

Adult Religiousness and History of Childhood Depression: Eleven-Year Follow-up Study

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This study investigates the association between childhood depression and the protective qualities of adult religiousness. Subjects were 146 (65 female and 81 male) adults with a history of childhood depression and 123 (61 female and 62 male) adults without a history of childhood depression interviewed as part of a long-term follow-up study (mean years of follow-up, 11.2; SD = 1.4). Depression in childhood and adulthood was assessed by blind and independent clinical interviews by using the Schedule for Affective Disorders for School Aged Children and the Schedule for Affective Disorders Life-time Version, respectively. Religiousness was assessed by report on the personal importance of religion, frequency of attendance of religious services, religious denomination, and child-adult concordance of report. Findings showed adult personal importance of religion to be associated with a decreased risk for depression in women without a history of childhood depression but an increased risk for depression in women with a history of childhood depression. Adult Catholicism as compared with Protestantism was associated with a decreased risk for depression in male childhood depressives, but this association was not found in men without childhood depression. The findings potentially suggest a reciprocal-influence process between childhood pathology and the development of religiousness.

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Childhood depression poses a risk for adult psychosocial functioning, in turn increasing the risk of adult psychopathology (Cicchetti and Aber, 1986; Hankin et al., 1998; Harrington et al., 1997; Weissman et al., 1999a, 1999b). Long-term follow-up studies on childhood depression find that adult impairment in work, parenting, and global social functioning lead to adult depression (Harrington et al., 1997; Weissman et al., 1999b). From within the cognitive perspective, longitudinal research shows that childhood depression leaves a cognitive scar characterized by self-blame, rumination, and lack of efficacy that poses risk for subsequent episodes of depression (Nolen-Hoeksema, 1996).

Given that childhood depression is associated with adult social functioning, it too might be associated with protective qualities of adult religiousness. This study examines the association between childhood depression and the protective qualities of

the three most highly researched dimensions of religiousness: personal importance of religion, frequent attendance of religious services, and religious denomination (for extensive reviews see Koenig, 1998; Larson and Larson, 1994).

Gender differences in the magnitude of the protective qualities of religiousness against depression consistently have been reported. As compared with male subjects, there has been found among female subjects a more robust protective effect of personal importance of religion against depression (Donahue, 1995; Feldman et al., 1995; Miller and Greenwald, 1998). Relative protective qualities of various religious denominations differ more greatly in male subjects, as compared with female subjects, specifically the palliative effects of Catholicism as compared with Protestantism (Miller et al., 1997; Park and Cohen, 1993; Wilson and Sherkat, 1994); however, no gender difference has been identified with respect to protective qualities of religious fundamentalism (Richards, 1994; Sethi and Seligman, 1993).

Gender differences in the protective qualities of religiousness reflect findings on fundamental gender differences in the nature of religiousness. Based on semistructured interviews, Tamminen (1994, p. 79) found religiousness in female subjects to be “more personal and based upon their own experience,” whereas for male subjects it was “more practical

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TABLE 1
Demographic Characteristics at Follow-up on Youth Grown-up by Childhood Depression Status

Demographic Variables	MDD in Youth (<i>N</i> = 146)		No MDD in Youth (<i>n</i> = 123)	
	Female (<i>n</i> = 65)	Male (<i>n</i> = 81)	Female (<i>N</i> = 61)	Male (<i>N</i> = 62)
Age (yr)	24.28 (3.00)***	24.90 (2.90)*	22.07 (2.63)	22.7 (3.54)
Hollingshead level				
I-II	26.0% (13/50)	25.0% (16/64)	37.0% (17/46)	18.6% (8/43)
III-IV	74.0% (37/50)	75.0% (48/64)	63.0% (29/46)	81.4% (35/43)
Ethnicity/race				
White	52.3% (34/65)***	46.9% (38/81)	26.2% (16/61)	41.9% (26/62)
Black	12.3% (8/65)***	24.78 (20/81)	39.3% (24/61)	33.8% (21/62)
Hispanic	30.8% (20/65)	27.1% (22/81)	34.4% (21/61)	20.9% (13/62)
Other	4.6% (3/65)	1.2% (1/81)	0.0% (0/61)	3.2% (2/62)
Clinical status				
MDD	36.9% (24/65)	34.6% (28/81)	29.5% (18/61)	33.9% (21/62)

p* < .05, *p* < .01, ****p* < .005.

