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To the Graduate Council:

I am submitting herewith a dissertation written by Linda Cox Broyles entitled "Resilience: Its Relationship to Forgiveness in Older Adults." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Human Ecology.

Ernest W. Brewer, Major Professor

We have read this dissertation and recommend its acceptance:

Gregory C. Petty, Ralph G. Brockett, Alan P. Chesney

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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Gregory C. Petty

Ralph G. Brockett

Alan P. Chesney

Accepted for the Council:

Anne Mayhew

Vice Chancellor and Dean of
Graduate Studies

(Original signatures are on file with official student records.)

**RESILIENCE: ITS RELATIONSHIP
TO FORGIVENESS IN OLDER ADULTS**

A Dissertation
Presented for the
Doctor of Philosophy Degree
The University of Tennessee, Knoxville

Linda Cox Broyles
May 2005

DEDICATION

In dedication to the resilience and forgivingness

inherent to living fully in this moment...

and the next...

and the next...

Every place I've ever been...

everyone I've known...

bring me to this point in time,

one that's all my own

From those times my story streams,

making threads that twine—

threads of life, its dreams and schemes—

all weaving my design.

A kaleidoscopic patchwork quilt

unites this mixed array

of tones and textures...contrasts... blends...

my life's work on display.

and to all the resilient and forgiving people I have been blessed to have in my life.

Linda Cox Broyles, 2005

ACKNOWLEDGMENTS

Resilience theory asserts that everyone has an innate dream. Everyone has a special blend of physical, mental, and spiritual genetics that affords a unique opportunity to contribute to the world. (Richardson, 2002, p. 318)

My appreciation extends to all who have contributed toward making my world a better place and who have directly or indirectly supported me in this academic endeavor.

The following list highlights these fine people, but in no way is offered as all-inclusive:

1. Committee chaired by Dr. Ernest W. Brewer, Professor and comprised of committee members, Dr. Gregory C. Petty, Professor; Dr. Ralph G. Brockett, Professor, and Dr. Alan P. Chesney, Adjunct Associate Professor—all remained steadfast throughout the vicissitudes of university life. Former committee member, Dr. Connie (Hollingsworth) Bronson—she inspired my move to HRD and buoyed me up by insisting on the best in me.
2. Statisticians in the Statistical Consulting Center— Cary Springer and Michael O’Neil applied the acid test to my SPSS analyses and patiently plodded through regressions and tables with me, streamlining my interpretations and rescuing me from grave distress.
3. Dissertation Consultant in the Graduate Studies Office—Alan Hollis provided helpful suggestions in formatting and style and explained more than once the steps needed in the electronic submission of this dissertation.
4. My colleagues in the College of Social Work Office of Research and Public Service and the clients I strive to serve in my evaluation projects—my work in SWORPS proved absolutely invaluable as preparation for the dissertation process, and my co-workers and clients were wonderful cheerleaders. One co-worker in particular, Debra Reagan—she took care of the many administrative details of my survey with integrity and professionalism.
5. A number of people took the risk of writing letters of recommendation for me and championed my goals—Phil Keith, former Chief of Police, Knoxville Police Department; James Cosby, Assistant Commissioner, Tennessee Department of Corrections; Reverend Marty Singley, Pastor, Tellico Village Community Church, James Rhodes, Lieutenant Colonel, United States Army (Retired); Carl Creager, Financial Systems Analyst, United States Internal Revenue Service; and Dr. Ronald Gribbins, Professor, Human Resource Management, Washington University in St. Louis, MO.

6. Researchers in resilience and forgiveness, especially the designers of the instruments permitted for use in this study—Dr. Gail M. Wagnild and Dr. Heather M. Young for the Resilience Scale and Dr. Everett L. Worthington, Jr. for the Trait Forgivingness Scale.
7. Family, friends, and neighbors—if a wide support network is key to resilience, I must be one of the most resilient people anywhere. I am so very grateful to the people who represent the bond of true kinship in my life.
8. Michael Broyles, my ENFJ husband, loving partner, and best friend to my INFP self—As my older stepdaughter Nikki sang with foresight at our wedding in 1991, he has been “the wind beneath my wings” all along the way.

In addition to these many fine people to whom I owe my gratitude, I am certainly cognizant of my spiritual source—the force that sustains me also helps me to be resilient and forgiving and ever mindful of all my blessings, including the completion of this dissertation. To all, I extend a sincere thank you.

ABSTRACT

This descriptive, correlational study investigated how psychological resilience might be associated with forgiveness in older adults. The population selected was a planned community in the southeastern United States; the majority of the 4,500 residents were over 50 years old, Caucasian, married, retired or semi-retired, and in reasonably good health. Having relocated to this community from all over our nation and from foreign countries and having achieved a generally high level of success on the average, these people brought with them a wide range of life's experiences. A random sample of 900 was drawn from the community directory. Of these, 497 respondents completed a mailed survey comprised of the *Resilience Scale* (Wagnild & Young, 1993), the *Trait Forgivingness Scale* (Berry, Worthington, O'Connor, Parrott, & Wade, 2005), and an individual profile of selected demographics and self-assessment items.

A series of *t* tests, bivariate correlations, and multiple regressions tested the relationships between resilience and forgiveness, as well as any contributing effects of age, gender, health, self-rated resilience, self-rated forgiveness, difficulty of childhood, highest educational level completed, highest annual salary earned, and current employment status. The analyses indicated a low, but statistically significant correlation between resilience and forgiveness ($r = .339, p < .05$); as forgiveness increased, resilience tended to increase somewhat. Age was not found to be significantly associated with either resilience or forgiveness in bivariate correlations, but did prove significant when in combination with other variables. The influence of the forgiveness score in the presence of the variables listed above in explaining the variance in resilience was tested using

hierarchical multiple regression techniques. The regression resulted in a model consisting of the forgiveness score, self-rated resilience, age, gender, and health status as the variables explaining about 28.1% of the variance in resilience. This research added to our knowledge about resilience, older adults and aspects of aging, and forgiveness. Findings may be generalized with caution to the community and to similar populations elsewhere. They hold implications for policy and procedures in disciplines such as adult education, workplace training and development, psychology, clinical practice, and gerontology.

TABLE OF CONTENTS

Chapter	Page
I: INTRODUCTION	1
Rationale for the Study	2
Importance to the Nation	2
Importance to the Individual.....	4
Importance to Research.....	5
Link with positive psychology.....	5
Link with forgiveness	6
Link with aging.....	8
Statement of the Problem.....	9
Purpose of the Study.....	11
Objectives	11
Conceptual Framework.....	12
Research Questions.....	13
Assumptions of the Study	14
Delimitations of the Study	15
Limitations of the Study.....	15
Definition of Constructs and Operationalized Terms	17
Age Level.....	17
Childhood Level of Difficulty	17
Educational Level	18
Employment Status	18
Forgiveness	18
Forgiveness level	19
Forgiveness self-rating.....	19
Geographic Location of Prior Residence.....	19
Health Status	19
Income Level	19

Resilience.....	20
Resilience level.....	20
Resilience self-rating	21
Organization of the Contents of This Study	21
Summary of Chapter I.....	21
II: REVIEW OF LITERATURE	23
Approach.....	23
The Emerging Field of Positive Psychology	24
Resilience.....	25
Background on Studies of Resilience	26
Theoretical Models of Resilience	32
Measures of Resilience	34
Resilience and Older Adults	40
Forgiveness	41
Research on Forgiveness.....	42
Measures of Forgiveness.....	45
Forgiveness: Strength or Weakness?	47
Aging.....	49
Ageism	52
The Gray America Challenge	55
Summary of Chapter II	58
III: METHOD	59
Research Guidelines.....	59
Approach.....	60
Selection of the Population and Sample	60
Sampling Frame	62
Sampling Procedures	62

Instrumentation	63
Resilience Scale (RS).....	64
Trait Forgivingness Scale (TFS).....	66
Personal Profile Inventory (PPI).....	66
Pilot Study.....	67
Procedures.....	67
Protection of Human Subjects	67
Survey Packet.....	68
Data Collection and Awarding of Gift Certificates	68
Data Entry and Preparation for Analysis	69
Data Analysis	71
Summary of Chapter III	72
IV: RESULTS	74
Participation and Response Rate.....	75
Exclusion of Non-respondents and Adequacy of the Sample.....	79
Reliability of Instruments Used	81
Assumptions of Normality and Linearity	83
Comparison of Means with Earlier Studies	83
Findings by Research Question	86
Research Question 1	86
Research Question 2	89
Research Question 3	89
Research Question 4	90
Research Question 5	94
Summary of Chapter IV	97
V: DISCUSSION.....	99
Generalizability of the Findings.....	100
Review of Scores Attained.....	101
Answers in Brief by Research Question	102

Research Question 1	102
Research Question 2	103
Research Question 3	103
Research Question 4	104
Research Question 5	105
Logistical Aspects of the Study and Some Lessons Learned	105
Decision to Exclude 33 “Non-respondent” Surveys.....	105
Verbiage and Disclaimers.....	106
Survey Packet.....	106
Effect of Being Interviewed.....	107
Instruments.....	108
Implications for Policy and Practice	110
Resilience.....	110
Forgiveness.....	111
Aging.....	112
Employment.....	112
The Helping Professions.....	113
Education and Training.....	114
Recommendations for Future Study	115
Use of Additional Instruments.....	116
Finding Alternatives to Self-report Measures.....	117
More Diverse Populations.....	117
Other Specialized Populations.....	118
Institutional Populations.....	119
Expanding and Enriching the Research on Forgiveness.....	120
Aspects of the Personality.....	120
Connecting Mind, Body, and Spirit.....	121
Studies of Lifespan Development.....	122
Summary of Chapter V	123

REFERENCES	127
APPENDICES	141
Appendix A: Resilience Scale	142
Appendix B: Trait Forgivingness Scale	145
Appendix C: Personal Profile Inventory.....	147
Appendix D: Resilience Study Cover Letter	149
Appendix E: Resilience Study Information Sheet	151
VITA	153

LIST OF TABLES

Table	Page
1 Responses in Relation to the Three-Mailing Survey Design	76
2 Frequency of Actual Ages Reported by Gender and Sample Total.....	77
3 Frequency of Highest Level of Education Completed by Participants.....	78
4 Frequency of Age, Gender, and Work Group of Participants by Current Employment Status.....	80
5 Statistical Differences between Respondents and Non-respondents	82
6 Internal Reliability of RS Factor 1, RS Factor 2, RS Factor Subtotal, RS Total, and TFS Total.....	84
7 Bivariate Correlations of Resilience and Forgiveness Scores for RS Factor 1, RS Factor 2, RS Subtotal of Factors, RS Item 26, RS Total, Self-rated Resilience, TFS Item 10, TFS Total, and Self-rated Forgiveness	88
8 Bivariate Correlations of Age with Resilience Scores (RS Item 26, RS Factor 1, RS Factor 2, RS Subtotal of Factors, and RS Total)	89
9 Bivariate Correlation of Age with Forgiveness Scores (TFS Item 10 and TFS Total).....	90
10 Model Summary of the Regression of Resilience on Age, Gender, Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Employment Status, and Educational Level.....	92
11 Analysis of Variance of Resilience Total as the Dependent Variable with Independent Variables of Age, Gender, Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Employment Status, and Educational Level	92
12 Coefficients of the Model of Resilience Regressed on Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Age, Gender, Employment Status, and Educational Level.....	93
13 Model Summary Resulting from the Hierarchical Multiple Regression of Total Resilience Score on Total Forgiveness Score in the Presence of Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Age, Gender, Educational Level, and Employment Status	95

14	ANOVA Resulting from the Hierarchical Multiple Regression of Total Resilience Score on Total Forgiveness Score in the Presence of Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Age, Educational Level, and Employment Status	95
15	Coefficients Resulting from the Hierarchical Multiple Regression of Total Resilience Score on Total Forgiveness Score in the Presence of Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Age, Educational Level, and Employment Status	96

LIST OF FIGURES

Figure		Page
1	Procedural flowchart of study components.....	70
2	Frequency of highest level of education completed by participants.....	78
3	Scattergram of RS Total and TFS Total scores with fit line depicting linearity	84

CHAPTER I

INTRODUCTION

Positive psychology is pushing its way toward taking the lead in mainstream psychology, turning the tide from the traditional focus on what is wrong with us to what is right with us (Richardson, 2002; Lopez & Snyder, 2003; Snyder & Lopez, 2002). With this paradigm shift from a “reductionistic, problem-oriented approach to nurturing strengths” (Richardson, p. 307) in recent years, theorists and practitioners alike have placed greater emphasis on our innate or attained resources available to us rather than on our deficiencies and dysfunctions. Research to discover “best practices” within and across disciplines has mushroomed, and the intense interest in optimizing the quality of life has spilled over into the popular press to an unprecedented degree. *Time* devoted an entire section to “The New Science of Happiness” in its special “Mind and Body Issue” of January 17, 2005, including an article on the importance of resilience and citing noted resilience researcher Werner.

Another driving force behind this trend toward recognizing and cultivating strengths is the “graying of America” and its implications in virtually all aspects of our modern life, whether we are young or old, in the privacy of our home or in a public setting, in the classroom or in the workplace (American Association of Retired People [AARP], 2002, 2004; Federal Interagency Forum on Aging-Related Statistics [Forum], 2004; Poulos & Nightingale, 1997). Substantial effort is devoted to overcoming some of the stereotypical ideas about older people (Aiken, 1998, 1999, 2001; Collins, 2003; Stein & Rocco, 2001), especially in terms of their role in society and in the workplace (Committee for Economic Development [CED], 1999; Dessler, 2000). According to the

Forum, while federal agencies report substantial information on older Americans, there remain important areas where there are gaps in our knowledge. All of these factors have led to increased attention to qualities such as resilience and forgiveness under the broad umbrella of positive psychology and how they manifest themselves over the lifespan.

Rationale for the Study

This study was undertaken to fill in some continuing gaps in empirical research on resilience and on older populations. That is, it was to expand our understanding of the construct of resilience within the context of positive psychology and to contribute to the data available on older adults. This stemmed from the ubiquity of resilience in current events and the media and its implications for our nation, our individual well-being, and research needed in the construct itself and in related areas such as forgiveness and aging.

Importance to the Nation

Events of recent years catapulted the concept of resilience to the forefront in the media and in our national consciousness here in the United States. The devastating loss of life and property we suffered in the destruction of the World Trade Center twin towers in New York City, the assault to the Pentagon, and the plane crash in Pennsylvania on September 11, 2001; the ensuing outbreak of anthrax and fear of other terrorist acts in the air or on the ground; the resulting war against terrorism—all of these strongly tested the resilience of the American spirit and the values held by the global community (Schimmel, 2002). We strived to not only recover, but to *transcend* the disasters and their aftermath to become even better and stronger (Fredrickson, 2000; Fredrickson, Tugade, Waugh, & Larkin, 2003; Paton, Violanti, & Smith, 2003; Tugade & Fredrickson, 2004). Federal agencies and private organizations responded to the challenges of the times. For example,

in 2002, the American Psychological Association (APA, 2004) instituted a Task Force on Promoting Resilience in Response to Terrorism with a website featuring “The Road to Resilience” and a developing series of fact sheets on fostering resilience in a variety of populations such as older adults.

This resiliency is woven into the very fabric of our nation, and effort is underway to incorporate it into our legal framework as well with the proposal of the House of Representatives National Resilience Development Act of 2003 (H.R. Bill 3774, 2003). This bill supports improved homeland security by providing for national resilience in preparation for and in the event of, a terrorist attack. The bill would amend the Public Health Service Act to direct the Secretary of Health and Human Services to convene and lead an interagency task force. The mission would be to increase the psychological resilience of the American public and improve the ability of federal, state, and local governments to respond to the behavioral, cognitive, and emotional impacts of terrorism and other disasters and their implications for disaster management. The bill was referred to the House Judiciary Subcommittee on Crime, Terrorism, and Homeland Security on March 1, 2004.

Where we are as a nation right now—our culture, vision, values, our position in the global community—all have been tested even further with the series of natural disasters in late 2004 and early 2005. These began with the hurricanes and flooding in the southeast of the United States, overcome by the catastrophic tsunami experienced in the Indian Ocean, followed on a smaller scale by the flooding and tragic mudslides on the United States west coast. It is not surprising when broadcasters recount events such as

these with voiced appreciation for the remarkable resilience of the people involved. Resilience has become a keyword for our country.

Importance to the Individual

At all ages past infancy, people seem to possess an incredible capacity for keeping a sense of control in circumstances that, to all outward appearances, have limited options. This adaptive functioning or resilience includes “the human capacity to maintain emotional well-being despite setback, major trauma, and the ups and downs of ordinary life” (Snyder & Lopez, 2002, p. 202). A leading example is Victor Frankl (1984) in his autobiographical account of life as a prisoner in a Nazi concentration camp where prisoners retained little control over their daily activities or mere existence. A sense of meaning and control in life was essential to survival, even if that control lay in their *attitude* toward their circumstances. According to Frankl, those who were able to keep this sense of self-efficacy were more likely to survive the harsh prison environment (Frankl; Snyder & Lopez). Their resilience and possibly their ability to let go of resentments may well have helped them to survive and to move forward.

Though we tend to focus on the more spectacular instances of coping and improving, resilience is really much more than the adrenaline rush in the midst of crises. Resilience is a natural part of our everyday lives, a kind of “ordinary magic” (Masten, 2001). It is an often unconscious response to all the minute changes we experience from minute to minute. Change is going to continue to happen on a large and small scale, and the better equipped we are to deal with change at all levels—the more resilient we are—the more likely we are to grow through it (Richardson, 2002). Individually, some people evidence great resilience, overcoming the odds time after time. Others do not seem to

rebound at all, or they take an inordinate amount of time to resume their normal functions. This has a cumulative effect upon our lives, and the outcomes are often overtly reflected in how well we live out our years.

Importance to Research

Richardson (2002) proposes that resilience research falls into three waves. The early theorists of the first wave strove to identify the qualities inherent to resilience as a personality trait. This was followed by the second wave devoted to determining the process by which resilience could be developed and how individuals could attain a more resilient mode of coping with life's challenges. Most of the work at that time was done with children and youth who had overcome the odds against them; few studies involved middle-aged or older adults. Further, the focus was on resilience as a reasonably stable characteristic. These two waves of research left questions of how resilience differs by context, time, age, gender, and cultural background largely unexplored and unresolved. The third wave in resilience research has begun. According to Richardson, the time has arrived to undertake a more comprehensive, multidisciplinary approach. Crossing philosophy, physics, anthropology, biology, psychology, sociology, and theology, resilience can be demonstrated in all its theoretical and spiritual aspects as a force within us all.

Link with positive psychology. One shortcoming of past research into the construct of resilience is that it often took the path of studies in stress and stress management based on a traditional "medical model" or "disease model" looking for what is wrong with us and with the dysfunctional side of life (O'Connell Higgins, 1994; Seligman & Csikszentmihalyi, 2000). "The growing focus on health promotion and

well-being, shifting away from pathology and problem-orientation, provides an opportunity to revisit the role of resilience in health” (Connor & Davidson, 2003, p. 77). This applies in other realms as well. More and more we seek to identify what resources we possess and how we can cultivate them rather than attend so fixedly to our deficiencies, especially as we age and perhaps begin to lose our position in the world of work (Collins, 2003; Stein & Rocco, 2001). This strengths perspective provides a more positive approach and accentuates personal responsibility.

Link with forgiveness. The possible link between resilience and forgiveness subtly manifests itself in the verbiage of the resilience researchers and the proponents of positive psychology (Richardson, 2002; Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002). Philosophically, some of the same dynamics may be ascribed to both constructs. For example, Nietzsche wrote an early essay about the power of the past and how it might rob us of our future.

In order to determine the extent and thereby the boundary point at which past things must be forgotten if they are not to become the grave diggers of the present, one has to know the exact extent of the plastic energy of a person, of a people, of a culture; that is, the power to grow uniquely from within, to transform and incorporate the past and the unknown, to heal wounds, to replace what is lost, and to duplicate shattered structures from within... There are people so lacking this energy that they bleed to death, as if from a tiny scratch, after a single incident, a single pain, and often in particular a single minor injustice. (Nietzsche, 1997, p. 62)

Though his point was aimed toward the use and misuse of history, it could well apply to our individual lives and how they can be stunted by sorrowful remembrances if we do not move past them. In fact, forgiveness has already found its way into the resilience literature to a limited degree (Sheffield, 2003); Wolin and Wolin (1993) bring out the need for the resilient individual to learn from their painful experiences, seek healing, and

let go of bitterness. Often discussed in terms of a religious imperative traditionally, the concept of forgiveness has come to be studied in recent years simply for its functional application in day-to-day life regardless of one's spiritual orientation. Researchers in psychology and related fields are weighing the effectiveness of forgiveness in specific interventions (Al-Mabuk, Enright, & Cardis, 1995; Boon & Sulsky, 1997; Coyle & Enright, 1997; Freedman & Enright, 1996; Hebl & Enright, 1993; McCullough & Worthington, 1995; McCullough, Worthington, & Rachal, 1997).

The empirical study of forgiveness is still relatively new; research on forgiveness is needed in almost any area of human behavior (Drinnon, 2000). The shortfall in forgiveness research accomplished is that it focused largely on perceived offenders and their specific offenses, with less attention on the propensity to be forgiving (Bradfield, 2000; McCullough, Hoyt, & Rachal, 2000). Studies exploring personality components (e.g., Five-Factor Dimensions) and determinants of forgiveness have shown indications that a high propensity to forgive correlates positively with traits like agreeableness (McCullough et al., 1998). In practical terms, if supported by appropriate research, forgiveness may be useful in its potential for transforming negative reactions into positive emotional and interpersonal states (e.g., increased affection, greater understanding, and reconciliation) in a wide array of contexts. However, it must be used judiciously in the correct therapeutic situation. Rather than forced, it needs to be a voluntary release of negative emotions. Otherwise, according to Drinnon, it can almost become a type of betrayal in itself by the person offended overlooking or seemingly dismissing infidelity, rejection, abandonment, abuse, disappointment, or disrespect.

Link with aging. Based on a review of the literature that included Polk's (1997) synthesis of existing definitions and characteristics of resilience from 26 published studies, Wagnild (2003) finds that there is much agreement about what constitutes resilience. She summarizes resilience as comprising five characteristics in older adults: equanimity (balanced perspective of life); meaningfulness (sense of purpose); perseverance; existential aloneness (recognition and acceptance of one's unique path); and self-reliance. What poses more of a more question is the process of achieving resilience or losing it. She considers this a facet of successful aging—"the enjoyment of health and vigor of the mind, body, and spirit into middle age and beyond. For many, it is also the freedom from impairment and the ability to live independently. As the population ages and more individuals are enjoying good health into their 80s and beyond, there is accompanying interest in factors associated with successful aging" (p. 43).

With the graying of America and the increasing quantity of life, we cannot automatically assume that living longer is necessarily better. We face a commensurately increasing responsibility for evaluating the quality of that longer life. The more we can learn about the convergence of various constructs like resilience and forgiveness in terms of aging and our ability to cope well with it, the better chance we have for optimizing the experience of growing older (AARP, 2002, 2004; Forum, 2004). In writing about the importance of forgiving oneself, particularly as we deal with choices toward the end of our lives, Holloway (2002) says:

There is an inevitable tendency in people, when they look back on their lives, to concentrate on their failures and mistakes; wrong roads taken, right roads not taken. That is when shame burns, and people are tempted to feel that they have done little or nothing with the time they were given. It may be that the great monsters of human history ought to feel this kind

of shame but, generally speaking, wallowing in this sort of guilt is pointless and shows an ungrateful lack of balance... We should be honest about what we have done badly, but we should also acknowledge what we have done well in our journey through life. (p. 50)

In our society, there remains a propensity to automatically accept age stereotypes, good and bad, often without questioning their validity or weighing the stigma involved, e.g., *wise* vs. *senile* (Aiken, 2001). Then, as we grow older, we may internalize the stereotypical beliefs about “old people,” especially with the focus on cognitive and physical decline and the sense of the ultimate outcome: death. People identify with or internalize certain age stereotypes without even being aware of it; social stereotypes can become self-stereotypes. This phenomenon has been discussed in terms of self-efficacy (Levy, Slade, Kunkel, & Kasl, 2002) and the tendency of some individuals to adopt the reputation of becoming less resilient as they age. In actuality, what may change most is the nature of the forces to deal with and possible limitations imposed by diminishing physical health. For all who are able to retain their cognitive faculties, the outlook is usually far more optimistic. In their review of the literature on coping and aging, Costa, Zonderman, and McCrae (1991) reached the conclusion that little evidence supports the idea that adaptive ability is impaired in aging individuals who are mentally healthy and capable. This may also be true for forgiveness. More research in these areas is needed.

