

# Attachment Theory and Religion: Childhood Attachments, Religious Beliefs, and Conversion\*

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In this paper we argue that attachment theory, as developed by John Bowlby and refined and extended by a host of other psychological researchers, offers a potentially powerful theoretical framework for the psychology of religion. A wide range of research findings concerning such topics as images of God, conversion, and prayer can be conceptually integrated within this framework. An exploratory investigation was conducted of the relationship between individual differences in respondents' childhood attachments to their parents and their adult religious beliefs and involvement. A sample of 213 respondents to a newspaper survey on love completed a follow-up mail survey concerning their religious beliefs and family backgrounds. Multiple regression analyses revealed that certain aspects of adult religiosity, particularly beliefs about God and having a personal relationship with God, can be predicted from the interaction of childhood attachment classification and parental religiousness. Respondents who classified their childhood relationships with their mothers as *avoidant* (one of two insecure patterns of attachment) were more religious as adults, according to several measures, than were those classifying their childhood relationships as *secure* or *anxious/ambivalent*; however, this pattern held only when the parents were reported as having been relatively nonreligious. Respondents in the avoidant category also reported significantly higher rates of sudden religious conversions during both adolescence and adulthood, irrespective of parental religiosity. These results suggest that God and religion may function in a compensatory role for people with a history of avoidant attachment; that is, God may serve as a substitute attachment figure.

Ever since Freud's well-known proclamation that God represents an "exalted father figure," psychologists of religion have wondered about the relationship between early childhood experience and subsequent religiosity. However, little is known about the ways in which early parent-child relationships influence religious development. Empirical research on the topic is sparse. The primary reason for this may well be the fact, as noted by Spilka, Hood, and Gorsuch (1985), in a section of their text entitled "Impact of Methods of Childrearing," that "research in this area has no general theoretical basis" (83). In this paper we present a theoretical framework for approaching these questions, namely

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attachment theory (Bowlby 1969; Bretherton 1985), and report findings from an initial, exploratory investigation linking adult religiousness with retrospective accounts of childhood attachment relationships.

One theoretical tradition that *has* devoted considerable attention to the relationship between religion and childhood experience is psychoanalysis, particularly the object relations school (McDargh 1983; Meissner 1984; Rizzuto 1979). The case studies reported in these sources suggest some intriguing links between parent-child relationships and subsequent religiosity. Unfortunately, however, psychoanalytic constructs are notoriously difficult to operationalize and test using quantitative research methods. This is undoubtedly due, at least in part, to what amounts to a paradigm clash between psychoanalysis and modern research psychology, in which the two traditions are guided by discrepant objectives and interpretative frameworks. Ainsworth (1969) has observed that a (or "the") defining characteristic of the psychoanalytic approach is its attempt to understand the phenomenological experience of the infant. In contrast, developmental and social-psychological researchers are primarily concerned with accounting for observed behavior. Stern (1985) has captured the essence of this conflict with his distinction between the *observed infant* studied by developmental psychologists, and the *clinical infant* with which psychoanalysis is concerned.

In 1969, John Bowlby published his first systematic attempt to construct an alternative conceptual framework to the object relations tradition in which he was himself trained. The new theory was intended to explain the same range and depth of phenomena with which the psychoanalytic tradition had always been concerned. However, it was also intended to be more amenable to operationalization and empirical research, as well as consistent with modern developments in other scientific domains such as ethology and developmental psychology. A comparison of psychoanalytic theory and attachment theory would be well beyond the scope of the present paper; the interested reader is referred to Ainsworth (1969) or Bretherton (1987) for such a discussion. Whatever the reasons, Bowlby's theory has clearly been more successful in motivating empirical research in the areas of social and emotional development and, more recently, in the area of adult relationships (Hazan and Shaver 1987). As one of us has explained in detail elsewhere (Kirkpatrick 1989), we believe that attachment theory also provides a rich and dynamic theoretical framework for organizing a wide range of theoretical and empirical results in the psychology of religion and for guiding future research efforts in this field.

### *A Brief Overview of Attachment Theory*

Originally introduced by Bowlby (1969) as an alternative to psychoanalytic object-relations theory, attachment theory postulates a primary, biosocial behavioral system in the infant that was "designed" by evolution primarily to maintain proximity of the infant to its mother. According to Bowlby, such a system was favored by natural selection due to its function in providing protection for the helpless infant, just as particular foraging and sexual behavior patterns evolved to promote nutritive and reproductive goals. However, Bowlby argued that the basic mechanisms of the attachment system are active and influential throughout the lifespan.

The central focus of the theory is on the relationship between the infant and his or her primary caregiver or attachment figure. The attachment figure alternately serves two key functions: He or she provides (1) a *haven* of safety and comfort to which the infant can turn in times of distress or threat, and (2) a *secure base* for exploration of the environment in the absence of danger. The attachment system is an organizational construct which describes the complex constellation of emotions, behaviors, and cognitive "internal working models" involved in the infant's efforts to maintain a comfortable level of felt security (Sroufe and Waters 1977). When startled or otherwise distressed, the infant engages in attachment behaviors such as crying, clinging, and/or moving toward the caregiver (if possible) in order to increase proximity and hence safety. When felt security is high, the child ventures away from the attachment figure to explore the environment, while periodically checking back to see that the secure base remains attentive and available. Bowlby (1969) borrows heavily from systems control theory to describe the dynamics of this emotional-behavioral complex.

