

Forgiveness and Health: Age Differences in a U.S. Probability Sample

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Forgiveness is a variable closely related to religiousness and spirituality that has been hypothesized to be protective of mental and physical health. However, we do not clearly understand which aspects of forgiveness are most clearly associated with health outcomes, and the conditions under which these relationships occur. This study used national probability data to systematically examine age differences in the association between forgiveness, religiousness/spirituality, and respondent reports of mental and physical health. Results showed age differences in the levels of forgiveness of others and feeling forgiven by God. In both cases, middle and old age adults showed higher levels of these forms of forgiveness than young adults. Furthermore, the relationship between forgiveness of others and respondent reports of mental and physical health varies by age. Forgiveness of others was more strongly related to self-reported mental and physical health for middle and old age adults than for young adults.

KEY WORDS: forgiveness; health; mental health; age; age differences.

OVERVIEW

The role of religiousness/spirituality in health has become a topic of growing interest to many health researchers. Most notably, studies have shown religious activity and attitudes to have beneficial effects on mental and physical health (Broyles & Drenovsky, 1992; Ellison, 1995; Ellison & Levin, 1998; Hummer, Rogers, Nam, & Ellison, 1999; Idler, 1987; Idler & Kasl, 1997; Koenig et al., 1997; Levin, 1994; Levin & Chatters, 1998; Musick, 1996; Strawbridge, Cohen, Shema, & Kaplan, 1997). These findings appear to be robust having been demonstrated in several subpopulations of the United

States using a variety of religious and health outcome measures.

Forgiveness is closely related to religiousness and spirituality (Enright, Santos, & Al-Mabuk, 1989; Gorsuch & Hao, 1993; Kaplan, 1992; Koenig, 1994; Subkoviak et al., 1995) and has been proposed as a mediator of the religiousness/spirituality and health relationship. Forgiveness is central to Judeo-Christian teaching and tradition (Hope, 1987; Pingleton, 1989) and has been discussed by theologians and philosophers for centuries (Coyle & Enright, 1998). Despite its religious centrality, it has received very little attention in the scientific literature. As recently as 1992, Kaplan suggested that, "there is essentially no scientific literature on forgiveness" (p. 8), and Fitzgibbons (1986) has speculated that researchers and psychotherapists have avoided addressing the issue of forgiveness because it has seemingly been a topic reserved for theologians. This perception appears to be changing as the number of studies focused on understanding the definition, dimensions, process, and effects of forgiveness continue to rise (Coyle & Enright, 1998).

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Definition and Dimensions of Forgiveness

Many researchers agree that forgiveness consists of giving up one's right to retribution and releasing or letting go of negative affect directed toward the offender (Coyle & Enright, 1998; Enright & Zell, 1989; Hargrave & Sells, 1997; Hebl & Enright, 1993; Hope, 1987; Pingleton, 1989; Shontz & Rosenak, 1983). Although this definition is common, there is no consensus on the most important dimensions. We focus on four dimensions that have been identified in previous research and theory (Gorsuch & Hao, 1993; Hargrave & Sells, 1997; Mauger et al., 1992; Shontz & Rosenak, 1983). First, forgiveness of oneself involves release of negative affect and self-blame associated with past wrongdoings, mistakes, or regrets. Second, forgiveness of others involves forgiving another for some harm done. Third, feeling forgiven by God refers to the belief or perception that one's transgressions are forgiven by the divine. Fourth, proactive forgiveness involves initiating the process of giving and receiving forgiveness.