Statement of the Problem

Positive psychology as an emerging discipline has cast new light on long-standing fields and has prompted researchers to identify possible shortcomings in prior research into the innumerable dimensions of human behavior. Emphasis is turning to the more positive and uplifting constructs related to our general well-being such as resilience and

forgiveness. We need to know much more about these constructs, their interrelationships, and their implications for policy and practice.

For example, the study of resilience has been primarily the domain of developmental researchers dealing with children and adolescents who had successfully coped with adversity (Garmezy & Rutter, 1983; McCubbin, Thompson, Thompson, & Fromer, 1994; Werner & Smith, 2001; Wolin & Wolin, 1993). The focus shifted to early and middle adulthood only recently, attributable in large part to the aging of the baby boomers. Werner and Smith assert that the study of resilience in later life is still an uncharted territory. In fact, empirical data on older adults in general are accumulating, but remain inadequate for answering the questions that arise in dealing with that growing population (AARP, 2002; Forum, 2004).

Regarding forgiveness, quantitative studies are only beginning to gain frequency and strength, and they need to probe dispositional forgiveness (Drinnon, 2000; McCullough, Hoyt, & Rachal, 2000). Further, interpersonal forgiveness has been neglected in past work in favor of delving into the inner, psychological aspects of forgiveness in the victim (Worthington, 1998). Little information is available on how forgiveness has been influenced by other psychosocial factors (e.g., coping style, introversion) over time.

Therefore, the problem addressed by this study involved the existing gaps in empirical research dealing with the constructs of resilience and forgiveness and with older populations in particular. The problem encompassed the continuing need for clarification of possible interrelationships among factors associated with positive psychology and identification of potential effects on policy and practice.

Purpose of the Study

The purpose of this quantitative, correlational study was to examine how resilience related to forgiveness among older adults in a planned community in the southeast of the United States. A cross-sectional descriptive approach was taken in order to provide an example of these interrelationships that might serve as basis for possible correlations with other groups and other constructs. It was hoped that findings would contribute to the positive psychology movement and would help fill in the gaps in research identified above related to resilience, forgiveness, and aging.

Objectives

The intent of this study was to delve into the concept of resilience and relate it to the following objectives:

1. To better understand the constructs of resilience and forgiveness and their relationships.
2. To better understand how age relates to the constructs of resilience and forgiveness.
3. To describe how age, other selected demographics or factors (i.e., health status, self-rated resilience, self-rated forgiveness, and difficulty of childhood), and variables typically associated with success (i.e., educational level and highest annual salary earned) relate to resilience and forgiveness.
4. To supplement our knowledge about older adults in the United States, dispelling some of the stigma of aging.
5. To contribute to the shift toward positive psychology in our country.

These objectives were pursued in light of the theory and previous research on resilience, forgiveness, and aging summarized into the conceptual framework described in the next section and elaborated upon in the theoretical background provided in Chapter II.

Conceptual Framework

In his *Metatheory of Resilience and Resiliency* (2002), Richardson describes resiliency inquiry as having emerged through phenomenological studies of survivors, particularly children, youth, and young adults, rather than from academic grounding in theory. He portrays resiliency inquiry as a trajectory evolving in three waves, as follows:

Wave 1. Identification of characteristics of resilient individuals

Wave 2. Discovery of the process of attaining resilient qualities

Wave 3. An ongoing effort to understand how resilience characterizes the life force in us all

The current study fits within Richardson's third wave of resilience research.

In their resilience model, Richardson, Neiger, Jensen, and Kumpfer (1990) describe the dynamics of disruptions to homeostasis (the comfort zone of the status quo) and four kinds of reintegration in the following recurring stages: dysfunctional reintegration (possibly resorting to substance abuse and other destructive behaviors); reintegration with loss (relinquishing some goal or desire to the demands of life's prompts); reintegration back to homeostasis (returning to one's comfort zone and turning down opportunities for growth), and resilient reintegration (experiencing insight or growth through disruptions). In essence, Richardson suggests that "life progression is the function of repeated resilient reintegrations" (p. 313), the coping process that results in growth, knowledge, self-understanding, and increased strength of resilient qualities.

Richardson opens the door to an interdisciplinary look at the many connotations ascribed to resilience. A continuing challenge is to detect possible overlaps with other constructs and to identify outcomes indicative of their contributions (Snyder & Lopez,

2002). One such construct is forgiveness, conceptualized by Worthington (1998) at two different levels or dimensions: (1) the inner, intrapsychic dimension involving the victim's emotional state (along with cognitive and behavioral components) and (2) the interpersonal dimension involving the ongoing relationship within which forgiveness takes place or fails to do so. The majority of past work has focused on the inner dimension of forgiveness to the neglect of the interpersonal dimension.

This interpersonal dimension of forgiveness presents an opportunity for comparison with resilience in that it involves *facing* perceived offenses, *letting go* of resentments, and *moving on* with life, all in parallel with resiliently *dealing with* adversity or life's changes and *coming out the better* for having done so. In keeping with this perspective, researchers in forgiveness propose the ability to truly forgive as one way to improve emotional health (Enright & Fitzgibbons, 2000) and to optimize the quality of life, an opinion applicable to resilience and to the other concepts explored via the broad brush of positive psychology. To the extent this heightened quality of life proves true as a function of any particular behavioral constructs, it holds significant implications for the helping professions and contributes to the developing principles and guidelines of positive psychology.

Research Questions

From the literature review and from substantial preliminary exploration of people's perceptions of the constructs and variables under study, the following research questions emerged:

1. Is there a significant relationship between resilience and forgiveness?
2. Is there a significant relationship between resilience and age?

3. Is there a significant relationship between forgiveness and age?
4. To what extent do selected demographic variables (i.e., age, gender, educational level, self-rated resilience, self-rated forgiveness, difficulty of childhood, health status, employment status, and highest salary earned) account for the variance in resilience?
5. To what extent does forgiveness help to explain the variance in resilience when combined with personal factors of self-rated resilience, self-rated forgiveness, difficulty of childhood, health status, age, educational level, employment status, or highest salary earned?

These questions served as a guide for the study overall. They helped to determine appropriate statistical tests and to structure the presentation of the findings.

Assumptions of the Study

As a point of departure to get this study underway, the researcher accepted certain premises. For the purposes of this study, it was assumed that:

1. Resilience and forgiveness are traits, processes, and dispositions found operating in all of us in varying degrees at various times in our lives.
2. Resilience and forgiveness can be fostered.
3. Resilience is more than stress management. Rather than simply coping with adversity, the resilient individual transcends it and comes out better for the experience.
4. Indications of the presence and strength of constructs like resilience and forgiveness can be measured.
5. The instruments selected are valid and reliable.
6. The sample was randomly selected and could be reasonably expected to represent the population at large.
7. Respondents provided honest answers to survey items to the best of their ability and recollection.

Delimitations of the Study

The researcher exercised control over a number of factors in the design and conduct of this study. The decisions were reached with the intent to narrow the scope of the study sufficiently to be commensurate with the period of time and other resources available and to allow for in-depth analysis. The delimitations included the following:

1. Resilience and forgiveness can be viewed from the standpoint of the individual, the family, the community, society, or the world—all far too broad for one investigation. The researcher chose to direct the study toward a focus on individual resilience and interpersonal forgiveness.
2. Similarly, aging in and of itself now constitutes a professional and academic discipline; it is beyond the scope of any single study. This study was restricted to an investigation of aging in terms of its relationship with resilience and forgiveness.
3. The target population was confined to the *adult* residents of a community selected because of its demographics (e.g., mostly adults, retired or semi-retired, reasonably financially secure, in generally good health).
4. There is much debate over whether aspects of personality like resilience are innate or acquired. Good cases for either side of this argument exist, and it was not within the scope of this study to substantiate or refute these. It suffices to say that resilience and forgiveness may ebb and flow under different circumstances, and there can be critical junctures at which they may be fostered or hindered. The constructs were viewed more as a continuum than a fixed trait, more as a propensity than a reaction to a given set of circumstances.
5. Only those questionnaires returned within designated timeframes and with all items answered (with the exception of specific demographic questions such as highest salary earned) were included as respondents and sampled non-respondents for the statistical analyses. All others were relegated to the non-respondent category and excluded from further analysis.

Limitations of the Study

Despite attempts made in the research design phase to anticipate and make allowance for potential pitfalls, it is likely that several factors not under the direct control of the researcher affected the implementation and results of this study. Some of these are

common to survey research; some are particular to the constructs involved, the population sampled, and the instruments used. These limitations are summarized as follows:

1. This study entailed a cross-sectional survey in which data were collected for selected individuals within a given period of time (Gay & Airasian, 2003). As such, it constituted a single, stand-alone study. This restricted point in time may not provide a broad enough perspective for generalizing the findings to other populations.
2. Survey research often yields much lower response rates than desired (Dillman, 2000; Gay & Airasian, 2003). Non-responses can differ in some systematic fashion implying bias. This must be taken into consideration when weighing the merits of the findings and their implications.
3. There may have been some degree of sample bias due to the use of the community phonebook as the sampling frame. Some residents may not have been appropriately represented (e.g., new to the community and not yet included in the directory, no phone, unlisted phone number, omitted in error by the publisher of the directory).
4. Using written instruments can be problematic. Unless accommodation is made, it restricts the participant to those who can read. Then, there may be semantic difficulties even with the best of instruments. There is no way to completely ensure how respondents interpreted terms or what certain concepts implied to them.
5. Constructs like resilience cannot be directly measured. The researcher had to rely upon indicators and their relative strength as measured by selected instruments. Even in a quantitative study of this nature, some subjective judgments must be applied.
6. Using chronological age to distinguish older adults tends to ignore biological, social, and psychological aspects of age particular to the maturational level and life's experiences of the given individual. Age often does not reflect the tremendous heterogeneity that exists in persons over 60. Some of the instruments or techniques utilized to assess facets of the personality may not be as valid and reliable as expected when used with older populations. Responses may be more dependent on maturational level than on age. Further, with this type of group, fatigue and cognitive impairment may affect response, e.g., some older adults become locked in repetitive loop of rereading response options because they could not simultaneously read and recall. Formats using yes/no or true/false formats appear to be easier and more reliable (Aiken, 2001). These psychometric and logistical concerns may affect responses.

7. Any study drawn largely from self-report data depends upon the respondents, i.e., their consistent understanding of what is being asked and their honesty in answering. In this particular study, the community chosen was mostly Caucasian, retired, and successful according to typical standards of education, employment, and earnings. Findings may not be generalizable to other communities or populations.

Definition of Constructs and Operationalized Terms

The constructs of resilience and forgiveness could be expressed in many ways open to many interpretations. While there was neither semantic debate intended in the conduct of this study nor operational specifications defined, it was recognized that a brief discussion of what was meant by those terms was essential to understanding the results. The definitions of resilience and forgiveness applied in this study were distilled from the literature and reduced to what was hoped to be simple, straight-forward, and appropriate to the study's purpose. In addition to the two constructs, there were several demographic variables included in the profile; these were operationalized for the purposes of the data analyses conducted. The constructs and the operationalized terms are explained below sequenced in alphabetical order.

Age Level

Based on the year of birth reported by respondents, those who were 65 years old or more were categorized as "older adults." This equated to the mean and the median age for the participants in this study; it also aligned with the definition in *Older Americans 2004: Key Indicators of Well-Being* (Forum, 2004).

Childhood Level of Difficulty

Comparing themselves to others they knew, participants rated their childhood experience ranging from much easier than that of others to much more difficult. This

allowed testing whether perceptions of one's childhood had any significant bearing on current resilience or forgiveness.

Educational Level

Respondents reported personal education completed ranging from eighth grade or less to doctoral level. Due to the well educated sample, the cut-off for the highly educated was at least a four-year degree. This allowed testing whether educational level held any significant bearing on resilience or forgiveness.

Employment Status

The current employment status reported by respondents reflected many variations (e.g., retired; retired, but self-employed; retired, but working part-time; retired, but working full-time, etc.). For comparison purposes, the responses were re-categorized to simply distinguish people who were currently working from those who did not report active employment.

Forgiveness

Forgiveness can be defined in terms of a response to a given situation or in terms of a trait inherent to the personality. Berry, Worthington, O'Connor, Parrott, and Wade (2005) distinguish these by defining forgiveness as the "replacement of negative unforgiving emotions with positive, other-oriented emotions" and trait forgivingness as the "disposition to forgive interpersonal transgressions over time and across situations." For the purposes of this study and for the sake of simplicity, the term forgiveness will be used throughout to mean "the disposition to stop feeling resentment toward a perceived offender or about a perceived offense."

Forgiveness level. The designers of the Trait Forgiveness Scale did not designate cut-off points distinguishing degrees of forgiveness. No other studies were found that categorized forgiveness using this scale. For the current study, the numeric score was used rather than assignment to a high or low forgiveness group.

Forgiveness self-rating. To gauge how forgiving individuals considered themselves and to allow comparison with instrument scores, the participants were asked how well they could stop feeling resentment toward an offender and an offense on the average in comparison with others they knew. They then rated their own forgiveness on a 5-point scale (1 = *much lower than average*; 5 = *much higher than average*).

Geographic Location of Prior Residence

To demonstrate the heterogeneous background of a currently homogeneous population (i.e., retired, Caucasian, white, older adults), participants reported the various locations from which they had relocated to the targeted community. This information was used for descriptive purposes only.

Health Status

To gauge individual perception of health level overall, the participants rated their own current health on a range from “excellent” down to “extremely poor” (unable to do most things). This allowed testing whether health had any significant bearing on one’s resilience or forgiveness.

Income Level

With so many respondents being retired, current income did not appear to be an appropriate way to gauge financial status. Therefore, participants were asked about the highest annual salary earned and the year in which that occurred so that the amount could

be converted to the 2004 dollar value. The median reported (\$88, 013) was used to distinguish high salary group. This allowed testing whether this indicator of income level held any significant bearing on resilience or forgiveness.

Resilience

The concept of resilience (used interchangeably with resiliency in this study) has been developed through the study of physics and the other sciences, and, in its being used to describe properties of elasticity and durability of products, it found application in the commercial world, e.g., the resiliency of tires and shock absorbers. These same properties have come to be ascribed to the human capacity to adapt. They appear in a variety of studies, often in the clinical areas of psychology and medicine and in athletics. In these two general contexts of physical and personal traits, *Webster's II New College Dictionary* (1995, p. 943) defines resilience as follows: (1) ability to recover rapidly from illness, change, or misfortune: *buoyancy*; (2) the property of a material that enables it to regain its original shape or position after being beat, stretched, or compressed: *elasticity*.

A real difference between these two definitions is the human capacity for doing more than just returning to the original state, but very often improving upon it. For the purposes of this paper, resilience is treated as “how well one deals with a situation and comes out the better for it.”

Resilience level. In their 25-item Resilience Scale, Wagnild and Young (1993) assigned scoring levels of 147 to 175 as high in resilience, 121-146 as mid-range, and less than 121 as less resilient. These categories were applied when analyzing and interpreting participant scores in this study in Chapters IV and V. Any exceptions to this

are noted in the text as in the case of comparison with Robinson's (2003) study in which scores for all 26 items of the revised scale were used.

Resilience self-rating. To gauge how resilient individuals considered themselves and to allow comparison with instrument scores, the participants were asked how well they dealt with situations in life in general and came out the better for it on the average in comparison with others they knew. They then rated their own resilience on a 5-point scale (1 = *much lower than average*; 5 = *much higher than average*).

Organization of the Contents of This Study

This study has been documented in accordance with current graduate school and doctoral committee guidelines. It consists of five chapters beginning with this Chapter I introduction and overview. Chapter II expounds upon the concepts introduced in Chapter I and provides the theoretical framework by means of a thorough review of the literature. The methodological approach is outlined in Chapter III, followed by an account of the actual findings and their analyses in Chapter IV. Chapter V summarizes the study, providing discussion of the findings and their implications as well as suggestions for future research. Sources cited are listed in the prescribed detail in References, and copies of instruments and other documents used are provided in their respective appendix.

Summary of Chapter I

This chapter presented the overall rationale and perspective of this research, including the contextual background, the presenting problem, the purpose, and the scope. By taking a strengths-based approach and looking for the many positive resources that we as individuals possess to varying degrees, the study focused on the resilience innate to us all to varying degrees and its possible relationship with forgiveness and age. Within the

stated assumptions, delimitations, and limitations, the chapter described the basic concepts being explored, laying the groundwork for the theoretical framework developed in the next chapter.

CHAPTER II

REVIEW OF LITERATURE

As presented in Chapter I, this study was designed to determine if any relationship existed between resilience and forgiveness, both encompassed within the broad, emerging discipline of positive psychology. This study was categorized as part of the third wave of resilience research described by Richardson (2002). Because of the demographic shift underway in our nation, an increased interest in aging, and noted gaps in our knowledge about that stage of life, this study targeted older adults in a selected community. Chapter II provides the theoretical framework for the study by way of a comprehensive review of the literature. The next section describes the approach taken and structure of the chapter.

Approach

To lay the foundation for the study and to construct a sound theoretical framework within which to adequately assess the findings, the researcher conducted a thorough review of the literature both in the areas of primary interest described above and in cognate areas that seemed relevant to the study in terms of the possible implications anticipated. This review included books, articles from scholarly journals and the popular press, dissertations, hardcopy and electronic reports and articles, and other pertinent publications. The initial focus was on existing studies on resilience to identify any gaps or deficiencies that this study might fill. Related literature on aging, resilience over the life span, employment issues, and implications for the workplace was also explored. By happenstance, this revealed a fairly new area in the field of psychology, “positive psychology,” that turned out to be the cornerstone for the theoretical framework and which opened up the possibility of linking resilience with forgiveness.

This chapter synthesizes the results of this literary investigation. Highlights are summarized in the respective sections below, beginning with positive psychology as encompassing the constructs of interest, followed by resilience, forgiveness, pertinent aspects of aging, and workplace implications.

The Emerging Field of Positive Psychology

According to Snyder and Lopez (2002), in the social sciences and in the medical community, including psychiatry and clinical psychology, traditionally there has been emphasis on the pathology of clients and patients, or as expressed by Seligman and Csikszentmihalyi (2000), a victimology with human beings seen as passive subjects upon which stimuli would render responses. In dealing with human behavior and striving to help others, practitioners tended to focus on the ailments and deficiencies of individuals either already in treatment or possibly in need of some kind of intervention. According to Seligman, “What psychologists have learned over 50 years is that the disease model does not move psychology closer to the prevention of these serious problems. Indeed, the major strides in prevention have come largely from a perspective focused on systematically building competency, not on correcting weakness” (p. 7). During the 1990s, there was a shift toward a strengths-based approach with greater consideration given to the assets and available resources of these clients and patients (e.g., courage, future mindedness, optimism, interpersonal skill, faith, work ethic, hope honesty, perseverance, the capacity for flow and insight, etc.). Greater effort was applied to building on the best in the individual rather than just diagnosing and healing the worst. Positive psychology came to the forefront.

With the subsequent growth of the field of positive psychology, researchers are once again looking at psychological processes that have traditionally been thought of as ethically desirable or psychologically or socially beneficial (Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002). Some have suggested that positive psychology might put these processes into a different light, breathing new life into these human strengths or positive traits.

The message of the positive psychology movement is to remind our field that it has been deformed. Psychology is not just the study of disease, weakness, and damage; it also is the study of strength and virtue. Treatment is not just fixing what is wrong; it also is building what is right. Psychology is not just about illness or health; it also is about work, education, insight, love, growth, and play. And in this quest for what is best, positive psychology does not rely on wishful thinking, self-deception, or hand waving; instead, it tries to adapt what is best in the scientific method to the unique problems that human behavior presents in all its complexity. (Snyder & Lopez, p. 4)

Resilience is certainly a part of this initiative, as well as the resilient qualities of morality, self-control, gratitude, dreams and hope, humility, and forgiveness (Richardson, 2002). The desire for optimal quality of life as we age will likely intensify this emphasis on building on our strengths with the resilient capacity described in the next section.

Resilience

As stated earlier, for the purposes of this paper, resilience is treated as how well one deals with a situation and comes out the better for it. The inquiry into resilience has been described as evolving through three waves (Richardson, 2002) from the differentiation of resilient qualities to the identification of the developmental processes involved to the deepened understanding of the theoretical concept of resilience itself. Depicted in the resilience model (Richardson et al., 1990) discussed in chapter I, this

theory alludes to the “motivational force within everyone that drives them to pursue wisdom, self-actualization, and altruism and to be in harmony with a spiritual source of strength. Both resilience and resiliency are metatheories providing an umbrella for most psychological and educational theories” (Richardson, p. 309).

Background on Studies of Resilience

In the 1970s, the early researchers such as Werner, Smith, Garmezy, and Rutter became more attentive to the observable phenomenon of children who succeeded in life despite their being at risk for problems and psychopathology. “These pioneers inspired three decades of research on resilience in development that has provided models, methods, and data with implications for theory, research, and intervention” (Snyder & Lopez, 2002, p. 74). Some later researchers came to question whether resilience could be treated as an influence or an outcome (Glantz & Johnson, 1999). Others focused on the connection between positive emotions that might lead to resilience following a crisis (Frederickson, 2000; Frederickson et al., 2003; Holman & Silver, 1998; Tugade & Frederickson, 2004). These investigators proposed that further clarification of such phenomena—or what they termed the study of resilience—held the potential to inform programs, policies, and interventions fostering competence in the lives of children. The literature on resilience abounds.

Generally, resilience refers to patterns of positive adaptation in the face of significant adversity or risk. There are two basic judgments: (a) “individuals are ‘doing OK’ or better than OK with respect to a set of expectations for behavior,” or (b) “there have been extenuating circumstances that posed a threat to good outcomes” (Snyder & Lopez, 2002, p. 75). Defining the criteria or method for determining what is good

adaptation (e.g., indicators such as positive behavior, social and academic achievements, life satisfaction) to specific threatening conditions (e.g., major turning points in life or day-to-day challenges, past or present) is critical to assessment of resilience in action.

The study of resilience has been complemented by research on self-efficacy, a theory based on the premise that people possess a certain level of belief in what they can achieve through their own efforts. Similar to resiliency studies, much of the research has been conducted with children and young people. Bandura (1997) formalized the notion of self-efficacy and laid the groundwork for discovering how it develops. This work, in conjunction with the exploration of self-regulation (Bandura, 1995, 1997, 1998) and studies such as those on hardiness (e.g., Kobasa, 1979, with its three factors of commitment, control, and challenge), all dovetail with resilience.

There are a number of ongoing studies on resilience, and one of the most cited is the Kauai Longitudinal Study. The study is about ordinary people living in an extraordinary time. Born in 1955 on the island of Kauai in Hawaii, at the midpoint of the post-World War II baby boom, these particular Hawaiians belong to a generation of some 75 million people nationwide born in the United States between 1946 and 1964. The study takes a look at the problems they encountered and the resilience they displayed when faced with adversity along the way. It has monitored, with manageable attrition, the impact of a variety of biological and psychosocial risk factors, stressful life events, and protective factors on the development of approximately five hundred men and women at six stages of their lives: infancy, early and middle childhood, late adolescence, young adulthood, and the threshold of midlife (at ages 1, 2, 10, 17/18, 31/32, and 40; Werner, Bierman, & French, 1971; Werner & Smith, 1977, 1982, 1992, 2001).

The principle goals of the investigation were to document, in natural history fashion, the course of all pregnancies and their outcomes in the entire island community from birth to age forty, and to assess the long-term consequences of perinatal trauma, poverty, parental psychopathology, and adverse rearing conditions on the individuals' adaptation to life. As the study progressed, the researchers began to take a special interest in those high-risk children who, in spite of exposure to birth complications, discordant and impoverished home lives, and uneducated, alcoholic, or mentally disturbed parents, went on to develop healthy personalities, stable careers, and strong interpersonal relationships—children who grew into competent, confident, and caring adults (Werner & Smith, 1992). The study is well documented, and the findings are considered relevant to health, educational, and social programs for children, with implications of interest to professionals in the fields of child development, education, maternal and child health, obstetrics, pediatrics, psychology, and sociology.