Individual differences in the nature of the infant-mother attachment relationship have been the focus of intensive research in developmental psychology in recent years. Ainsworth et al. (1978) have identified three distinct patterns of attachment in one- to two-year-old infants. The *secure* pattern reflects "optimal" functioning of the attachment system as described above, in contrast to two suboptimal or insecure patterns. The *anxious/ambivalent* (or *resistant*) pattern is characterized by the infant's uncertainty about the mother's availability and responsiveness, resulting in the infant's being generally anxious and frequently clingy. In the *avoidant* pattern, the caregiver appears to serve neither as a secure base nor as a haven; the infant is not at all confident of the mother's availability or responsiveness and in fact expects his or her proximity-maintaining efforts to be rebuffed.

These differences have been shown to be predictable from various dimensions of maternal behavior and attitudes during the first six months of the infant's life, and they appear to be relatively stable from the first to sixth year of life. Unlike the attentive and sensitively responsive mothers of secure babies, mothers of anxious/ambivalent babies have been shown to be inconsistent and unpredictable in responding to the infant's social signals; mothers of avoidant babies tend to avoid physical contact with the infant and to rebuff the infant's bids for attention and nurturance. Moreover, individual differences among one-year-olds have been demonstrated to predict variation in many social behaviors five years later (Arend et al. 1979; Main et al. 1985). According to attachment theory, the child develops through experience expectations and beliefs about the availability and reliability of the attachment figure as a haven and secure base; Bowlby refers to these schemata as *working models* of the attachment relationship. It is these cognitive models that are responsible for perpetuating the effects of early attachment experience across time.

Motivated by Bowlby's (1969) emphasis on attachment as a lifespan issue, researchers have begun to extrapolate attachment constructs to the topic of close interpersonal relationships among adults. Weiss (1973, 1982) has argued that attachment is one kind of provision offered by close interpersonal relationships and that this kind of relationship reflects the workings of the same emotional-behavioral system seen in infant-mother relationships. More recently, Shaver et al. (1988) have illustrated how adult romantic love relationships bear striking resemblances to infant-mother attachments in important ways,

including cognitive, emotional, and behavioral dimensions.

Conceptualizing romantic love as an "attachment process," Hazan and Shaver (1987) reasoned that the individual differences in adults' orientations toward love relationships may resemble individual differences in patterns of infant attachment as described by Ainsworth and her colleagues (1978). Accordingly, they developed a measure by which adult newspaper-survey respondents classified themselves as secure, avoidant, or anxious/ambivalent lovers; they found the relative frequencies of responses in the three categories to parallel closely the corresponding percentages reported by infant researchers. More important, the results showed that the three groups differed in theoretically predictable ways with respect to their experiences with and attitudes about romantic love, as well as retrospective reports concerning their childhood relationships with parents. A number of related studies motivated by the Hazan and Shaver findings have recently begun to appear, which relate individual differences in adult attachment to various other measures of close relationships, love, and personality (Collins and Read 1990; Feeney and Noller 1990). Hazan and Shaver (in press) have also begun to explore the utility of attachment theory for investigating the relationship between love and work and have reported a number of theoretically predictable findings.

### *Attachment and Religion*

We believe that, like romantic love relationships, many aspects of religious belief and experience may be fruitfully conceptualized from the perspective of attachment theory and that individual differences in religiousness may be related to early attachment experiences. The most striking (and perhaps obvious) point of contact, simply stated, is that the God of most Christian traditions seems to correspond very closely to the idea of a secure attachment figure. Kaufman (1981), a theologian, was impressed by the correspondence between Christian theology and Bowlby's description of the attachment relationship, concluding that "the idea of God is the idea of an absolutely adequate attachment-figure. . . . God is thought of as a protective parent who is always reliable and always available to its children when they are in need" (67).

Kaufman further emphasized that God represents an *ideal* attachment figure, while human attachment figures are, even at their best, fallible and hence not perfectly trustworthy. The applicability of the attachment model to religion was also noted explicitly by Reed (1978), whose sociological "oscillation theory" of religion seems to parallel closely the secure base and haven constructs described in the attachment literature. We believe that this theoretical perspective offers a potentially powerful framework for integrating research findings in the psychology of religion concerning such diverse topics as images of God, sudden religious conversions, prayer, and glossolalia. (See Kirkpatrick 1989 for an extended theoretical discussion and review.)

For example, there is no paucity of evidence to support the idea that religion, and particularly a perceived relationship with God, serves as a haven in times of distress or threat. This idea is illustrated by the popular maxim that there are "no atheists in foxholes," and indeed research shows that soldiers in combat do pray frequently (Allport 1950; Stouffer et al. 1949). Specifically, people seem to turn to prayer, rather than to the church, in times of emotional distress (Argyle and Beit-Hallahmi 1975). Bereaved persons

tend to become more religious, although, importantly, the fundamental content of their beliefs often remains essentially unchanged (Loveland 1968). Finally, it has long been known that sudden (in contrast to gradual) religious conversions often occur during times of severe emotional distress or crisis (Clark 1929; Starbuck 1899; Strickland 1924), although recently the field has begun to shift away from deterministic, psychological interpretations of such accounts (Richardson 1985). All of these findings are consonant with the idea that a perceived relationship with God may be functionally similar to the provisions offered by attachment relationships.

Of course, the idea that religion provides believers with comfort and a sense of security is hardly new. Surely Freud (e.g., [1927] 1961) believed this to be the case, as did many others. However, Bowlby's model has the important advantage (as a scientific theory) of allowing us to conceptualize these phenomena in a less value-laden manner, without the negative connotations suggested by terms such as "regression," "dependence," etc.<sup>1</sup> Bowlby quite deliberately purged his account of attachment of such terms in favor of a model in which the "need" for an available and responsive caregiver remains with us throughout the lifespan; it is not an infantile drive to be banished from our adult lives. To the extent that Bowlby is correct, and we believe he is, theistic religion may play an important role in many adults' lives because of its ability to function in the manner of an attachment relationship.

