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# Religion's Role in Adjustment to a Negative Life Event: Coping With the Loss of a Child

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Parents ($N$ = 124) who had lost an infant to sudden infant death syndrome were interviewed 3 weeks and 18 months postloss. Two components of religion (religious participation and religious importance) were assessed, and their relations with 3 coping-process variables (perceived social support, cognitive processing of the loss, and finding meaning in the death) were examined. Greater religious participation was related to increased perception of social support and greater meaning found in the loss. Importance of religion was positively related to cognitive processing and finding meaning in the death. Furthermore, through these coping-process variables, religious participation and importance were indirectly related to greater well-being and less distress among parents 18 months after their infants' deaths. Results suggest that further study of the social and cognitive aspects of religion would be profitable.

Since antiquity, peoples' understanding and experience of death has been colored by their religious beliefs and practices (Glick, Weiss, & Parkes, 1974; Parrinder, 1983; Spilka, Hood, & Gorsuch, 1985). In fact, Parsons (1957) claimed that "from the psychological point of view . . . religion has its greatest relevance to the points of maximum strain and tension in human life" (p. 385). Moreover, religion is an important component of many individuals' lives. The Princeton Religion Research Center (1980) reported that 69% of Americans claim to be church members, 57% indicate that their beliefs are very important to them, and 94% of those over 18 believe in God. In addition, a Gallup poll revealed that 88% of Americans pray (Poloma, 1988). In fact, in the largest and most comprehensive national survey ever conducted on religious affiliation in the United States, over 92% of Americans identified themselves as religious (Goldman, 1991). However, to date, relatively little empirical work has been conducted on the association between religious variables and the process of adjustment to major stressful life events (for notable exceptions, see Jenkins & Pargament, 1988; Pargament et al., 1990; Sherrill & Larson, 1987; and see Pargament, 1990; Stroebe & Stroebe, 1987, for discussions).

A variety of studies have made clear the fact that many individuals view religion as helpful in coping with an aversive event (Balk, 1983; Friedman, Chodoff, Mason, & Hamburg, 1963; Glick et al., 1974; Palmer & Noble, 1986). For example, Koenig, George, and Siegler (1988) found that the most frequent respondent-generated answer to questions concerning how older adults handled major negative events was with religious coping. However, the fact that respondents often claim that religious beliefs and practices are helpful in coping with stressful outcomes does not demonstrate an actual link between religion and adjustment, nor does it indicate how religion might be helpful. The present study of parents who were coping with the recent death of their infants was designed to define and clarify the role religion may play in adjusting to an irrevocable loss.

There are two broad means by which religion may influence coping processes and outcomes. First, religious participation may be associated with integration into a social network or community (Durkheim, 1951; Stroebe & Stroebe, 1987; Wuthnow, Christiano, & Kuzlowski, 1980). These social ties may lead the individual who has experienced a loss to perceive greater social support after it. Second, religion may provide a belief system or perspective that enables individuals to deal differently and perhaps better with crises in general and death in particular (e.g., Glick et al., 1974; McIntosh, 1993; Spilka, Hood, & Gorsuch, 1985; Wortman & Silver, 1989; Wuthnow et al., 1980). This may be termed the intrapsychic perspective. Each is examined in more detail in turn.

## Social Support

Numerous studies have demonstrated that social support is beneficial for adjustment following negative life events (for reviews, see Kessler, Price, & Wortman, 1985; Sarason, Sarason, & Pierce, 1990). In fact, it may be the social component of

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religion that positively influences adjustment (Stroebe & Stroebe, 1987). Members of a religious community into which the bereaved is well integrated may respond positively to his or her expressions of distress about the death, facilitating postloss adjustment. Indeed, among the bereaved, higher levels of religious participation have been associated with less depression (Bornstein, Clayton, Halikas, Maurice, & Robins, 1973) and loneliness (Bahr & Harvey, 1979), as well as greater positive affect (McGloshen & O'Bryant, 1988) and optimism (Sanders, 1980). However, although attending religious services appears to be related to postcrisis adjustment, it is not clear whether a corresponding increase in the perception of social support is the means through which this relation can be explained.

## Intrapsychic Perspective

Religion may also influence coping processes and outcomes through tenets and attitudes held by the believer (Koenig et al., 1988; Wuthnow et al., 1980). For example, among bereaved parents, Maton (1989) found a negative association between depressive symptoms and the belief that one receives personal support from one's God, independent of reported levels of social support. However, the mechanisms through which intrapsychic components of religion influence adjustment have not been made clear (Koenig et al., 1988).

To understand how religious beliefs and activity may be related to coping, we believe there is heuristic value in viewing religion as a cognitive schema. Schemata are mental organizations of experience that influence the way information is processed and the way behavior is organized (Hastie, 1981; Taylor & Crocker, 1981) and can represent people's basic assumptions about the world (Fiske & Taylor, 1991; Janoff-Bulman, 1989, 1992). In particular, two specific effects of schemata seem applicable when considering the ways in which religion may influence coping and adjustment: (a) increased speed of processing domain-relevant information and (b) assimilation of stimuli to a form congruent with an extant schema (McIntosh, 1993). The first function may expedite cognitive processing of an aversive event, and the second may facilitate the finding of meaning in the negative outcome.

