that social desirability is more prevalent in younger age ranges, the possibility of a significant correlation with this sample certainly existed and in fact was found. However, it has been asserted that correlations between a social desirability measure and a self-report measure do not necessarily jeopardize construct validity (Diener, Sandvik, Pavot, & Gallagher, 1991; McCrae & Costa, 1983; Thompson et al., 2005).

Though the reliability and validity with this sample was supported, the generalizability of the findings in the current study is of course limited by the sample size and demographics. With a larger and more diverse sample, exploratory and confirmatory factor analyses may provide a replicable and more solid structural two factor model. A sample from a range of settings, as well as ages, would provide a deeper basis for understanding forgiveness in the child and adolescent population. For example, a cross-sectional study examining forgiveness with different age groups would provide interesting developmental information regarding the progression of the factor structure of
forgiveness and unforgiveness with age. If the factor structure does change from a two
factor model in children to a three factor model in adults, such a study could reveal the
point at which this may occur. Examination of this measure in a more clinically
depressed population may be beneficial as well, considering the majority of this sample
did not report depressive symptoms in the clinical range.

This study serves as an insightful beginning for further exploration of dispositional
forgiveness in younger ages, both as it relates to other constructs of well-being, and
particularly the importance of understanding the factors that may make up forgiveness (or
unforgiveness) with such a population. Future studies may wish to use the current scale
with a larger sample for comparison, both to better understand the factor structure of
forgiveness as it presents in children/adolescents, as well as the relationship of
forgiveness to other constructs of well-being and positive psychology (i.e. altruism,
cognitive flexibility, openness to experiences, etc) and more pathological constructs such
as neuroticism, perfectionism, or negative affect. Furthermore, the brief qualitative
responses obtained in this study encourage more extensive, qualitative interviews with
younger populations in order to better inform future quantitative analyses and provide a
solid and sound basis for appropriate development of tools for measuring forgiveness.
### APPENDIX A
### CADFI ITEMS AND FACTOR LOADINGS

<table>
<thead>
<tr>
<th>CADFI item</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. I dislike myself for negative things I have done.</td>
<td>.703</td>
<td></td>
</tr>
<tr>
<td>3. Learning from bad things that I have done helps me get over them.</td>
<td></td>
<td>.516</td>
</tr>
<tr>
<td>4. It is really hard for me to accept myself when I’ve messed up.</td>
<td></td>
<td>.546</td>
</tr>
<tr>
<td>5. With time I am understanding of myself for mistakes I have made.</td>
<td></td>
<td>.486</td>
</tr>
<tr>
<td>6. I get upset with myself for negative things I have felt, thought, said, or done.</td>
<td></td>
<td>.629</td>
</tr>
<tr>
<td>7. I keep punishing a person who has done something that I think is wrong.</td>
<td></td>
<td>.368</td>
</tr>
<tr>
<td>9. I stay upset with others who have hurt me.</td>
<td></td>
<td>.370</td>
</tr>
<tr>
<td>10. Even though others have hurt me in the past,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with time I have been able to see them as good people.</td>
<td></td>
<td>.582</td>
</tr>
<tr>
<td>13. When things go wrong for reasons that can’t be controlled,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I keep having negative thoughts about it.</td>
<td></td>
<td>.396</td>
</tr>
<tr>
<td>14. With time I can be understanding of bad things in my life.</td>
<td></td>
<td>.627</td>
</tr>
<tr>
<td>15. I keep thinking negatively about things in my life that I cannot control.</td>
<td></td>
<td>.581</td>
</tr>
<tr>
<td>16. With time I make peace with bad things in my life.</td>
<td></td>
<td>.409</td>
</tr>
<tr>
<td>17. It is hard for me to accept negative things that are not anyone’s fault.</td>
<td></td>
<td>.554</td>
</tr>
<tr>
<td>18. With time I let go of negative thoughts about bad things</td>
<td></td>
<td></td>
</tr>
<tr>
<td>that are beyond anyone’s control.</td>
<td></td>
<td>.412</td>
</tr>
</tbody>
</table>
APPENDIX B
QUALITATIVE QUESTIONS

Is it hard for you to accept yourself when you mess up?
What is it like for you when you mess up? Can you think of a time when you did?

Do you stay upset with others who have hurt you?
What do you do? Can you think of an example?

Is it hard for you to accept negative things that are not anyone’s fault?
What is it like for you when something bad happens and it’s not anyone’s fault?
Can you think of a situation? What happened?
APPENDIX C
QUALITATIVE RESPONSES

Participant 300:

Is it hard for you to accept yourself when you mess up? No.
What is it like for you when you mess up? I get annoyed with myself.
Can you think of a time when you did? When I dropped my baton twice.

Do you stay upset with others who have hurt you? No.
What do you do? Play with other friends.
Can you think of an example? A day my friends said mean things. We are still friends – I still forgave them.

Is it hard for you to accept negative things that are not anyone’s fault? Ah man!
What is it like for you when something bad happens and it’s not anyone’s fault? I do something else.
Can you think of a situation? What happened? When it rains when I want to go in the pool.

Participant 12:

Is it hard for you to accept yourself when you mess up? Sometimes.
What is it like for you when you mess up? Can you think of a time when you did? Like when remembering my words (for school).