Although the evidence depicting religion as a haven of safety and comfort seems persuasive (if the point weren't obvious already), it is perhaps the "secure base" aspect of attachment that is particularly interesting with respect to religion. Bowlby (1973) emphasized repeatedly that the perceived availability of a responsive attachment figure is an antidote to fear and anxiety: "Whether a child or adult is in a state of security, anxiety, or distress is determined in large part by the accessibility and responsiveness of his principal attachment figure" (23). Many psychological writers, including William James, have noted the degree to which religion provides people with a sense of security and confidence that allows them to function effectively in everyday life. For example, Johnson (1945) remarked upon the "basic confidence and security" provided by faith, and further described faith as "the opposite of fear, anxiety, and uncertainty" (191). Moreover, the imagery and language used by many Christians to represent their beliefs is strongly reminiscent of attachment phenomena: God or Jesus is "by one's side," "holding one's hand," or "holding one in his arms," enabling believers (by their own accounts) to cope with stress and face the trials and tribulations of the world.

Research findings concerning individual differences in images of God also appear to fit well within the attachment framework. Many factor-analytic studies have been conducted in support of various multidimensional frameworks for describing God-images. Despite the variability in these studies with respect to specific item content and subject populations, one very strong (and usually first) factor emerges from each of them that

1. The attachment approach also appears more consonant with recent trends in the psychology and sociology of religion, particularly with respect to conversion, toward interpreting religious conversion in a more positive, growth-oriented manner, in contrast to many deterministic psychological theories (Richardson 1985). Attachment theory clearly emphasizes the individual's active role in constructing, maintaining, and negotiating close relationships (and mental models of these relationships), rather than viewing individuals as passive victims of internal and external forces beyond their control.

seems clearly to describe secure attachment. Broen (1957) labeled the large first factor in his analyses "Nearness to God." Other studies have pointed to a similar, large factor defined by such items as "loving," "protective," "not distant," "not inaccessible" (Gorsuch 1968; Spilka et al. 1964), and "who gives me comfort," "a warm-hearted refuge," and "who is always waiting for me" (Tamayo and Desjardins 1976).

Other data point directly toward possible links between parent-child relationships and subsequent religious beliefs which are consistent with an attachment theoretical framework. Several studies have demonstrated correlations between people's images of God and of their parents, particularly of their mothers (Nelson 1971; Strunk 1959). As the primary attachment figure is more likely to be the mother than the father in our culture (Lamb 1978), this result may reflect a process by which internal working models of attachment figures during childhood provide the basis for adult attachments to God. Similar results have also been reported cross-culturally: Societies in which "accepting" (i.e., loving, nurturing) child-rearing practices are predominant tend also to be characterized by beliefs in benevolent, rather than malevolent, supernatural deities (Lambert et al. 1959; Rohner 1975). The frequently reported positive association between God-images and self-concept or self-esteem (Benson and Spilka 1973; Jolley 1983) is similarly consistent with Bowlby's notion that models of self and models of attachment figures tend to be complementary: People who view attachment figures as loving and caring, for example, tend to see themselves as lovable and worthy of being cared for.

In summary, many aspects of personal (as opposed to institutional) Christian religion bear striking similarity to central defining aspects of attachment relationships. In light of these observations, early attachment relationships might be expected to exert important influence on subsequent religious beliefs and experience. Two general classes of hypotheses may be derived from attachment theory concerning the nature and direction of these relationships. First, a "compensation hypothesis" would suggest that certain aspects of religion, and particularly belief in a loving, personal, available God, serve as a substitute for the secure attachment relations that some people never had with their parents or with other primary caregivers. In contrast, Bowlby's (1969) discussion of children's working models of attachment suggests that early relationships provide the foundation upon which future attachment relationships are built (Sroufe and Fleeson 1986), in this case, a relationship with God. This line of reasoning suggests that one's working models of early attachment relationships might provide the basis for constructing images of God and other religious beliefs, and so might be labeled the "mental model hypothesis."

The study reported here represents an initial attempt to examine these various possibilities empirically. Data were collected via mail survey from a sample of adults who had previously responded to a newspaper survey about love. Respondents completed measures designed to assess (retrospectively) their childhood attachment relationships with parents, as well as a variety of measures of adult religious belief and involvement. Because previous research has consistently shown that one of the most potent predictors of religiousness is the religiousness of one's parents (Argyle and Beit-Hallahmi 1975), our analyses also incorporated measures of parents' religiousness as covariates in order to examine the possibility of an interaction between parental religiosity and attachment.

## METHOD

### *Respondents and Procedure*

The data reported here were collected from two surveys. The first of these, designed and implemented by Hazan and Shaver (1987), appeared in a Sunday newspaper and included questions about childhood experiences and relationships with parents, current romantic relationships, demographic variables, and various other topics. Over 1000 respondents returned the survey, of which the first 670 were entered into the computer for analysis. In response to a question concerning willingness to participate in follow-up research, 290 (43.3%) answered affirmatively and provided complete mailing addresses. (Another 97, or 14.5%, provided only telephone numbers. For convenience, only those providing addresses were contacted for the follow-up survey.)

Several weeks after the newspaper survey data were collected, the 290 respondents who had provided mailing addresses were sent a letter soliciting their participation in a new study on religious beliefs and experience. The letter explained the nature and purpose of the study and indicated that participants would be paid \$5.00 for their assistance. Of the 287 respondents who received this mailing (three were returned by the post office as undeliverable), 213 respondents (74.2%), including 180 females and 33 males, eventually completed and returned the religion survey and received the \$5.00 payment.