### *Cognitive Processing*

Possessing a schema in a domain of interest enables individuals to process schema-relevant information more quickly and efficiently (e.g., Markus, 1977; Taylor, Crocker, & D'Agostino, 1978). In fact, schemata may allow individuals who possess them to use shortcuts or heuristics that simplify and shorten the process (see Taylor & Crocker, 1981, for a review). Although the differences in processing time reported in studies investigating schematic processing are generally in milliseconds, these studies have not dealt with data that are inconsistent with people's most fundamental organizations of beliefs about the world (Janoff-Bulman, 1989). Previous studies have examined the effects of lower level, more concrete schemata on processing of information relatively inconsequential for a person's most fundamental beliefs. Because schemata function similarly at different levels of abstraction (Taylor & Crocker, 1981), viewing religion as a schema allows us to draw analogies between these previously demonstrated effects and the potential effects of religious (and other more abstract) schemata on processing of information highly consequential for a person's most fundamental beliefs. As Janoff-Bulman (1989) pointed out, integration of such consequential information with belief-system schemata is likely to be difficult and time-consuming.

Religious schemata may incorporate beliefs about death that make it more familiar and less threatening. This perspective is supported by a review concluding that most studies of religious individuals reveal low levels of anxiety, fear, and concern about death (Spilka, Hood, & Gorsuch, 1985). If religious people do possess a cognitive structure that includes ways of thinking about death, such a schema should facilitate faster cognitive processing of a loss.

Greater processing may also be related to better acceptance of and adjustment to a death. Traumatic events can challenge people's generally unquestioned fundamental beliefs (Janoff-Bulman, 1989, 1992; Janoff-Bulman & Frieze, 1983; Parkes, 1975). Individuals must integrate the data of traumatic, negative experiences with prior assumptions (cf. Horowitz, 1976; Janoff-Bulman, 1989, 1992; Parkes, 1972). Janoff-Bulman (1989) argued that intrusive, recurrent thoughts experienced by victims of traumatic events are evidence that the victims are "actively trying to process the information" (p. 124) of the event, and such ruminations are "in the service of this crucial cognitive reconstructive process" (Janoff-Bulman, 1992, p. 106). Being able to process the event quickly and efficiently is likely to facilitate such integration. Such processing or "working through" of the event may take the form of thinking and talking about it (cf. Silver, Boon, & Stones, 1983; Wortman & Silver, 1989).

Our analysis is consistent with recent work by Park, Cohen, and Herb (1990), who found that, among Protestant college students for whom religion was at least somewhat important, those who possessed a highly intrinsic orientation toward religion, that is, viewed religion as their "master motive" in life (cf. Allport, 1966; Donahue, 1985), experienced decreased depression over time. These authors speculated that this was due to integration of negative experiences facilitated by the respondents' religion.

### *Finding Meaning*

Taylor (1983) has proposed that the search for meaning is one of three important themes in the coping process (see also Rothbaum, Weisz, & Snyder, 1982; Silver & Wortman, 1980). A number of studies report that meaning is often sought during crises (e.g., Bulman & Wortman, 1977; Dollinger, 1986; Glick et al., 1974; Sanders, 1980) and that finding meaning in misfortune is associated with effective adjustment (Silver et al., 1983; Thompson, 1991; but see Dollinger, 1986, for evidence of an attribution–distress link).

Palmer and Noble (1986) proposed that lack of a system of beliefs about death may make dealing with the loss of a loved one more difficult. A prime example of a belief system that might provide meaning for a negative event is religion (Allport, 1950; Clark, 1958; Sherrill & Larson, 1987; Spilka, Hood, & Gorsuch, 1985; Spilka, Shaver, & Kirkpatrick, 1985; Wuthnow et al., 1980). In fact, having a schema for religion may well

influence how a bereaved person perceives a loved one's death. In general, schemata not only affect what people perceive (Neisser, 1976) but also how they understand what they perceive (Taylor & Crocker, 1981). Schematic conceptions of how the world works (e.g., religious beliefs) may help create the reality that people anticipate, even in the absence of objective environmental bases (Taylor & Crocker, 1981). For example, Bartlett (1932) found that subjects frequently added their own causal ties, ignored unusual information, and revised the plot of a non-Western-style Indian folk tale until the story resembled a Western schema for folk tales. In a similar fashion, religious individuals may better be able to fit a death to an extant schema, perhaps imposing understanding and meaning (see Wuthnow et al., 1980). The more religious an individual is, the more prepared he or she may be to impose satisfactory meaning on a negative event. Furthermore, having found meaning, the more likely he or she may be to adjust successfully to the loss.

## The Present Study

Taken together, the work discussed above suggests a specific model for religion's role in coping following a negative event. In the present study we make this model explicit and directly investigate how well it describes such relations. In particular, we studied the impact of religion on parents' responses to the death of their babies to sudden infant death syndrome (SIDS). SIDS is the sudden, unexpected, and unexplained death of an apparently healthy infant (Bergman, Beckwith, & Ray, 1970). By definition, it is an irrevocable loss for which no event-specific psychological preparation is possible.