and rule oriented." Seventy-eight percent of female subjects as compared with 61% of male subjects reported feeling the nearness of the Divine "at least a few times"; 13% of female subjects as compared with 24% of male subjects reported having never felt the nearness of the Divine. Consistent with Tamminen's study, other researchers have shown adolescent male subjects, as compared with female subjects, tend to report a "legalist" view of the Divine with an emphasis on ultimate powerfulness (Argyle and Beit-Hallahmi, 1975; Janssen et al., 1994).

Childhood Religiousness

Little empirical research has been conducted on childhood religiousness. Some research has shown a heritable contribution to childhood religiousness (Glass et al., 1986; Kendler et al., 1997), from which has been postulated the notion of innate spirituality, or an inherent capacity for religiousness in childhood (Miller et al., in press). Innate propensity for religiousness, rather than environmental conditioning of religiousness upon a *tabula rasa*, could be seen to account for roughly equal rates of personal religiousness in childhood irrespective of parental religiousness or parental pathology (Miller et al., 1997, in press). However, on a potentially innate spirituality in childhood, it has been shown that parental psychopathology, poor childhood environment, and lack of parental religiousness, over the long-term, degrade rates of adult religiousness and related protective qualities (Coleman et al., 1986). Given that childhood environment affects adult religiousness (Kendler et al., 1997) substantially more than childhood religiousness, it might be expected that childhood depression status correlates with adult religiousness more highly than with child religiousness.

In this study, the association between childhood depression and the protective qualities of adult religiousness was explored through use of a longitudi-

nal study on depressed and nondepressed children grown-up. An 11-year follow-up study (Weissman et al., 1999a, 1999b) was conducted on children who had been assessed in the late 1970s and early 1980s for a DSM-III diagnosis of depression and matched community controls (Puig-Antich et al., 1989). Specifically we asked: a) is childhood depression associated with rates of religiousness in adulthood? and b) does childhood depression impact the protective qualities of adult religiousness against depression?

Methods

The overall design was a clinical follow-up conducted between 1992 and 1996 on subjects initially assessed between 1977 and 1985. Mean follow-up time was 11.9 years (SD = 1.4 years) with a range of 10 to 15 years. Rate of subject location and subject acceptance into the follow-up study was 73% (146/199) among subjects diagnosed with childhood depression and 70% (123/176) among subjects without a diagnosis of childhood depression.

Subjects

Subjects were 146 (65 female and 81 male) youths with a history of depression and 123 (61 female and 62 male) youths without a history of childhood depression followed up into early adulthood. Table 1 displays demographic characteristics and rates of major depressive disorder (MDD) at follow-up by childhood depression status by gender.

Initial Selection of Depressed and Nondepressed Children

An extensive description of subject ascertainment has been published elsewhere (Weissman et al., 1999a, 1999b). Children (ages 6 to 12 years) and adolescents (ages 13 to 18 years) were screened for

mental illness when they came to the Child and Adolescent Depression Clinic of the New York State Psychiatric Institute if they said they felt sad, had suicidal ideation or behavior, refused to attend school, were nervous or afraid, or displayed ritualistic behavior. If the screening indicated that the diagnosis of MDD or anxiety disorder was likely, the child was given a diagnostic evaluation that included administration of the Schedule for Affective Disorders for School-Aged Children (K-SADS; Orvaschel et al., 1982) by a psychiatrist and a repeat administration of the instrument 2 weeks later by a second psychiatrist blind to the initial diagnosis. Children were excluded from the sample if they had been taking medications that could produce depressive symptoms. Based on these diagnostic procedures, children were entered into the study if they met criteria for a depressive disorder or an anxiety disorder. This study concerns exclusively those children diagnosed with a depressive disorder and not those children diagnosed with an anxiety disorder.