Forgiveness and Health

Several studies have shown that forgiveness is associated with mental and physical health. In a study of 25 women above age 65 (mean age = 74.5), Hebl and Enright (1991) showed that forgiveness was related to higher self-esteem, as well as, lower depression, state-anxiety, and trait-anxiety. Hargrave and Sells (1997) demonstrated that, in a sample of 35 adult men ($n = 12$) and women ($n = 23$), forgiveness was associated with better life satisfaction. Mauger et al. (1992) examined the association between forgiveness and mental health measures from the Minnesota Multiphasic Personality Inventory in a sample of 237 counseling outpatients. For these individuals, problems forgiving oneself were moderately associated ($r_s .40-.56$) with depression, anxiety, anger/distrust, and negative self-esteem. Although these studies utilized small, convenience samples, Poloma and Gallup (1991) collected data from a national, random sample of 1,030 adult men and women and found that forgiveness was modestly related to life satisfaction. This relationship appeared complex, however, with many religious/spiritual variables influencing forgiveness. Pingleton (1989) has reviewed research that suggests forgiveness may have a role in recovery from cancer, and Kaplan (1992) has argued that forgiveness might be protective of coronary heart disease. In sum, empirical evidence and theory suggest that forgiveness

may be associated with better mental and physical health.

Age Differences in Forgiveness and Health

Several studies have found that age is positively related to forgiveness (Enright et al., 1989; Enright, Gassin, & Wu, 1992; Mullet, Houdbine, Laumonier, & Girard, 1998; Park & Enright, 1997; Subkoviak et al., 1995). However, few attempts have been made to empirically examine the extent to which there are age differences in the association between forgiveness and health. Moreover, existing studies have used small and unrepresentative samples, lacked comparisons groups (e.g., Hebl & Enright, 1993), and not provided formal statistical tests of age differences (e.g., Subkoviak et al., 1995).

The present investigation was designed to investigate age differences in the association between forgiveness and health in a nationally representative probability sample of the United States. This study goes beyond prior work in multiple ways. First, we measured multiple dimensions of forgiveness. Second, we included measures of both mental (i.e., psychological distress and life satisfaction) and physical (i.e., self-rated health) health outcomes. Third, in examining the relationship between forgiveness and health, we adjusted for potentially confounding factors such as religiousness/spirituality variables and demographic factors. Fourth, we examined age differences in levels of forgiveness and its relationship to health in young, middle age, and old adults. Fifth, we used data collected from a nationally representative probability sample of the United States. Overall, the two primary goals of our analyses were to identify age differences in levels of forgiveness and to examine how the relationship between forgiveness and health varies by age.

METHOD

Participants

Participants responded to the Survey of Consumers, a telephone survey of adults age 18 and older conducted by the University of Michigan's Institute for Social Research. The sample was nationally representative and was randomly selected using an extended form of the two-stage random-digit-dialing (RDD) procedure described by Waksberg (1978). The survey employs a rotating panel design to gather data

from approximately 500 respondents on a monthly basis. Each monthly sample consists of about 300 new respondents and 200 respondents being reinterviewed 6 months after their initial interview. For five consecutive months in 1998, our study added questions to the monthly survey administered to the new national sample of about 300 respondents. The total sample for the 5-month period was 1,423 respondents, and the response rate for the survey ranged from .69 to .71 during the 5-month period.

Measures

Age

Respondents were asked to report their age in years. For the present purposes, age was conceptualized as young (ages 18–44), middle (45–64), and old (65 and older).

Health Status

We used three measures of health status. *Psychological distress* was assessed using a six-item index ($\alpha = .83$). For each item, respondents were asked how often (1 = never to 5 = very) they had felt: (a) nervous, (b) restless or fidgety, (c) hopeless, (d) that everything was an effort, (e) worthless, and (f) so sad that nothing could cheer the respondent up. This measure was developed as part of a project that used modern Item Response Theory methods to identify an optimal short-form scale of nonspecific psychological distress (Kessler & Mroczek, 1994, 1995). *Life satisfaction* was assessed by asking respondents to think about their life as a whole and rate their satisfaction with it. Response categories included (1) not at all satisfied, (2) not very satisfied, (3) somewhat satisfied, (4) very satisfied, and (5) completely satisfied. *Self-rated health* was assessed by asking respondents to rate their overall health at the time of the interview. Response categories included (1) poor, (2) fair, (3) good, (4) very good, and (5) excellent. This item is a global measure of health that is strongly associated with other more objective measures such as mortality (Idler, 1992; Idler & Benyamini, 1997).