### *Measures*

*Religion Measures.* The religion survey contained a variety of closed- and open-ended questions regarding the respondents' religious backgrounds, changes in religiousness during and since adolescence, and several scales and items for assessing the respondents' current religious beliefs and commitments. The variables of primary interest for this report include the following:

(1) The widely used Intrinsic and Extrinsic Religious Orientation scales were utilized as measures of a genuine, committed orientation to religion, and a utilitarian, selfish orientation, respectively (Allport and Ross 1967).

(2) Respondents were asked to rate, with respect to their "adolescence and young adulthood (roughly, ages 13 to 22)," the degree to which their "religious beliefs or faith became more or less important to you during this time." A five-point scale ranging from "much less important" to "much more important" was provided. Respondents were then asked which of the following alternatives best described this change: (a) "an intense and sudden personal experience"; (b) "a slow, gradual change with one or more relatively intense experiences and changes"; (c) "a slow, gradual change over a long period of time"; or (d) "no change." Respondents who indicated a maximal increase in importance of religion on the former item, and who chose response alternative (a) on the latter item, were classified as having had a *sudden religious conversion* during adolescence. A parallel set of questions was subsequently asked concerning the years "since adolescence/young adulthood," yielding a similar measure of sudden religious conversion in adulthood.

(3) A single item was designed to distinguish between belief in a personal God in contrast to a pantheistic or deistic theology. Respondents were asked, "Which of the

following best describes your current beliefs about God?" with response alternatives: (a) "God is a living, personal being who is interested and involved in human lives and affairs"; (b) "God created the universe, but is no longer active or involved in human lives and affairs"; and (c) "God is an impersonal, transcendental force in the universe." The variable *personal God* was scored as 1 for respondents choosing (a), and 0 for respondents choosing (b) or (c).

(4) A single item asked respondents, "Do you feel that you have a personal relationship with Jesus Christ and/or God?" This variable will be referred to as *personal relationship*.

(5) The *loving* and *controlling* God-image scales of Benson and Spilka (1973) were used to assess respondents' beliefs about God. Each scale was constructed by summing responses to five bipolar adjective rating scales such as "accepting-rejecting" (from the Loving scale) and "restricting-freeing" (from the Controlling scale). In addition, a third scale was constructed consisting of two filler items from the Benson-Spilka scale ("distant-close" and "impersonal-personal"), along with three new adjective pairs selected for this study ("not comforting-comforting," "not available-available," and "not responsive-responsive"). This scale was labeled *distant God*, and was designed specifically to tap attachment-theoretical constructs.

(6) Respondents were asked to report on a five-point scale their frequency of *attendance at religious services*.

(7) A single item asked whether the respondent considered himself or herself to be a *Christian*.

(8) A single item inquired whether the respondent considered him- or herself to have been *born again*. (This and the following question were asked only of respondents who had previously described themselves as Christians.)

(9) A forced-choice item, designed by Paloutzian et al. (1978), was used to distinguish between two Christian orientations: an "ethical" Christian orientation focusing on the moral/ethical teachings of Christianity and a "born-again" orientation focusing on Jesus Christ as Lord and Savior. (Means on this variable, as scored here, reflect the proportion of respondents endorsing the "ethical" option; the variable will be referred to hereafter as *ethical Christian*.)

In addition, multiple-item scales were constructed to measure respondents' perceptions of their parents' religiousness during their childhood. These items asked respondents to rate each parent separately with respect to church attendance, commitment to religion, and frequency with which religious issues were discussed with or taught to the respondent during his or her childhood. The items for each parent were summed to yield unidimensional maternal and paternal religiousness scales, respectively.

*Childhood Attachments to Parents.* Childhood attachments to mother and father were rated separately by respondents on two trichotomous items. These parallel items, developed by Hazan and Shaver, presented respondents with descriptions of the secure, avoidant, and anxious/ambivalent patterns of childhood attachment described by Ainsworth and her colleagues (1978). The maternal attachment item is reproduced below, along with the percentages of subjects endorsing each alternative. The paternal item was identical except for appropriate modification of pronouns. (In the actual survey, the three categories were not labeled.) For each parent, respondents were asked to read the three descriptions and



check the one that best described their relationship with that parent during their pre-adolescent years:

*Secure:* She was generally warm and responsive; she was good at knowing when to be supportive and when to let me operate on my own; our relationship was almost always comfortable, and I have no major reservations or complaints about it. (50.7%)

*Avoidant:* She was fairly cold, distant, and rejecting, and not very responsive; I often felt that her concerns were elsewhere; I frequently had the feeling that she would just as soon not have had me. (8.1%)

*Anxious/Ambivalent:* She was noticeably inconsistent in her reactions to me, sometimes warm and sometimes not; she had her own needs and agendas which sometimes got in the way of her receptiveness and responsiveness to my needs; she definitely loved me but didn't always show it in the best way. (41.2%)

## RESULTS

### *Maternal Attachment and Current Religiousness<sup>2</sup>*

Multiple regression equations were constructed separately for each dependent (religion) variable. The independent variables in each equation were: (1) maternal religiousness, (2) two dummy-coded variables representing the three maternal attachment categories, and (3) two interaction variables representing the cross-products of maternal religiousness and each of the attachment dummy variables. The interaction of maternal attachment and maternal religiousness was statistically significant in the equations predicting the variables *intrinsic*,  $F(2,198) = 3.31, p < .05$ ; *ethical Christian*,  $F(2,198) = 5.58, p < .01$ ; *born-again*,  $F(2,198) = 3.08, p < .05$ ; *personal God*,  $F(2,198) = 3.84, p < .05$ ; and *personal relationship*,  $F(2,198) = 5.13, p < .01$ . In each of these cases, a main effect for attachment type also emerged as a significant predictor over and above the interaction effect.<sup>3</sup>