Children without MDD were randomly selected from grades 3, 4, and 5 of an urban school in the neighborhood of the hospital. Children (age 11 to 12 years) and adolescents (ages 13 to 18 years) without MDD were recruited by newspaper advertising and word of mouth, contact with schools and counselors, and meetings with parent and teacher organizations in the neighborhood of the hospital. Only children and adolescents without any psychiatric disorders (current or past) and absence of other exclusion criteria were accepted as healthy subjects. The study was described as an overall mental health survey and questions on a variety of psychiatric disorders were asked. Informed consent was obtained from the parents or legal guardians and from the children in all groups.

Follow-up Procedures

To ensure accurate estimates of rates, extensive efforts were made to locate the original sample. Once the subjects were located, interviews were conducted and informed consent was obtained. All data were collected by clinical interviewers blind to original diagnosis and without access to the original clinical records. At follow-up, life-time psychiatric status was assessed using the Schedule for Affective Disorders and Schizophrenia for Lifetime Disorders (Endicott and Spitzer, 1978). Interviews were conducted by 18 clinically trained and experienced interviewers, who were monitored monthly.

Measures

Depression status was assessed using structured clinical interviews administered by trained clinicians: the K-SADS (Orvaschel et al., 1982) at initial interview and the SADS-L (Endicott and Spitzer, 1978) at follow-up, which have been shown highly reliable and valid at yielding DSM-III diagnoses and Research Diagnostic Criteria diagnoses, respectively. Childhood religiousness was based on response to two questions in the SADS-L: frequency of attendance of religious services (at least monthly/less than monthly) and religious denomination. Adult religiousness was based on adult response to these two questions as well as a third, personal importance of religion (highly important/not highly important). Child-adult concordance of response to the two shared items was used as a measure of continuity of religiousness. Although a range of religious denominations were represented in the sample, because of limitations of statistical power, analyses concerning religious denomination were limited to Catholicism and Protestantism. Parental bonding was assessed based upon child report on the Parental Bonding Instrument (PBI; Parker et al., 1979). The PBI measures parenting along two dimensions, caring and overprotection. Cutoff scores were based on previously established norms (high maternal care $> 27 >$ low maternal care; high maternal overprotection $> 13.5 >$ low maternal overprotection; Parker et al., 1979). On the basis of these cutoff scores the subject responses were organized into four quadrants to identify those children reporting a parenting style of affectionless-control, which has been associated with depression in offspring (Parker, 1984).

Subject socioeconomic status at follow-up was categorized according to the Hollingshead (1965) 5-point 2-factor index, which combined levels of education and occupation into a single score.

Analyses

Data were stratified by childhood depression status and by gender. Univariate logistic regression was conducted with depression status at follow-up as the outcome and each childhood religiousness variable and each adult religiousness variable as predictors. Analyses were controlled for age and then were repeated to control for variables (race and parental bonding style) associated with childhood depression status.

TABLE 2
Rates of Adult Religiosity by Childhood Depression Status by Gender

	Childhood MDD		No Childhood MDD	
	Female (N = 65)	Male (N = 81)	Female (N = 61)	Male (N = 62)
Initial assessment child religiosity				
Frequent Attendance	79.4% (50/63)	79.2% (47/59)**	79.7% (47/59)	64.9% (37/57)
Denomination				
Protestant	11.5 (7/61)*	20.8% (15/72)	32.8% (19/58)	17.9% (10/56)
Catholic	59.0% (36/61)	55.6% (40/72)	53.4% (31/58)	46.4% (26/56)
Jewish	14.8% (9/61)	15.3% (11/72)**	8.6% (5/58)	7.1% (4/56)
Other	25.4% (9/61)	8.3% (6/72)**	5.2% (3/58)	28.6% (16/56)
Follow-up adult assessment				
Importance	41.9% (26/62)	20.7% (16/77)*	30.3% (18/60)	34.4% (20/58)
Frequent Attendance	39.7% (25/63)	20.7% (16/77)	38.6% (27/57)	24.1% (14/58)
Denomination				
Protestant	16.9% (10/59)	16.7% (12/72)	22.8% (13/57)	9.3% (5/54)
Catholic	45.8% (27/59)	36.1% (26/72)	36.8% (21/57)	37.0% (20/54)
Jewish	11.9% (7/59)	15.3% (11/72)**	7.0% (4/57)	3.7% (2/54)
Other	25.4% (15/59)	31.9% (23/72)**	33.3% (19/57)	50.0% (27/54)
Child-Adult Concordance				
Frequent Attendance	47.6% (30/63)	36.4% (28/77)	54.4% (31/57)	45.6% (26/57)
Denomination	60.0% (39/65)	59.3% (48/81)	63.9% (39/61)	56.5% (35/62)

* $p < .1$, ** $p < .05$.