Research into the resilience in “odds-defying” children focused on their invulnerability, even to the point of their being less susceptible to disease or other disorder. Some of the risk factors that they faced were gender (i.e., males more vulnerable in childhood; females, in adolescence and onset of childbearing), demographic status, social and intellectual skills, genetic history, biochemical defects, stressful life events, residential area, mobility patterns, familial and cultural characteristics, and social support available to them (Werner & Smith, 2001). These children did not seem as vulnerable to these risks as others, i.e., they did not seem predisposed to negative outcomes. What made them different? Garnezy and Rutter (1983) and a number of others have come up with the following “protective factors” that serve almost as an

“inoculation” against stress: (a) positive personality dispositions, e.g., autonomy, independence, curiosity, empathy, and problem-solving skills; (b) supportive family environment, e.g., competent and caring mother, open communication among family members, strong interest shown in the child; and (c) external social support system that reinforces the child’s coping efforts.

One of the longitudinal studies that supports a workplace slant was begun in 1928 at Berkeley’s Institute of Human Development, with the latest follow-up done in 1991 (Moen, Elder, & Lüscher, 1995). The 268 participants were asked about “turning points” in their lives. They mentioned experiences such as occupational event or circumstance, marriage, military service, college or educational experience, childhood event, divorce, parenthood, own illness or injury, death of family member, psychological crisis, move to another community, illness of spouse, quest for identity, and departure of children. From these items mentioned, the two major role sets of adulthood—work and family—were the contexts in which turning points were seen as most salient.

In keeping with Richardson’s (2002) third wave of resiliency research, studies are beginning to appear in the literature that span disciplinary boundaries and probe possible linkages with resilience. As an example from education and educational psychology, in her study involving 148 graduate students, Robinson (2003) presented findings supporting a direct correlation between self-directed learning readiness and resilience ($r = .61$; $p < .001$), and with the resilience factors of personal competence and acceptance of self and life as measured by the Resilience Scale (Wagnild & Young, 1993). In the area of clinical psychology, Bogdonoff (2002) conducted a quasi-experimental study measuring resilience at two points in time for individuals recovering from alcohol

dependence. She compared participants in a Self Management and Recovery Training (SMART Recovery) with others in an Alcoholics Anonymous (AA) 12-step program. Resilience did not prove to be predictive of abstinence during the first 90 days of recovery, but the study did provide additional information about the various scales used and differences in programs. Both resilience and recovery are complex interactions of many internal and external factors. “By definition, alcoholics who overcome their addiction are resilient. However, the causal attribution of recovery to resiliency remains unclear from this brief investigation” (p. 114).

For gerontology, psychology, and psychosocial clinical practice, Walton (1999) proposed that resilience might not be an outcome of normal late life aging, but that “psychological resilience may well be an important variable in identifying personal strengths and important resources that support adaptation into later stages of life” (p. 144). However, she found that studies in adult resilience tended toward cross-sectional responses to some type of life adversity (e.g., diminishing health, personal loss, etc.) rather than on long-term protective structures that support life-long resilience, making the planning of effective intervention strategies more difficult. She pursued a mixed methods approach employing the quantitative research method of integrated literature review of diverse research databases and the qualitative method of thematic analysis (code development and co-validation of results) of the publications derived. Interestingly, when the keyword search was confined to literature on adults aged 65 and older, this drastically reduced the number of available resources or brought up outdated publications, indicative of the dearth of studies on older adults at that time. A number of outcome characteristics emerged from the matrix analysis that followed, such as

perception of control, self-understanding, equanimity, self-reliance, self-responsibility, self-esteem, positive attitude, ability to adapt to changing circumstances and to see change as a challenge, active problem-focused coping, use of resources, meaningfulness, and quality relationships.

What seems to arise for many resiliency researchers is the commonplace aspect of this phenomenon. Even though we generally tend to think about the catastrophic upsets of life and the often miraculous personal traits involved when considering resilience, some take greater notice of the amazing similarity in the resources shared by the resilient. Masten (2001) regarded this as “ordinary magic,” resilience resulting from common, day-to-day living rather than from something extraordinary and superhuman. Therefore, this resilience—this ordinary magic—is attainable to us all. According to Greene (2002), professionals in a number of fields are incorporating educational components in their practice to cultivate qualities of resilience in individuals and in communities. There is an ongoing effort to promote the cognitive components of resilience in interventions and training and to systematically search for the protective or resilience factors underpinning individual and group capacity to adapt to, and even grow from, exposure to adverse work experiences (Paton et al., 2003). It is extremely important to realize the full potential of those professionals who respond to emergencies and disasters and other demanding situations on a regular basis. These are people involved in high-risk professions such as emergency response teams, law enforcement, and the helping professions in general. This also applies to their clients who are struggling to deal with conditions like their own victimization or substance abuse problems. The U.S. Department of Health and Human Services (DHHS) Substance Abuse and Mental Health Services Administration’s

(SAMHSA) current vision and mission reflects this beautifully—*A Life in the Community for Everyone: Building Resilience & Facilitating Recovery*.

Theoretical Models of Resilience

Researchers and others interested in the resiliency construct have described and depicted it in many forms. As one example, after conducting a historical study, Mandel (1989) concludes there are four components of the resilience process—coping, competence, self-esteem, and creativity—operationalized into the four areas of affect, behavior, cognition, and social. By her definition, resilience is a construct associated with bouncing back from adversity by doing something to change the situation or the perception of the situation (coping), and by managing situations with appropriate skills so that they no longer seem stressful (competence). After achieving success in these areas, one's self-esteem rises, and the resulting self-confidence leads to the willingness to handle more ambitious ventures. The element necessary to do more than simply bounce back from adversity is creativity, i.e., when one finds new meaning in a situation and grows through the adversity in self-enhancing ways. Based on this model and on a review of the existing literature at the time, Mandel devised an intake checklist for nurses.

As another example of modeling resilience, Wolin and Wolin (1993) considered resilience as the capacity to bounce back, to withstand hardship, and to repair oneself. They contended that, by learning about resilience, a person can become resilient. According to the Wolins, these resiliency skills ripen into seven lasting strengths or aspects of resilience—seven resiliencies:

1. *Insight*: The mental habit of asking searching questions and giving honest answers.
2. *Independence*: The ability to draw appropriate boundaries, keeping emotional and physical distance while satisfying the demands of your conscience.
3. *Relationships*: Intimate and fulfilling ties to other people that balance a mature regard for your own needs with empathy and capacity to give to someone else.
4. *Initiative*: The determination to assert yourself and master your environment, thereby taking charge of problems, exerting control, and stretching and testing yourself in demanding tasks.
5. *Creativity*: The skill at imposing order, beauty, and purpose on the chaos of your troubling experiences and painful feelings (“*nothing into something*”).
6. *Humor*: The skill at finding the comic in the tragic (“*something into nothing*”).
7. *Morality*: An informed conscience that extends your wish for a good personal life grown large and inclusive to all humankind. (adapted from Wolin & Wolin, p. 57)

Wolin and Wolin (1993) depict these dynamics in a mandala (symbolic circle that stands for peace and order in the self) with the seven resiliencies forming a protective ring around the inner circle of the self. These resiliencies tend to cluster by personality type; an outgoing type of person will have a different array of resiliencies from a more introspective type. In fact, resilience may be strongly and systematically related to general traits of personality, such as those referred to as the five-factor (or “Big Five”) model of personality (Snyder & Lopez, 2002). The five factors of Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience have proven remarkably robust with the same five factors emerging in both self-ratings and peer ratings (McCrae & Costa, 1987, 1997) and in the analysis of both children and adults (Digman, 1997).

One of the most cogent depictions of resilience is the resiliency model of Richardson, Neiger, Jensen, and Kumpfer (1990). This model portrays a person as going through phases:

1. Homeostasis or maintaining the status quo,
2. Reaction to life situations,
3. Disruption in the status quo,
4. Degree of readiness for reintegration, and
5. The choice to either
 - a. Reintegrate with dysfunction,
 - b. Reintegrate with loss,
 - c. Return to homeostasis, or
 - d. Reintegrate resiliently, transcending the original status quo.

Although we may all certainly choose the “comfort zone” of the known status quo, there are other alternatives. If we call upon our innate or developed resilience, as well as whatever we deem our spiritual source of strength, we have the chance to take ourselves to a more integrated whole. “Resilience theory asserts that everyone has an innate dream. Everyone has a special blend of physical, mental, and spiritual genetics that affords a unique opportunity to contribute to the world” (Richardson, 2002, p. 318).

Measures of Resilience

Despite the fact that resiliency researchers have taken the study of resilience beyond the theoretical model to develop and test a number of instruments, it is not an easy task to locate and select an appropriate tool to measure a proclivity for resilience. In her 1999 overview of resilience instrumentation, O’Neal studied what was available at

that time. She documented several measures of resilience or hardiness used in recent years, providing a description of the instruments, their origins, uses, and respective psychometric properties. Some of these include the following: (a) *Personal Views Survey III* (Funk, 1992), (b) *Cognitive Hardiness Scale* (Nowack, 1989), (c) *Psychological Hardiness Scale* (Younkin, 1992), (d) *Resilience Scale* (Wagnild & Young, 1993), and (e) *Family Hardiness Index* (McCubbin, Thompson, & McCubbin, 1996). Of these, Wagnild and Young's *Resilience Scale* seemed the most appropriate candidate for use in this study, and it is discussed in Chapter III.

A number of other researchers later added to this scale development. For example, Polk (2000) conducted a quantitative correlation study to develop and validate an instrument that operationalized the concept of resilience. She treated resilience as an integration of dispositional, relational, situational, and philosophical patterns, depicted by her own model. Her study was conducted in three phases (content validity of item pool, preliminary item testing, field test of completed instrument), using a purposive sample of 232 students for the preliminary item testing and 153 students for the field test. A panel of experts was convened to perform the item review, and she utilized five additional instruments for comparison, as well as a personal profile form for gathering demographic information. This resulted in the "Polk Resilience Patterns Scale." Of the 112 items initially developed in the scale, 46 remained after content validation, and these were reduced to 20 with the pilot test. The field test of the final instrument yielded the alpha reliability coefficient of .90 with a four-factor solution corresponding to the four patterns of resilience. Significant correlations were found between resilience and sense of coherence, hardiness, hopelessness, and helplessness. Demographical comparison

indicated that students rating themselves higher on current level of health or reporting no personal history of mental healthy problems scored significantly higher on the scale. Demographic variables such as gender, age, year in college, ethnicity, and religious background did not significantly impact scores. Little direction was provided on how the scoring was calculated, leaving the user to logically determine those items that were to be reverse-scored.

The Polk Resilience Patterns Scale (Polk, 2000) is one example of an instrument based on a nursing or medical model. There are others, and this is not surprising in that resilience research in general has evolved from a “disease model” often focused on stress factors and stress management. For example, the Essi Systems Resiliency Map™ (a derivative work of Essi Systems’ StressMap®) is a “comprehensive, self-administered assessment and action planning guide which measures 21 separate factors related to resiliency, adaptability, and ability to grow” based on a “paradigm of resiliency” as a “complex set of interactions between one’s environment, one’s skills and competencies, and one’s values and beliefs” (Orioli & Trocki, 1999, p. 2). Essi Systems strives to differentiate resilience from stress management, saying, “Much of our research has highlighted the fact that the skills emphasized in most traditional stress management programs (e.g., self care and the importance of gaining social support) apparently turn out *not* to be the most important factors in helping individuals increase resiliency and deal with life’s burdens and stressors” (p. 6). Nevertheless, the majority of their 21 scales relate to health and stress factors.

In the Resiliency Map, the most pertinent scales for resilience in particular fall under the category of “Resilient Beliefs and Values.” The scales are titled as follows:

(a) Scale Seven: *Self Esteem*, (b) Scale Eight: *Positive Outlook*, (c) Scale Nine: *Personal Power*, and (d) Scale Ten: *Purpose in Life*. As an example, on Scale 9, respondents are asked to think back over the past month and to indicate how a given statement like “I find ways to accomplish what I want” fits into their self-perception. Their options are offered in a Likert scale of 0 (*not at all like me*), 1 (*not very much like me*), 2 (*somewhat like me*), and 3 (*very much like me*). Contrary to many of the scales on the market, this instrument does come with published norms. All scales elicited alpha coefficients of above .68, considered to be in the “good” to “excellent” range of internal reliability. For test-retest reliability, a 6-week retest with no specific interventions in between resulted in 80% of the scales with reliabilities of over .70 and retained this remarkable stability when retaken after one year. It may be one of the most thorough of the commercial instruments available, but the fact remains that its origin and emphasis lie with stress and health factors. As an alternative, a strengths outlook provides a more positive approach. It reinforces many of the components of a traditional wellness program, e.g., job enrichment, empowerment, organizational culture, and advocacy (Norman, 2000).

As far as using resilience or other qualities as a screening tool in a work environment, personality can be a valid predictor of job performance, particularly when the unique personality requirements of the job have been accurately identified. Personality assessment is extremely useful in predicting contextual job performance (i.e., the “soft side” of work — interpersonal effectiveness, person-organization fit, etc.) as opposed to technical aspects of job performance. For example, if one were to ask an employer to list the attributes of a good performer in a given job, many of the characteristics listed would be personality constructs such as reliable, curious, and

even-tempered (Dessler, 2000). The difficulty arises with identifying distinguishable levels of resilience and categorizing jobs accordingly.

Then, in testing the more mature worker for resilience, there are additional considerations. We are different in how we respond to our environment as we grow older, and some external factors must be structured to accommodate that change. What works for other age groups may not be valid or reliable for seniors "... because of lower interest and motivation in performing psychological test tasks, as well as greater difficulty concentrating and remembering, the test performance of older adults is often less reliable than that of younger adults" (Aiken, 2000, p. 20). So, applicable tests and instrumentation, as well as associated training, must be geared appropriately for the older sector of the workforce.

There are a number of measures developed from a specific corporate or clinical need. For example, in the corporate world, there are all kinds of driving forces triggering change and evoking the need for resilience—competition, technology, downsizing, mergers and takeovers, flattened organizations with a more empowered and entrepreneurial workforce, and diversity of all kinds at all levels. In *Managing at the Speed of Change*, the author as well as founder and CEO of ODR, Inc. calls forth resilience, readiness, resources, and architecture to manage organizational change and to build more resilient workplace environments (Conner, 1993, 1994). His company created and used the ODR *Personal Resilience*[®] *Questionnaire* (1994) identifying five characteristics of resilience:

1. Positive in one's outlook on the world (optimism) and on oneself (high self-esteem/internal locus of control)
2. Focused (strong sense of purpose in life with clear goals and priorities)
3. Flexible in one's thoughts (ability to look at things from multiple points of view) and in one's social interdependence with others
4. Organized (ability to find order in chaos and deal with ambiguity)
5. Proactive (willingness to act decisively rather than simply react to circumstances)

A more recent resilience scale was developed by Connor and Davidson (2003), the Connor-Davidson Resilience Scale (CD-RISC). As with some of the other instruments mentioned earlier, this tool also has a medical and stress-related base, but offers excellent potential for use in broader research. In developing their instrument, the designers used the research literature to guide development, and they included a wide adult sample consisting of a community group, primary care outpatients, psychiatric outpatients, subjects in a study of generalized anxiety disorder, and subjects in clinical trials for posttraumatic stress disorder (PTSD). Statistical testing within and across these various groups resulted in a satisfactory overall internal consistency (Cronbach's alpha = 0.89), a high level of test-retest reliability (intraclass correlation coefficient = 0.87), and satisfactory convergent validity when correlated with Kobasa's (1979) hardiness measure (Group 3, $n = 30$, $r = 0.83$, $p < .0001$). This scale may be useful for identifying levels of resilience in a wide range of populations in addition to quantifying changes in resilience during therapy. As indicated earlier in terms of positive psychology and efforts made by medical professionals in many of their patient-oriented services (Snyder & Lopez, 2002), this therapy may well include concepts of forgiveness as discussed later.

Resilience and Older Adults

Generally, people who are resilient will likely have a positive outlook, a personal sense of mastery, and a proactive approach to dealing with events and finding meaning in them. In many cases, older adults display greater resilience in the face of challenging circumstances than younger people, avoiding overreacting and having positive strategies at hand based on cumulative lifetime knowledge, cultivated social network, and ability to maintain perspective on what matters most (APA, 2004). This ranges from the mundane difficulties faced everyday to traumatic extremes such as natural disasters and acts of terrorism. In other words, knowing only a person's age will not necessarily predict how well that individual will deal with changes. It is important to avoid ageist assumptions that an older adult may not benefit from psychotherapy or other intervention efforts. In fact, APA suggests that "older adults may be considered an underutilized national resource as communities seek to provide helpful intervention alternatives" (p. 4). In other words, some older citizens may be able to assume responsibility for conducting certain interventions themselves and relieving others to handle logistical concerns always paramount in crises.

Wagnild (2003) looks at resilience and aging in terms of income, with high income defined as more than \$35,000 per year. The three samples are described as (1) a convenience sample of 43 low-income older adults living in public housing; (2) a sample of 176 high-income and 161 low-income people randomly selected from community-dwelling older adults, and (3) a sample of 232 high-income and 112 low-income people randomly selected from community-dwelling older adults. The 25-item RS (Wagnild & Young, 1993) was used with scoring levels assigned of 147 to 175 as high in resilience,

121-146 as mid-range, and less than 121 as less resilient. Internal reliability alpha coefficients for the three samples are .76, .91, and .94, respectively. Average scores for the groups ranged from 141.2 to 149.1, all in the upper mid-range or high level of resilience.

Results were mixed. When comparing high-income (> \$35,000 annual income) and low-income respondents (< \$15,000 annual income), a statistically significant difference in scores between income groups was found for Sample 3 ($F = 9.43, p < .002$), but not for Sample 2. Sample 3 respondents who scored higher on resilience reported higher incomes. The inconclusive findings cloud the implications. However, according to Wagnild, if resilience is associated with successful aging regardless of income, there may be positive justification for intervening to enhance resilience among low-income older adults. This intervention includes helping people to recognize their own resilience, perhaps by use of an instrument such as the RS and discussion afterward, and reminding them of their resilient strengths as they face health issues and the challenges of aging.

Forgiveness

One positive psychological process that has received attention is forgiveness (Enright & Fitzgibbons, 2000; Lopez & Snyder, 2003; McCullough et al., 2000; Worthington, 1998). McCullough, Hoyt, and Rachal (2000) classified research on forgiveness as either (a) *offense-specific* (aimed at understanding forgiveness of a specific person for a single transgression), (b) *dyadic* (aimed at understanding forgiveness of a specific person for a history of transgressions), or (c) *dispositional* (aimed at understanding forgiveness as an enduring personality trait). Most research on forgiveness has focused on offense-specific or dyadic forgiveness, such as studies of forgiveness and

related constructs in experimental social psychology aimed at determining variables that influence willingness to forgive particular transgressions or transgressors (Bradfield, 2000; McCullough et al., 1997; McCullough et al., 1998). Some of the salient work is summarized in the sections that follow.

Research on Forgiveness

Psychological research on forgiveness is still in its infancy. Exline, Worthington, Hill, and McCullough (2003) provide a review of forgiveness research and its interface with justice, summarizing recent developments related to forgiveness in the fields of law, management, philosophy, theology, and psychology. They allude to the tension between descriptive and prescriptive approaches, with empirical research being more descriptive in focus. On the other hand, prescriptive issues such as the moral appropriateness of forgiveness arise in philosophical and theological work. This likely contributed to the long absence of forgiveness from empirical research, a gap that is slowly being filled.

Forgiveness holds strong historical importance in Judeo-Christian religious theology and moral philosophy (Cunningham, 1985; Drinnon, 2000; Sheffield, 2003). It is a complex experience replete with psychological and spiritual implications. More and more, the concept of forgiveness has been studied by researchers in psychology and related fields and in regard to specific interventions (Al-Mabuk et al., 1995; Boon & Sulsky, 1997; Coyle & Enright, 1997; Freedman & Enright, 1996; Hebl & Enright, 1993; Malcolm & Greenberg, 2000; McCullough & Worthington, 1995; McCullough et al., 1997; Pargament & Rye, 1998). Both empirical and theoretical work have explored the relevance of forgiveness within an extensive array of contexts, such as forgiveness of strangers, forgiveness of nation states, and forgiveness of the self (e.g., Mauger et al.,

1992). There is some evidence that forgiveness increases from adolescence to old age (Murphy & Lamb, 2002).

Hebl and Enright (1993) conducted a forgiveness intervention with 24 women at least 65 years old ($\bar{x} = 74.5$) who were randomly assigned to either a treatment or a control group. Each group met for one hour a week for eight weeks, with the experimental group's discussing forgiveness during the session and the control group's talking of current social issues. The researchers administered measures of self-esteem, depression, anxiety, and forgiveness. Both groups showed a significant decrease in depression and anxiety, but only the experimental group increased significantly in forgiveness. This demonstrated that an educator could help participants to forgive an offender evidenced as a greater willingness to extend them help. Similar studies done at the time with other groups implied that participants who wished to forgive could be taught to do so regardless of the age of the sample.

There have been a number of studies correlating a forgiving disposition—or forgivingness—with myriad traits, both positive and negative. For example, in three studies of 179, 233, and 80 undergraduate students, respectively, forgivingness was negatively correlated with trait anger, hostility, neuroticism, fear, and vengeful rumination, and was positively correlated with agreeableness, extraversion, and empathy. The proclivity toward ruminating vengefully tended to hinder forgivingness (Berry et al., 2005). According to Worthington (1998), forgiveness is “one of the most life-affirming choices we can make... Why would you choose to forgive? (a) You yourself do bad things and want to be forgiven when that happens, (b) you want to restore your

relationship with the offender, albeit on a different footing, (c) you need to get past this incident to get on with your life, or (d) you want to do the right thing” (p. x).

There is an impressive body of evidence indicating that a person’s confidence level to perform a particular activity (self-efficacy) powerfully influences the actual performance of that activity (Bandura, 1995, 1998; Worthington, 1998). Bandura (1998) has reviewed this evidence for self-efficacy across a broad spectrum of social, physical, and psychological problems and issues. A self-efficacy level often predicts future success in being able to do something more than a person’s own past performance of that activity (e.g., the act of forgiving). Its inclusion in forgiveness interventions seems justified.

Forgiveness can be a challenge to attain, an often difficult and seemingly unnatural process to work through. Many models of forgiveness at varying levels of complexity have been proposed in recent years. One of the simplest of these devised by McCullough, Exline, and Baumeister (1997) is called the REACH model, a name formed by an acrostic of the following steps: *Recall* the hurt. *Empathize* with the one who inflicted the hurt. [offer the] *Altruistic* gift of forgiveness. [make a] *Commitment* to forgive. *Hold* on to the forgiveness.

There are many benefits derived from true forgiveness, many of which support and enhance one’s overall health. This has implications for resilience as well.

We are perplexed that, until quite recently, the scientific community has not noticed the link between forgiving and the alleviation of such distresses as depression, anxiety, hopelessness, and low self-esteem. People who do not forgive may be at risk not only for continual emotional disruption, but also for damaged relationships and perhaps even physical complications. The question about psychological interventions on forgiveness, then, should be taken seriously by a wide variety of helping professionals. (Fitzgibbons, 1986, p. 139)

Such interventions are being implemented and studied. Lin (2001) explored the effect of forgiveness intervention with alcohol and other drug users (seven experimental and seven alternative treatment participants) on emotional regulation and pattern of drug use. The strategy was based on the process model developed by Enright and the Human Development Study Group (Enright, 2001; Enright & Fitzgibbons, 2000); this model encompassed the four phases of *uncovering* insights about the offense, *deciding* to commit to forgiveness of the injury, *working* toward a cognitive understanding of the offender, and *deepening* the meaning of the experience with the goal of a renewed purpose in life. From pre- and post-test scores on selected instruments, this study demonstrated that the experimental group had significantly higher gains in forgiveness and self-esteem and correspondingly greater decreases in depression, anger, anxiety, and vulnerability to drug use. In a correctional institution setting, York (2000) found that inmates who perceived they had been forgiven by their victims tended to score higher on self-esteem than did those who did not feel forgiven.

Measures of Forgiveness

A construct must be conceptualized before it can be effectively measured, and, as with so many aspects of human behavior, forgiveness has not lacked for debate over how it should be conceptualized (McCullough et al., 2000). Most agree, however, that forgiveness is adaptive (e.g., Mauger et al., 1992; McCullough, 2000; McCullough & Worthington, 1995) and supported by research linking it with physiological health and psychological well-being (e.g., Mauger; Subkoviak et al., 1995). The perspective of forgiveness can be toward oneself, another person or persons, or a situation that one views as being beyond anyone's control as an illness, "fate," or a natural disaster (Lopez

& Snyder, 2003). The measure then must take into consideration the perspective adopted and whether the aim is to gauge level of offense-specific, dyadic, or dispositional forgiveness (McCullough et al., 1997; McCullough et al., 1998).