Religiousness/Spirituality

Four religiousness/spirituality factors were assessed as follows: *Service attendance* was measured by asking respondents how often they went to religious services. Response categories ranged from (1) never

to (6) more than once a week. Frequency of *prayer* was measured by asking how often they prayed in places other than church and synagogue. Responses ranged from (1) never to (6) more than once a day. Respondents were also asked to rate how *religious* and how *spiritual* they were on a 10-point scale.

Forgiven Self ($\alpha = .67$)

The index for having forgiven oneself is composed of two items: (a) I often feel that no matter what I do now I will never make up for the mistakes I have made in the past, and (b) I find it hard to forgive myself for some of the things I have done wrong. For each of the items, respondents were asked whether they strongly agreed, agreed, disagreed, or strongly disagreed. As with all following forgiveness indices, higher scores represent more forgiveness.

Forgiven Others ($\alpha = .72$)

The forgiven others index is composed of five items. Respondents were asked when someone had hurt them, how often they (a) hold resentment or keep it inside, (b) try to get even in some way, and (c) try to forgive the other person. Response categories included never, hardly ever, not too often, fairly often, and very often. Respondents were also asked whether they strongly agreed, agreed, disagreed, or strongly disagreed with the following statements: (d) I have grudges that I have held on to for months or years, and (e) I have forgiven those who have hurt me.

Forgiven by God ($\alpha = .64$)

This two-item index ascertained the degree to which respondents felt forgiven by God. Respondents were asked if they strongly agreed, agreed, disagreed, or strongly disagreed with the following items: (a) Knowing that I am forgiven for my sins gives me the strength to face my faults and be a better person, and (b) I know that God forgives me.

Proactive Forgiveness ($\alpha = .64$)

This three-item index taps the extent to which one is proactive in giving and receiving forgiveness. Respondents were asked how often they did the following: (a) ask God's forgiveness when the respondent had hurt someone, (b) ask the other person's forgiveness when the respondent had hurt someone,

Table 1. Levels of Forgiveness and Religiousness/Spirituality by Age Category

Variables	Age 18-44 (Referent) (<i>n</i> = 711-737)		Age 45-64 (<i>n</i> = 383-410)		Age 65 and older (<i>n</i> = 246-276)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Forgiveness						
Forgiven self	3.89	1.28	4.00	1.20	3.81	1.28
Forgiven others	3.87 _a	0.84	4.10 _a	0.71	4.22 _a	0.70
Forgiven by God	4.67 _{bc}	0.71	4.74 _c	0.62	4.79 _b	0.51
Proactive forgiveness	3.83	0.99	3.90	0.97	3.86	1.07
Religiousness/spirituality						
Service attendance	3.20 _a	1.60	3.55 _a	1.60	3.69 _a	1.71
Prayer	4.08 _{ac}	1.62	4.25 _c	1.59	4.57 _a	1.56
Religiosity	5.85 _a	2.67	6.49 _a	2.49	6.50 _a	2.37
Spirituality	6.54 _{ac}	2.59	7.09 _a	2.22	6.84 _c	2.26

Note. Like subscripts denote significant differences between referent group (18-44) and specified group at the following probability levels: a = $p \leq .001$, b = $p \leq .01$, c = $p \leq .10$.

and (c) pray for someone who had hurt the respondent. Responses for each of the statements included very often, fairly often, not too often, hardly ever, and never.

Control Variables

Covariates assessed included gender (0 = male, 1 = female), race (0 = Whites, 1 = Blacks/Hispanics), marital status (0 = not married, 1 = married), education (years completed), and income (13 categories ranged from under \$10,000 to \$100,000 or more).