Results

Demographic Characteristics and Depression Status

Table 1 displays the demographic characteristics of the sample by childhood depression by gender. Among both women and men, subjects recruited into the childhood MDD group were slightly older than subjects recruited into the childhood no MDD group; among women, subjects recruited into the childhood MDD group were more likely to be Caucasian and less likely to be African-American than subjects recruited into the childhood no MDD group. Childhood depression status was not significantly associated with rates of depression at follow-up. Subsequent analyses controlled for potentially confounding demographic variables.

Religiousness by Childhood Depression Status

Table 2 shows rates of childhood religiousness, adult religiousness, and child-adult concordance of religiousness by childhood depression status. With the exception of the personal importance of religiousness (at the level of a statistical trend), neither rates of adult religiousness nor child-adult concordance of religiousness were found to differ by childhood depression status. Differences in childhood religious denomination by depression status potentially reflect differences between the two conditions in subject recruitment, although higher rates of depression have been identified among Jews as com-

pared with Protestants or Catholics among a nationally representative sample of adults (Yeung and Greenwald, 1992). High rates of personal religiousness and frequent attendance of religious services are consistent with those identified in nationally representative samples (Gallup and Bezilla, 1994).

Protective Qualities of Religiousness by Childhood Depression Status

Table 3 shows the likelihood of MDD at follow-up associated with each dimension of childhood religiousness, each dimension of adulthood religiousness, and each dimension of child-adult concordance of religiousness by childhood depression status by gender.

Among women without childhood depression, there was a decrease in the likelihood of adult MDD of 51% associated with adult personal importance of religion and of 65% associated with adult frequent attendance at the level of a statistical trend, and of 84% associated with childhood frequent attendance. Among women with a history of childhood depression, there was an increase in the likelihood of adult depression of 236% associated with adult personal importance of religion.

Among men without a history of childhood depression, there was no association between religiousness and adult depression. Among men with a history of childhood depression, there was a decreased likelihood adult depression of 78% associ-

TABLE 3
Likelihood of MDD at Follow-up Associated with Adulthood Religiosity and Youth Religiosity by Depression Status in Youth by Gender

	Childhood MDD				No Childhood MDD			
	Female (N = 65)		Male (N = 81)		Female (N = 61)		Male (N = 62)	
	OR	95%CI	OR	95%CI	OR	95%CI	OR	95%CI
Adult								
Importance	2.36**	.99–6.70	1.34	.41–4.42	.49*	.13–1.29	.83	.25–2.75
Frequent Attendance	1.63	.60–4.75	1.28	.40–4.11	.35*	.08–1.16	.79	.20–3.12
Denomination (Catholic vs. Protestant)	1.21	.27–5.32	.22**	.05–0.96	1.08	.16–7.08	--	--
Child								
Frequent attendance	.99	.28–3.49	2.87	.72–11.49	.16**	.03–.81	.69	.22–2.23
Denomination (Catholic vs. Protestant)	1.51	.25–9.03	.32*	.09–1.14	.80	.12–4.53	5.52	.58–51.75
Child-adult concordance								
Frequent attendance	1.98	.70–5.60	.95	.35–2.60	.78	.24–2.58	1.44	.46–4.50
Denomination	1.54	.54–4.42	.60	.23–1.58	1.23	.37–4.17	.86	.29–2.58

* $p < .1$, ** $p < .05$. All regression analyses control for age and ethnicity.

ated with adult religious denomination and of 68% associated with childhood religious denomination, specifically, Catholicism as compared with Protestantism.

None of the demographic variables nor parental bonding style were found to account for any of the reported associations between religiousness and adult depression.