In the present study, we used a longitudinal design to examine relations between coping processes, adjustment, and religion as measured by two related but distinct variables: importance of religion and participation in religious services. We used these two separate measures of religion because making a distinction between them allowed us to evaluate how these factors may differentially relate to coping processes. For example, attendance at religious services can be seen in terms of the degree of participation in a religious community and should therefore be related to the corresponding social benefits. The importance of religion is a measure of an internal, cognitive state; the more important religion is to an individual, the more likely he or she is to possess a developed religion schema. Of course, there may be individuals who regard religion as important but who seldom attend church, and there may be individuals for whom religion is not highly important who attend church nonetheless. Separating the measurement of these two aspects of religion allows us to examine with more precision the role of religion in coping processes and outcome.

We also sought to investigate directly three possible coping-process variables (social support, cognitive processing, and finding of meaning) that may drive a religion–adjustment link. On the basis of the above discussion, we predicted that religious participation and importance of religion would relate differently to these three coping processes. Specifically, we expected religious participation to be positively associated with social support, and we predicted that importance of religion (i.e., possession of a developed religious schema) would be related positively to both cognitive processing and to finding meaning in the death. We also expected that social support, cognitive processing, and finding meaning would facilitate adjustment to the death (see Figure 1). Thus, we expected that religion would be positively related to adjustment to the loss through its relations with social support, cognitive processing, and finding meaning.

Two parallel models were analyzed to test the above predictions. In keeping with previous work establishing the independence of positive and negative affect (e.g., Bradburn, 1969; Diener & Emmons, 1984; Watson & Tellegen, 1985), these outcomes were examined separately. In one, adjustment was measured as the extent to which the respondent reported experiencing positive affect and well-being; in the second, adjustment was measured as the degree to which the participant failed to report experiencing negative affect and distress.

## Method

### *Subjects*

Subjects were parents living in one of two major metropolitan areas —Wayne County, Michigan, and Cook County, Illinois—who had recently lost an infant to SIDS. Both county medical examiners' offices provided us with the names and addresses of all parents whose infants were suspected of having died of SIDS within 48 hr after the death. A SIDS diagnosis was subsequently confirmed by autopsy.

### *Procedure*

All mothers who had lost an infant to SIDS between January 1983 and December 1984 were sent a letter of introduction to our study 7 days after their baby's death (see Downey, Silver, & Wortman, 1990, for additional details about recruitment procedures). Mothers were first invited to participate in the research. If the mother agreed and the baby's biological father was living with her at the time of death, the father was also invited to participate. Interviews were conducted in the parents' homes or another convenient location. The first interview was scheduled between 15 and 30 days postloss; follow-up interviews were conducted approximately 3 months and 18 months later. Because we

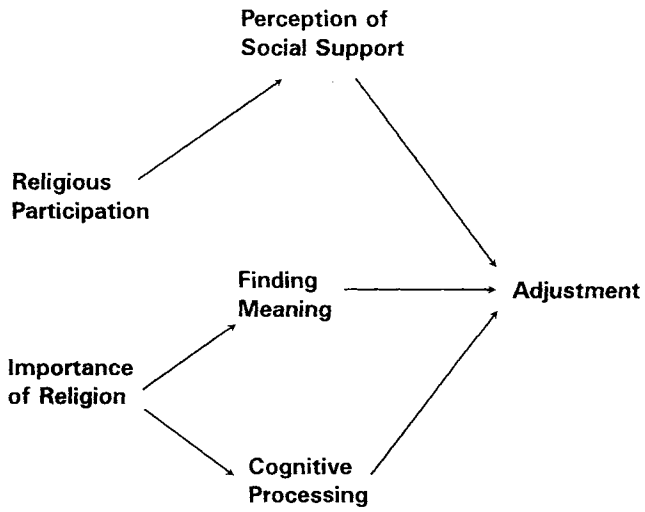


*Figure 1.* Theoretical model of religion's role in adjustment.

were interested in long-term adjustment to the loss, and because we wanted to minimize the number of parameters estimated in our analyses, data from the second wave of data collection are not used in this article.

Interviews were conducted by 11 female interviewers from the Institute for Social Research at the University of Michigan. When possible, respondents were assigned to an interviewer of the same race. If both the child's parents participated in the research, different interviewers were assigned to each parent, and when possible, parents were assigned the same interviewer at all three time points. At the completion of each interview, parents were given $10 in appreciation for their time. Procedures were identical at all three waves of data collection.

## Response Rates

Three hundred thirty infants in Cook County, Illinois, and Wayne County, Michigan, were suspected of having died of SIDS during the period of our study.[1] Two hundred eighty-one mothers met our eligibility requirements, which stipulated that (a) the death was confirmed as SIDS on the basis of an autopsy, (b) the mother was at least 15 years old and spoke English, and (c) a visiting Public Health nurse had informed the mother before our contact that her infant had died of SIDS. One hundred seventy-two eligible mothers were interviewed at Wave 1 (61.2% of total eligible; 81.1% of those located during our eligibility period, 15–30 days postdeath). Eighty-five of the biological fathers were living with mothers who agreed to be interviewed, and 56 (65.9%) of them agreed to participate at Wave 1.