Statistical Analyses

Data were weighted for age, gender, and race to take into account differential probabilities of selection and to adjust the demographics of the sample to that of the United States population using the Current Population Survey. Our analyses were conducted in two phases. In phase one, we examined age differences in unadjusted levels of forgiveness comparing young adults to both middle and old age adults. These analyses are summarized in Table 1. In phase two, associations between forgiveness and health were assessed using hierarchical ordinary least squares regression models. For this phase, all effects were adjusted for control variables entered on the first step. On step two, religiousness and spirituality variables were entered into the equation, and on step three forgiveness variables were entered. In Tables II-IV the final model coefficients are displayed, as well as, change in *R*-squared values from step one to step two, from step two to step three, and *R* squared

for the full model. We tested for significant differences in regression slopes to examine age differences in associations between forgiveness and health. We used the method described by Jaccard, Turrisi, and Wan (1990) for these analyses. The equation was: $t = b_1 - b_2 / (s_{b_1}^2 + s_{b_2}^2)^{1/2}$ where *b* was the slope and *s* was the standard error.

RESULTS

Age Differences in Levels of Forgiveness and Religiousness/Spirituality

In Table 1, the mean, standard deviation, and cell size for all forgiveness and religiousness/spirituality variables is reported for each age group. Looking across the forgiven others row, young adults reported significantly ($p \leq .001$) less forgiveness of others than middle and old age adults. The difference between young and old adults on the forgiven by God measure was statistically significant ($p \leq .01$), but the difference between young and middle age adults on this variable only approached significance ($p \leq .10$). Levels of forgiven self and proactive forgiveness did not vary significantly across age group (see Table 1).

For service attendance and religiosity, lower scores were observed in the young adult group as compared to middle and old age adults ($p \leq .001$). Young adults reported significantly less prayer than old adults ($p \leq .001$), but the difference between young and middle age adults on this variable only approached significance ($p \leq .10$). Self-rated spirituality for young adults is lower than that for middle age adults ($p \leq .001$), but this difference only approaches

Table II. Unstandardized (and Standardized) Regression Coefficients for the Association of Forgiveness, Religiousness/Spirituality, and Psychological Distress^a

Variable	Age category			Coefficient difference ^b	
	18-44 (n = 709)	45-64 (n = 377)	65 and older (n = 242)	18-44/ 45-64	18-44/ 65+
Religiousness/spirituality					
Service attendance	-.05* (-.10)	-.06* (-.11)	-.02 (-.05)		
Prayer	-.04 (-.07)	.01 (.03)	.03 (-.06)		
Religiosity	.00 (.01)	-.02 (-.05)	.03 (.11)		
Spirituality	.01 (.02)	.05* (.14)	.02 (.06)		
Δ R ² (step 2)	.01†	.03*	.03		
Forgiveness					
Forgiven self	-.17*** (-.25)	-.17*** (-.26)	-.16*** (-.26)		
Forgiven others	-.24*** (-.24)	-.48*** (-.42)	-.37*** (-.34)	***	†
Forgiven by God	-.08† (-.07)	.07 (.05)	-.08 (-.05)	*	
Proactive forgiveness	.16*** (.19)	.11* (.13)	.11* (.16)		
Δ R ² (step 3)	.15***	.28***	.23***		
Intercept (full model)	4.47***	4.67***	4.91***		
R ² (full model)	.29***	.43***	.42***		

^aModels adjusted for sex, race, education, income, and marital status.

^bSignificance of difference between respective *B* coefficients.

† *p* ≤ .10.

* *p* ≤ .05. ** *p* ≤ .01. *** *p* ≤ .001.

significance when comparing young and old adults (*p* ≤ .10) (see Table I).