Discussion

Childhood depression was differentially associated with protective qualities of adult religiousness by gender. Personal importance of religion reduced by 51% the risk for depression among women without a history of childhood depression but increased by 236% the risk for depression among women with a history of childhood depression. Catholicism, as compared with Protestantism, reduced by 78% the risk for depression among men with a history of childhood depression but showed no significant association with depression among men without a history of childhood depression.

Personal Religiousness in Women

That personal religiousness poses a twofold increased risk for adult depression in female depressed children contrasts against a well-established set of findings on protective qualities of personal religiousness in community samples of female subjects (Ellis and Wagemann, 1993; Feldman et al., 1995; Janssen et al., 1994; Koenig, 1998). Consistency between the findings on women without childhood depression in this study and those in community samples possibly reflects the relatively low 6% to 8% national rate of childhood depression found in community samples of girls (Harrington et al., 1997).

The authors extrapolate from previous research to interpret the main finding that personal religiousness poses a twofold risk of recurrence of depression in female childhood depression. One explanation concerns differential attraction and attrition from personal religiousness by severity of depression. National rates of religiousness decrease from childhood through early adulthood (Gallup and Bezilla, 1994), suggesting that it may be normative to fall away from personal religiousness in adolescence and young adulthood. As an exception to this trend, severely depressed girls, with greater risk for recurrence, may gravitate to personal religiousness for comfort or support (Burris, 1994). Evidence from this study against differential attrition from religion by childhood depression status includes: a) similarity in overall rates of personal religiousness between girls with and without childhood depression; and b) the range of severity of depression at follow-up among women without childhood depression, in whom personal importance of religion was shown to be protective.

A second explanation of the findings implicates childhood depression as potentially mutagenic in the development of personal religiousness. One such mutagenic path might be that the depressive symptoms of guilt, low self-worth, and exaggerated responsibility that frequently occur in female depression (Aube et al., 2000; Zahn-Waxler et al., 1991) distort religious, other-centered understandings of services, empathy, or altruism (Bridges and Spilka, 1992) culminating in a depressogenic interpersonal style. Religious messages for young women, as compared with young men, might be particularly amenable to this process, as Heggen and Longy (1991) argue that some religious traditions discourage self-

expression and encourage submissiveness and lack of mastery specifically in women.

From a cognitive perspective, often depressed children demonstrate a scar characterized by self-blame, inwardness, rumination, and lack of efficacy, enduring beyond individual episodes of depression and tending to occur more frequently in girls than in boys (Butler and Nolen-Hoeksema, 1994; Gotlib, 1993; Morton and Kutcher, 1995; Nolen-Hoeksema, 1999). Were this self-implicating cognitive style to be integrated into personal religious belief, female depressed children might tend to develop punitive or guilt-inducing forms of religiousness, much as has been found in substance abusers (Gorsuch, 1995).

From an experiential perspective, a sense of transcendence or personal connection with the Creator often is reported as central to the protective qualities of personal religiousness (Kendler et al., 1997; Koenig, 1998; Park and Cohen, 1993). Were childhood depression to occlude a sense of connection to the Creator, over time, depressed children might be prone to struggle with spiritual alienation or an unfulfilled quest for meaning (Burris, 1994).

Childhood Depression and Religious Denomination

The other chief finding of this study is that childhood depression is positively associated with protective qualities of Catholicism in men, which extends previous research showing Catholicism, as compared with Protestantism, to protect against depression among male subjects in general (Hettler and Cohen, 1998; Miller et al., 1997; Park and Cohen, 1993). One interpretation of this finding derives from Durkheim's (1951) research and subsequent replication of his findings showing Catholicism, as compared with Protestantism, to be a relatively greater source of social collectivism (Weisman and Lopez, 1996). The strong social network within Catholic religious communities, generally characterized by acceptance (Idler and Kasl, 1997; Krause et al., 1999; Oman and Reed, 1998), might particularly benefit depressed children who tend to lack social support or to suffer from poor interpersonal skills (Lewinsohn et al., 1994; Puig-Antich et al., 1989). That these protective qualities of Catholicism were shown exclusively in boys may reflect: a) a disenfranchisement of girls from religious denominations in which women hold very few leadership positions and appear ancillary to the institution (Bridges and Spilka, 1992; Heggen and Long, 1991), or b) gender-specific liturgical dictates (Richards and Bergin, 2000).