At 3 months postloss, 163 respondents were reinterviewed (19 parents refused a second interview, two deaths—3 parents—were reclassified as non-SIDS, and 43 parents could not be relocated or scheduled during our eligibility period). At 18 months postloss, 124 (54.3% of the Wave 1 sample) were interviewed a third time (19 parents refused a third interview, and 20 parents could not be located or scheduled during the Wave 3 eligibility period).

## Interview Instrument

The project interview was developed to assess psychological distress and well-being, attributional issues, the search for meaning, ruminations, emotional ventilation, and additional sources of stress following bereavement. Members of the National SIDS Foundation provided input on interview construction, and it was then pretested on 15 parents who had lost a child to SIDS. The measures used in the present investigation were embedded in the larger instrument. Most questions were assessed through a structured interview format, although scales assessing adjustment were self-administered at the start of the interview, before any information about the infant's death was discussed. Questions were asked using the identical format and wording at each wave, and each interview took an average of 2 hr ($SD$ = 35 min).

## Measures

*Religion.* Religious issues were measured in several ways. The extent to which parents possessed a schema for religion was assessed through a question that asked them about the importance of religion in their lives. Specifically, parents were asked "How important is religion in your life?," rated on a 5-point scale with endpoints at *not at all important* (1) and *extremely important* (5). Of course, the fact that an individual reports religion to be important is not necessarily sufficient to determine that the person possesses a religious schema. As an example of additional criteria, Markus (1977) used both importance and extremity in a particular domain as a prerequisite for possession of a self-schema. Unlike Markus, however, we did not create groups of schematics and aschematics by making cut-off lines at particular scale points. We only propose that the more important religion is to an individual, the more probable it is that he or she possesses a religious schema.

Religious participation was measured by asking "How often do you attend religious services?" Parents replied on a 5-point scale with endpoints at *never* (1) and *more than once a week* (5). Finally, each respondent's religious affiliation was recorded.

*Social support.* Ten items assessed the respondent's perception of receipt of social support. Questions were rated on 5-point scales with endpoints at *not at all* (1) and *a great deal* (5). These items addressed (a) the degree to which parents felt they could share their feelings about their infants' deaths, (b) their perceptions of favorable responses from others to the expressions of their feelings regarding their loss, and (c) the love, concern, understanding, and so forth shown to the respondent by others. Because interitem correlations were high, the items were combined to form an index with an internal consistency of .84 at Wave 1.

*Cognitive processing.* Nineteen items assessed the extent to which parents engaged in attempts to process or work through their loss. Respondents indicated on 5-point scales how often in the past week they had thoughts, memories, or mental pictures of the child, how vivid and absorbing these were, how often they thought they saw or heard the infant, the extent to which they purposely engaged in thinking about the child, and how often they desired to and actually talked about the baby and his or her death. We take higher scores on this scale as an indication that individuals are engaged in integrating the new data of the traumatic event to their old schemata (cf. Horowitz, 1976; Janoff-Bulman, 1989). Because interitem correlations were high, the items were combined to form an index with an internal consistency at Wave 1 of .89.

*Meaning.* The extent to which parents found meaning in the infant's death was assessed with the question "Have you made any sense or found any meaning in your baby's death?" Subjects responded on a 5-point scale with endpoints at *no, not at all* (1) and *yes, a great deal* (5).

*Well-being.* Well-being was assessed with 20 positive affect items from the 40-item Affects Balance Scale developed by Derogatis (1975). These items assess joy, contentment, vigor, and affection toward others. Respondents rated on a 5-point scale ranging from *never* (1) to *always* (5) how often a particular emotion was experienced in the previous week. In addition, three items from the Bradburn Well-Being Scale (Bradburn, 1969) were included. Because interitem correlations were high, these 23 items were combined to form a single index of well-being, with Cronbach alphas of .91 at Wave 1 and .93 at Wave 3.

*Distress.* Psychological distress was assessed with a shortened (32-item) version of the revised Symptom Checklist (SCL-90-R; Derogatis, Rickels, & Rock, 1976). The SCL-90-R is a widely used distress scale with high within-subscale internal consistency and convergent validity (see Derogatis et al., 1976). The version we used included the entire depression and somatization subscales and seven additional items indexing generalized distress. Negative affect was also assessed with the 20 negatively valanced items from Derogatis's (1975) Affects Balance Scale. These items assessed the extent to which parents experienced hostility, depression, anxiety, and guilt in the previous week, rated on 5-point scales with endpoints at *never* (1) and *always* (5). As with the measure of well-being, both these scales were self-administered at the start of the interview. Because interitem correlations were high, the 52

[1] Parents of 162 additional infants who died of SIDS during 1983–1984 in the counties under study were randomly assigned to a measurement control condition in which they were invited to participate in our research at one time only (at 18 months postloss). Because these subjects are not part of the results we report here, they are not discussed further.

items were combined to form a single index of distress, with Cronbach alphas of .95 at Wave 1 and .96 at Wave 3.