Age Differences in the Association between Forgiveness, Religiousness/Spirituality, and Health

Psychological Distress

Table II shows the final model coefficients, adjusted for control variables, for the association of forgiveness and psychological distress and for religiousness/spirituality and psychological distress. In addition, change in *R* squared from step one to two is shown below religiousness/spirituality coefficients, change from step two to three is shown below forgiveness coefficients, and *R* squared for the full model is shown below the intercept. Tests for coefficient differences across the age groups are indicated in the far right two columns. Looking across the change in *R*-squared rows, it is apparent that for all age groups forgiveness variables accounted for more variance in psychological distress than religiousness/spirituality variables. For young, middle, and old age groups

the change in *R* squared for religiousness/spirituality was .01, .03, and .03, respectively, but for forgiveness change in *R* squared was .15, .28, and .23, respectively (see Table II). Across all age groups forgiveness of self and others is negatively associated with psychological distress (*p* ≤ .001). However, the relationship is significantly stronger in middle age adults as compared to young (*p* ≤ .001), and the difference in the strength of the relationship between young (*B* = -.24) and old (*B* = -.37) adults approaches significance (*p* ≤ .10). Interestingly, proactive forgiveness was significantly associated with psychological distress for young (*p* ≤ .001), middle (*p* ≤ .05), and old (*p* ≤ .05) adults, but in contrast to the pattern of the other forgiveness measures, higher levels of proactive forgiveness predicted higher levels of distress.

Table II also shows the relationship between measures of religiousness/spirituality and distress. Few significant associations are evident. Service attendance was negatively associated with psychological distress for all ages but significantly so only for young (*p* ≤ .05) and middle (*p* ≤ .05) age adults, and self-rated spirituality was positively associated with

Table III. Unstandardized (and Standardized) Regression Coefficients for the Association of Forgiveness, Religiousness/Spirituality, and Life Satisfaction^a

Variable	Age category			Coefficient difference ^b	
	18-44 (n = 701)	45-64 (n = 375)	65 and older (n = 237)	18-44/ 45-64	18-44/ 65+
Religiousness/spirituality					
Service attendance	-.09*** (.16)	.01 (.01)	.13*** (.24)	†	
Prayer	-.10*** (-.18)	-.01 (-.03)	.03 (.05)	†	.
Religiosity	-.01 (-.03)	.00 (.01)	.00 (-.01)		
Spirituality	.01 (.03)	.00 (.00)	-.04 (-.11)		
Δ R ² (step 2)	.03***	.00	.06**		
Forgiveness					
Forgiven self	-.11*** (.16)	.03 (.04)	.07 (.10)		
Forgiven others	.05 (.04)	.24*** (.19)	.27** (.20)	.	.
Forgiven by God	.09† (.07)	-.18* (-.12)	.16 (.09)	**	
Proactive forgiveness	.12** (.13)	.00 (.00)	-.16* (-.19)		***
Δ R ² (step 3)	.05***	.04***	.08***		
Intercept (full model)	1.97***	2.73***	1.46*		
R ² (full model)	.15***	.17***	.28***		

^aModels adjusted for sex, race, education, income, and marital status.

^bSignificance of difference between respective *B* coefficients.

† $p \leq .10$.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

psychological distress for middle age adults ($p \leq .05$) (see Table II). It should also be noted that initially self-rated religiosity was positively associated with psychological distress for old individuals ($B = .07$, $p \leq .05$), but this association did not remain significant when forgiveness variables were added into the final model ($B = .03$, $p > .10$).

Life Satisfaction

Table III is organized in identical fashion to Table II. For all age groups, forgiveness variables accounted for more variance in life satisfaction than religiousness/spirituality variables. However, the contribution of forgiveness to accounting for variation in life satisfaction was considerably smaller than that observed for psychological distress. A significant positive association ($p \leq .001$) was observed between forgiveness of self and life satisfaction but only in young adults. Positive associations were observed between forgiveness of others and life satisfaction in middle ($p \leq .001$) and old ($p \leq .01$) adults, and the relation-