Findings on boys also might be interpreted from a developmental perspective. Children have been

shown to hold relatively affective and sensory experiences of religion, in comparison with the meta-cognitive or theoretical understanding of religiousness found in late adolescents and adults (Fowler, 1986; Scarlett, 1994). Because affect centrally figures into childhood religious experience, in childhood the experience of Catholic ritual may involve particularly pronounced affect (Shafranske³) and in turn be most directly ameliorative of depression. Once this affective experience of ritual gains form in childhood, the capacity for ritual to be curative might endure into adulthood.

Gender Differences in Depression and Developmental Religiousness

The findings suggest that, for each gender, childhood depression is associated with that dimension of religiousness which most protects against depression: the institutional dimension of religiousness in men and the personal dimension of religiousness in women. These gender differences in religiousness parallel findings on gender difference in moral judgement among adolescents: females tend to base moral reasoning on an internal sense of care or avoidance of harm, whereas males tend to adopt a rule-based or institutionalized system of morality (Gilligan, 1994). The simultaneous burgeoning of like gender differences in adolescence within both religiousness and moral judgment (Brown and Gilligan, 1991; Stillwell et al., 1996) may indicate shared emergent mechanisms or possibly a unified process of moral-religious development.

Limitations

This is the first longitudinal study to show an association between childhood depression and the protective qualities of religiousness in adulthood. The study benefits from a unique 11-year longitudinal data set that includes DSM-III diagnosis of childhood depression (at a period in time when such diagnoses were new to psychiatry). For purposes of the current inquiry, the original measures of religiousness might have assessed more specific dimensions of religiousness, including potential mechanisms. The religiousness variables used, however, are part of widely used structured clinical interview, allowing for comparison of these findings with those of other studies on children and adults. Ideally future research might investigate variables potentially underlying both religiousness and depression beyond those used in this study.

³ Shafranske EP (1999) Personal communication. Annual Convention of the American Psychological Association, Boston, MA.

Conclusion

An 11-year follow-up on depressed children found personal importance of religion to pose risk for recurrence in female subjects and religious denomination to protect against recurrence in male subjects. For both female and male subjects, childhood depression was associated with the protective qualities of that dimension previously identified as most central to religiousness.

That childhood depression was shown to be associated with adult religiousness but not childhood religiousness potentially reveals a reciprocal-influence process: childhood religiousness and childhood depression may start out as independent entities yet over the course of development exert mutual impact. Such a reciprocal-influence process in girls may contribute to the severe life-time course of depression associated with female childhood onset (Birmaher et al., 1996; Kovacs, 1996).

Clinical Implications

Psychotherapy for depression in children extends beyond treatment of symptoms of the disorder to address deficits in psychosocial functioning. The current findings may suggest that psychotherapy with depressed children should also integrate consideration of religiousness.