## Results

### Attrition Analysis

To determine whether there was any differential attrition across waves, parents who participated in all three interviews were compared with those who were involved in the first interview only. These groups of parents did not differ significantly from each other on any of the religion measures, demographic characteristics, measures of social support, cognitive processing, finding meaning, or the outcome measures of well-being and distress. The 124 parents who completed interviews at Waves 1 and 3 comprise the final sample for all analyses reported below.[2]

### Sample Demographics

The sample of 124 parents was comprised of 98 women (79%) and 26 men. Fifty percent of the respondents were married, and 15% reported that they were the only adult members of the household. Parents' ages ranged from 15 to 40 ($M$ = 24.9, $SD$ = 5.33). Fifty percent of the respondents were Black, 45% were White, and 5% were other ethnicities. The median annual family income was approximately $11,000 (range = under $1,000 to over $35,000 per year). Fifty-three percent of the respondents had at least 12 years of education ($M$ = 11.6, range = 6–17). Respondents had, on average, 1.4 children ($SD$ = 1.22, range = 0–5) still living with them at the first interview. The infant's age at death ranged from 9 days to approximately 11 months, with most deaths occurring in infants between 2 and 4 months old ($M$ = 81 days, $SD$ = 49 days).

The sample was almost entirely Christian in affiliation. Fifty-six (45%) participants indicated they were Baptist, 46 (37%) reported being Catholic, 19 (15%) were scattered among 11 other Christian organizations, and 1 was Jewish. Average religious service attendance was a point between attendance *rarely* and *once or twice a month* ($M$ = 2.7, $SD$ = 1.26). Mean importance of religion was between religion being *fairly important* and *very important* ($M$ = 3.7, $SD$ = 0.92); no one indicated that religion was *not at all important*. The degree to which this distribution is representative of the local population is unknown.

### Data Analysis

*Overview.* A path model was performed using EQS (Bentler, 1989). This technique allows a series of hypothesized regression equations to be analyzed simultaneously to generate an estimated covariance matrix. This estimated matrix can then be evaluated against the actual sample covariance matrix through the use of several goodness-of-fit statistics to determine whether the hypothesized model is an acceptable representation of the data. In general, a chi-square probability value greater than 0.05, a chi-square–degrees of freedom ratio of 2:1 or lower, or a comparative fit index (CFI) of .90 (Bentler, 1990) or better are indicative of an acceptable model fit. The CFI indicates the degree of fit of a model to the data set, with a value of 0 reflecting no fit and 1 representing perfect fit.

*Variable characteristics.* Parameter estimation was performed using a maximum likelihood method, which assumes multivariate normal distribution. Before data analysis, all measured variables were examined for departure from normality and were determined to be normal. Kurtosis of 100% of the variables fell within −1.00 and 1.06; skewness of 88% of the variables fell within −0.70 and 0.89 (see Table 1).

*Analyses of the models.* A series of regression equations representing the hypotheses were presented in a hypothesized model (Figure 1). It should be noted that although no relations were expected between the three coping-process variables (social support, cognitive processing, and finding meaning), these variables were allowed to correlate freely. This model also imposed the necessary assumptions that predictor variables are not associated with the residual error variables of the dependent variables (Bentler, 1989). The models fit the data very well, for well-being, $\chi^2(5) = 0.78$, $p = .98$, CFI = 1.00; for distress, $\chi^2(5) = 1.32$, $p = .93$, CFI = 1.00. The statistical significance of the correlation between religious participation and importance of religion, as well as the path coefficients, were determined by critical ratios on unstandardized coefficients. Table 1 presents the zero-order correlations between all variables in the model; Figures 2 and 3 depict the results of each path model.[3] For ease of presentation, only significant correlations and path coefficients (standardized), equivalent to partial regression coefficients, are presented.

As can be seen in Figures 2 and 3, the greater the religious participation parents reported, the greater the amount of social support they perceived and the more they reported finding meaning in their babys' deaths. The greater the importance of religion in parents' lives, the more they reported finding meaning in their loss and the greater the degree of cognitive processing they reported. Moreover, perceiving one's social relations as supportive and finding meaning in the death were associated with increased well-being and less distress 3 weeks after the loss. In addition, perceiving greater levels of social support 3 weeks postloss was directly associated with long-term psycho-

[2] The inclusion of data from both mothers and fathers of 26 infants raises the possibility that the nonindependence of data from members of these couples may have distorted our results. However, restricting the analyses to the mothers only had little effect on our results, because the path models obtained were almost identical. To maximize statistical power and the external validity of our findings, we report the results of analyses based on the sample of both mothers and fathers.

[3] Note that the path coefficients generated by EQS are different from the zero-order relations between pairs of variables. This is because path coefficients represent the relations between the variable pair, taking into account the relations of each of the variables with the other variables in the model. For example, there was a positive zero-order correlation between importance of religion and perceived social support; however, there was no significant path between importance of religion and social support. This indicates that when the relations between religious importance and participation, and between participation and social support, are taken into account, religious importance no longer relates to perceived social support. The zero-order correlation between importance and social support appears to be due to their shared association with religious participation.