Studies indicate that people's scores on measures of dispositional forgiveness tend to be related to their scores on measures of mental health and well-being, whereas scores on measures of forgiveness of specific transgressions tend not to be significantly related to mental health and well-being. Thus, measures of dispositional forgiveness appear to be especially useful for assessing psychological correlates of forgiveness. (McCullough & Witvliet, in press, as cited in Lopez & Snyder, 2003, pp. 307-308)

For the purposes of the current study, finding an appropriate measure focused on instruments measuring dispositional forgiveness. However, as mentioned earlier, most that were reviewed pertained to specific people, offenses, and scenarios rather than a disposition to be forgiving across situations. One measure of dispositional forgiveness is the Heartland Forgiveness Scale (HFS; Yamhure Thompson, Snyder, Hoffman, Michael, Rasmussen, et al., as cited in Lopez & Snyder, 2003, p. 303). This is an 18-item instrument composed of three, six-item subscales for the measurement of forgiveness of self, others, and situations. Half of the items on each subscale are positively worded assessing forgiveness; half are negatively worded assessing unforgiveness. Responses are based on a 7-point scale with verbal anchors of *almost always false of me* = 1, *more often false of me* = 3, *more often true of me* = 5, and *almost always true of me* = 7. The nine negatively worded items are reverse-scored, and the resulting values are summed for each subscale and for all 18 items. Psychometric values were not stated, and this instrument was set aside in favor of the TFS used in this study.

With forgiveness becoming more a focus for educational psychology, especially with changing perceptions from its being theological to its more psychological application, researchers and clinicians are expected to refine current instruments further and to gear them to positive outcomes (Coyle & Enright, 1998). For example, genuine forgiveness as an internal process may occur without apology or even recognition of wrongdoing on the part of the offender. This complex inner working can transform both the forgiver and the forgiven. However, there are many sides to the issues inherent to forgiveness as explained briefly in the next section.

Forgiveness: Strength or Weakness?

There are philosophical objections to forgiveness (Cose, 2004; Coyle & Enright, 1998) and practical reasons for ensuring a true understanding of its implications. In general, findings support the utility of encouraging forgiveness in others, but caution is needed, especially in differentiating between the strength of true forgiveness and the self-deception of pseudo-forgiveness born of weakness and fear.

First of all, it is important to keep in mind what forgiveness is *not* (Lin, 2001). Coyle and Enright (1998) explain that forgiveness is not the legal act of pardon or leniency. It is not the same as condoning, excusing, forgetting, being indifferent, or mourning. Denying can lead the injured to believe they have forgiven another and prevent them from seeing their own anger, an anger that can often be subtly or overtly self-destructive. Forgiveness is not justification and often does not necessarily lead to reconciliation.

Even allowing for these boundaries, forgiveness may not be an appropriate or viable option for all clients, such as those with certain personality disorders, e.g.,

antisocial personality, dependent personality, and schizophrenia (Drinnon, 2000; McCullough & Worthington, 1994). Even for clients with no major adjustment problems, forgiveness must be presented as a matter of personal choice, not a coerced one. Forced forgiveness can result in a pseudo-forgiveness that leads to greater resentment and pain (Enright, Eastin, Golden, Sarinopoulos, & Freedman, 1992). Some of the literature comes across as overly sentimental and enthusiastic, presenting only the benefits of forgiveness and the negative repercussions of getting even or holding resentment. Some findings bring up questions of bias involving the researcher or the proponent providing the financial backing for the research.

Unlike other granting agencies that support scientific research under a presumption that such research will be objective, the Templeton Foundation, which is dedicated to the 'reintegration of faith into modern life' (John Templeton Foundation, 2000), challenged social scientists to design research that will prove the usefulness of forgiveness, a challenge that is reminiscent of drug companies who do research on the effectiveness of their own products. (Lamb & Murphy, 2002, p. 9)

Forgiveness should be intentional, not simply an automatic default. Relevant studies should include criticism as well as advocacy (Govier, 2002; Lamb & Murphy, 2002; Murphy, 2003; Schimmel, 2002).

It is possible to use forgiveness for self-serving motives (Baumeister, Exline, & Sommer, 1998) or fail to pursue justice by too readily forgiving (Exline, Worthington, Hill, & McCullough, 2003; Wade & Worthington, 2003; Worthington & Wade, 1999). There are a number of books and studies defending lack of forgiveness in some cases, particularly where forgiveness may undermine justice and due punishment. One of the most noted, at least in terms of explaining these counter approaches, is Enright's (2001) *Forgiveness Is A Choice: A Step-by-Step Process for Resolving Anger and Restoring*

Hope. There are other more direct opponents of forgiveness as a general practice, and they need to be taken into consideration when evaluating the implications of any forgiveness study. For the current study, forgiveness was treated as a variable relating to resilience and aspects of aging successfully. It was not prescribed as a way to deal with specific people or situations, only described in terms of possible implications.

Aging

The number of older Americans is increasing, taking over a greater proportion of the total population. They represent a formidable force. Their resulting political power has already led to better medical care, increased housing subsidies, larger retirement incomes, and enhanced social services for older Americans (Aiken, 2001). All of this does not come easy or free.

Aiken describes old age as both costly and beneficial to the individual and society as a whole. All too often the social benefits of a long life, such as continuing productivity and the role of wise and experienced older adults as teachers and counselors of the young, are minimized while the disabilities and costs of old age are emphasized. These costs, in terms of health care, retirement payments, housing, and social services for older adults, are, of course, real enough. We are striving toward new insights into the problems and possibilities associated with aging. With the changes showing up in related employment statistics, there is more interest in labor force participation and retirement trends for the more mature worker. At the same time, we are seeing progress in psychological assessment of the cognitive abilities and personality characteristics of older adults and more research on increasing the life span, accompanied by more careers in gerontology,

geriatrics, geropsychology, and related fields. The potential here is unprecedented, and much can be attributed to the baby boom.

As described by Poulos and Nightingale (1997), the baby boom generation consists of about 75 million persons born in the United States between 1946 and 1964, increasing to 83 million baby boomers when combined with contemporary immigrants from other countries. By the end of 2005, the first of the baby boomers will begin to turn 60. Between 1995 and 2025, the population that is 55 and older will increase much more sharply than any other age group and will constitute up to 25% of the population. The baby boomers increased the size of the labor market and raised the average age of the workforce. Assuming a retirement age of 65, baby boomers will not begin to retire until 2011. The 60- to 70-year-old category is expected to increase until the early baby boomers begin retiring in large numbers after 2020. Based on historic participation, we can anticipate that the demand for employment services by older workers will increase as the baby boom generation ages over the next few years. That demand, mainly from those with relatively less education and work skills, may suggest that current employment and training programs should begin now to prepare for the aging of its participants and, possibly, for expanding program services to accommodate a growing need.

We all face turning points and periods of transition in our lives, individually and organizationally. Sometimes these changes and other influences over time include effects on the job leading to unemployment or underemployment in some cases. They bring out a number of implications for those involved in workforce education, e.g., the dynamics of intergenerational differences and how they may affect the job, women's roles and resilience, how we bridge the gap between school and work, and how we face retirement.

For many, maintaining employment is often essential to holding onto an overall sense of intactness (AARP, 2004; Aiken, 2001). It is a part of their own identity, a mainstay in the face of the vicissitudes of the human experience. Continued employment relates to lifelong learning and skill development (Smith & Pourchot, 1998).

Employers' willingness to employ or retain older workers depends on the workers' productivity and cost. There are, in fact, no discernible differences between the intrinsic abilities (measured as physical and mental ability and capacity to learn) of most older workers and those of their younger counterparts for the majority of jobs today. The individuals themselves must have a realistic perspective on their own capabilities and their expectations of any employer. Hints to the job seeker now include advice to the older applicant, such as this suggestion on resilience found in a recent career column: "Mention work experience that shows flexibility and creativity to counteract the stereotype that those over 50 don't have imagination. Discuss ways you solved problems and share ideas you developed to help your former employer save money or time" (Lunceford, 2002).

We want to strengthen our abilities—our qualities of resilience—both to maximize where we are and to let go when the time is right to move on. Some believe there are ways to reinforce our resilience.

People can look back on their lives and see that they have experienced many changes in their lifetime but are still intact, still very much who they have always been. Some of these changes may have seemed cataclysmic at the time, and one's identity may have shifted and grown as a result, but the core of who one is did not disappear. This kind of retrospective can develop self-confidence in one's resilience and perspective on the present. (Barger & Kirby, 1995, p. 178)

Levy, Slade, Kunkel, and Kasl (2002) examined whether self-perceptions of aging influence longevity by surveying a cohort of 660 participants (338 men and 322 women), aged 50 and older by July 1, 1975, cognitively intact, and who resided in Oxford, Ohio; they responded to items such as “As I get older, things are (better than, worse than, or the same as) I thought they would be” or “As you get older, you are less useful.” The researchers matched data from the Ohio Longitudinal Study of Aging and Retirement (OLSAR) with data from the National Death Index (NDI) to arrive at the outcome of survival. Results indicated that those with more positive aging self-perceptions at baseline live longer (after controlling for relevant factors of age, gender, socioeconomic status, functional health, and loneliness). The mean survival for the more positive self-perceptions group was 22.6 years past baseline; for the more negative, 15 years (risk ratio of .87, $p < .001$). It is important to emphasize positive views of aging among the young; this may be done by promoting positive intergenerational activities. It is also important to encourage more self-awareness among older people, prompting them to distinguish between how others target them and how they in turn target themselves. Transferring theory into educational programs for adults has been proposed (Smith & Pourchot, 1998), perhaps with the outcome of an adult educational psychology informed by cognitive and instructional psychology, adult development, and gerontology. Adults can continue to learn, develop, and mature across the whole of their lives in the workplace, the family, and the community.

Ageism

Age discrimination is the fastest growing type of discrimination claim today, with the Equal Employment Opportunity Commission reporting that “the number of age-bias

claims against private-sector employers jumped 8.7% to 17,405 in the fiscal year that ended September 30, compared with the previous year. The figure accounted for 22% of all claims filed during fiscal 2001” (Murray, 2002). Even though the majority of these claims do not succeed, the pattern is sufficient to have coined the term *ageism*.

Ageism is “the process of systematic stereotyping of and discrimination against people because they are old. Ageism can also be positive, automatically assuming the older person to be wiser and more experienced” (Aiken, 2001, p. 177). In 1996, the first of the baby boomers reached the age of 50. “Just as the baby boomers redefined the popular notion of what other life cycle phases mean, there is evidence that they are now contributing to a redefinition of aging and what it means to be a mature adult or an older worker and what it means to retire” (Poulos & Nightingale, 1997).

With improvements in the health of older individuals and increases in life expectancy, Americans spend more time in retirement than ever before. According to the CED (1999), we now measure retirement in decades rather than years. In 1965, a typical male worker could expect to spend 13 years in retirement; today, he will spend 18 years. For working women, the retirement span has increased from 16 years to more than 20. This prolonged retirement may not continue to be beneficial and affordable for individuals or for the nation. The disproportion between the retired baby boomers and workers supporting them will be unprecedented. In 1950, there were seven working-age persons for every person age 65 and older in the United States; by 2030, there will be fewer than three (AARP, 2004). Further, the long-awaited retirement can turn out to be a bittersweet reward. Some studies indicate that about half of those over 55 would like to continue working part-time after retirement. The “employee may be free of the daily

requirements of his or her job, but at the same time be slightly adrift as a result of not having a job to go to” (Dessler, 2000, p. 386). As a society, we can benefit from reconsidering our stereotypical views of older workers and coming up with alternatives to full-time, career employment for additional years of work in some form.

Older Americans currently face barriers to work on several fronts, including financial disincentives to work, workplace discrimination, and inadequate training. Even younger retirement ages have been in part, a reflection of these barriers. Older workers’ experiences in the job market indicate problems as well; unemployment becomes more persistent as workers age, and job opportunities are often limited. According to the CED, very few older workers have the option to scale back employment in a long-held, career job (i.e., “phased retirement”). An effective pro-work agenda for older Americans can be a win-win for all parties involved—older workers, businesses, and government.

According to the AARP (2004), employers understandably give priority to training those workers they deem most valuable or promising to their organizations, most capable of learning new skills, and most cost-efficient to train. Their concerns about the learning ability of older workers, as well as the costs of and returns to training older employees who may soon retire, help explain such workers’ underrepresentation in training programs. Workers who fail to get training not only risk obsolescence, they reinforce stereotypes about older worker trainability and adaptability. These stereotypes then serve as impediments to further training opportunities.

Retirement programs themselves can be challenged as de facto programs for forcing the discharge of older employees against their will. Even some electing early retirement admit it was not entirely voluntary. For example in the case of *Paolillo v.*

Dresser Industries, Inc., employees were given only a few days to decide about retirement, with details of the package provided just three days before the deadline. As a result of the suit and appeal that followed, the U.S. Court of Appeals for the Second Circuit (New York) ruled in favor of the retirees, stating that the employee's decision to retire must be voluntary and without undue strain (Dessler, 2000).

The Gray America Challenge

According to Aiken (2001), people aged 55-75 are expected to be healthier, better educated, and more demanding of a greater variety of options in life than ever before. They may have retired from their *first* career, but desire to remain active and involved in some type of job or other capacity, with all the pros and cons involved, such as:

1. The health of the great majority of older Americans is good enough to permit them to function adequately.
2. Most older Americans are either employed or would like to do some kind of work.
3. Older adults have poorer memories than younger adults.
4. Older adults tend to respond more slowly than younger adults.
5. Older adults learn new things more slowly than younger adults.
6. Chronic illness tends to increase, but acute illness tends to decrease with aging.
7. The rate of absenteeism is lower among older employees than among younger employees.
8. The accident rate is lower among older employees than younger employees.

Older people do often have greater difficulty sustaining attention to a new task. Less able to organize new information as quickly or as effectively as younger people, they may have greater difficulty in forming associations and using visual images in processing information into memory, and, therefore, the material is not processed

adequately into memory storage initially. The older person may remember the gist of a text, but the details are not easily recalled (Aiken, 2001). However, what the older workers can bring to the job is vision, experience, and compensation for losses in memory and ability. They often are willing to invest more time and effort into a task, substituting other skills for the deteriorating ones and settling for less ambitious solutions or goals (Aiken; Dessler). There are also some lifestyle habits they can incorporate to help forestall the detriment to their functional capacities. Some of these factors associated with a lower risk in cognitive decline include maintaining a healthy lifestyle to avoid chronic illnesses like cardiovascular disease, continuing to learn and develop new interests, cultivating a marriage to a person with similar cognitive skills, and being satisfied with life.

Given adequate ability, good health, sufficient encouragement, and opportunity, a person can be creative at any age. However, potentially creative people who are not properly stimulated or rewarded, or who do not have an opportunity to demonstrate their abilities, will, all too often, settle into a routine existence in which their potentials remain unfulfilled and may even deteriorate. In order for those creative potentials to be developed and expressed, the school system, and society as a whole, must value unusual ideas and individual differences. Only a society that recognizes the wide variations in individuals, regardless of age, and provides opportunities for these differences to manifest themselves, can hope to make optimal use of its older citizens. (Aiken, p. 97)

According to Aiken, creativity tends to persist in varying degrees throughout an individual's life. A decline in creativity in later life may come from demands of other activities, illness, personal problems, increased stress, or a loss of interest or motivation in the field of endeavor. However, though creativity declines in most older people, we encounter many, many examples where individuals continue to blossom in later years. Their broad experiences as well as extensive factual and procedural knowledge often

culminate in greater wisdom and creative productivity that can extend into late life. The lives of Michelangelo, Giuseppe Verdi, Goethe, Pablo Picasso, Sophocles, Monet, Thomas Edison, and Luther Burbank show that highly original work is possible into one's 70s, 80s, or 90s (Aiken, 1998). Others may come to learn new things, develop new skills, and become truly creative for the first time in their later years. Renowned author James Michener himself admitted he only began his accomplishments at 40 (Michener, 1974). Grandma Moses began painting at 73, holding her first exhibition at 80 and attaining international fame as an artist by the time of her death at 101.

The aging of the baby boom generation coincides with a trend toward longer life expectancy and longer healthy life expectancy. Because the pipeline of younger employees may not be enough to support workforce needs for a number of years, and, given the clear evidence that most older persons prefer alternative combinations of work and retirement, policymakers might do well to capitalize on both the life preferences that seem evident and the fact that more people remain healthy into older ages.

We need to challenge societal perceptions of “old” (e.g., *cautious* rather than *rigid* or *inflexible*) to objectively discern advantages and disadvantages to growing older (e.g., the older person is not so preoccupied with what other people think—is more resilient). The thought is that age is best measured in terms of functional capacity (ability to engage in purposeful activity), with job assignments suited to the ability, not the age group, of the worker. Arrangements might include shared positions, part-time jobs, and flexible working hours. This interest in the aging process may heighten efforts to conduct related research and to broaden our perspective on the cognitive abilities and personality

characteristics of older adults. Research will not simply focus on increasing life span, but on increasing the quality of that extended life as well.

Summary of Chapter II

There is a rapidly expanding body of literature on the phenomenon of resilience—the dynamic process that leads to positive adaptation within the context of significant diversity (e.g., individual differences in background and personality and wide variety of life circumstances). With a focus on protective factors, resilience is conceived as an end product of buffering processes that do not eliminate risks and adverse conditions in life, but allow the individual to deal with them effectively. This may involve complex interactions with other traits such as forgiveness and may be a function of aging.

More people are living longer and remaining healthy into older ages. As seen posted on a wellness bulletin board, “The object is to die ‘young’ ... as late as possible.” Resilience and creativity can span a lifetime for some individuals if appropriately cultivated, and forgiveness can grow with the wisdom of age. One way to foster this can be for these evolving people to continue in some form of active employment. This can be encouraged when job assignments are based on the ability of the workers, not the age group to which they belong. Appropriate measures of personality traits can help us to learn more about effective life-long learning and utilization, and this holds many implications for policy and procedures in disciplines such as education, workplace training and development, psychology, clinical practice, and gerontology.

In view of all these considerations, this chapter lays the groundwork for this study in resilience. It provides the theoretical framework and conceptual basis supporting the methodology described in the following chapter.

CHAPTER III

METHOD

One of the principles of an effective research study is a sound, comprehensive research design based on careful, thoughtful planning. In essence, this chapter presents a research plan detailing the steps to take to arrive at accurate data collection and meaningful results on the possible relationship between resilience and forgiveness among older adults. It includes an outline of the overall approach; a description of the target population, sampling frame, and instrumentation; and procedures for sample selection, data collection, and data analysis.

Research Guidelines

There is a preponderance of very fine textbooks on research methods. The primary reference used as an overall guide for setting up this study was *Educational Research: Competencies for Analysis and Application* (Gay & Airasian, 2003). This volume proved extremely helpful in categorizing the type of study needed and determining the sampling and data collection procedures best suited to derive optimal results. Another rich source was *Research Methods in Family Therapy* (Sprenkle & Moon, 1996) covering major types of research design in use today—quantitative, qualitative, or mixed methods. Methods proposed for this study were drawn from this guide in conjunction with another geared specifically toward forgiveness research, *Forgiveness: Theory, Research, and Practice* (McCullough et al., 2000).

To appropriately assess the survey technique itself and its effectiveness in this particular study, the researcher relied upon Dillman's (2000) *Mail and Internet Surveys: The Tailored Design Method*. Day's (1998) *How to Write & Publish a Scientific Paper*

helped with many of the technical aspects of documenting the study, e.g., recommendations on style, tense, and pitfalls to avoid. In the words of the author, “Good scientific writing is not a matter of life and death; it is much more serious than that” (Day, p. ix). Formatting decisions were based on the fifth edition of the *Publication Manual of the American Psychological Association* (APA, 2001) and current graduate school and departmental guidelines.

Approach

Descriptive research, also referred to as survey research, seemed the design that best supported the purpose of this study and the intent to supplement information available on older adults. Rather than testing a theory in some way, a descriptive study simply describes how things are (Gay & Airasian, 2003). This study was quantitative and correlational to determine whether a relationship existed between the quantifiable variables of resilience and forgiveness, and, if so, how strong that relationship was. It also tested for possible associations with factors such as age, educational status, employment status, highest salary earned, and self-rated levels of resilience, forgiveness, childhood challenges, and health.

Selection of the Population and Sample

A key objective of this study was to add to what is known about older adults in the United States. Therefore, attention turned to finding an accessible population with appropriate demographics. For example, it was desirable to tap into a group primarily aged 50 and above, in overall good health, and displaying a lifestyle generally connoting satisfaction and success.

To some extent, the actual selection was one of convenience. The researcher knew of such a community in the southeast, one that appeared rather unique in that it was designated a “planned” versus “retirement” community,” yet consisted of mostly retired or semi-retired residents without quite the preponderance of health issues so often encountered in retirement communities or facilities. The location of this particular community held appeal due to the moderate climate of the area, the community at large that indicated welcoming hospitality and goodwill, the surrounding beauty of lakes and mountains, a rural setting with nearby urban amenities and medical facilities, a favorable tax structure, proximity to grandchildren and destination sites for tourism, and myriad personal reasons emanating from aspects of advancing age. Census (2000) data showed the community to include almost 2,600 people, mostly married and Caucasian, with a median age of 62. By mid-2004, according to property owner association records, this number had risen to approximately 4,500 people who had come from an array of geographic areas and had brought with them a wide range of life’s experiences. In their prior careers, many had attained positions of significant responsibility, authority, and power. This seemed a good place to investigate the presence and strength of resilience and forgiveness.

To see if there might be other similar communities better suited to this study, the researcher explored “urban clusters,” densely settled territory of at least 2,500 people but fewer than 50,000 (Census, 2000) in states known for attracting people as they look to retirement (primarily Arizona, Arkansas, Florida, South Carolina, and Tennessee for this search). A number of sites arose that were comparable in total population, but varied in other ways (e.g., designated as “country club, gated, golf, recreational, or retirement”

communities, incorporated entities rather than unincorporated communities; or populated with lower concentrations of ages over 50). While this was not an exhaustive search, it did help justify the decision to target the community of interest.

Sampling Frame

The sampling frame was the community phonebook for Spring/Summer 2004. The likelihood that some individuals might not have elected to disclose their contact information in the phonebook was taken into account. However, when each individual's name was entered into a database for the purposes of random sampling, 4,431 entries resulted, very close to the 4,500 residents estimated by the property owners association and a reasonable representation of the community as a whole. Besides any personal decisions to avoid being listed in the directory, some of the difference was attributed to the stages of residence, i.e., property purchased with expectation of future relocation, property purchased for investment and resale, or construction of new home still in progress. In other words, the property owners were not all current residents at the time of publication of the directory.

Sampling Procedures

Each individual in the phonebook was assigned a sequential number. In other words, if a couple lived at a given address listed, there was a number assigned to each party listed individually. This gave everyone listed an opportunity to be included in the sample from the 4,431 names entered into the Microsoft® Access database.

Gay and Airasian (2003) recommend a sample of 10% to 20% of a population this size in order to attain a significance level of .05. By use of a random number table generated from SPSS 12.0 for Windows, 900 people (20% of the property owners

association estimate of the community population) were selected by simple random sampling. These 900 names and addresses were then entered into the database for a mail merge and for tracking responses. In compliance with the informed consent provided to potential respondents, this participant listing and cross-reference file were destroyed upon completion of all mailings for the study.

Instrumentation

As indicated in the literature review in Chapter II, numerous instruments were evaluated in terms of their applicability to the objectives of this study, the variables of interest, and their psychometric properties. For measuring resilience, the choices were narrowed down to the often used RS (Wagnild & Young, 1993) and the newly developed CD-RISC (Connor & Davidson, 2003). The RS was selected because of its tested application to older populations and its item orientation that appeared more in line with the concepts of positive psychology. Permission was secured through the official website for the instrument.