References

- Argyle M, Beit-Hallahmi B (1975) *The social psychology of religion*. London: Routledge & Kegan Paul.
- Aube J, Fichman, L, Saltaris C, Koestner R (2000) Gender differences in adolescent depressive symptomatology: Towards an integrated social-developmental model. *J Soc Clin Psychol* 19:243–265.
- Birmaher B, Ryan N, Williamson D, Brent D (1996) Childhood and adolescent depression: A review of the past 10 years. Part I. *J Am Acad Child Adolesc Psychiatry* 35:1427–1438.
- Bridges RA, Spilka B (1992) Religion and the mental health of women. In JF Schumaker (Eds), *Religion and mental health* (pp 43–53). New York: Oxford University Press.
- Brown LM, Gilligan C (1991) Listening for voice in narratives of relationship. In MB Tappan, MJ Packer (Eds), *Narrative and storytelling: Implications for understanding moral development*. *New directions for child development* (Vol 54, pp 43–62). San Francisco: Jossey-Bass.
- Burris CT (1994) Curvilinearity and religious types: A second look at intrinsic, extrinsic, and quest relations. *Int J Psychol Religion* 4:245–260.
- Butler LC, Nolen-Hoeksema S (1994) Gender differences in responses to depressed mood in a college sample. *Sex Roles* 30:331–346.
- Cicchetti D, Aber JL (1986) Early precursors of later depression: An organizational perspective. In L Lipsett (Ed), *Advances in infancy research* (Vol 3). Norwood, NJ: Ablex.
- Coleman SB, Kaplan JD, Downing RW (1986) Life cycle and loss: The spiritual vacuum of heroin addiction. *Family Process* 25:5–23.
- Donahue M (1995) Religion and the well-being of adolescents. *J Soc Issues* 51:145–160.
- Durkheim E (1951) *Suicide: A study in sociology*. Glencoe, IL: Free Press.
- Ellis L, Wagemann BM (1993) The religiosity of mothers and their offspring as related to the offspring's sex and sexual orientation. *Adolescence* 28:227–234.
- Endicott J, Spitzer RL (1978) A diagnostic interview. *Arch Gen Psychiatry* 35:837–844.
- Feldman S, Fisher L, Ranson D, Dimiceli S (1995) Is "what is good for the goose good for the gander?" Sex differences in relations between adolescent coping and adult adaptation. *J Res Adolesc* 5:333–359.
- Fowler JW (1986) Dialogue toward a future in faith development studies. In C Dykstra, S Parks S (Eds), *Faith development and Fowler* (pp 275–301). Birmingham, AL: Religious Education Press.
- Gallup GH, Bezilla R (1994) *The religious life of young Americans*. Princeton, NJ: The George H. Gallup International Institute.
- Gilligan C (1994) In a different voice: Women's conceptions of self and of morality. In B Puka (Ed), *Caring voices and women's moral frames: Gilligan's view*. *Moral development: A compendium* (Vol 6). New York: Garland.
- Glass J, Bengtson VL, Dunham CC (1986) Attitude similarity in three-generation families: Socialization, status inheritance, or reciprocal influence? *Am Sociol Rev* 51:685–697.
- Gorsuch RL (1995) Religious aspects of substance abuse and recovery. *J Soc Issues* 51:65–84.
- Gotlib IH (1993) Depressive disorders. In AS Bellack, M Hersen (Eds), *Psychopathology in adulthood*. Boston: Allyn & Bacon.
- Hankin BL, Abramson LY, Moffitt TE, Silva PA (1998) Development of depression from pre-adolescent to young adulthood: emerging gender differences in a 10 year longitudinal study. *J Abnorm Psychol* 107:128–140.
- Harrington R, Rutter M, Weissman M, Fudge H (1997) Psychiatric disorders in the relatives of depressed probands: I. Comparison of prepubertal, adolescent and early adult onset cases. *J Affect Disord* 42:9–22.
- Heggen CH, Long V (1991) Counseling the depressed Christian female client. *Counseling Values* 35:128–135.
- Hettler TR, Cohen LH (1998) Intrinsic religiousness as a stress-moderator for adult Protestant churchgoers. *J Community Psychol* 26:597–609.
- Hollingshead A (1965) A two-factor index of social position. New Haven, CT: Yale University Department of Sociology.
- Idler EL, Kasl SV (1997) Religion among disabled and nondisabled persons. II: Attendance at religious services as a predictor of the course of disability. *J Gerontol Series B- Psychol Sci Soc Sci* 52B:S306–S316.
- Janssen J, De Hart J, Gerardts M (1994) Images of God in adolescence. *Int J Psychol Religion* 4:105–121.
- Kendler K, Gardner C, Prescott C (1997) Religion, psychopathology, and substance use and abuse: A multimeasure, genetic-epidemiologic study. *Am J Psychiatry* 154:322–329.
- Koenig HG (1998) *Handbook of religion and mental health*. San Diego, Academic Press.
- Kovacs M (1996) Presentation and course of major depressive disorder during childhood and later years of the life span. *J Am Acad Child Adolesc Psychiatry* 35:705–715.
- Krause N, Ingersoll-Dayton B, Liang, J, Sugisawa H (1999) Religion, social support, and health among the Japanese elderly. *J Health Soc Behav* 40:405–421.
- Larson D, Larson J (1994) *The forgotten factor*. Rockville, MD: National Institute of Healthcare Research.
- Lewinsohn PM, Clarke GN, Seeleuy JR, Rohde P (1994) Major depression in community adolescents: Age at onset, episode duration, and time to recurrence. *J Am Acad Child Adolesc Psychiatry* 33:809–818.
- Miller L, Greenwald S (1998) Religion and psychopathology among adolescents in the NCS. Presented at the Annual Convention of APPA, New York, NY.
- Miller L, Warner V, Wickramaratne P (1997) Religiosity and depression: Ten-year follow-up of depressed mothers and offspring. *J Am Acad Child Adolesc Psychiatry* 36:1416–1425.