Table 1
*Correlation Matrix and Normality Characteristics of Religion, Coping, and Adjustment Variables in Sample of SIDS Parents (N = 124)*

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 1. Religious participation | — | | | | | | | | |
| 2. Importance of religion | .48*** | — | | | | | | | |
| 3. Perceptions of social support | .35*** | .25** | — | | | | | | |
| 4. Finding meaning | .38*** | .36*** | .13 | — | | | | | |
| 5. Cognitive processing | .11 | .29*** | .04 | .13 | — | | | | |
| 6. Well-being (3 weeks postloss) | .18* | .18* | .41*** | .23* | .05 | — | | | |
| 7. Well-being (18 months postloss) | .02 | .05 | .25** | .09 | .23** | .30*** | — | | |
| 8. Distress (3 weeks postloss) | −.14 | −.10 | −.43*** | −.18* | .32*** | −.46*** | −.20* | — | |
| 9. Distress (18 months postloss) | .02 | .03 | −.18* | −.05 | .12 | −.13 | −.46*** | .56*** | — |
| Skewness | .33 | −.24 | −.45 | 1.43 | −.70 | .09 | .04 | .40 | .89 |
| Kurtosis | −1.00 | −.74 | .26 | .76 | 1.06 | −.04 | −.42 | −.36 | .56 |

*Note.* SIDS = sudden infant death syndrome.
* $p < .05$. ** $p < .01$. *** $p < .001$.

logical well-being. Finally, increased cognitive processing shortly after the loss was associated with increased short-term distress and was marginally associated with decreased reports of distress over time. Increased cognitive processing in the weeks following the loss was related to increased reports of well-being 18 months later.

No representation of a model is complete without an examination of indirect effects (Sobel, 1988); the magnitude and significance of these effects are provided by EQS. Thus, for each model, we also examined the significant indirect effects, that is, the extent to which one variable has a causal effect on another, through its relation with one or more intermediate variables (Bentler, 1989; Bollen, 1989; Loehlin, 1987). Results revealed several significant indirect effects. First, although importance

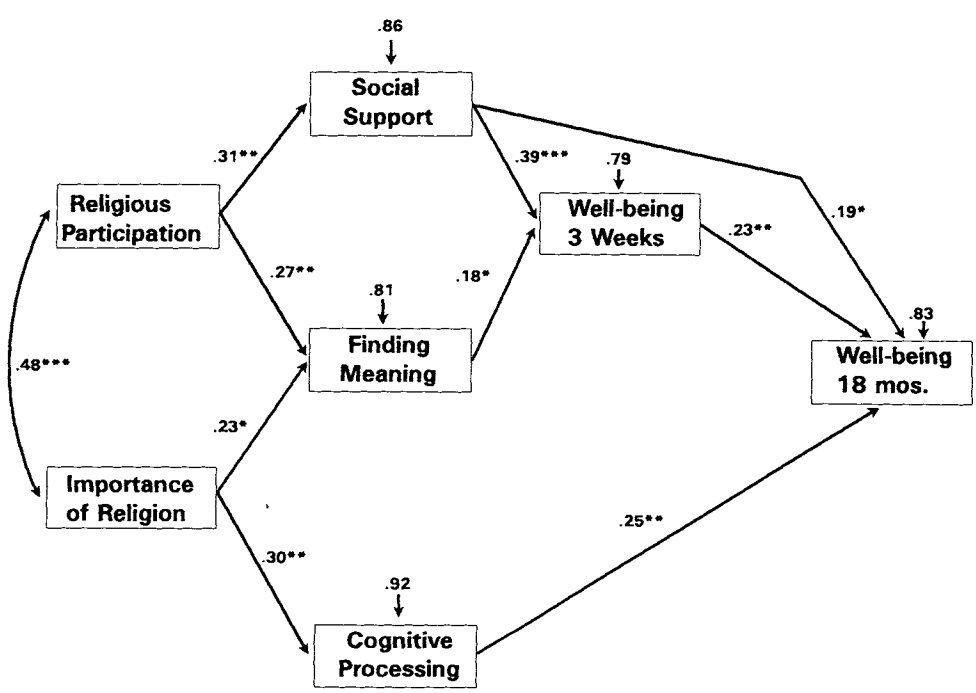


*Figure 2.* Path model of variables associated with well-being. (mos. = months. *$p < .05$. **$p < .01$. ***$p < .001$.)