Various instruments for measuring either forgiveness, per se, or some indicator of the presence or absence of a forgiving disposition are mentioned in the literature; most actually related to specific offenses, specific types of offense or offender, or forgiveness interventions. The dispositional measures were often still at some stage of development or publication. Advice was sought from one of the leaders in forgiveness research who identified four instruments he had found most useful in his work and granted permission for their use in the current study (E. L. Worthington, personal communication, November 4, 2003). These were reviewed for possible use in the current study: (a) *Transgression-Related Interpersonal Motivations* (TRIM) (McCullough et al., 1998); (b) *Transgression*

Narrative Test of Forgiveness (TNTF) (Berry, Worthington, Parrott, O'Connor, & Wade, 2001); (c) *Trait Forgivingness Scale* (TFS) (Berry et al., 2005). The TFS was determined to be the most appropriate for this study from the perspective of positive psychology; it will be described later in this chapter.

An inventory of personal opinion and demographic items was devised to include validating questions and additional variables for describing the sample and for possibly correlating with the primary variables of interest: resilience and forgiveness. These instruments are discussed in their respective sections below.

Resilience Scale (RS)

Wagnild and Young's Resilience Scale ([RS]; 1993) was chosen for its applicability to adult populations, the positive tone of the items as compared with other resilience measures (some of which were discussed earlier in Chapter II), its relative brevity, and its ease of administration and scoring. A copy of this instrument is provided in Appendix A. The scale was drawn from an initial qualitative study in 1988 involving 24 women who had adapted successfully to a critical event in their lives and from a broad review of the literature. The literature encompassed equanimity (a balanced perspective of one's life and experiences), perseverance (persistence despite adversity or discouragement), self-reliance (belief in oneself and one's capabilities), meaningfulness (realization that life has purpose), and existential aloneness (realization that each person's life path is unique). All in all, this scale appeared to reflect the principles of positive psychology better than the other scales considered.

The original scale consisted of 25 items scored on a 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*), with possible scores of 25 to 175 (a higher score

indicating a greater level of resilience). These normative values were established on the original scale of 25 items. However, the version provided for this study contained an additional item on the respondent's self-perceived level of resilience based on the same Likert scale continuum of the first 25 items. It should be noted that the data collection included all 26 items, and findings were summarized and reported either by factor, by the sum of the two factors, by the total of all 26 item responses, or by using item 26 for validation, each labeled as needed for clarification.

The scale was tested using a sample of 810 community-dwelling older adults, mostly Caucasian with more females (62.3%) than males, aged 53 to 95 ($\bar{x} = 71.1$, $SD = 6.5$), retired (79%), well-educated, and in generally good health. Psychometric properties were developed from the 810 responses. Scores ranging from 25 to 175 ($\bar{x} = 147.91$; $SD = 16.85$) were slightly negatively skewed, but approximated a normal distribution. Item-to-item correlations resulted in alpha coefficients ranging from .37 to .75, ($p < .001$). Test-retest reliability ranged from .67 to .84 ($p < .01$) over 18 months, and internal consistency was high with an alpha coefficient of .91 ($p < .001$).

Factor analysis yielded two factors: Personal Competence and Acceptance of Self and Life. Concurrent validity was established by positive correlations with adaptive outcomes (physical health, morale, and life satisfaction) and negative correlation with depression. Higher resilience scores were associated with high morale, life satisfaction, better physical health, and less depression. No significant relationships were indicated between the RS and age, education, income, or gender.

A possible weakness in the scale as noted by the authors was the negative skewing of the responses; scores tended to fall in the upper range. Using 147 as the floor

for high scores, the sample's mean score of 147.91 put it on the line between high and mid-range scores. This must be taken into consideration in the data analysis.

Trait Forgivingness Scale (TFS)

The Trait Forgivingness Scale ([TFS]; Berry et al., 2005) is a one-dimensional trait scale measuring one's self-reported disposition to be forgiving of interpersonal transgressions. A copy of this instrument is provided in Appendix B. This instrument contains 10 items scored on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). Concurrent construct validity was tested by comparing ratings by self and by significant others ($r = .35, p < .01$) and by correlating results from similar instruments ($r = .50, p < .001$). Internal consistency was indicated by Cronbach's alpha for three studies = .80, .78, and .79, with item mean-square fit statistics ranging from .60 to 1.38. Test-retest correlation (8-week interval) showed $r = .78 (p < .001)$.

Personal Profile Inventory (PPI)

The Personal Profile Inventory (PPI) was designed by the researcher for this study in particular. It captured basic demographic information (e.g., year of birth, gender, highest educational level attained, and highest career level attained in terms of salary) and self-report items gauging resilience, forgiveness, and current status of overall health. Appendix C displays this instrument. With the community's being comprised of mostly Caucasian married couples, items on race and ethnicity and marital status were excluded from the data collection as there was little more information to be gained from these questions. These data were used to describe the sample and to identify appropriate subgroups for further data analysis, particularly in regard to research questions 4 and 5 involving possible interaction effects.

Pilot Study

Prior to the study, 11 selected university staff and students reviewed the research plan, completed the survey package, and provided comments and suggestions for the actual administration of the instruments and analysis of the response data. Based on their feedback, the layout of the instruments was revised to better accommodate the older reader (e.g., larger font size and directional arrows to indicate continuation). The PPI was simplified, reduced to one page, and formatted into a columnar layout, with items re-sequenced so that the most sensitive questions were asked last. The intent was to facilitate the readability of the survey packet and to increase response rate.

Procedures

The research protocol was adapted from the guidelines for conducting surveys in Dillman (2000) and Gay and Airasian (2003). Essentially, after being approved, the survey was conducted in three consecutive mailings: (1) an initial mailing to all 900 people in the sample, (2) a reminder postcard to all non-respondents by a specified date, and (3) a second complete packet to all remaining non-respondents. The following sections detail these procedures to include obtaining approval for the study, conducting the survey, collecting and processing responses, and analyzing the resulting data. The components are described briefly on the assumption that the reader will have a basic understanding of research and statistical methods.

Protection of Human Subjects

The researcher developed a cover letter and information sheet that would explain to participants the nature of the study, measures taken to ensure confidentiality, and the disposition of the data collected. Copies of the letter and information sheet are shown in

Appendix D and E, respectively. As an added incentive, a two-part ticket was to be attached to the bottom of the letter; participants who returned one part of the ticket with their name and phone number would be eligible for a drawing for gift certificates regardless of their participation in the study. Those who also chose to participate would indicate informed consent by virtue of their returning the completed questionnaire. Based on this proposed approach, the Human Subjects Institutional Review Board (IRB) at The University of Tennessee, Knoxville granted permission to the researcher to administer the RS, TFS, and PPI to the selected population sample.

Survey Packet

Upon receiving IRB approval, the researcher with the help of an authorized assistant put together the survey packets for mailing. Each mailer consisted of the cover letter personally addressed to the individual with a ticket for a drawing stapled to the bottom, an information sheet, RS, TFS, PPI, and a pre-addressed, stamped return envelope. The packets were identified with the individual's random sample number to ensure responses remained linked and to allow for follow-up with non-respondents.

Data Collection and Awarding of Gift Certificates

The data collection began with the mailing of the survey packets to the 900 people in the sample, allowing two weeks for a response. One week after the deadline, reminder postcards were sent to non-respondents. Two weeks later, second packets (with a new cover letter and drawing ticket) were mailed to the remaining non-respondents. Shortly after the end of the third mailing, 352 out of 497 people (70.8%) had returned tickets for the drawing. To give everyone in this group a 3-out-of-100 chance to win, there were 11 gift certificates awarded in the amount of \$25.00 each. These were purchased from the

Chamber of Commerce and were redeemable at over 100 local businesses offering a wide variety of products and services. The gift certificates were mailed to the winners within two weeks of the data collection completion.

A sample of non-respondents was contacted by telephone to learn why they chose not to respond and to obtain completed surveys, if agreeable to them. These follow-up surveys completed by phone interview or by mail were entered into the data base and categorized as a non-respondent. Then, preliminary to a statistical test, the follow-ups were assessed qualitatively for any differences between the respondents and non-respondents to the extent they could be inferred from comments made during the interviews or written on the questionnaires. A flowchart of the procedural steps is depicted in *Figure 1*.

Data Entry and Preparation for Analysis

The authorized assistant entered the participant responses into the database, flagging any questionable items or incomplete responses for the researcher to resolve. Sometimes this involved mailing at least part of the survey back to the respondent in order to obtain a complete and accurate response. The researcher also randomly compared the data entered with the submitted forms for quality assurance.

Several of the data items required recoding prior to summarizing and testing. For example, the RS items were further defined to distinguish the two factors. Five TFS items had to be reverse-scored. Regarding the PPI item on highest salary earned and the year that occurred, the salary was converted into 2004 dollars for comparison purposes. The researcher used the Consumer Price Index (CPI) inflation calculator on the Bureau of Labor Statistics web page to make this conversion.

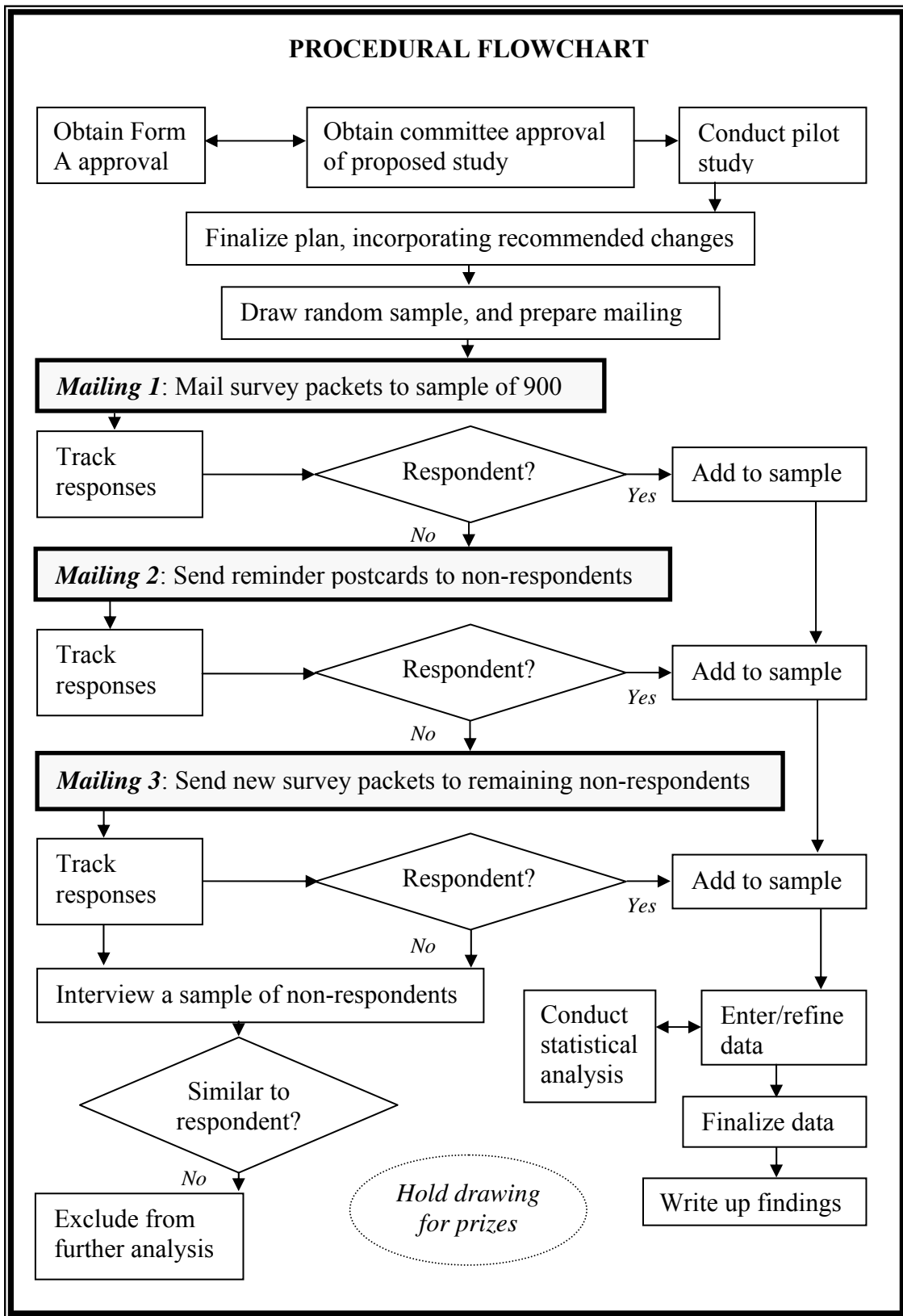


Figure 1. Procedural flowchart of study components.

Regarding employment status, there were several recurring conditions written in by respondents that supported some additional categories (e.g., voluntarily retired and now working part-time). For purposes of analysis, this item was recoded to show current employment status (not working; working). Some of the other variables were also recoded into dichotomous categories by using the median as the cut-off point in most cases (Ramsey & Schafer, 2002). To correspond with other studies of “older adults” (e.g., Forum, 2004), age groups were determined by those under 65 and those at least 65 years old, the mean and the median for this study. Other variables were also split into groups primarily to simplify summary data and comparisons with other studies. These variables included the total scores for resilience (low = < 150; high = 150 and more), forgiveness (low = < 38; high = 38 and more), educational level (low = up to an associate’s degree; high = at least a four-year college degree or higher), and high salary level (< \$88,013; \$88,013 and higher).

When all adjustments to the data were applied, the researcher imported the data set into the Statistical Package for the Social Sciences (SPSS) 12.0 for Windows, the statistical package chosen for the analysis. Data analysis assistance was then obtained from the Statistical Consulting Center at The University of Tennessee, Knoxville.

Data Analysis

The first order of business was to determine if non-respondents differed significantly from respondents and if the two groups could be combined to increase the response rate. An independent samples *t* test along with Levene’s test for equality of variances was applied. Then, standard descriptive statistics were calculated (frequencies, means, and standard deviations) to describe the sample and to provide basis for other

logical comparisons. In the case of highest salary obtained, there were substantial missing data that would require running some tests a second time and omitting that variable in order to include all responses. Both the RS (and its two factors) and the TFS were tested for internal consistency using Cronbach's alpha.

To compare the mean scores obtained from the current survey with established norms or with earlier studies, one-sample *t* tests were applied. Correlations and other possible interrelationships were tested using independent samples *t* tests, correlation analysis, and multiple linear regression. These helped determine the statistical significance of the data relationships as posed in the research questions; significance was tested at the .05 level. Findings were compared with those of other relevant studies, as available and applicable. Specific tests applied to each research question and their results are explained in detail in the next chapter.

Summary of Chapter III

This quantitative, correlational study involved surveying a sample of 900 residents in a selected community in the southeast. The survey was conducted using a three-mailing approach, i.e., an initial mailing and two follow-up mailings to non-respondents. Attempts to contact many of the remaining non-respondents were then made to see if that group was significantly different from the respondent group. When the data set was finalized, statistical tests were applied for the purposes of describing the sample, affirming the reliability of the instruments, and determining the statistical significance of any relationships revealed. The analyses included descriptive statistics (frequencies, means, and standard deviations), one-sample *t* tests, independent samples *t* tests, correlations, and hierarchical multiple regression. In summary, this chapter provided the

rationale for the choices of methods and procedures used in conducting this particular study, as well as the quantitative techniques of analysis that were considered appropriate for interpreting the data. Methodological considerations for the design of this study were driven by the nature of the data and the guidelines consulted, as described earlier. Study findings and implications are discussed in Chapters IV and V, respectively.

CHAPTER IV

RESULTS

The intent of this descriptive, correlational, cross-sectional study was to examine the relationship between resilience and forgiveness among older adults residing in a selected community. The study investigated whether personal factors of resilience level, forgiveness level, difficulty of childhood, health status, age, educational level, employment status, or highest salary earned accounted for any of the variation in the resilience and forgiveness scores. The approach taken was a mailed survey consisting of the Resilience Scale ([RS]; Wagnild & Young, 1993), the Trait Forgivingness Scale ([TFS]; Berry et al., 2005), and the Personal Profile Inventory (PPI) designed by the researcher for this study.

This chapter discusses the response rate achieved by the study, a profile of the sample, a comparison of respondents and non-respondents, and analytical responses to the research questions. Tables and figures are displayed when deemed appropriate to emphasize the particular results or distribution or to expound upon and clarify the summary in the text. To the extent practical, the tables were simplified to display only the cells necessary. For example, in tables displaying the results of correlations, the cells representing item correlations with themselves ($r = 1$) and the redundant cells due to the two-way correspondence were deleted to simplify the tables. Results that were not statistically significant might be explained briefly in terms of how that affected the analysis, but, for the most part, these were not graphically displayed.

Participation and Response Rate

Out of 900 surveys sent to a random sample of a primarily adult community in the southeast, followed up by reminder postcards and replacement packets, 497 people returned completed surveys for a response rate of 55.2%. These were coded “r” in the data base for respondent. Of the 403 non-respondents, 3 were deceased; 18, undeliverable; 18, refused; and 364, unanswered due to unknown reasons. These results are broken down in relation to the three mailings of the survey design as depicted in Table 1.

The demographic characteristics of the 497 participants were commensurate with what was expected given the community at large. There was an even gender split (female = 248; male = 249). Ages ranged from 39 to 92 years old. Most were over 50 years old ($\bar{x} = 65.42$; $Mdn = 65$), retired, and in reasonably good health ($\bar{x} = 4.8$ and $Mdn = 5.0$ on a 6-point scale). Frequencies and percentages of age by gender are shown in Table 2.

Participants reflected a middle-of-the-road outlook on the difficulty of their childhood in relation to others they knew ($\bar{x} = 2.82$ and $Mdn = 3.0$ on a 5-point scale). They stated they had relocated to this community from 41 of the 50 states plus Washington, DC, as well as from abroad (e.g., Brazil, England, Germany, Mexico, Saudi Arabia, Singapore, and South Africa), with the predominant origins being Michigan, Tennessee, Ohio, Illinois, Florida, and New York, in descending order.

The highest educational level attained was impressive, with 70% holding at least an associate’s degree. The actual frequencies are enumerated in Table 3 and pictorially displayed in *Figure 2*. Highest annual earnings reported were substantive. In assessing the data available on salary, the mean appeared somewhat disproportionate due to a few

Table 1*Responses in Relation to the Three-Mailing Survey Design*

Mailing	Status	Number	Percent
<i>Mailing 1:</i> Survey packets mailed to sample of 900.	Received	289	
	Deceased	3	
	Refused	9	
	Undeliverable	18	
	No response	581	
Completed surveys at end of Mailing 1		289	32.1%
<i>Mailing 2:</i> Reminder postcards mailed to 581 non-respondents.	Received	39	
	Refused	3	
	No response	539	
Completed surveys at end of Mailing 2		328	36.4%
<i>Mailing 3:</i> New survey packets mailed to 539 non-respondents.	Received	169	
	Refused	6	
	No response	364	
Completed surveys at end of Mailing 3		497	55.2%

Table 2*Frequency of Actual Ages Reported by Gender and Sample Total*

Age	Female	Male	Frequency	Cumulative Frequency	Percent	Cumulative Percent
39	1	0	1	1	.2	.2
42	1	0	1	2	.2	.4
43	1	0	1	3	.2	.6
45	0	1	1	4	.2	.8
47	2	1	3	7	.6	1.4
49	1	2	3	10	.6	2.0
50	1	2	3	13	.6	2.6
51	1	2	3	16	.6	3.2
52	1	1	2	18	.4	3.6
53	6	0	6	24	1.2	4.8
54	4	3	7	31	1.4	6.2
55	2	2	4	35	.8	7.0
56	6	4	10	45	2.0	9.1
57	6	11	17	62	3.4	12.5
58	15	9	24	86	4.8	17.3
59	13	7	20	106	4.0	21.3
60	13	15	28	134	5.6	27.0
61	9	8	17	151	3.4	30.4
62	19	17	36	187	7.2	37.6
63	12	18	30	217	6.0	43.7
64	18	8	26	243	5.2	48.9
65	14	11	25	268	5.0	53.9
66	8	6	14	282	2.8	56.7
67	11	20	31	313	6.2	63.0
68	14	9	23	336	4.6	67.6
69	8	10	18	354	3.6	71.2
70	8	11	19	373	3.8	75.1
71	9	11	20	393	4.0	79.1
72	9	12	21	414	4.2	83.3
73	7	8	15	429	3.0	86.3
74	6	7	13	442	2.6	88.9
75	3	7	10	452	2.0	90.9
76	6	3	9	461	1.8	92.8
77	1	2	3	464	.6	93.4
78	2	3	5	469	1.0	94.4
79	1	4	5	474	1.0	95.4
80	3	2	5	479	1.0	96.4
81	2	3	5	484	1.0	97.4
82	0	2	2	486	.4	97.8
83	0	1	1	487	.2	98.0
84	0	1	1	488	.2	98.2
85	1	0	1	489	.2	98.4
86	2	0	2	491	.4	98.8
87	0	1	1	492	.2	99.0
88	0	1	1	493	.2	99.2
89	0	1	1	494	.2	99.4
90	0	1	1	495	.2	99.6
92	1	1	2	497	.4	100.0

Table 3

Frequency of Highest Level of Education Completed by Participants

	Frequency	Percent	Cumulative Percent
8th grade or below	2	.4	.4
Some high school	1	.2	.6
High school graduate (including GED)	43	8.7	9.3
Some college or other post-high school education, but no degree	101	20.3	29.6
Two-year college degree	42	8.5	38.0
Four-year college degree	177	35.6	73.6
Master's or equivalent degree	112	22.5	96.2
PhD or equivalent degree	19	3.8	100.0
Total	497	100.0	

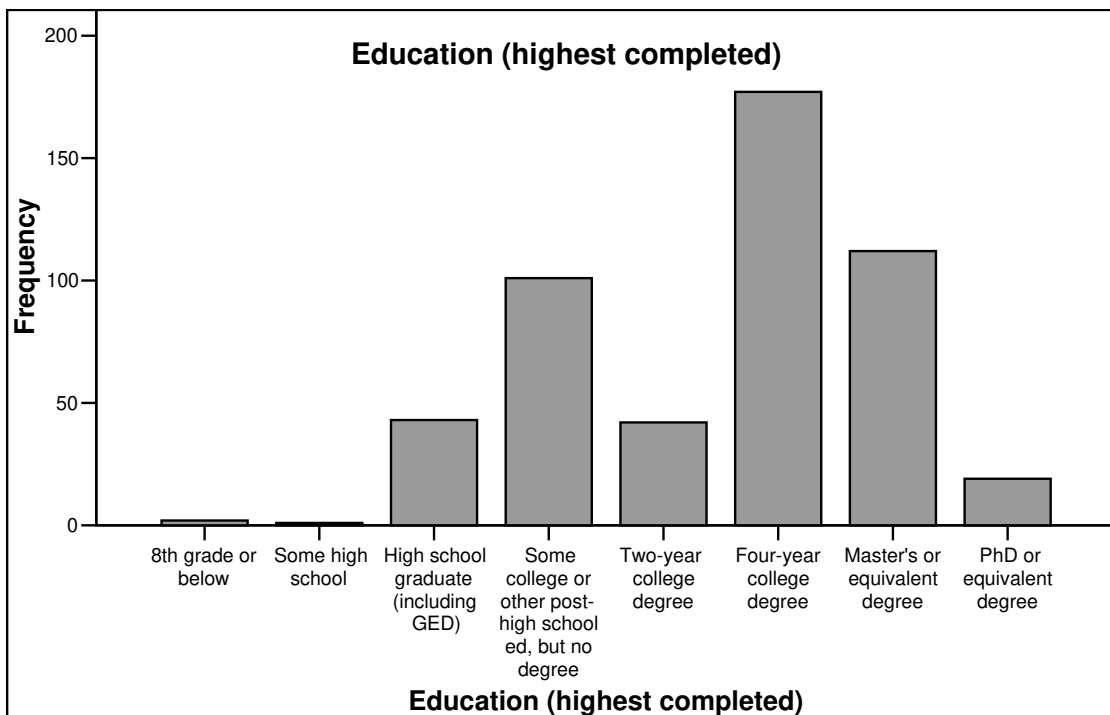


Figure 2. Frequency of highest level of education completed by participants.

extreme outliers, e.g., part-time or seasonal wages on the low end and executive officer salaries with incentives on the high end. The median was used as a more descriptive and accurate statistic in this case. Of the 370 people who answered the item, the median salary reported was \$88,013 at the 2004 dollar value. The other 127 participants refused to answer this question either because of the sensitive nature of financial status, an inability to remember, the individual's capacity as a homemaker rather than wage-earner, or other reasons not expressed in writing or in conversation.

The vast majority of the participants (381 or 76.6%) reported having retired voluntarily, 21 of whom were still working in some capacity (part-time, full-time, or self-employed). There were a small number (20 or 4.0%) who indicated they had been involuntarily or medically retired; only one of these reported working at the time of the survey (part-time). All of the categories are summarized by age group, gender, and current working status in Table 4.