These interactions may be described in two ways. First, the correlations between maternal religiousness and respondents' religiousness can be calculated separately within each of the three attachment groups. These correlations, along with the omnibus correlations (ignoring attachment classification), are shown in Table 1. The correlations vary

2. Although space does not permit a discussion of the data regarding attachments to fathers, it should be pointed out that the same patterns of findings described here were observed when paternal attachment and paternal religiousness were used in place of the maternal measures. However, the results were generally somewhat weaker, consistent with the observations of attachment researchers that (1) attachment to mother at age one is a better predictor of social behavior at age six than is attachment to father (Main et al. 1985), and (2) in our culture the mother is more likely to be primary in a child's hierarchy of attachment figures (Lamb 1978). This is also consistent with the review of Argyle and Beit-Hallahmi (1975) that mothers tend to have a stronger influence than do fathers on their children's religious development.

3.  $F$  values for these tests were as follows (in each case  $df = 2,198; p < .01$ ): *intrinsic* = 5.37, *ethical* = 5.07, *born again* = 5.27, *personal God* = 5.43, and *personal relationship* = 5.42. Other significant effects were: main effect for maternal attachment in predicting *attendance*,  $F(2,198) = 4.76, p < .01$ ; main effect for maternal religion in predicting *Christian*,  $F(1,198) = 5.96, p < .01$ , and *personal God*,  $F(1,198) = 7.00, p < .01$ .

TABLE 1  
CORRELATIONS BETWEEN RELIGION VARIABLES AND  
MOTHER'S RELIGIOUSNESS WITHIN MOTHER ATTACHMENT GROUPS

Religion Variables	Maternal Attachment Type			Total Sample
	Avoidant	Secure	Anx./Ambiv.	
Loving God	-.26	.25**	.05	.11
Controlling God	-.14	.01	.00	-.03
Intrinsic	-.20 <sub>a</sub>	.35 <sub>b</sub> **	.10	.16**
Extrinsic	.38	-.07	-.10	-.02
Attendance	-.24 <sub>a</sub>	.29 <sub>b</sub> **	.12	.14*
Christian	.21	.27**	.24*	.23**
Ethical Type	.73 <sub>a</sub> **	-.14 <sub>b</sub>	.07 <sub>b</sub>	.04
Born Again	-.31 <sub>a</sub>	.28 <sub>b</sub> **	.03	.06
Personal God	-.52 <sub>a</sub> *	.28 <sub>b</sub> **	.29 <sub>b</sub> **	.20**
God Relationship	-.07	.36 <sub>a</sub> **	-.06 <sub>b</sub>	.13
<i>N</i>	18	107	87	

Note: Within each row, correlations with different subscripts differ at the .05 level of significance according to a z-test.

\* $p < .05$     \*\* $p < .01$

considerably in magnitude, and frequently in sign, across the three attachment groups. Specifically, correlations are generally positive within the secure attachment group, negative within the avoidant group, and in between (and near zero) within the anxious/ambivalent group, for those variables evincing significant interaction effects. The opposite pattern is observed for *ethical Christian*, which was coded such that the more conservative "born again" type was "low" and the less conservative "ethical" type was "high." Thus the interactions may be described by saying that the relationship between mothers' and respondents' religiousness depends on the nature of the respondent's childhood attachment relationship with his or her mother. The rightmost column of Table 1 shows that when attachment classification is ignored, the omnibus correlations between parents' and respondents' religiousness are generally negligible. In a few cases (*Intrinsic*, *Christian*, and *Personal God*) there is a significant positive correlation, but the absolute values of these correlations are quite small.

A second way of looking at the interaction suggests a somewhat different perspective on the results. For this analysis, the maternal religiousness variable was dichotomized at the scale midpoint into *low* and *high* categories; then the differences among the attachment groups were examined separately within the low and high maternal religious groups. These results are summarized in Table 2.

As can be seen, when maternal religiousness is *low*, the nature of the mother-respondent attachment relationship appears to have a substantial impact on respondents'

TABLE 2  
MEANS FOR MOTHER ATTACHMENT TYPES ON  
RELIGION VARIABLES FOR HIGH AND LOW MATERNAL RELIGION GROUPS

RELIGION VARIABLES FOR HIGH MATERNAL RELIGIOUSNESS				
Religion Variables	Means for Maternal Attachment Types			Significance Test for Simple Effect <sup>a</sup>
	Avoidant	Secure	Anx./Ambiv.	
Low Maternal Religiousness				
Loving God	6.5	5.7	5.9	n.s.
Controlling God	3.5	3.5	3.5	n.s.
Intrinsic	3.8	3.0	3.2	<i>p</i> < .05
Extrinsic	2.1	2.5	2.6	<i>p</i> < .05
Attendance	3.2	2.0	2.0	<i>p</i> < .05
Christian	84.6	66.7	55.3	n.s.
Ethical Type	45.5	71.4	68.2	n.s.
Born Again	54.5	16.7	29.2	n.s.
Personal God	88.9	53.8	44.7	<i>p</i> < .05
God Relationship	84.6	48.5	71.1	<i>p</i> < .05
High Maternal Religiousness				
Loving God	6.2	6.1	6.1	n.s.
Controlling God	3.6	3.1	3.2	n.s.
Intrinsic	3.5	3.5	3.4	n.s.
Extrinsic	2.5	2.5	2.4	n.s.
Attendance	2.8	2.6	2.6	n.s.
Christian	100.0	85.9	79.5	n.s.
Ethical Type	100.0	67.7	72.2	n.s.
Born Again	40.0	27.0	27.0	n.s.
Personal God	50.0	76.9	70.4	n.s.
God Relationship	80.0	80.3	69.0	n.s.