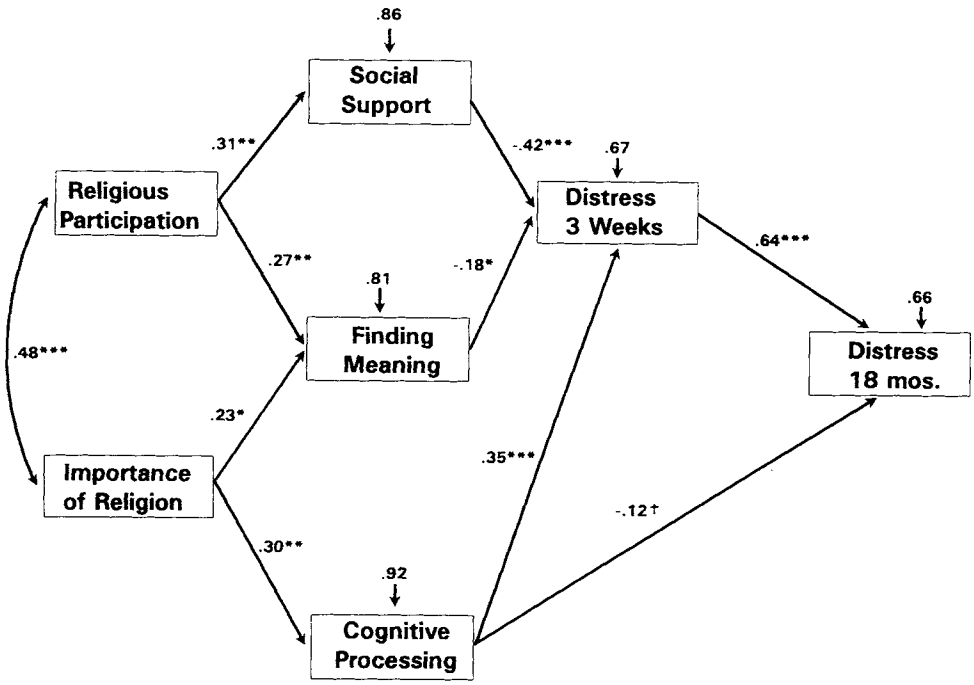


*Figure 3.* Path model of variables associated with distress. (mos. = months. †$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.)

of religion had no direct effect on long-term well-being, it did indirectly predict long-term well-being through its relation with processing (.12, $p < .05$). Religious participation had indirect effects on short-term (.17, $p < .001$) and long-term (.10, $p < .05$) well-being and short-term (−.19, $p < .01$) and long-term (−.09, $p < .05$) distress through its relations with social support and finding meaning in the death. Social support had an indirect effect on both long-term well-being (.09, $p < .05$) and distress (−.27, $p < .001$) through its associations with short-term adjustment and the other coping-process variables. Finally, both finding meaning (−.11, $p < .05$) and cognitive processing (.23, $p < .001$) indirectly influenced long-term distress through their associations with short-term distress.

## Discussion

Several basic questions were raised as a result of an examination of previous work in the religion and coping areas. First, what impact does conceptualizing religion as either religious participation or religious importance have on religion's observed relations with coping-process variables theorized to be involved in adjustment following a loss (social support, cognitive processing, and finding meaning)? Furthermore, what are the direct or indirect paths through which religion plays a role in adjustment to loss? These questions were addressed in two path analyses—one each for well-being and distress. Because the findings for both models were so similar, they are discussed together below.

### *Religion and Coping-Process Variables*

We hypothesized that the relations between the two dimensions of religion (participation and importance) would relate differently to the three process variables. Our data support this distinction. Greater religious participation is related to the social support a bereaved person perceives. As predicted, religious participation does not relate directly to the amount of cognitive processing an individual reports. However, contrary to predictions, we also found that greater religious participation was associated with increased meaning found in the death. This may be the result of a shared sense of understanding of the death that may be offered by members of a religious community (cf. Silver & Wortman, 1980).

As expected, importance of religion was related to more cognitive processing of and finding meaning in the loss. This provides support for our view that being religious means having a more developed cognitive structure for religion. Note that we used only one item (importance of religion) to measure probability of possessing a religious schema. In future studies aimed at testing the degree to which religion can be thought of as a cognitive schema, more extensive criteria should be used. The fact that we found some support for hypotheses derived from conceptualizing religion as a schema suggests that further investigation of the notion is warranted. In addition, our results suggest the need for future research in this area to measure both religious participation and importance of religion and examine their differential effects on adjustment and the coping process.

### *Process Variables and Adjustment*

We theorized that social support would be related to postloss adjustment. As expected, perceiving greater levels of social support was related to better adjustment 3 weeks after an infant's

death. In addition, perceiving greater levels of social support shortly after the loss was also directly related to higher levels of well-being, and indirectly related to lower levels of distress, 18 months later.

We also examined the relation of cognitive processing with adjustment. The path between cognitive processing and well-being 3 weeks after the loss was not significant. However, when controlling for the association between well-being and processing 3 weeks after the loss, increased cognitive processing at Wave 1 was significantly related to greater levels of well-being 18 months later. Regarding distress, more processing of the baby's death was associated with greater distress shortly after the loss. Yet, when the relation between processing and distress at 3 weeks was controlled, increased cognitive processing at Wave 1 was marginally related to lower levels of distress 18 months later. However, note that there was a positive relation between processing and Wave 1 distress, as well as a strong positive relation between short- and long-term distress. Moreover, processing immediately after the loss was indirectly related to greater distress at 18 months. Thus, although long-term well-being appears to be facilitated by greater cognitive processing, the long-term effects on distress are unclear. The findings from this study suggest that more thorough investigations of the role of cognitive processing would be valuable. One important step would be refining the conceptualization and measurement of cognitive processing. Here, we have focused on the importance of integrating the event into one's belief system; from this perspective, early cognitive processing is likely to be adaptive because it is likely to lead to quicker resolution. However, more processing may be taken as a sign of more concurrent distress (the positive association between processing and distress at 3 weeks postloss is consistent with this) or, at later points, as an indication that the person has not been able to integrate the traumatic event successfully (cf. Silver et al., 1983; Tait & Silver, 1989).