Do you stay upset with others who have hurt you? No.
What do you do? Like, I just try to ignore them until we both have forgotten about it.
Can you think of an example? At computers, someone was annoying me and I ignore it. Today, we were getting our backpacks, he let the lid down and it hit me on the cheek. “You need to watch what you’re doing”.

Is it hard for you to accept negative things that are not anyone’s fault? No.
What is it like for you when something bad happens and it’s not anyone’s fault? Like, I keep going on with my life.
Can you think of a situation? What happened? Like a car accident, he wrecked the van, it wasn’t anybody’s fault.

Participant 11:

Is it hard for you to accept yourself when you mess up? No.
What is it like for you when you mess up? Can you think of a time when you did?

Do you stay upset with others who have hurt you? What do you do? No. When someone hurt me physically?
Can you think of a situation? When someone pushed me off my bike and almost sprained my ankle. That was 2 years ago. I forgave them.
Is it hard for you to accept negative things that are not anyone’s fault? No. What is it like for you when something bad happens and it’s not anyone’s fault? Can you think of an example? What happened?

**Participant 306:**

Is it hard for you to accept yourself when you mess up? No. What is it like for you when you mess up? *It doesn’t bother me.* Can you think of a time when you did? *Saturday, I missed my baton.*

Do you stay upset with others who have hurt you? No. What do you do? *I get upset, and I let it go.* Can you think of an example? *My friends, when they didn’t want to hear about my trip I was so excited to go on.*

Is it hard for you to accept negative things that are not anyone’s fault? No. What is it like for you when something bad happens and it’s not anyone’s fault? *I get upset.* Can you think of a situation? *Maggie moved away to Oklahoma.* What happened? *I got sad and dealt with it.*

**Participant 305:**

Is it hard for you to accept yourself when you mess up? *Sometimes.* What is it like for you when you mess up? *It is hard.* Can you think of a time when you did? *One time I messed up in horseback riding lessons.*

Do you stay upset with others who have hurt you? *Not really.* What do you do? *I walk away and try to be calm.* Can you think of an example? *One time a person called me a name and I didn’t like it.*

Is it hard for you to accept negative things that are not anyone’s fault? *It’s kinda hard.* What is it like for you when something bad happens and it’s not anyone’s fault? *I feel funny.* Can you think of a situation? *One time a glass bowl fell off the table.* What happened? *I was doing a dance and everyone was clapping and one moment the bowl was there and one moment it fell.*

**Participant 304:**

Is it hard for you to accept yourself when you mess up? *Sometimes.* What is it like for you when you mess up? *Hard.* Can you think of a time when you did? *At school.*
Do you stay upset with others who have hurt you? No.
What do you do? I go tell the teacher.
Can you think of an example? When another kid hurt my feelings in music class. She yelled at me.

Is it hard for you to accept negative things that are not anyone’s fault? Yes.
What is it like for you when something bad happens and it’s not anyone’s fault? Sometimes I feel scared.
Can you think of a situation? When my dog Belle got sick.
What happened? Sometimes I get really scared – feeling is scary because you don’t know what’s happening.

Participant 303:

Is it hard for you to accept yourself when you mess up? Yes.
What is it like for you when you mess up? I feel upset.
Can you think of a time when you did? Yes, I told a lie.

Do you stay upset with others who have hurt you? Sometimes.
What do you do? Tell or keep it to myself.
Can you think of an example? Today someone accused me for something.

Is it hard for you to accept negative things that are not anyone’s fault? Yes.
What is it like for you when something bad happens and it’s not anyone’s fault? Very sad.

Participant 302:

Is it hard for you to accept yourself when you mess up? Sometimes.
What is it like for you when you mess up? I feel ashamed.
Can you think of a time when you did? Yes.

Do you stay upset with others who have hurt you? Sometimes.
What do you do? Forgive them.
Can you think of an example? When my friend and I fought at school.

Is it hard for you to accept negative things that are not anyone’s fault? No, it’s sad.
What is it like for you when something bad happens and it’s not anyone’s fault? Sad.
Can you think of a situation? When my friend moved.
What happened? She moved far away.

Participant 301:

Is it hard for you to accept yourself when you mess up? Yes.
What is it like for you when you mess up? Bad.
Can you think of a time when you did? *No.*

Do you stay upset with others who have hurt you? *Yes.*
What do you do? Can you think of an example? *No.*

Is it hard for you to accept negative things that are not anyone’s fault? *Yes.*
What is it like for you when something bad happens and it’s not anyone’s fault? *Bad.*
REFERENCES


BIOGRAPHICAL SKETCH

I was born in Tampa, Florida on July 5th, 1980, and grew up in Temple Terrace and South Tampa until eighteen years of age, when I graduated from King High School’s International Baccalaureate Program.

I attended the University of Florida as an undergraduate, majoring in psychology and supplementing my psychology major with concentrations in dance and biological sciences. I completed my undergraduate senior honors thesis in an area of developmental psychology, and graduated summa cum laude in 2003 with my Bachelor of Science degree with a major in psychology.

I then joined the Department of Psychology at the University of Florida as a graduate student in the Counseling Psychology Program. I completed my Master of Science degree in the summer of 2006.