Exclusion of Non-respondents and Adequacy of the Sample

Two weeks after the final mailing, 230 telephone contact attempts were made to the remaining 364 non-respondents to determine if they differed in any systematic way implying bias. Seventy calls were successful in actually reaching the person, and 33 surveys (13 females and 20 males) were completed, entered into the database, and coded "n" for non-respondent. Using analysis of variance (ANOVA) techniques, they were compared statistically with the 497 respondent surveys on total scores for resilience and forgiveness and on demographic variables related to gender, age, health, and employment

Table 4

Frequency of Age, Gender, and Work Group of Participants by Current Employment Status

Employment Status	Age Group			Gender		Current Work Status			
	< 65	≥ 65	Total	Female	Male	Total	No	Yes	Total
Retired (voluntarily)	137	217	354	165	189	354	354	0	354
Employed full-time	36	2	38	14	24	38	0	38	38
Retired (voluntarily) and working part-time	12	9	21	11	10	21	0	21	21
Self-employed	14	4	18	8	10	18	0	18	18
Retired (involuntarily)	7	10	17	7	10	17	17	0	17
Employed (part-time)	14	2	16	15	1	16	0	16	16
Homemaker	5	8	13	13	0	13	13	0	13
Unemployed (not seeking work)	7	0	7	7	0	7	7	0	7
Retired (voluntarily) and working full-time	4	0	4	2	2	4	0	4	4
Retired medically	0	2	2	2	0	2	2	0	2
Unemployed (disabled)	2	0	2	0	2	2	2	0	2
Retired (voluntarily) and self-employed	2	0	2	1	1	2	0	2	2
Other	1	0	1	1	0	1	1	0	1
Unemployed (seeking work)	1	0	1	1	0	1	0	1	1
Retired (involuntarily) and working part-time	1	0	1	1	0	1	0	1	1
Total	243	254	497	248	249	497	396	101	497

status. As shown in Table 5, there were no significant differences between the two groups regarding gender, age, health, and employment status ($p > .05$). However, respondents differed significantly from non-respondents on both resilience scores ($F = 8.168, df_1 = 1, df_2 = 528, p < .05$) and forgiveness scores ($F = 4.434, df_1 = 1, df_2 = 528, p < .05$).

With this statistical difference between the mean scores of the two instruments, it was decided to exclude the 33 non-respondents from the data set and from further analysis (Dillman, 2000; Gay & Airasian, 2003; Ramsey & Schafer, 2002). Comparison of overall means with and without the non-respondents showed that their exclusion did not significantly affect the results. However, the insights gained from this follow-up effort are of value and are discussed later in Chapter V.

In regard to the adequacy of the remaining sample of 497, Dillman (2000) suggests that, to keep results within a $\pm 5\%$ sampling error for a population of 4,000 to 6,000, a sample should include at least 351 to 361 people when the population is generally homogeneous (50/50 split) or 232 to 236 when there is greater diversity (80/20 split) in the population. Therefore, despite the response rate of 55.2%, the 497 participants more than exceeded the minimum required.

Reliability of Instruments Used

The reliability of the two construct measures used in this study—the Resilience Scale ([RS]; Wagnild & Young, 1993) and the Trait Forgivingness Scale ([TFS]; Berry et al., 2005)—was tested for internal consistency for each of the scores: RS Factor 1 (17 items), RS Factor 2 (8 items), RS Factor Subtotal (25 items), RS Total (26 items), and TFS Total (10 items). The analysis resulted in Cronbach's alpha coefficient of .91 for the

Table 5*Statistical Differences between Respondents and Non-respondents*

		Sum of Squares	df	Mean Square	F	Sig.
RS Total	Between Groups	2328.326	1	2328.326	8.168	.004*
	Within Groups	150508.685	528	285.054		
	Total	152837.011	529			
TFS Total	Between Groups	206.973	1	206.973	4.434	.036*
	Within Groups	24648.114	528	46.682		
	Total	24855.087	529			
Gender	Between Groups	.342	1	.342	1.365	.243
	Within Groups	132.128	528	.250		
	Total	132.470	529			
Age	Between Groups	.713	1	.713	.011	.915
	Within Groups	33017.966	528	62.534		
	Total	33018.679	529			
How would you describe your health in general?	Between Groups	.005	1	.005	.005	.941
	Within Groups	500.795	528	.948		
	Total	500.800	529			
Currently Working	Between Groups	.150	1	.150	.907	.341
	Within Groups	87.020	528	.165		
	Total	87.170	529			

* Significant at the 0.05 level (2-tailed).

overall RS and .81 for the TFS, both generally consistent with the earlier research of the instrument designers. These results are summarized in Table 6.

Assumptions of Normality and Linearity

Parametric tests such as the *t* tests, correlations, and regressions used in this study are based on assumptions of normal distribution, and correlations assume somewhat linear relationships. To test for the normality of the distribution of scores, stem-and-leaf plots, box plots, and histograms were examined for each of the scales and factors: RS Factor 1 (17 items), RS Factor 2 (8 items), RS Factor Subtotal (25 items), RS Total (26 items), and TFS Total (10 items). This examination showed only slight departures from normality, and due to the robust nature of the tests to be applied, the assumption of normality was determined to be met (Ramsey & Schafer, 2002). To determine whether a linear relationship existed, the total RS and TFS scores were plotted in a scattergram. A fit line demonstrating linearity was superimposed, and this suggested a direct linear relationship as represented in *Figure 3*.

Comparison of Means with Earlier Studies

To be able to describe the overall resilience and forgiveness scores in terms of their comparison with other groups, an effort was made to compare sample score means with those of similar studies. Of course, as asserted in the statement of the problem underlying this study, the difficulty lay in the dearth of appropriate comparable studies for older adults, especially any that might correspond with the particular demographics of the target population of the current study. The researcher relied upon studies conducted by the instrument designers simply for descriptive purposes.

Table 6

Internal Reliability of RS Factor 1, RS Factor 2, RS Factor Subtotal, RS Total, and TFS Total

Scale/Factor	\bar{x}	Variance	SD	Number of Items	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items
RS Factor 1: Personal Competence	99.11	135.707	11.649	17	.894	.897
RS Factor 2: Acceptance of Self and Life	43.85	40.245	6.344	8	.736	.760
RS Factor Subtotal	142.96	264.297	16.257	25	.900	.909
RS Total	148.84	287.856	16.966	26	.907	.915
TFS Total	37.08	46.610	6.827	10	.810	.813

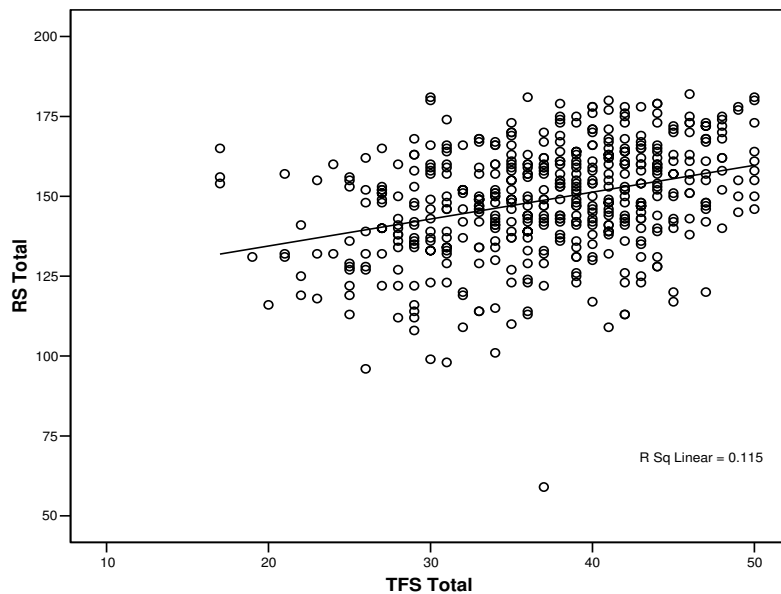


Figure 3. Scattergram of RS Total and TFS Total scores with fit line depicting linearity.

For the RS, the Wagnild and Young (1993) sample consisted of 810 community-dwelling people (62.3% women; 61.2% married), the majority of whom were white, retired, educated beyond high school, and in good health. Their average resilience score from the 25-item RS was 147.91 ($SD = 16.85$). By using a one-sample t test, this mean was compared statistically with the RS Subtotal of Factors for the current sample ($n = 497$, $\bar{x} = 142.96$, $SD = 16.257$) and was found to be statistically different ($t = -6.788$, $df = 496$, $p < .001$). Overall, the current sample scored about five points less on the average than that earlier group.

In establishing the psychometric values for the TFS, Berry et al. (2005) drew several samples from undergraduate students at a mid-Atlantic state university. No adult-focused studies were found that adequately corresponded with the current study. Therefore, as a minimal effort to gain some perspective on how the current study scores might rank against others, the researcher considered one study from the series just mentioned that compared forgiveness and affective traits such as agreeableness and empathic concern, personality characteristics consistent with dimensions of positive psychology. Participants consisted of 179 undergraduates: 151 females and 28 males, averaging 24.3 years old, the majority of whom were white. Positive associations were found between forgiveness ($\bar{x} = 33.5$, $SD = 7.1$) and variables of interest. By using a one-sample t test, this mean was compared statistically with the TFS scores for the current sample ($n = 497$, $\bar{x} = 37.08$, $SD = 6.827$) and was found to be statistically different ($t = 11.692$, $df = 496$, $p < .01$). Overall, the current sample scored about four points more on the average than that earlier group.

Findings by Research Question

With the internal consistency of the instruments established and with the assumptions of normality and linearity acceptably satisfied, other standard statistical tests proceeded. These primarily included correlational and regression techniques to both clarify any relationships that existed as well as to determine the degree of that relationship between and among variables. Respondent data were analyzed to determine appropriate answers to the research questions that could be statistically substantiated in describing the sample and the associations. The tests were conducted as they pertained to each question, and the results were summarized accordingly. Variables were treated as continuous data unless otherwise stipulated. These findings are presented in the following sections by research question.

Research Question 1

Is there a significant relationship between resilience and forgiveness? Bivariate correlation techniques are generally used to illuminate the relationship between two variables; each variable is equally responsible for the nature and strength of the link. That is, as the values of either variable change, the values of the other variable tend to change as indicated by the correlation coefficient. The stronger the correlation, positively or negatively, the stronger the pattern of corresponding change between the two variables (Gay & Airasian, 2003; Ramsey & Schafer, 2002).

Bivariate correlations were conducted on each of the key variables related to resilience and forgiveness scores: RS Factor 1, Personal Competence; RS Factor 2, Acceptance of Self and Life; RS Factor Subtotal, RS Item 26, *I am resilient*; RS Total; Self-rated Resilience, PPI Item 1; TFS Item 10, *I am a forgiving person*; TFS Total, and

Self-rated Forgiveness, PPI Item 2. The correlations displayed in Table 7 indicated a direct relationship between each pair of scores.

As expected for subscales of an instrument, RS Factors 1 and 2 each showed a strong direct correlation ($r > .8, p < .01$) with the RS Factor Subtotal and RS Total scores and a moderate direct relationship with each other ($r = .598, p < .01$). Because of the one-dimensional nature of the TFS, there were no subscales to compare.

An unexpected finding arose with RS Factor 2. Its correlation with TFS Total ($r = .424, p < .01$) was stronger than for the instrument as a whole. In other words, correlation between the RS Total and TFS Total scores indicated a direct relationship, but with a lower correlation coefficient ($r = .339, p < .01$) than that resulting for RS Factor 2, Acceptance of Self and Life.

Self-assessment entered into a number of the scale items and served as the primary focus of the self-rated resilience and forgiveness items of the PPI. Correlations with the self-rated levels of the disposition to be resilient and forgiving (i.e., PPI items 1 and 2, respectively, as well as the individual items on each scale that were comprehensive for the construct, RS item 26 and TFS item 10) all indicated at least a slight direct relationship between each pair of scores. RS Item 26 and TFS Item 10 both correlated slightly and positively with their respective self-rated scores of PPI Item 1 ($r = .334, p < .01$) and PPI Item 2 ($r = .343, p < .01$). Both resulted in weak relationship with the counter self-rating ($r = .186$ for RS Item 26 and PPI Item 2; $r = .162$ for TFS Item 10 and PPI Item 1); yet, self-rated resilience (PPI Item 1) and forgiveness (PPI Item 2) showed a moderate and stronger correlation with RS Total score ($r = .407, p < .01$) and TFS Total score ($r = .514, p < .01$), respectively.

Table 7

Bivariate Correlations of Resilience and Forgiveness Scores for RS Factor 1, RS Factor 2, RS Subtotal of Factors, RS Item 26, RS Total, Self-rated Resilience, TFS Item 10, TFS Total, and Self-rated Forgiveness

	RS Fac1	RS Fac2	RS Subtotal	RS26	RS Total	PPI1	TFS10	TFS Total	PPI2
RS Factor 1: Personal Competence	1	.598**	.950**	.667**	.949**	.413**	.195**	.240**	.229**
RS Factor 2: Acceptance of Self and Life			.819**	.550**	.817**	.276**	.332**	.424**	.306**
RS Subtotal of Factors				.692**	.999**	.404**	.269**	.337**	.284**
RS Item 26: I am resilient.					.722**	.334**	.221**	.270**	.186**
RS Total						.407**	.271**	.339**	.283**
Self-rated Resilience (PPI Item 1): Compared to others you know, how well do you deal with situations and come out the better for it, in general?							.162**	.201**	.318**
TFS Item 10: I am a forgiving person.								.683**	.343**
TFS Total									.514**
Self-rated Forgiveness (PPI Item 2): Compared to others you know, at what rate do you tend to stop feeling resentment toward a perceived offender or about a perceived offense, in general?									1

Pearson Product Moment correlation coefficient r is shown. All respondent records ($n = 497$) were included.

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

Research Question 2

Is there a significant relationship between resilience and age? Bivariate correlation indicated no significant relationship between RS Total score and age ($r = .014, p = .758$). Tests were then run to check for any association with other resilience scores (individual scores for factors, self-rated resilience). Again, as seen in Table 8, there was no significant correlation on any components of resilience when corresponded with age.

Research Question 3

Is there a significant relationship between forgiveness and age? Bivariate correlation indicated no significant relationship ($r = .036, p = .428$) between TFS Total score and age. Tests were then run to check for any association with the self-rated forgiveness of PPI item 2 on forgiveness. Again, there was no significant correlation on this component of forgiveness when corresponded with age. These results are shown in Table 9.

Table 8

Bivariate Correlations of Age with Resilience Scores (RS Item 26, RS Factor 1, RS Factor 2, RS Subtotal of Factors, and RS Total)

		RS Item 26: I am resilient	RS Factor1: Personal Competence	RS Factor2: Acceptance of Self and Life	RS Subtotal of Factors	RS Total
Age	Pearson Correlation	.024	- .003	.038	.013	.014
	Sig. (2-tailed)	.588	.951	.395	.773	.758
	<i>n</i>	497	497	497	497	497

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

Table 9

*Bivariate Correlations of Age with Forgiveness Scores
(TFS Item 10 and TFS Total)*

		TFS Item 10: I am a forgiving person		TFS Total
Age	Pearson Correlation	-.001		.036
	Sig. (2-tailed)	.989		.428
	<i>n</i>	497		497

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

Research Question 4

To what extent do selected demographic variables (i.e., age, gender, educational level, self-rated resilience, self-rated forgiveness, difficulty of childhood, health status, employment status, and highest salary earned) account for the variance in resilience?

Multiple regression analysis was used to determine the extent to which the variables just listed explained the RS Total score. The test included the RS Total score as the dependent variable with the independent variables of gender, age, current employment status (working or not working), educational group (up to associate's degree; four-year degree or higher); self-rated resilience (PPI Item 1), self-rated forgiveness (PPI Item 2), level of childhood difficulty experienced (PPI Item 3), and health status (PPI Item 4).

Highest annual salary earned and respective salary group (< \$88,013; ≥ \$88,013) were considered for the analysis; however, with the inclusion of the salary group, this limited the model to the 370 participants who provided salary information. Therefore, to be able to test all 497 participant records, the variable for highest salary earned was

treated separately because of its missing data. Bivariate correlations of highest salary earned or salary group with each of the other variables listed above failed to produce any significant relationships.

From another perspective on resilience and salary, Wagnild (2003) arrived at inconclusive findings when comparing RS scores of low- and high-income groups (high meaning over \$35,000 annual income). For most there was no difference in scores based on income group, but one sample did differ significantly ($n = 344$, $F = 9.43$, $p < .002$) with higher income respondents reporting higher resilience. The differences were explained in part by possible interaction from other factors such as self-esteem and effects of some of the stresses of lower income status (e.g., widowhood, less education, and poorer health or less healthy lifestyle). For the purposes of the current study, this ambiguity helped with the decision to exclude the salary group or highest salary earned from the regression.

Statistical regression procedures were applied to all 497 records. To gauge the strength of the resulting model, the coefficient of determination (i.e., the squared value of the correlation coefficient or R^2) was used (Ramsey & Schafer, 2002). The combination of variables stated above explained approximately 24.9% ($R^2 = .249$) of the variability of the total resilience scores as summarized in Table 10. The F test is commonly used to compute the significance of the set of variables to the explanation reflected in R^2 (Ramsey & Schafer). In this case, the ANOVA generated from the regression showed this model to be significant ($F = 20.277$, $df = 8$, $p < .01$), as displayed in Table 11.

Table 10

Model Summary of the Regression of Resilience on Age, Gender, Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Employment Status, and Educational Level

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.499(a)	.249	.237	14.818

Table 11

Analysis of Variance of Resilience Total as the Dependent Variable with Independent Variables of Age, Gender, Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Employment Status, and Educational Level

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35620.368	8	4452.546	20.277	.000**
	Residual	107156.075	488	219.582		
	Total	142776.443	496			

** Significant at the 0.01 level (2-tailed).

As can be deduced from the model coefficients arrayed in Table 12, self-rated resilience ($t = 8.161, p < .01$), self-rated forgiveness ($t = 3.173, p < .01$), health status ($t = 4.916, p < .01$), age ($t = 2.297, p < .05$), and gender ($t = - 2.639, p < .01$) all contributed significantly to the model. Difficulty of childhood, employment status, and educational level did not add significantly to accounting for the variance in resilience. It was of interest that, while age as a single factor did not show significant relationship with resilience in the bivariate correlation of Research Question 2, it did contribute significantly in the presence of the other variables in the resulting model in this regression model.

Table 12

Coefficients of the Model of Resilience Regressed on Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Age, Gender, Employment Status, and Educational Level

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	84.228	9.368		8.991	.000**
Self-rated Resilience (PPI 1): Compared to others you know, how well do you deal with situations and come out the better for it, in general?	8.510	1.043	.354	8.161	.000**
Self-rated Forgiveness (PPI 2): Compared to others you know, at what rate do you tend to stop feeling resentment toward a perceived offender or about a perceived offense, in general?	2.779	.876	.134	3.173	.002**
Compared to others you know, how difficult was your childhood?	-.427	.595	-.028	-.717	.474
How would you describe your health in general?	3.446	.701	.199	4.916	.000**
Age	.213	.093	.099	2.297	.022**
Gender	- 3.792	1.437	-.112	- 2.639	.009**
Currently Working	.799	1.777	.019	.450	.653
Educational Group	- 1.658	1.474	-.047	- 1.125	.261

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

Research Question 5

To what extent can forgiveness explain resilience when combined with personal factors of self-rated resilience, self-rated forgiveness, difficulty of childhood, health status, age, educational level, employment status, and highest salary earned? To examine how forgiveness contributed to the explanation of the variance in resilience, hierarchical multiple regression techniques were applied by introducing the TFS Total score to the variables in the model previously established in the Research Question 4 regression analysis. As discussed earlier, highest salary earned was excluded, and all 497 participant responses were tested.

Table 13 demonstrates the incremental effect of adding the TFS Total score, significantly increasing the coefficient of determination from .249 in Model 1 to .281 in Model 2 ($\Delta R^2 = .032$). This is followed by the Table 14 ANOVA exhibiting the strength of the expanded model ($F = 21.157, df = 9, p < .01$).

Based on the model coefficients for each of the variables displayed in Table 15, self-rated resilience ($t = 7.981, p < .01$), health status ($t = 4.672, p < .01$), age ($t = 2.095, p < .05$), gender ($t = -2.131, p < .05$), and TFS Total score ($t = 4.627, p < .01$) all contributed significantly to the model and helped account for approximately 28.1% of the variance in resilience. Interestingly, with the inclusion of the TFS Total score, self-rated forgiveness no longer contributed significantly to the model ($t = .743, p = .458$). Self-rated forgiveness, difficulty of childhood, employment status, and educational level did not add significantly to explaining the variance in resilience.

Table 13

Model Summary Resulting from the Hierarchical Multiple Regression of Total Resilience Score on Total Forgiveness Score in the Presence of Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Age, Educational Level, and Employment Status

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df ₁	df ₂	Sig. F Change
1	.499	.249	.237	14.818	.249	20.277	8	488	.000**
2	.530	.281	.268	14.518	.032	21.410	1	487	.000**

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

Table 14

ANOVA Resulting from the Hierarchical Multiple Regression of Total Resilience Score on Total Forgiveness Score in the Presence of Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Age, Educational Level, and Employment Status

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	40132.883	9	4459.209	21.157	.000**
Residual	102643.560	487	210.767		
Total	142776.443	496			

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

Table 15

Coefficients Resulting from the Hierarchical Multiple Regression of Total Resilience Score on Total Forgiveness Score in the Presence of Self-rated Resilience, Self-rated Forgiveness, Childhood Difficulty, Health Status, Age, Educational Level, and Employment Status

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	<i>B</i>	Std. Error	Beta		
(Constant)	73.263	9.479		7.729	.000**
Self-rated Resilience (PPI 1): Compared to others you know, how well do you deal with situations and come out the better for it, in general?	8.174	1.024	.340	7.981	.000**
Self-rated Forgiveness (PPI 2): Compared to others you know, at what rate do you tend to stop feeling resentment toward a perceived offender or about a perceived offense, in general?	.718	.967	.035	.743	.458
Childhood Difficulty (PPI 3): Compared to others you know, how difficult was your childhood?	-.164	.586	-.011	-.280	.780
Health Status (PPI 4): How would you describe your health in general?	3.217	.689	.186	4.672	.000**
Age	.191	.091	.088	2.095	.037*
Gender	- 3.022	1.418	-.089	- 2.131	.034*
Currently Working	1.088	1.743	.026	.624	.533
Educational Group	- 1.488	1.444	-.043	- 1.030	.303
TFS Total	.525	.113	.211	4.627	.000**

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

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

Summary of Chapter IV

This chapter presented the demographic data describing the sample and affirmed the reliability of the instruments. Based on the data collected from 497 residents randomly selected from the population of interest, statistical analyses such as correlations and regressions were conducted for each of the research questions, and results were summarized by question.

Of the 900 surveys mailed, there was a response rate of 55.2% (497 completed surveys returned). The demographic profile showed the sample to be proportionally equal in men and women, aged 65 on the average, retired for the most part, well educated in general, and in reasonably good health. These people had lived in a wide variety of locations in the United States and in other countries to a much lesser degree; they did not indicate particularly difficult or easy childhood experiences. Highest annual salaries reported by 370 of the participants were high on the average, with a median salary of over \$88,000 in 2004 dollar values.

Regarding Research Question 1 on the relationship between resilience and forgiveness, the correlation between the RS Total and TFS Total scores indicated a direct but weak relationship ($r = .339, p < .01$). As an unexpected outcome, RS Factor 2, Acceptance of Self and Life, actually provided a stronger association with forgiveness ($r = .424, p < .01$) than did the instrument as a whole. Research Questions 2 and 3 asked about the relationship of age with resilience and forgiveness, respectively; no significant associations were found in the bivariate correlations conducted.

Research Question 4 probed the combined effect of age, gender, educational level, self-rated resilience, self-rated forgiveness, difficulty of childhood, health status, and

employment status on resilience; highest salary earned was tested independently because of missing data. The multiple linear regression resulted in significant main effects for self-rated resilience, self-rated forgiveness, health status, age, and gender, with their presence together explaining about 24.9% of the variability of the total resilience scores. This model was expanded in Research Question 5 by adding forgiveness as another variable explaining resilience when combined with age, gender, educational level, self-rated resilience, self-rated forgiveness, difficulty of childhood, health status, and employment status; as before, highest salary earned was tested independently because of missing data. Hierarchical multiple regression led to a model that included the TFS Total score combined with self-rated resilience, health status, age, and gender; this model accounted for about 28.1% of the variance in RS Total scores.