Finally, we also theorized that finding meaning would relate to postloss adjustment. As predicted, the paths from finding meaning to adjustment 3 weeks postloss were significant, suggesting that those more able to find meaning experience less distress and greater well-being immediately after the loss. Although no direct link was found between meaning and long-term adjustment, it was indirectly related to distress at 18 months through its influence on short-term adjustment.

### *Religion and Adjustment*

Our religion variables had no direct effect on adjustment. Rather, as hypothesized, they indirectly influenced adjustment in the predicted direction through their relations with the coping process variables we identified. In particular, participation in religious services was indirectly related to well-being and distress at both 3 weeks and 18 months postloss through its associations with perceived social support and finding meaning in the death. Similarly, importance of religion had an indirect effect on long-term well-being through its relations with finding meaning in and cognitive processing of the loss.

In this study, religion had no direct effect on adjustment, yet had a sequential impact on adjustment through three coping-process variables (see Bollen, 1989; Sobel, 1988, for a further discussion of the meaning of *indirect effects*). The pattern of results obtained suggests that religion in and of itself is not associated with better adjustment after a traumatic event; simply knowing whether someone is religious will not help predict how that person will respond to the trauma. However, importance of religion and religious participation are associated with coping processes that are associated with better adjustment.

### *Implications*

Our study supports the position that two components of religion are directly related to coping-process variables following a traumatic life event and in general play an indirect role in both short- and long-term adjustment to it. However, conclusions drawn from this study must be tempered by several limitations. First, of course, there were no preevent measures available. Therefore, we cannot ascertain the degree to which the loss affected the religion variables. Second, because our measure of religious participation was based on self-report and was not corroborated by objective evidence, we must acknowledge that its measurement may have been subjected to response bias. Third, a few of our variables were assessed with single-item measures; the reliability and validity of these measures is not known. In subsequent research efforts, investigators should operationalize these variables with more extensive measurement. Fourth, the paths between religion and the three coping-process variables were based on cross-sectional correlations; thus, no absolute causal inferences can be drawn. Reverse causality is a possibility (e.g., cognitive processing may cause religion to be more important), as is the effect of unmeasured third variables (e.g., a tendency to affiliate with others causes both religious participation and greater perceptions of social support). The present data suggest that a more thorough investigation of these relations would be profitable. Finally, although the theoretical foundation for the findings suggests that these relations should hold for all religious individuals and for various traumatic events, we must acknowledge that our sample was overwhelmingly urban and Christian and had lost a child to SIDS. Future research might try to replicate these findings using individuals who live in other settings, possess different religious beliefs, and have experienced other traumas.

Despite these limitations, the present study still provides valuable information about the role of religion in coping with loss. Breaking religion into cognitive and behavioral components enabled us to further our understanding of religion's role in coping. Greater refinement of conceptualizations of religion may lead to an even more complete comprehension of its function. For example, one intriguing facet of the findings reported by Park et al. (1990) is that they found intrinsic religion—religion viewed as the "master motive" in life (cf. Allport, 1966; Donahue, 1985)—to be beneficial in the long run for Protestants only.[4] Furthermore, McIntosh and Spilka (1990) found

[4] Unfortunately, we were unable to test these predictions in the present sample. Although we could create groups of religious Catholics and Protestants on the basis of the information we had, we did not ask specific information on subjects' ways of being religious (e.g., intrinsic vs. extrinsic). In addition, we make a more general claim about how religion may influence coping processes. Combined with our findings, their data provide further evidence that more thorough investigations of religion and coping are needed.

that being extrinsically religious, that is, viewing one's faith as a means to an end (cf. Allport, 1966; Donahue, 1985), is negatively associated with finding meaning in religion. Because components of the coping process appear to interact with individual differences in forms of personal faith, future researchers might do well to take advantage of these distinctions.

Our conceptualization of religion-as-schema has also received support. It is likely that there are other systems of beliefs that function similarly. For example, researchers might examine belief systems other than religion, for example, philosophical orientations or world views (cf. Wortman & Silver, 1990), that might enable individuals to process negative events more quickly. Further exploration of the advantages of conceptualizing religion and other belief systems as organizing cognitive structures is clearly needed.

In addition to clarifying the role of religion in coping and adjustment, the findings of the present study suggest several areas for more specific empirical and theoretical work. Although we are just now beginning to understand the role of religion in coping in a broader theoretical context, there is much room for increased attention to this issue.

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