ships were significantly stronger in these groups than in young adults ($p \leq .05$). Table III also provides evidence that some dimensions of forgiveness are associated with poorer health status, at least for some age groups. For middle age adults only, feeling forgiven by God was negatively associated with life satisfaction ($p \leq .05$). The pattern of association with proactive forgiveness was complex. This dimension of forgiveness was positively associated with life satisfaction for young adults ($p \leq .01$) and negatively associated for old adults ($p \leq .05$). In young and old adults, service attendance was positively associated with life satisfaction ($p \leq .001$), and for young adults prayer was negatively associated ($p \leq .001$). Self-rated religiosity and spirituality were unrelated to life satisfaction.

Self-Rated Health

Table IV presents the findings for our global measure of health. For young adults, forgiveness variables again explained a higher proportion of variance in self-rated health than religiousness/

Table IV. Unstandardized (and Standardized) Regression Coefficients for the Association of Forgiveness, Religiosity/Spirituality, and Self-Rated Health^a

Variable	Age category			Coefficient difference ^b	
	18-44 (n = 705)	45-64 (n = 372)	65 and older (n = 234)	18-44/ 45-64	18-44/ 65+
Religiosity/spirituality					
Service attendance	.06* (.09)	.15*** (.21)	.08* (.13)	†	
Prayer	-.01 (-.01)	-.03 (-.04)	.07 (.10)		
Religiosity	.05* (.13)	.00 (.00)	-.08* (-.18)		**
Spirituality	.00 (-.01)	-.03 (-.06)	-.06 (-.11)		
Δ R ² (step 2)	.02***	.04**	.05**		
Forgiveness					
Forgiven self	.19*** (.24)	.13** (.14)	.07 (.18)	†	
Forgiven others	-.04 (-.04)	.06 (.04)	.24* (.12)		*
Forgiven by God	-.06 (-.05)	.04 (.02)	.12 (.06)		
Proactive forgiveness	-.01 (-.01)	-.03 (-.02)	-.14† (-.14)		
Δ R ² (step 3)	.04***	.02*	.04**		
Intercept (full model)	2.42***	1.16*	.36		
R ² (full model)	.14***	.26***	.34***		

^aModels adjusted for sex, race, education, income, and marital status.

^bSignificance of difference between respective B coefficients.

† p ≤ .10.

* p ≤ .05. ** p ≤ .01. *** p ≤ .001.

spirituality variables, but for middle and old age adults forgiveness variables explained a smaller proportion (see Table IV). Forgiveness of self was significantly positively associated with self-rated health for both young ($p \leq .001$) and middle ($p \leq .01$) age adults. Only in old adults was there a positive association between forgiveness of others and self-rated health ($p \leq .05$). Service attendance was positively associated with self-rated health for young ($p \leq .05$), middle ($p \leq .001$), and old ($p \leq .05$) adults. Religiosity was positively associated with self-rated health for young adults ($p \leq .05$) and negatively associated for old adults ($p \leq .05$). Spirituality was not significantly associated with self-rated health at any age.

DISCUSSION

A primary goal of our study was to identify age differences in levels of multiple forms of forgiveness. We found age differences in levels of forgiveness of others and feeling forgiven by God. On these dimensions of forgiveness middle and old age adults scored

higher than their younger counterparts. No significant differences were found in levels of forgiveness of self and proactive forgiveness. Our findings for forgiveness of others confirm previous work showing age-related differences in forgiveness (Enright et al., 1989; Mullet et al., 1998; Park & Enright, 1997; Subkoviak et al., 1995). Unfortunately, much of the prior work has focused exclusively on forgiveness of others and additional dimensions of forgiveness have not yet been closely examined. Hence, little evidence exists for us to compare to our findings for forgiveness of self, feeling forgiven by God, and proactive forgiveness. Nevertheless, it appears that there are age differences in some forms of forgiveness.