<sup>a</sup>Significance tests for simple effects represent one-way tests of group differences within a row. The test is an *F* test for continuous dependent variables (Loving God, Controlling God, Intrinsic, Extrinsic, and Attendance) or chi-square for dichotomous dependent variables (Christian, Ethical Type, Born Again, Personal God, and God Relationship).

religiousness. Respondents reporting avoidant attachments were clearly the most religious, and particularly the most conservatively religious, of the three attachment groups. This group displayed the highest means on the loving God and intrinsic scales, attendance at services, being a Christian, having been born-again, belief in a personal God, and reporting a personal relationship with God; they had the lowest means on the extrinsic scale and the ethical Christian variable. The secure and anxious/ambivalent groups tended to be relatively similar, although the secure group was much lower on the personal relationship variable. One-way analyses of variance of these simple effects within the low maternal religiousness group revealed significant or near-significant differences among the attachment groups on intrinsic, extrinsic, attendance, personal relationship, personal God, and born-again (see Table 2).

As for the group defined by *high* maternal religiousness, however, the pattern described for the low maternal religiousness group was either completely absent or, if anything, reversed. Tests of simple effects yielded *F* values less than 1.0 for each of the

five continuous religion variables and  $X^2$  values less than 2.5 for the five dichotomous religion variables. When maternal religiousness is high, attachment appears to exert little if any effect on respondents' religiousness.

Analyses were also conducted to test the relationship between attachment classification and each religion variable, ignoring parental religiosity. On the basis of one-way analyses of variance (for continuous dependent variables) and chi-square analyses (for dichotomous variables), there were no significant differences among the three groups on any religion measure at the conventional .05 level.

### *Sudden Religious Conversions*

Perhaps the most intriguing results concerned reports of sudden religious conversions. Three dichotomous (yes-no) variables were created based on the religious change items described in the "Method" section: (1) sudden conversion during adolescence; (2) sudden conversion during adulthood; and (3) sudden conversion at any time (i.e., during either adolescence or adulthood).

The differences among the three maternal attachment groups on these variables are shown in Table 3. For *adolescent* conversion (Row 1), we can see that nearly 28% of respondents reporting an avoidant maternal attachment also reported a sudden religious conversion during adolescence. In sharp contrast, less than 1% of the secure group, and less than 4% of the anxious/ambivalent group, reported adolescent conversions. These percentages differed significantly by a chi-square test,  $X^2 (2, N = 210) = 27.24, p < .001$ . Similar but slightly weaker results were observed for *post-adolescent* sudden conversions,  $X^2 (2, N = 211) = 5.14, p < .08$ . The third row, which combined the two variables to assess whether the respondent had *ever* had a sudden conversion, shows the powerful combined effect in which avoidant respondents were more than four times as likely to have experienced sudden religious conversion at some point in their lives as were members of the other attachment groups,  $X^2 (2, N = 209) = 19.80, p < .001$ . Comparison of the figures in the last row of the table with the previous rows indicates that for the most part, the respondents reporting conversions during adulthood represented different individuals from those reporting adolescent conversions.

TABLE 3  
PERCENTAGES OF RESPONDENTS REPORTING SUDDEN RELIGIOUS CONVERSIONS  
AS A FUNCTION OF MATERNAL ATTACHMENT TYPE

Religion Variables	Maternal Attachment Type			
	Avoidant	Secure	Anx./Ambiv.	$X^2 (2)$
Adolescence	27.8%	0.9%	3.5%	27.24**
Adulthood	22.2	8.4	5.8	5.14
Either	44.4	9.4	8.2	19.80**
<i>N</i>	18	106	86	

\*\* $p < .01$

Although the direction of this effect is consistent with the previously reported results showing the avoidant group to be the most "religious," these additional findings differ in two important ways. First, the conversion results were not replicated, or even approximated, when attachment to fathers was considered in place of attachment to mothers. Second, no interaction was evident between maternal attachment type and maternal religiousness, as was found with the other dependent variables. Maternal attachment classification was the only significant predictor in each of these regression equations.

Following the religious change items in the survey, respondents were encouraged to write freely about their perceptions concerning the factors that might have led to their change in religious commitment at the time it occurred. Of the 26 respondents classified as having had a sudden religious conversion either during or after adolescence, 23 provided answers to these items. The vast majority of respondents classified as having experienced a sudden religious conversion described a period of intense emotional turmoil or crisis as a precipitating factor.

The most commonly mentioned precipitating event, especially among those who reported sudden religious conversions after age 30, was divorce or severe marital problems. Six of the nine respondents who converted at age 30 or later had recently experienced divorces; for one of these this was the third divorce, and for another the fourth. One respondent who reported a sudden religious conversion at age 26 also cited a recent divorce.

Several of these recently divorced respondents also mentioned additional emotional stresses: One had suffered three miscarriages, and one had become an alcoholic. Two others mentioned severe emotional distress, described by one as a recent "period of intense emotional upheaval and pain." The other respondent described her experience by saying that "I had become so desperately out of control in/of my life that I finally gave up and truly let go of control enough that I could allow the Spirit to give me the experience." Another woman who had not been divorced, but who noted that she was very unhappy with her marriage, wrote that she had been "very depressed and bordering on suicide" and had lost a 9-year-old son to suicide.