Chapter V addresses these findings in terms of their consistency with earlier research, possible interpretations based on the data and contextual considerations, and implications for policy and practice. It also recounts the logistical concerns manifested during the administration of the survey and lessons learned in dealing with them. This discussion leads into recommendations for further research and conclusions drawn from this study.

CHAPTER V

DISCUSSION

This study was designed as part of Richardson's (2002) third wave of resiliency inquiry with the intent to increase our understanding of how resilience plays out in daily life and how it manifests an inner life force. From the language of the literature and the processes related to resilience and forgiveness, there appeared to be a logical connection between the two constructs. The data from this study as documented in Chapter IV did not strongly support that stance, but they did provide additional insights about resilience, forgiveness, older adults, and possible implications for disciplines within the domain of positive psychology.

Based on the general finding that the two constructs were linked weakly in the community of interest, this chapter provides a brief review of the scores attained and explanations of the data analyses, synthesizing them into a number of theoretical and practical implications that might be logically and statistically drawn from answering these five research questions:

1. Is there a significant relationship between resilience and forgiveness?
2. Is there a significant relationship between resilience and age?
3. Is there a significant relationship between forgiveness and age?
4. To what extent do selected demographic variables (i.e., age, gender, educational level, self-rated resilience, self-rated forgiveness, difficulty of childhood, health status, employment status, and highest salary earned) account for the variance in resilience?
5. To what extent can forgiveness explain resilience when combined with personal factors of self-rated resilience, self-rated forgiveness, difficulty of childhood, health status, age, educational level, employment status, or highest salary earned?

Further, this chapter addresses issues encountered during the administration of the survey and what might be learned from them. This discussion leads into possible implications for policy and practice and additional questions or areas of research proposed for future study. Chapter V ends with an overview of what was accomplished by this study and concluding comments about resilience and forgiveness in older adults.

Generalizability of the Findings

In research involving sampling, there is usually a question of the degree to which the sample is generalizable to the target population and to other groups (Dillman, 2000; Gay & Airasian, 2003). In this study, the exclusion of the additional sampling of the non-respondents cast even more doubt on the external validity of the study. However, as stated earlier, the exclusion had negligible effect on the statistical results. Further, from what is known about the population at large, the dynamics particular to older respondents, and the possible difficulties created by the administration of the survey as discussed in a later section, there is justification for considering the study to be representative of the community. The findings can be used as bases of comparison with similar groups or in contrast to populations distinguished by specified characteristics in other studies. As a cautionary note, the relationship between resilience and resilience may be stronger in some populations and weaker in others. The instruments used were considered highly reliable (Cronbach's alpha = .91 for the overall RS and .81 for the TFS) as demonstrated in Table 6 of Chapter IV. Nonetheless, either or both concepts may not have been effectively measured, and a more complex conceptual model is needed to explore their relationship, especially when considering the myriad factors that can affect results over the lifespan.

Review of Scores Attained

Based on their RS and TFS scores, the 497 participants in this study might be generally described as somewhat less resilient than those in other studies who completed the RS and, in similar fashion with the TFS, a little more forgiving. This mid-range level of resilience (mean of 143 out of 175 points on the RS, excluding item 26 recently added to the scale) was surprising in view of the broad backgrounds experienced by participants and the high level of success enjoyed by most. Ironically, the means of the 497 RS Total scores (including item 26; $\bar{x} = 148.84$, $SD = 16.966$) more closely matched Robinson's (2003) findings from testing 148 graduate students ($\bar{x} = 149.84$, $SD = 14.73$), a much younger group of participants ($\bar{x} = 33.8$, $SD = 10.67$) than the 65-year-olds of the current study. In respect to forgiveness, the participants' average of 37 out of 50 points on the TFS fell somewhere around a possible breakpoint of mid- to high-range scores for that instrument, consistent with the scant empirical data presently available on forgiveness as measured by the TFS.

The sample surveyed showed no significant correspondence of resilience and forgiveness with age as a distinct indicator. It certainly bears out that age may not be a clear discriminator for resilience or forgiveness. Age did, however, add information when combined with other variables such as health, gender, self-rated resilience, and total forgiveness score, depicted in Tables 12 and 15 in Chapter IV. This reinforced the premise that we do not necessarily diminish as we age. Given reasonably good health, we may at least maintain many of our developed abilities and traits and even improve in some ways. Our own perceptions may contribute to how well we age (Levy, Slade, Kunkel, & Kasl, 2002). This could in fact prove true for many other stereotypical ideas

we have about people in their later years (AARP, 2002, 2004; Aiken, 2001; Collins, 2003; Forum, 2004; Stein & Rocco, 2001).

Answers in Brief by Research Question

This section summarizes the data collected via the Chapter III methodology and analyzed in Chapter IV into brief responses to the five research questions posed by this study. Correlations are gauged according to the cut-off levels prescribed by Gay and Airasian (2003): low, slight, or weak, $r < .35$; moderate, $r = .35$ to $.65$; high or strong, $r > .65$. The responses are then discussed against the contextual backdrop of Chapter I and the theoretical framework constructed in Chapter II.

Research Question 1

Is there a significant relationship between resilience and forgiveness? In this study, there was a low direct relationship between resilience and forgiveness ($r = .339, p < .01$). Overall, as forgiveness scores increased, resilience scores tended to increase slightly as well. The correlation was stronger between the RS Factor 2 (Acceptance of Self and Life) and TFS score with a direct moderate association indicated ($r = .424, p < .01$).

This finding aligns well with the tendency to discuss and to study resilience along with other constructs of positive psychology such as optimism, hope, good morale, and life satisfaction (Fredrickson et al., 2003; Polk, 2000; Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002; Wagnild, 2003). It also raises a question about whether the RS can be effectively streamlined to obtain a more efficient measure of resilience.

Self-perceptions of resilience and forgiveness reflected direct moderate associations with RS ($r = .407, p < .01$) and TFS ($r = .514, p < .01$) scores, respectively.

Respondents appeared to be better at judging their own propensity to be forgiving than that of being resilient, providing the RS and TFS scores offered good bases of comparison with the self-ratings.

Anecdotally, respondent comments about some of the RS items (e.g., Item 3, “I am able to depend on myself more than anyone else” and Item 6, “I feel proud that I have accomplished things in life”) indicated a reluctance to take full credit for accomplishments fearing it would imply excessive pride and denial of their spiritual source of strength. Related to this, as shown in Table 7 of Chapter IV, RS Factor 1 (Personal Competence) produced a weaker result ($r = .240, p < .01$) than RS Factor 2 (Acceptance of Self and Life) discussed above. This attitude and personal interpretation of the scale may have contributed to a greater identification with the items of forgiveness and a response to the TFS that was more consistent with self-perception. Respondents could have felt somehow “wrong” or “prideful” to claim great resilience.

Research Question 2

Is there a significant relationship between resilience and age? In this study, there was no significant relationship between resilience and age. A change in age did not indicate a corresponding change in resilience either positively or negatively. This is consistent with the implications of Robinson’s (2003) study of 148 graduate students discussed earlier; scores of that younger group coincided with the scores of the older group in the current study.

Research Question 3

Is there a significant relationship between forgiveness and age? In this study, there was no significant relationship found between forgiveness and age. A change in age

did not indicate a corresponding change in forgiveness either positively or negatively. There are as yet few studies using the TFS. Suffice it to say that this finding supported the notion that older people tend to be at least as forgiving if not more so than when they were younger (Aiken, 2001; Murphy & Lamb, 2002), and the scores were similar to those obtained from the samples of college students tested by the TFS designers (Berry et al, 2005).

Research Question 4

To what extent do selected demographic variables (i.e., age, gender, educational level, self-rated resilience, self-rated forgiveness, difficulty of childhood, health status, employment status, and highest salary earned) account for the variance in resilience? In this study, self-rated resilience and forgiveness levels in the presence of age, gender, and health status accounted for approximately 24.9% of the variability in resilience ($R^2 = .249$) as shown in Tables 10, 11, and 12 of Chapter IV. The other variables listed did not contribute significantly to the model.

While the intent of this study did not entertain the debate of resilience as a state, process, or character trait, this finding corresponded with the literature regarding the presence of resilience regardless of external factors (Masten, 2001; Richardson, 2002; Werner et al., 1971), the influence of one's health status on many aspects of living (AARP, 2002; Forum, 2004), and the possible effect of gender on resilience at various stages in life (Werner & Smith, 2001). These various perspectives all reflected resilience as an aspect of personality.

Research Question 5

To what extent can forgiveness explain resilience when combined with personal factors of self-rated resilience, self-rated forgiveness, difficulty of childhood, health status, age, educational level, employment status, and highest salary earned? In this study, the total forgiveness score in the presence of self-rated resilience, age, gender, and health status explained about 28.1% of the variability in resilience, as presented in Tables 13, 14 and 15 of Chapter IV. The other variables listed did not contribute significantly to the model. This reinforced the findings in the previous research questions of a weak relationship between resilience and forgiveness, but one that was strengthened in the presence of other factors. Resilience is a complex construct; no single indicator adequately detects its presence or its strength.

Logistical Aspects of the Study and Some Lessons Learned

Some of the logistics involved in the conduct of the study could have affected the survey results and subsequent decisions on how to deal with specific situations. Hindsight and recommended processes discovered too late into the implementation certainly offered ideas for how this study could have been improved. Highlights of these issues are summarized in the next subsections.

Decision to Exclude 33 “Non-respondent” Surveys

Of the 70 contacts made with non-respondents, the 37 people who refused to complete the survey even after talking with the assistant gave reasons such as “too long,” “did not want to take the time,” medical concerns with self or spouse, “too personal,” “too busy,” “wasn’t sure what it was for,” “did not like some of the questions,” “did not see the point,” “did not like disclaimers,” “confusing,” or “no reason; just didn’t want to

do it.” Despite the negative reactions, as a result of these calls, an additional 33 questionnaires were completed either by telephone interview (17) or by mail (16). Regarding the exclusion of these 33 surveys from the sample, the differences between the respondents and non-respondents could have been largely due to a combination of the way the survey was presented, the instrumentation, and the means of contact. This was inferred anecdotally from notes written on the completed surveys and from the comments made to the researcher or to the interviewer telephonically. Aspects of these phenomena are discussed further below.

Verbiage and Disclaimers

For some, the use of the word “study” in the cover letter and information sheet implied having to invest considerable time and resources to participate in sessions at the university or other meeting place. Even after being assured the study involved only the survey, most of these people had already decided they did not have the time. The disclaimers required for the protection of human subjects seemed to cause concern for others. The safeguards might have come across as being inordinately strong for a study that was purported to hold little or no risk for the participants, and in turn, this might have tapped into the fears of a “hidden agenda” for some of the readers. As Aiken (1998, 2001) suggests, the perceived and actual vulnerabilities of older people often require approaches that differ from standard procedures for the general population.

Survey Packet

The survey packet itself appeared to present some difficulties. The instruments had been reformatted with a larger font size to accommodate the older reader, but that might not have been enough to optimize the survey. Dillman (2000) recommends a

booklet format rather than the two-sided, stapled pages used in this survey. In fact, a number of the forms submitted were missing an entire page, and that could well have come from having to turn the pages back and forth. Several individual pages were sent back to the respondent with a request that they fill those out. All complied, suggesting the omission was inadvertent and not a deliberate avoidance of a given instrument or set of items. An easier layout in booklet form might have alleviated this extra effort substantially and made this survey more effective with this older group.

Effect of Being Interviewed

Generally, item answers for the 33 non-respondents were significantly higher ($p < .05$) than for the respondents, as shown in Table 5 of Chapter IV. Scores for the RS averaged 148.8 for respondents and 157.5 for non-respondents; for the TFS, 37.1 for respondents, 39.7 for non-respondents. These somewhat inflated scores could have been due in part to the interviewing process. In describing reactions encountered during the telephone contacts, the interviewer stated that a number of the people sounded genuinely surprised and perhaps flattered to be called by someone from the university; they seemed to reconsider the importance of the survey in that it supported requirements for a degree. Some were apprehensive of the disclaimers in the cover letter and information sheet, but expressed a better understanding of the confidentiality safeguards after the interviewer's explanation. Those people who completed the surveys after this conversation may have taken the questions more seriously and given more weight to their answers.

This reactivity possibly elicited by the interview was similar to the inherent dangers of participant-observation and potential biases or other effects that can threaten the internal validity of a qualitative case study (Maxwell, 1996; Yin, 2003). This

represented a situation where the trade-offs gained from learning more about the non-respondents warranted the interview process. Further, as explained earlier, the exclusion of the 33 surveys did not substantially affect the overall results.

Instruments

Issues related to the instruments used to measure the variables, the population sampled, and the unique aspects of the data appeared to influence the obtained results. Regarding the RS, Wagnild and Young (1993) themselves expressed concern that the scale might elicit only the top range of scoring. Based on the original 25-item scale, Wagnild (2003) described scores of 147 to 175 as high, 121 to 146 as mid-range, and less than 121 as less resilient. From five groups in three studies relating resilience to high and low income, she displayed the means that ranged from 141.2 to 149.1, all in the top level of the mid-range scores. In this current study involving mostly high income participants, scores on the 25 items (RS Factor Subtotal) averaged 143, similar to those earlier studies. Further, no significant association was found between resilience scores and income. This could imply that resilience is independent of income, but the possibility of the bias of the instrument must be taken into consideration.

Anecdotally, several respondents found a few of the questions to be problematic. On the RS, the item about being friends with oneself was termed “psychobabble” by one of the male participants. The items on self-reliance (e.g., “I am able to depend on myself more than anyone else”) strongly distressed some respondents; they wrote about their need to make reference to their spiritual source of strength. This occurred with the TFS as well, but not with the same intensity.

The major point of confusion with the TFS seemed to be with the reverse-scored items. On at least 25 of the 497 completed forms, the first answers were crossed out and a corrected answer was marked. Even though there is a danger of a patterned response when items are all positively framed, reverse scoring seems to cause greater chance of error (Dillman, 2000; Gay & Airasian, 2003). The one area of contention that arose was similar to that found with the RS—many respondents indicated the lack of a spiritual dimension. This might have been assuaged had there been more from the literature about both resilience and forgiveness in the information sheet in the survey packet. The trade-off of a lengthier package could have lessened response rate simply because the extra verbiage discouraged participation for some.

On the PPI, items on health status, perception of childhood's relative difficulty, educational level achieved, employment status, and highest salary earned were included to describe the sample in terms of well-being and personal accomplishment and to test how these characteristics might affect one's disposition to be resilient or forgiving. Problems lay with the two items on employment status and salary. There were not enough categories describing the many employment situations experienced by the participants. The list might have improved by instructing the respondent to mark all that applied. As it stood, some people wrote in additional details; others did not. The researcher added categories in the analysis to account for some of these situations (e.g., retired, but working part-time, full-time, or for oneself). Any analysis using the resulting frequencies must consider the likelihood that this item was answered inconsistently and probably incompletely.

The item on salary was a challenge from the beginning. Because the sampled population was mostly retired, the usual categories for current income ranges did not apply. The highest annual salary earned and the year (so it could be converted to current dollar values) seemed to be a way to gauge this measure of success. However, 127 respondents left this item blank, and several wrote in comments about its invasiveness. Nine of the people interviewed complained about this particular item. The 370 responses were analyzed separately, and the findings were consistent with other studies (Wagnild, 2003) suggesting that resilience was likely not a function of income. Although the salary data were used, the item itself might be more effective if set up differently in later studies.

Implications for Policy and Practice

In *The Human Condition*, moral philosopher Hannah Arendt (1958) explains what to her are the two most persistent challenges of human existence: (1) we can remember the past, but cannot change it; and (2) we can imagine the future, but cannot control it. With that said, we can at the least forgive the past, learn from it, and, with resilience, look for what we can do to build upon past experience and further our knowledge to the advantage of all. This section presents some implications for policy and practice suggested by this study, followed by additional research that might prove enlightening.

Resilience

The topic of resilience has risen to the surface, broadening medical, psychological, and social science fields beyond what goes wrong with people to what makes it possible for at least some people to resist or resolve detrimental influences. More than just an academic exercise, understanding resilience offers the possibility of

more effective interventions (Glantz & Johnson, 1999). For example, traditionally, mental health and substance abuse prevention and treatment were based primarily on trying to avoid or overcome negative behaviors and circumstances. Policy and procedures geared toward building on the positive and strengthening the individual could in turn strengthen these agencies and organizations themselves and increase the possibility of healthier outcomes in the long term. This reorientation could start with something as simple as making a list of the current resources an individual has available, thereby supplanting the list of needs and deficiencies so paramount in the past. Further, judicious application of the principles of resilience can help build bridges between clinicians and researchers, practitioners, and policymakers.

Forgiveness

As discussed in Chapter II, self-efficacy level often predicts future success in being able to do something more than a person's own past performance of that activity (Bandura, 1995, 1998). Forgiveness interventions can use resilience or self-efficacy ratings as part of a baseline screening measure (e.g., if too low, the person may need a different intervention) and as a predictor of treatment outcomes. These ratings can also serve to gauge progress made toward tasks and goals. We can possibly enhance the positive roles that resilience and forgiveness alike play in reducing violent, vengeful responses to perceived transgressions. Concurrently, community institutions such as schools, civic and business organizations, and adult education programs can alter policies and practices to promote greater use of forgiveness as a viable way of dealing with a variety of offenses (Bandura, 1995).

Aging

With the graying of America and with the enjoyment of good health well into advanced ages for many, there has never been a better time for taking a deep look into what factors may be associated with successful aging. According to Wagnild (2003), if resilience is associated with successful aging regardless of income, this could encourage efforts to teach and encourage resilience among low-income older adults, and, in accordance with AARP (2004), this could apply to older adults in general.

Resilience may be innate to a large extent; yet, many believe it can also be enhanced through life experiences and through training focused on development of resilient qualities and protective factors. In many individuals resilience persists into old age even when physical health declines. In other words, they age successfully (Wagnild).

These findings can help dissipate the insidious effects of ageism in our society and especially in the workplace. Rather than focus on what people can no longer do or do well after a certain age, we can concentrate on how to capitalize on the many tasks and responsibilities these older resources can undertake (APA, 2004). This may in turn improve self-perceptions and contribute to longevity (Levy et al., 2002).

Employment

For those who want to continue to work, their resilience and ability to take things in stride could justify that decision (AARP, 2004; CED, 1999; Dessler, 2000). In fact, in this study, there was no significant correlation between resilience and current employment status, educational level, or salary. Resilience seemed more an enduring personality trait than a function of any of these factors. While dealing with difficulties may strengthen one's coping responses in general, there may be greater merit in seeing

resilience as part of one's character. This even proved true for how difficult the respondents viewed childhood experiences in comparison with those of other people they knew. A high level of resilience then may not necessarily be a function of having faced great adversity.

Age only became a factor explaining resilience when combined with health, gender, and scores from the resilience and forgiveness measures as indicated in Tables 12 and 15 in Chapter IV. If anything, resilience was shown to increase with age as long as health allowed one to be generally functional. Health rather than age is often the predominant issue for the individual in decisions about employment. Health may only affect our basic personality traits or dispositions when incapacitating circumstances lay us low (Forum; Wagnild, 2003). The employer should weigh all these factors in employment decisions that affect the healthy, older employee.

The Helping Professions

Although the current study emphasized resilience implicit to day-to-day life—the “ordinary magic” of resilience (Masten, 2001)—the fact remains that there are implications for policy and procedures for those employed in emergency, helping, and law enforcement professions. These people must be resilient. They face regular and repetitive exposure to mass emergencies and disasters and their consequences as poignantly demonstrated in the aftermath of the terrorist attacks in New York and Washington DC on September 11, 2001. Knowledge of both risk and protective factors will help determine the personal, group, and organizational characteristics required to promote the confidence, well-being, and performance capability of those who are repeatedly cast into the vitally important role of protecting and safeguarding communities

and their members (Paton et al., 2003). Theoretically rigorous and comprehensive reviews of such characteristics as resilience will establish a framework for organizational analysis and the development of the systems, procedures and programs necessary to effective emergency organizations.

Education and Training

Many processes like those associated with resilience and forgiveness are taken for granted on the assumption that people come equipped with the skills or do what they need to do to acquire them (Worthington, 1998). Actually, we may benefit from more systematic preparation in the practice of being resilient and forgiving; this extends to aspects of growing older as well, especially in the dynamics of aging successfully.

Educational institutions, various organizations, and the corporate world (Conner, 1993) are prompted to provide workshops and coursework on resilience. Wolin and Wolin (1993) note that resilient individuals display personal insight by using their knowledge of emotions to secure social networks and guide future coping. Setting the study of resilience in this emotional intelligence domain, Tugade (2001) suggests more encouragement of the teaching of resilience and other skills associated with emotional intelligence. We can teach more about resilience, forgiveness, and aging.

Clinical experience, anecdotal data, and studies indicate that many people harbor hostility and resentment, and, as a result are living more diminished and unhealthy lives. Yet, at the same time, pervasive lack of knowledge about forgiveness persists in our social and cultural institutions. People are rarely provided with basics of forgiveness as a coping skill (Worthington, 1998). Many people do not know, or understand, how to forgive—or realize how doing so can benefit themselves and others in the long term. The

teaching of forgiveness in practical terms has gotten underway to some extent. Effects of participating in workshops on forgiveness have already been demonstrated (Al-Mabuk et al., 1995; Boon & Sulsky, 1997; Coyle & Enright, 1997; Freedman & Enright, 1996; Hebl & Enright, 1993; Malcolm & Greenberg, 2000; McCullough & Worthington, 1995; McCullough et al., 1997; Pargament & Rye, 1998).

Smith and Pourchot (1998) recommend more educational programs for adults aligned with psychology, adult development, and gerontology to foster their learning and positive self-perceptions. Ironically, these same educational needs also apply to children and youth, but with a different slant. Teaching the young about aging and promoting positive intergenerational activities can prepare people for the changes they face and help to allay the tendency to instill a negative outlook on growing older.

Recommendations for Future Study

A value inherent to descriptive research is that it can lend evidence toward causal theories and suggest directions of future research. This current study helped elucidate the work remaining to be done in learning more about resilience, forgiveness, and aging. It provided an example of an older population, and it reinforced the need to continue to research constructs related to positive psychology.

It is highly likely that resilience and many other constructs subsumed into positive psychology will continue to find their way into prevention and therapy. According to Seligman and Csikszentmihalyi (2000), there is good reason to foresee an empirical matrix emerge, an analysis of the relationships among enabling conditions such as well-being or income and dimensions of successful aging.

Like the fish who is unaware of the water in which it swims, people take for granted a certain amount of hope, love, enjoyment, and trust because these are the very conditions that allow them to go on living. These conditions are fundamental to existence, and if they are present, any number of objective obstacles can be faced with equanimity and even joy. Camus wrote that the foremost question of philosophy is why one should not commit suicide. One cannot answer that question just by curing depression; there must be positive reasons for living as well. (p. 13)

Resilience and forgiveness are certainly likely candidates for more intensive study, and a comprehensive matrix will help clarify what enabling conditions or combinations of factors lead to given outcomes. This has particular application with the continuing need to learn more about life span developments (Moen et al., 1995). In that sense, further resilience and forgiveness studies can support positive psychology as more of a prescriptive discipline in years to come. Some specific recommendations are discussed in the following sections.

Use of Additional Instruments

Considering the possible floor effect of the RS and the difficulties experienced with the reverse-scored items of the TFS, future studies might include additional, more recent measures of those constructs for comparison. With the possible effect of lifestyle and current status in some populations, it might do well to include an instrument gauging satisfaction with life, especially as it might pertain to outlook and end-of-life choices. If the study involves a survey using these and other instruments, it might also be advisable to administer them in pamphlet format for ease of handling and decreased chance of overlooked pages.

Finding Alternatives to Self-report Measures

There is growing recognition of the need to find ways to assess personality traits other than self-report (Snyder & Lopez, 2002), and the emphasis is on qualitative or mixed-method techniques. In regard to forgiveness, McCullough, Hoyt, and Rachal (2000) recommend moving away from exclusive reliance on self-report measures and their implicit threat to validity. When feasible, studies might be more effective if they included multi-method assessments utilizing peer and partner ratings, physiological measures, and behavioral measures like responses in a game. Tugade (2001) suggests peer reports to corroborate self-ratings and experience-sampling to reveal the temporal dynamics of psychological resilience (e.g., Do levels of psychological resilience vary in different situations? Are people able to become more resilient over time? Do repeated experiences of positive emotions help build psychological resilience?).