- Miller L, Weissmann MM, Gur M, Greenwald S (in press) Religiosity and substance use in children of opiate addicts. *J Substance Abuse*.
- Morton P, Kutcher S (1995) The prevalence of cognitive distortion in depressed adolescents. *J Psychiatry Neurosci* 20:33–38.
- Nolen-Hoeksema S (1996) Chewing the cud and other ruminations. In RS Wyer Jr (Ed), *Ruminative thoughts: Advances in social cognition* (Vol 9, pp 135–144). Mahwah, NJ: Lawrence Erlbaum.
- Nolen-Hoeksema S (1999) Children coping with uncontrollable stressors. *Measurement Issues and Practice* 11(2):9–15.
- Oman D, Reed D (1998) Religion and mortality among community dwelling elderly. *Am J Public Health* 88:1469–1475.
- Orvaschel H, Puig-Antich P, Chambers W (1982) Retrospective assessment of prepubertal major depression with Kiddie-SASDS-E. *J Am Acad Child Adolesc Psychiatry* 21:392–397.
- Park CL, Cohen LH (1993) Religious and nonreligious coping with the death of a friend. *Cognitive Ther Res* 17:561–577.
- Parker G (1984) The measurement of pathogenic parental style and its relevance to psychiatric disorder. *Soc Psychiatry* 19:75–81.
- Parker G, Tupling H, Brown LE (1979) A parental bonding instrument. *Br J Med Psychol* 52:1–10.
- Puig-Antich J, Goetz D, Davies M, Kaplan T, Davies S (1989) A controlled family history study of prepubertal major depressive disorder. *Arch Gen Psychiatry* 46:406–418.
- Richards PS (1994) Religious devoutness, impression management, and personality functioning in college students. *J Res Pers* 28:14–26.
- Richards PS, Bergin AE (2000) *Handbook of psychotherapy and religious diversity*. Washington, DC: APA Books.
- Scarlett WG (1994) Cognitive-developmental and psychoanalytic comments on Tamminen's essay. *Int J Psychol Religion* 4:87–90.
- Sethi S, Seligman MEP (1993) Optimism and fundamentalism. *Psychol Sci* 4:256–259.
- Stillwell BM, Galvin M, Kopta SM, Padgett RJ (1996) Moral valuation: A third domain of conscience functioning. *J Am Acad Child Adolesc Psychiatry* 35:230–239.
- Tamminen K (1994) A viewpoint of religious development between the ages of 7 and 20. *Int J Psychol Religion* 4:91–104.
- Weisman AG, Lopez SR (1996) Family values, religiosity, and emotional reactions to schizophrenia in Mexican and Anglo-American cultures. *Family Process* 35:227–237.
- Weissman MM, Wolk S, Goldstein RB, Moreau D (1999a) Depressed adolescents grown-up. *JAMA* 281:707–1713.
- Weissman M, Wolk S, Wickramaratne P (1999b) Children with prepubertal-onset major depressive disorder and anxiety grown up. *Arch Gen Psychiatry* 56:794–801.
- Wilson J, Sherkat D (1994) Returning to the fold. *J Sci Study Religion* 33:148–161.
- Yeung PP, Greenwald S (1992) Jewish Americans and mental health: Results of the NIMH catchment area study. *Soc Psychiatry Psychiatr Epidemiol* 42:292–297.
- Zahn-Waxler C, Cole PM, Barrett KC (1991) Guilt and empathy: Sex differences and implications for the development of depression. In J Garber J, K Dodge (Eds), *The development of emotional regulation and dysregulation*. New York: Cambridge University Press.