Emotional distress was also mentioned in several other accounts. One woman reported that her conversion at age 32 occurred "during a very stressful and demanding experience in the wilderness," although she did not elaborate further on the details of that experience. This woman had noted elsewhere on her survey that her father had committed suicide when she was 12 years old. A Catholic woman experienced her conversion at age 23 after giving birth by Caesarian section and then being told by her gynecologist that she would have to take birth control pills for two years; she found this tremendously upsetting because of the conflict with her Catholic upbringing. Another woman wrote that just before her conversion experience, she had been diagnosed with multiple sclerosis, and her mother had become very ill and died. One young man, who had had a conversion experience at age 20, described his life before his conversion: "I had few friends, the girl I loved didn't love me, I was fired from a job, I dropped out of school, and I had tried to kill myself. I had to find something to pull me up out of the gutter, and that was God."

The themes of loneliness, loss, and love problems appeared in other accounts as well. One man experienced a sudden conversion after becoming very lonely in the military; this was the first time he had lived away from his family. In response to the survey items concerning happiness in relationships with "close/intimate friends" and with "boy-

friends/girlfriends" during this time, this respondent left the items blank and scribbled in the margin, "did not have any." Another respondent experienced her conversion at age 20 after leaving home to get away from her family and from a man she had dated for six years. She wrote that she was "scared," and that she "asked God for strength and for Him to guide me in the right direction."

Among respondents who converted during their teen years, several described family problems and poor relationships with parents. Two others mentioned the influence of religious peers, and one was converted by evangelical relatives (an aunt and uncle). Another respondent who converted at age 17 was very unhappy with a love relationship, although she did not elaborate further. One woman had her conversion experience after entering a convent at age 14.

To summarize, three themes dominated respondents' own analyses of the circumstances leading to their conversion experiences, and nearly every account referred to at least one of these: (1) problems with love relationships, especially among those who had converted after age 30; (2) problems in relationships with parents, especially among respondents who had converted at younger ages; and (3) severe emotional distress, brought about by a wide range of events and circumstances. From the perspective of attachment theory, these recurrent themes of lost or disrupted love relationships, family problems, and severe emotional distress represent the very sorts of circumstances in which people are likely to seek the safe haven provided by an attachment figure: in this case, God. Although McGuire (1987) and others have warned that converts' retrospective descriptions of their conversion experiences are potentially subject to various biases (i.e., reinterpretation of previous events in terms of the current belief system), we do not believe that such biases can completely account for the preponderance of these particular themes in our respondents' accounts.

### *Sex Differences*

To assess the possibility that the various results described above might interact with sex differences, all analyses were performed separately for males and females.<sup>4</sup> In each case, the results were highly similar for both sexes. For example, the following results were obtained with respect to the variable *sudden religious conversion*. Of the three males reporting avoidant maternal attachments, two reported sudden conversion experiences. Only two of the 19 males (10.5%) in the secure maternal attachment group, and none of the 10 males in the anxious/ambivalent group, reported such experiences. For females, the respective percentages for the avoidant, secure, and anxious/ambivalent groups were 42.9, 9.2, and 9.3. For this and other analyses, however, results must be interpreted cautiously given the small number of males in the sample ( $n = 33$ ).

## DISCUSSION

The results presented above suggest that the relationship between attachment history and religious belief is not simple. For several measures of religiousness, and particularly

4. Due to the small sample size for males, in conjunction with the small sample size for the avoidant attachment category, statistical significance tests of interactions would be of limited value.

those concerning theistic beliefs focusing on a personal God and on one's personal relationship with God, insecure (avoidant) parental attachments were associated with high levels of adult religiousness and secure attachments with lower levels. However, this relationship was moderated by maternal religiousness: The attachment-religion relationship was observed only for respondents who had grown up with relatively nonreligious mothers. For those with strong religious upbringings, individual differences in attachment were essentially unrelated to adult religiousness. In predicting the intensely emotional and frequently crisis-precipitated experience of sudden religious conversion, however, attachment history emerged as a powerful predictor independent of maternal religiousness.

Thus the results, particularly with respect to variables concerning beliefs about and perceived relationships with a loving, benevolent, and protective deity, tend to support the "compensation hypothesis" outlined above (but only for respondents with relatively non-religious mothers). Ainsworth (1985) has discussed the possibility of "parent surrogates to whom [a child] may become attached, and who may play an important role in his life, especially for those who find in them the security that they sought but could not attain with their own parents" (799). She listed a number of possibilities in this regard, including older siblings or other relatives, special teachers or mentors, priests or pastors, and therapists. Although God or other supernatural figures do not appear on Ainsworth's list, we would argue (along with Kaufman 1981) that for many people, God may be the ideal "substitute" attachment figure in the sense described by Ainsworth. The particularly strong results observed for variables such as *personal God* and *personal relationship* with God are particularly supportive of this interpretation.

At the same time, the results appear to contradict the predictions of the "mental models hypothesis," and an interesting direction for future research would be to attempt to discover why. One possibility is that perceived relationships with God are (presumably) not subject to the same kinds of constraints as are relationships with other people, in which the "other" inevitably has his or her own agenda and exerts considerable influence on the dynamics and functioning of the relationship. To the extent that interpersonal relationships and perceived relationships with God are influenced *differentially* by early attachment history, an investigation of these differences may prove highly useful in understanding the dynamics of working models and substitute attachment relationships.

The fact that the effect of attachment history was generally restricted to those with relatively nonreligious parents is an important, although not totally unexpected, finding. It may be that for people who grow up with strong religious backgrounds, there exist a variety of reasons for maintaining involvement in religion which may or may not be associated with attachment, and therefore attachment history *per se* is not a strong predictor of later belief. As Weiss (1986) has emphasized, attachment is only one of many provisions offered by close relationships. Yet in times of severe distress, respondents with insecure attachment histories reported the experience of sudden religious conversions at a high rate, regardless of parental religiousness. This suggests that in times of severe emotional distress, and particularly distress associated with disrupted attachment relationships, attachment history exerts its strongest influence and overwhelms the effects of religious background. According to these data, this was particularly true with respect to conversions during adolescence, a period of life characterized by the emotionally turbulent process of "relinquishing the parents as attachment figures" (Weiss 1982).