Phenomenological or qualitative studies using more intensive methods, such as in-depth interviews, stories, and journalizing, have been lacking, a deficiency that has deprived researchers of data about people's ongoing experiences (e.g., feelings, beliefs, expectations, and attributions). Such data are needed to develop interventions that can be more tailored to fit particular individuals (Worthington, 1998).

More Diverse Populations

With the demographics inherent to the community selected for the current study, the focus was on older Caucasians, married, retired, successful, and healthy. According to the Forum (2004), although the number of studies of older minorities has been increasing, the quality of data available to researchers is still limited. This has been attributed to small sample sizes and language barriers that prevent certain racial and ethnic groups

from participating in surveys. With the increasing diversity among senior citizens comes a greater need to collect data on nativity and to analyze generational differences in health and well-being, data currently only found consistently and sufficiently in the decennial census and the American Community Survey to be implemented in the 2010 census.

Regarding resilience, more research is required with different ethnic, cultural, and geographic factors, e.g., rural versus urban. As resilience development becomes incorporated into more training and education, intervention studies will help identify best practices in assisting people to become more resilient. Longitudinal studies might be designed or expanded to include a component to see if resilience has an effect on longevity, health, and successful aging in general (Wagnild, 2003). As indicated by other researchers (AARP, 2002; Bogdonoff, 2002; Forum, 2004; Levy et al., 2002), this holds practical relevance in the realms of clinical psychology, education, family counseling, substance abuse treatment, and military training, among others.

Other Specialized Populations

There may be some justification for comparing the current population with other groups of a similar demographic profile or with a specialized profile (Worthington, 1998). These might include victims of crime; people who are divorced, separated, or in the process of divorcing; people who have problems with substance or alcohol abuse; trauma victims (e.g., sexual abuse, discrimination, physical abuse, domestic violence, rape); accidental traumas (e.g., car accidents, earthquakes); elderly and dealing with end-of-life issues; victims of workplace aggression or discrimination; people who have been “downsized” into unemployment; terminal disease; romantic rejection; self-condemning; other injuries or offenses. This could further elucidate whether people in extreme

circumstances are any more or less resilient and forgiving and whether resilience and forgiveness are a part of the individual's personality despite external influences. This also applies to other special populations such as those in institutions.

Institutional Populations

Another gap in the research on resilience, forgiveness, and other behavioral constructs involves institutionalized populations. These groups are often excluded from studies because of the complex ethical and methodological issues involved, as well as the high costs usually associated with collecting these data. According to the U.S. Census Bureau, the institutionalized population includes persons under formally authorized, supervised care or custody in institutions at the time of enumeration. Such persons are classified as "patients or inmates" of an institution regardless of the availability of nursing or medical care, the length of stay, or the number of persons in the institution (Census, 2000). Because this definition includes people in nursing homes, psychiatric hospitals, and long-term care hospitals for the chronically ill, mentally retarded, and physically handicapped, this exclusion can become a critical issue for researchers who are interested in studying the entire older population (Forum, 2004). It would help if research designs included institutions in the sampling frames.

One of the major successes of the 20th century is the increase in longevity and improved health of the older population. As life expectancy increases, the importance of effectively treating chronic diseases and reducing disability becomes ever greater. Understanding the underlying reasons for the improvements in longevity and functioning is a critical first step to further advances toward these goals. (Forum, 2004, p. 60)

The use of assisted-living facilities, group homes, continuing-care retirement communities, and other types of residential settings as alternatives to long-term care in a

nursing home has grown over the last 15 years. There is a lack of information on the characteristics of older people in different community-based residential care settings and their service use and health care needs. Perhaps more importantly, there is little information on the costs, duration, and transitions into and between different long-term care settings. Factors such as personal resilience might prove to have a significant effect on how long people remain in care facilities, how well they adapt, and how much they recognize and capitalize their own inner resources. These people and the qualities they bring to their care settings need to be considered in future studies. Findings can help us to better design institutions to accommodate varying levels of functioning ability and to evaluate the effect of the institutions on our personal qualities and perspectives.

Expanding and Enriching the Research on Forgiveness

The study of forgiveness is only beginning. Though the groundwork has been laid, there are a number of questions that remain to be explored further (Exline et al., 2003). These include the following: What does forgiveness mean? Does forgiveness invite or deter repeated offenses? Are certain offenses or persons unforgivable? What motives underlie forgiveness? Do factors that influence perceived injustice also influence forgiveness? More quantitative research is needed to address these questions in a more systematic, more scientifically rigorous fashion than shown in many past studies.

Aspects of the Personality

With only slight association found between resilience, forgiveness, and attributes of age, health, childhood difficulty, and personal success, the results of this study pointed to the likelihood of these constructs reflecting aspects of the personality more than temporal reactions to conditions. This was in keeping with the perspective taken in much

of the literature, especially as viewed through the lens of positive psychology. From a symbolic mandala (Wolin & Wolin, 1993) to empirical tests of the “Big Five” model of personality (Digman, 1997; McCrae & Costa, 1987, 1997; Snyder & Lopez, 2002), resilience is discussed as part of one’s character. As dispositional forgiveness research grows, the same may be said of the trait of being forgiving. More work is needed on how these constructs manifest in our lives and across the lifespan.

Connecting Mind, Body, and Spirit

Snyder and Lopez (2002) suggest it could be worthwhile to explore whether people who describe themselves as “spiritual” or “religious” are more resilient or more forgiving. A number of the respondents in the current study certainly expressed the lack of a spiritual dimension in the survey. In relation to the current study, do they demonstrate a higher correlation with the TFS and RS than those who are less amenable to spiritual matters?

There have been indications that religious or spiritual people might enjoy higher levels of happiness. For many, religion brings a profound sense of meaning and purpose, relieving “religious angst” by providing plausible answers to the basic existential questions of life (e.g., “Why am I here?” and “What will happen to me after I die?”). There is also a social dimension to religion that supports the social network that can serve as a useful tool in being resilient. Membership in a religious organization allows people to congregate, share views, form supportive relationships, and ameliorate any feelings of loneliness that might otherwise be oppressive.

Forgiveness, once almost exclusively related to religion and philosophy, has re-emerged in psychology as one of a number of psychological factors relating to both

emotional and physical health. Though much still needs to be learned about the interrelationships involved, the paradoxical phenomenon of forgiveness appears to be more widely recognized as an intervention process that could assist many individuals who have previously and unsuccessfully struggled to overcome damaging events in their lives (Sheffield, 2003). There may be less reluctance to include forgiveness in studies and to connect it with constructs like resilience that have less of a religious connotation. Conversely, there may be less reluctance to include resilience in spiritually-oriented studies in the sense that constructs like forgiveness have come to be viewed as a kind of religious coping. Regardless of religious orientation or affiliation, the focus is on an inner commitment and intimate relationship with a spiritual source—an active partnership for all intents and purposes, one that has pragmatic application in dealing with life's circumstances.

Studies of Lifespan Development

The conceptual link between resilience and forgiveness proved empirically weak in this study, with the correlations not highly revelatory in and of themselves. However, they might very well substantiate views held by many researchers and commentators on the more positive aspects of aging and help dispel some of the stigma attached to those in the latter stages of living. If research could demonstrate that people over 50, or even better, over 65, continued to display resilient and forgiving personality traits, this could fortify the premise of positive psychology fostering a strengths-based outlook throughout the lifespan. For proponents of workplace alternatives for older employees, it would add to the credence placed on efficacy of training and development for this group and on their potential usefulness past any arbitrary cut-off point in age.

Summary of Chapter V

This descriptive, correlational study investigated how psychological resilience might be associated with forgiveness in older adults. The population selected was a planned community in southeastern United States; the majority of the 4,500 residents were over 50 years old, Caucasian, married, retired or semi-retired, and in reasonably good health. Having relocated to this community from all over the country and from foreign areas and having achieved a generally high level of success on the average, these people brought with them a wide range of life's experiences. A random sample of 900 was drawn from the community directory. Of these, 497 respondents completed a mailed survey comprised of the *Resilience Scale* (Wagnild & Young, 1993), the *Trait Forgivingness Scale* (Berry, Worthington, O'Connor, Parrott, & Wade, 2005), and an individual profile of selected demographics and self-assessment items.

A series of *t* tests, bivariate correlations, and hierarchical multiple regressions tested the relationships between resilience and forgiveness, as well as any contributing effects of interrelationships with self-rated resilience, self-rated forgiveness, age, gender, health, difficulty of childhood, highest educational level completed, highest annual salary earned, and current employment status. The analyses indicated a low, but statistically significant correlation between resilience and forgiveness ($r = .339, p < .05$); as forgiveness increased, resilience tended to increase somewhat. Age was not found to be significantly associated with either resilience or forgiveness in bivariate correlations, but did prove significant when in combination with other variables. The influence of the forgiveness score in the presence of the variables listed above in explaining resilience was tested using hierarchical multiple regression techniques; highest annual salary earned

was excluded due to missing data and lack of significant relationship with the variables of interest. The regression resulted in a model consisting of the forgiveness score, self-rated resilience, age, gender, and health status as the variables explaining about 28.1% of the variance in resilience. This research added to our knowledge about resilience, older adults and aspects of aging, and forgiveness. Findings may be generalized with caution to the community and to similar populations elsewhere. They hold implications for policy and procedures in disciplines such as adult education, workplace training and development, psychology, clinical practice, and gerontology.

Change is inevitable. With the volatility in our socioeconomic world, corporations and individuals alike would serve themselves well to prepare themselves to adapt. We can neither change the past nor how much time has gone by nor the things that have happened to us. What we can change is the way we understand it all. We can forgive and transform what we do with our lives from this point forward with resilience.

We cannot press a button to rewind history, to reverse the events of September 11, to get the planes back on the tarmac in Boston, to start that day again and let it follow its accustomed path. Those horrifying events are irreversible. The dead cannot return, the deed cannot be undone. Nor can the holocaust of the Jews nor the slave trade in Africans nor the genocide of the native American communities nor the ancient miseries of the poor in all places at all times. None of it can be undone, nor can it be appropriately avenged or made sense of. Only unconditional, impossible forgiveness can switch off the engine of madness and revenge and invite us, with infinite gentleness, to move on into the future. (Holloway, 2002, p. 86)

This present study sought to fill a fundamental gap in the research and the literature on resilience, particularly as it related to forgiveness and to older adults. Much of the previous work had dealt with children, youth, and young adults, and empirical studies for forgiveness were only beginning to produce substantive results. To redress

these deficiencies to some degree, this study surveyed adult residents of a selected community comprised largely of people over 50. The 497 participants responded to questions on their propensity to be resilient and forgiving. While the findings did not support a strong correlation between resilience and forgiveness, they did contribute to our understanding of the constructs and added to the data available on the growing segment of our population, older adults. Further, participants scored in the upper mid-range of possible scores in resilience and in a range consistent with earlier research in forgiveness, helping to inform the debate about whether these traits deteriorate with old age. Even with inconsistencies, the data indicated a lack of systematic decline. It may be that older people become wiser and more comfortable with themselves, experiencing a shift in self-perception that contributes to a more balanced view of the self. Findings evoke these recommendations for future study and application to policy and procedures:

1. Follow a representative sample longitudinally to clarify realistic expectations of how the personality and personal capacity sustain us as we age.
2. Incorporate a positive psychology focus in education and training that includes the study of factors like resilience and forgiveness in such domains as the workplace, substance abuse prevention and treatment, mental health treatment, law enforcement, criminal justice, emergency organizations, clinical practice, and professional development.
3. Educate our children and youth about aging and appreciation for the positive aspects of that stage of life.
4. Continue to assess employment and retirement procedural guidelines to accommodate the heterogeneity of needs of individuals as they grow older and to capitalize on what they have to offer.
5. Develop testing and instrumentation that optimize their use with older adults and better accommodate needs particular to aging.

6. Expand survey research to utilize a greater variety of instruments and alternatives to self-report measures (e.g., ratings from other people who know the study participant, qualitative approaches like interviews and case studies, gauges like reactions to scenarios or responses in games, and physiological responses, etc.).
7. Expand the study of resilience to more diverse populations (e.g., communities or groups with greater demographic diversity, special populations as those in institutions, etc.).
8. Continue research on resilience, forgiveness, and other aspects of the personality to determine how they develop over the lifespan and the effect they may have on health, longevity, and successful aging.
9. Include the spiritual dimension in future studies, especially with a focus on the practical benefits derived from a sound connection of mind, body, and spirit.

All in all, this research added to our knowledge about resilience, older adults and aspects of aging, and forgiveness. Findings may be generalized with caution to the community and to similar populations elsewhere. They hold implications for policy and procedures in disciplines such as education, adult education, management, workplace training and development, psychology and related clinical practice in the medical community, family counseling, substance abuse treatment, and gerontology.

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APPENDICES

APPENDIX A

RESILIENCE SCALE

The Resilience Scale™

Please read the following statements. To the right of each, you will find seven numbers ranging from “1” (*Strongly Disagree*) on the left to “7” (*Strongly Agree*) on the right. Circle the number which best indicates your feelings about that statement. For example, if you strongly disagree with a statement, circle “1.” If you are neutral, circle “4,” and if you strongly agree, circle “7,” etc.

Statement	<u>Strongly Disagree</u>				<u>Strongly Agree</u>		
1. When I make plans, I follow through with them.	1	2	3	4	5	6	7
2. I usually manage one way or another.	1	2	3	4	5	6	7
3. I am able to depend on myself more than anyone else.	1	2	3	4	5	6	7
4. Keeping interested in things is important to me.	1	2	3	4	5	6	7
5. I can be on my own if I have to.	1	2	3	4	5	6	7
6. I feel proud that I have accomplished things in life.	1	2	3	4	5	6	7
7. I usually take things in stride.	1	2	3	4	5	6	7
8. I am friends with myself.	1	2	3	4	5	6	7
9. I feel that I can handle many things at a time.	1	2	3	4	5	6	7
10. I am determined.	1	2	3	4	5	6	7
11. I seldom wonder what the point of it all is.	1	2	3	4	5	6	7
12. I take things one day at a time.	1	2	3	4	5	6	7
13. I can get through difficult times because I’ve experienced difficulty before.	1	2	3	4	5	6	7

Statement	Strongly Disagree			Strongly Agree			
	1	2	3	4	5	6	7
14. I have self-discipline.	1	2	3	4	5	6	7
15. I keep interested in things.	1	2	3	4	5	6	7
16. I can usually find something to laugh about.	1	2	3	4	5	6	7
17. My belief in myself gets me through hard times.	1	2	3	4	5	6	7
18. In an emergency, I'm someone people can generally rely on.	1	2	3	4	5	6	7
19. I can usually look at a situation in a number of ways.	1	2	3	4	5	6	7
20. Sometimes I make myself do things whether I want to or not.	1	2	3	4	5	6	7
21. My life has meaning.	1	2	3	4	5	6	7
22. I do not dwell on things that I can't do anything about.	1	2	3	4	5	6	7
23. When I'm in a difficult situation, I can usually find my way out of it.	1	2	3	4	5	6	7
24. I have enough energy to do what I have to do.	1	2	3	4	5	6	7
25. It's okay if there are people who don't like me.	1	2	3	4	5	6	7
26. I am resilient.	1	2	3	4	5	6	7

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APPENDIX B

TRAIT FORGIVINGNESS SCALE

Trait Forgiveness Scale (TFS)

Directions: Using a scale of 1 to 5 (1 = *strongly disagree*, 2 = *mildly disagree*, 3 = *agree and disagree equally*, 4 = *mildly agree*, 5 = *strongly agree*), please circle the number indicating your agreement or disagreement with each statement below.

	Statement	Strongly disagree	Mildly disagree	Agree/ disagree equally	Mildly agree	Strongly agree
1.	People close to me probably think I hold a grudge too long.	1	2	3	4	5
2.	I can forgive a friend for almost anything.	1	2	3	4	5
3.	If someone treats me badly, I treat him or her the same.	1	2	3	4	5
4.	I try to forgive others even when they don't feel guilty for what they did.	1	2	3	4	5
5.	I can usually forgive and forget an insult.	1	2	3	4	5
6.	I feel bitter about many of my relationships.	1	2	3	4	5
7.	Even after I forgive someone, things often come back to me that I resent.	1	2	3	4	5
8.	There are some things for which I could never forgive even a loved one.	1	2	3	4	5
9.	I have always forgiven those who have hurt me.	1	2	3	4	5
10	I am a forgiving person.	1	2	3	4	5

Berry, J. W., Worthington, E. L., Jr., O'Connor, L. E., Parrott, L., & Wade, N. G. (2005). Forgiveness, vengeful rumination, and affective traits. *Journal of Personality*. Adapted with permission.

APPENDIX C

PERSONAL PROFILE INVENTORY

Personal Profile Inventory

For each of the items below, please circle or write in responses that are *most* appropriate for you and how you compare with others you have known. The information you choose to disclose is voluntary; however, it is hoped that you will complete all items.

- 1. Compared to others you know, how well do you deal with situations and come out the better for it, in general?**
 - a. Much higher than average
 - b. Somewhat higher than average
 - c. About average
 - d. Somewhat lower than average
 - e. Much lower than average
- 2. Compared to others you know, at what rate do you tend to stop feeling resentment toward a perceived offender or about a perceived offense, in general?**
 - a. Much higher than average
 - b. Somewhat higher than average
 - c. About average
 - d. Somewhat lower than average
 - e. Much lower than average
- 3. Compared to others you know, how difficult was your childhood?**
 - a. Much more difficult
 - b. Somewhat more difficult
 - c. About the same
 - d. Somewhat easier
 - e. Much easier
- 4. How would you describe your health in general?**
 - a. Excellent
 - b. Very good
 - c. Good
 - d. Fair
 - e. Poor (still able to do most things)
 - f. Extremely poor (unable to do most things)
- 5. Where did you live before relocating to current address?**
(Please name the U. S. state, U. S. territory, or other country.)

- 6. Gender:** a. Female b. Male
- 7. Year of Birth:** _____
- 8. Education (highest completed):**
 - a. 8th grade or below
 - b. Some high school
 - c. High school graduate (including GED)
 - d. Some college or other post-high school education, but no degree
 - e. Two-year college degree
 - f. Four-year college degree
 - g. Master's or equivalent degree
 - h. Ph.D. or equivalent degree
- 9. Employment Status:**
 - a. Retired (voluntarily)
 - b. Retired (involuntarily)
 - c. Self-employed
 - d. Employed full-time
 - e. Employed part-time
 - f. Unemployed (disabled)
 - g. Unemployed, but seeking work
 - h. Unemployed (not seeking work)
 - i. Other (please specify):

- 10. Highest Annual Salary Earned:**
 - a. Amount \$ _____
 - b. Year _____

APPENDIX D

RESILIENCE STUDY COVER LETTER

[letterhead]

[date]

John Q. Resident
999 Street Name
City, ST 99999

Dear Mr. Resident:

You are cordially invited to take part in a research study focused on resilience and its possible relationship to forgiveness. The results will be published in a doctoral dissertation in Human Ecology through The University of Tennessee College of Education, Health, and Human Sciences. Your participation is voluntary, but strongly encouraged. Your input to this study is considered valuable in helping us to learn more about the concept of resilience across the lifespan. Further details regarding the nature and intent of the study, your involvement as a participant, measures taken to safeguard your confidentiality, contact information in case you have questions, and your consent to participate are explained in the attached information sheet.

In addition to the satisfaction derived from contributing to research, you may also win a prize. Regardless of your decision about being in the study, if you would like to participate in a drawing on [date] for such items as gift certificates, event tickets, and local vendor products, please detach the “ticket” portion of the coupon affixed to the bottom of this letter, print your name and phone number legibly on the back, and return it (along with the completed survey, if you do choose to participate) in the stamped, pre-addressed envelope provided. **Please respond by [date].**

Thank you for the time and thought you put into participating in this study.

Yours very truly,

Linda Broyles

Linda Broyles
Principal Investigator

xc:Dr. Ernest W. Brewer, Professor and Doctoral Committee Chairperson
Department of Educational Administration and Policy Studies

APPENDIX E

RESILIENCE STUDY INFORMATION SHEET

RESILIENCE STUDY INFORMATION SHEET

INTRODUCTION. You are invited to take part in a research study focused on *resilience* (“how well one deals with a situation and comes out the better for it”) and its possible relationship to *forgiveness* (“the disposition to stop feeling resentment toward a perceived offender or about a perceived offense”). The results will be published in a doctoral dissertation in Human Ecology through The University of Tennessee College of Education, Health, and Human Sciences. Your participation is voluntary, but strongly encouraged.

Your input to this study is considered valuable in helping us to learn more about the concept of resilience across the lifespan. There have been a substantial number of studies to date on the resilience of children and youth, but comparatively few on adult populations. This study will help to fill that gap and to add the dimension of forgiveness as a potential ingredient to our level of resilience. It may also provide some indication of the part aging plays in how resilient and forgiving we are. Findings are expected to hold implications traversing many disciplines, e.g., psychology, educational psychology, biology, adult education, clinical practice, and gerontology, among others.

INFORMATION ABOUT PARTICIPANTS’ INVOLVEMENT IN THE STUDY. Your participation involves completing the attached questionnaires on resilience and forgiveness, as well as a demographic profile. This is expected to take no more than 20 minutes of your time. There is a stamped, pre-addressed envelope provided for returning the completed survey by [date]. The study is expected to end by [date].

RISKS AND BENEFITS. There are no foreseeable risks to you as a participant. You stand to benefit from the satisfaction of contributing to our knowledge of resilience and forgiveness. You are also eligible to compete in the drawing for prizes by returning your ticket in the stamped, pre-addressed envelope provided, even if you choose not to complete the survey.

CONFIDENTIALITY. Access to survey data will be confined to the principal investigator and administrative assistant. Your responses will be secured, safeguarded as confidential, and only reported in aggregated statistics, not attributed or identifiable to you as an individual. The packet is numbered only to ensure the correct questionnaires are linked together in the analysis and to allow follow-up mailings, if needed. As soon as all mailings are completed, the cross-reference to your name will be destroyed.

CONTACT. If you have any questions about this study or the procedures, or if you would like to be informed about the findings from this study, please contact Linda Broyles, Principal Investigator, by mail at 310 Dilegwa Way, Loudon, TN 37774-2869, by e-mail at lindab91@charter.net, or by phone at (865) 458-6741. If you have questions about your rights as a participant, please contact Research Compliance Services at (865) 974-3466.

CONSENT TO PARTICIPATE. Your participation is voluntary. You may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed. **Return of the completed survey constitutes your consent to participate.**

VITA

Linda Cox Broyles, originally from Greensboro, North Carolina, holds a bachelor's and master's degree in education from the University of North Carolina at Greensboro. Before entering graduate school, Ms. Broyles served a one-year tour in South Vietnam with the American International Red Cross developing and presenting recreational programs for our service people there. At the end of her tour, she was presented the *Award for Civilian Service in Vietnam*. Later, after teaching in the public schools in Greensboro for three years, Ms. Broyles began a 20-year career in federal service as a management analyst. She served at the Naval Air Rework Facility, Marine Corps Air Station, Cherry Point, NC; the Naval Aviation Logistics Center, Naval Air Station, Patuxent River, MD; Defense Contract Administration, Los Angeles, CA; Headquarters, U. S. Army, Europe, Heidelberg, Germany; and the U. S. Army Publications Distribution Center, St. Louis, MO. Ms. Broyles participated in several systems design projects and conducted a wide array of studies and workshops. She was named *Woman of the Year* at the Marine Corps Air Station and awarded the *Decoration for Meritorious Civilian Service* for her efforts in peacetime stationing of Army units in Europe and for developing plans for the troop drawdown there. She graduated from the Army Management Staff College and the Office of Personnel Management Women's Executive Leadership Program. Ms. Broyles has served as a program evaluator for the University of Tennessee, College of Social Work, Office of Research and Public Service (UT-SWORPS) for almost seven years. In that time, she assumed responsibility for the formal evaluation of a number of grant programs in human services and criminal justice arenas. Dedicated to life-long learning, Ms. Broyles has continued to pursue graduate coursework throughout her career, culminating in her doctoral studies at The University of Tennessee. She is married to Michael Broyles (Chaplain, Colonel, United States Army, Retired), who now, as owner and president of Broyles Renderings, Inc., excels as a digital artist and photographer.