The second major goal in this study was to examine age differences in the relationship between forgiveness and health. In general, the present results confirm those from previous studies (Enright et al., 1992; Fitzgibbons, 1986; Hargrave & Sells, 1997; Kaplan, 1992; Mauger et al., 1992; Pingleton, 1989; Poloma & Gallup, 1991) showing that some forms of forgiveness are associated with better health. However, we did observe age differences in the association

between forgiveness and health. A particularly consistent and relevant age difference was observed for forgiveness of others. It appears that forgiveness of others is more strongly associated with mental health outcomes (i.e., psychological distress and life satisfaction) for middle and old age adults than for young adults.

The findings for proactive forgiveness are in stark contrast to those for other dimensions. Surprisingly, proactive forgiveness was associated with more psychological distress at all ages. For old adults a similar and unexpected association with life satisfaction was evident, but in young adults proactive forgiveness did show the expected association. We offer three possible explanations for these findings. First, it could be the case that those high on this dimension are experiencing heightened stress associated with the task of initiating the forgiveness process. These individuals, whether transgressors or victims, are "taking the first step" in the process of forgiveness—a task that may actually engender psychological distress and lowered life satisfaction. Second, it may be the case that individuals high on proactive forgiveness are not actually sincere or genuine in their efforts. These individuals may actually be engaging in "pseudo-forgiveness." Researchers (Baumeister, Exline, & Sommer, 1998; Enright, Freedman, & Rique, 1998; Enright & Zell, 1989) have discussed pseudo-forgiveness as something that is not real but meant to achieve a goal or objective. For example, "I have forgiven you, now you owe me one." This is an attempt to gain power over someone, not an actual act of forgiveness. Pseudo-forgiveness involves an outward offering of forgiveness on the interpersonal level, but the inner resolution of conflict and anger is not achieved. Thus, individuals high in proactive forgiveness may actually be experiencing worse health as a result of the effects of unresolved anger and conflict associated with pseudo-forgiveness. Third, proactive forgiveness may be closely related to neuroticism, low self-esteem, or some other personality characteristic that is predictive of poor mental or physical health or both. Irrespective of mechanism, it appears quite clear that not all forms of forgiveness are beneficial for mental or physical health.

Taken together our findings emphasize that forgiveness is a multidimensional phenomenon. There are age differences in some forms of forgiveness and in their relationship to health. Our results are generally consistent with developmental theories of forgiveness (Enright et al., 1989; Park & Enright, 1997). Although much of this work has tended to focus on differences

in forgiveness during early childhood and adolescent years, the present findings provide empirical evidence of age differences in adults.

Although we find merit in having demonstrated adult age differences in forgiveness and health, limitations of this research must be acknowledged. First, although our forgiveness items have face validity, they may engender socially desirable responses. Hence, measurement strategies (i.e., the Enright Forgiveness Inventory; Subkoviak et al., 1995) that employ a more indirect approach may be preferable. Second, we measure forgiveness without regard to context. Examining forgiveness as it relates to a particular event (i.e., wrongdoing, injury, loss), and attending to the frequency and severity of such an event may be informative. Third, our analyses of cross-sectional data provide no information about the causal ordering of variables and the reciprocal effects of predictors and outcomes. Longitudinal data are essential in examining the overall process that lies between forgiveness and health. Fourth, due to survey constraints we were unable to measure some key mechanisms (i.e., neuroticism). It may be useful to know the extent to which such variables as religiosity, spirituality, and forgiveness can be considered character traits or to what degree they are related to major personality variables. Future studies would do well to evaluate the stability of religiosity, spirituality, and forgiveness variables and include additional measures of personality. In spite of these limitations, this study has shown the importance of investigating age differences in the association of forgiveness and health.

ACKNOWLEDGMENTS

This study was supported in part by the Fetzer Institute as part of the John Templeton Foundation's campaign for forgiveness research, by grant T32-MH16806 from the National Institute of Mental Health, and by a Faculty Research Grant from the Office of the Vice President for Research at the University of Michigan.

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