The findings on sudden religious conversion were striking: More than 25% of the respondents reporting avoidant attachment relationships with their mothers also reported having had sudden conversion experiences during adolescence; 44% in this category reported such experiences at some time in their lives. In contrast, fewer than 5% of respondents in the other maternal attachment groups reported adolescent conversion, and fewer than 10% of these respondents reported ever having experienced such conversions.

### *Caveats and Future Directions*

It should be obvious that an important task for future research is to attempt to replicate these findings, utilizing different kinds of samples and measures to assess the generalizability of the effects reported here. A more narrowly focused study of conversion, for example, could employ a wider variety of more precise measures of conversion experiences and could systematically probe for broader and more detailed data concerning the circumstances surrounding the conversion.

Improved measurement of the attachment dimensions is also an important matter for future research. For example, multiple-item measures of childhood attachment may prove more reliable than did the trichotomous "prototype" item employed in this research. Several scales that tap attachment-relevant dimensions are currently available, although they are not explicitly designed to reproduce the three attachment "types" derived from the "Strange Situation." The Mother-Father-Peer Scale (Epstein 1983) and the Parental Bonding Instrument (Parker et al. 1979) both measure two dimensions of parental relationships, viz. acceptance (vs. rejection) and overprotectiveness (vs. encouragement of independence). Hazan and Shaver (1987) have also developed a parental history "checklist," which was subsequently adapted by Feeney and Noller (1990).

George et al. (1985) have developed an extensive Adult Attachment Interview (AAI) for assessing individual differences among adults in their orientation toward attachment. These investigators distinguish among three groups ("preoccupied with attachment," "secure," and "dismissing of attachment") which correspond respectively to the anxious/ambivalent, secure, and avoidant infant-attachment types. It would be desirable to employ this, or a related interview measure, in a replication of some of the results reported here. Although data derived from this procedure are, like questionnaire measures, based on self-report, the AAI is designed explicitly to take into account certain patterns of socially-desirable responding. For example, subjects ultimately classified as "dismissing" frequently describe their parents quite favorably in global terms, but are unable upon further questioning to provide elaboration or examples consistent with the global characterizations.

The results of the present study are undoubtedly contaminated by self-report biases; for example, there may be many "truly" avoidant subjects who classified themselves as secure. However, the relatively complex results of the study are not easily explained by a simple social-desirability interpretation. In fact, it seems to us fairly remarkable that, given the primitive measurement of maternal attachment used in this study, such strong results were obtained in many instances (e.g., those regarding sudden religious conversions). In any event, replication with a variety of measures, and with a watchful eye on



the potential effects of self-report bias, is clearly an important task for future research.

An important limitation of this research is the gender bias evident in the sample: Only 33 males (15.5%) were included in the present sample. While we did not discern any noteworthy differences in the results for males and females when analyses were conducted separately for the two sexes, replication of the results in a larger sample of males remains an important task for future research. Of particular concern is the issue of the relative importance of maternal versus paternal attachment for males and females, respectively. Again, we found no strong evidence for a differential effect of same-sex versus opposite-sex parental attachments in predicting the religion variables, and attachment theory does not offer any obvious predictions with respect to such relationships. Such predictions might easily be generated from other psychodynamic theories, however, and are worthy of empirical test. In the meantime, the possibility of sex differences in the attachment-religion relationship remains open.

Another important limitation of this research, like many other studies in the psychology of religion, is its restrictive focus on Christian, theistic religion. The most powerful results were observed with respect to perceptions of God as a personal (and unitary) being and one's personal relationship with this being. This is not surprising, of course, as relationship issues are at the heart of attachment theory and of the measures used to operationalize its constructs. We believe there are persuasive theoretical reasons to pursue the implications of attachment for religious belief and involvement beyond evangelical Christianity. However, it remains a task for future research to spell out these implications and submit them to empirical test.

If some of the key results reported in this article are indeed replicated, and strong empirical links between attachment relationships and religious belief and behavior are confirmed, the next important step will be to explore the processes by which these links are forged. At least two potentially important processes have been cited in the interpretation of the present results. The first involves the idea, discussed previously, of a substitute attachment figure. Whether the "substitute" is God or another person, the idea of relinquishing one primary attachment figure in favor of another deserves research attention. By what means do people come to establish such new relationships? How do people with attachment histories characterized by insecure attachments learn to establish secure relationships with new attachment figures? Answers to these questions would be useful for the study of religious and spiritual development in particular, and for theory and research concerning relationships and emotion in general. Recent attempts to explicate the processes by which internal working models are transformed and restructured (Main et al. 1985) represent an important step in this direction.

Another interesting direction from which to approach the attachment-religion link would be from individual differences in adult attachment as manifested in, for example, romantic love (Hazan and Shaver 1987). The relationship between measures of religiousness and individual differences in adult attachment style was also investigated in the research reported here; these results are presented elsewhere (Kirkpatrick and Shaver 1990).

Of course, the results presented in this article represent only an initial, exploratory step toward a systematic investigation of the role of attachment in the development of religious belief and involvement. As one of us has attempted to show elsewhere (Kirkpatrick 1989), attachment theory offers considerable promise as a paradigm or conceptual

framework for the psychology of religion, and the research reported here only begins to scratch the surface of the theory's potential utility in this domain. We hope others will join our effort to explore the potential utility of this rich, dynamic theory in the scientific study of religion.

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