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## God is nowhere, God is now here: Attachment activation, security of attachment, and God's perceived closeness among 5–7-year-old children from religious and non-religious homes

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### Abstract

God's perceived closeness (GC) is greater when the attachment system is activated. This conclusion is based primarily on adult studies, but some findings suggest its validity also in childhood. Adult studies have shown GC to vary in relation to security of attachment, but child studies have been few and methodologically limited. In this study, we tested differences between securely and insecurely attached children on GC in attachment activating and neutral conditions, as well as whether parental religiousness acted as a moderator. Participants were forty 5–7-year-olds, from non-religious and Christian homes. The adapted Separation Anxiety Test was used to assess attachment. Participating children were told brief stories about visually represented children in different situations, and placed a God symbol on a felt board to represent GC to the fictional child. Results showed that GC was greater in attachment activating situations, particularly for secure children, supporting a hypothesis of internal working model correspondence between models of Self/Others and God. Although a religious type of home emerged as predictive of GC, no support was found for a moderating role of parental religiousness.

**Keywords:** *Attachment, religion, separation anxiety test, childhood, internal working model*

### Introduction

The present study investigated children's perceptions of God's closeness in situations involving attachment system activation vs. non-activation, and in relation to security vs. insecurity of attachment as well as to religious and non-religious home environments. A core set of observations behind the formulation of attachment theory was that in particular situations, such as physical separation, illness, pain, and predator approach, primate offspring have a strong tendency to signal, flee, or stay close to their primary caregiver (Bowlby, 1969/1982). Based on such "normative" observations, Bowlby (1969/1982, 1973, 1980) argued that offspring possess an attachment behavioural system, originally designed by selection pressures in the environment(s) of evolutionary adaptedness, and henceforth activated by situations (external as well as internal to the offspring) that give a natural clue to danger.

The behaviours resulting from attachment activation are modulated by the dyadic organization of the offspring–caregiver relationship (Ainsworth, Blehar, Waters, & Wall, 1978), which is, in turn, mediated by internal working models (IWMs) of self and others. An

important characteristic of *secure* attachment is the implied ease with which the children distinguish between attachment activating and neutral conditions, flexibly shifting their attentional focus and behavioural repertoire accordingly (e.g., Main, 1991). In contrast, *insecure* attachment is characterized by comparable difficulties in distinguishing between attachment activating and neutral conditions. Insecurely attached children are thought to defensively either minimize (i.e., avoidant attachment), or maximize (i.e., ambivalent attachment), their attention to and behavioural expression of attachment in both types of situations, or else to fall apart (attentionally as well as behaviourally) from the stress of attachment activation (i.e., disorganized attachment; Main, 1991). In the present study, we tested both normative effects of attachment activation and the potentially modulating role of attachment security on children's perceptions of God's closeness. Although often studied behaviourally in infancy, through a move to the representational level (Main, Kaplan, & Cassidy, 1985), the manifestations of IWMs are now also inferred from speech and other representational products later in development.

## **Attachment and the perceived God relationship**

### *Normative aspects and ontogenetic maturation*

Kirkpatrick (1999, 2005) pioneered the employment of attachment theory as a framework to understand the relational aspects of religion, particularly the individual's perception of having a personal relationship with an anthropomorphically shaped deity. According to Kirkpatrick (1999, 2005), believers' perceived God relations meet the most important criteria for defining attachment relationships. These include seeking closeness to God in prayer and rituals, using God as a safe haven during distress, and as a secure base for exploring the environment. Hence, in serving the function of obtaining/maintaining a state of felt security (Sroufe & Waters, 1977), aspects of attachment presumably function in a similar way for believers in relation to God as they do for children in relation to their parents.

Most studies that have touched on normative aspects of attachment theory, in relation to religion, have been conducted on adolescents and adults. For example, during adolescence and early adulthood, the periods when offspring autonomy vis-à-vis parents climax, sudden religious conversions have long been known to be disproportionately common (e.g., James, 1902; Pargament, 1997). In adult theistic believers, results from two recent experiments showed that participants whose attachment systems were experimentally activated increased more in their wish to be close to God from pre- to post-attachment system activation, compared to participants who received attachment neutral stimuli (Birgegard & Granqvist, 2004). Also, towards the end of life, elders who suffer spousal bereavement (i.e., the loss of an attachment figure; Bowlby, 1980) report a stronger affectional bond with God (Cicirelli, 2004) and show a prospective increase in the importance of their God relation after the bereavement experience compared to the non-bereaved (Brown, Nesse, House, & Utz, 2004).

Although studies on children have been fewer, the conclusion that maturational processes as well as situational experiences associated with a period of heightened attachment activation are linked to an increased significance of the perceived God relation, is supported in some child studies as well (see Granqvist & Dickie, 2006, for a review). As attachment to primary caregivers increasingly moves towards goal-corrected partnerships in preschool (Bowlby, 1969/1982), children are able to withstand longer separations, presumably due to an emerging capacity to represent their attachment figures symbolically. Already at this age, children develop a concept of God that they describe or draw as a person (Heller, 1986). In

middle childhood, as children enter school and move even farther from parents' immediate care, God is typically viewed as personally closer than in early childhood (Eshleman, Dickie, Merasco, Shepard, & Johnson, 1999; Tamminen, 1994).

From early childhood on, God is also perceived as available to serve a safe haven and secure base function in times of stress. For example, Tamminen (1994) found that Finnish 7–12 year olds reported feeling close to God particularly during emergencies (e.g., escaping or avoiding danger, encounter with death or sorrow) and loneliness. Moreover, among the Finnish children, the category of situations in which God's guidance had been most frequently experienced consisted of external danger and difficulties, which was embraced by approximately 40% of the participating children. Additionally, Eshleman et al. (1999) found that American pre- and elementary school children placed a God symbol closer to a fictional child when the fictional child was in attachment activating situations (e.g., sick and in hospital, had fallen from a bike, the child's dog had died) than when the fictional child was in situations that were less clear-cut in terms of attachment activation (e.g., fictional child had stolen an apple, stolen a ball, hurt another child).

#### *Individual differences in attachment and religion*

Kirkpatrick (1999, 2005) also derived two general hypotheses from attachment theory concerning relations between security–insecurity of attachment and aspects of religiosity. First, he formulated a correspondence hypothesis concerning relations between individuals' IWMs of self/others, as derived from early attachment experiences with caregivers, and their perceived God relations (IWM correspondence; see Bowlby, 1969/1982, 1973, 1980). Through the operation of generalized IWMs, individuals with secure attachments were hypothesized to form relationships with a God perceived as loving and caring, whereas individuals with insecure attachments were expected either to form no relationships with God or else to perceive God as distant, rejecting, or inconsistent.

A socially based aspect of religiosity has been added to Kirkpatrick's correspondence hypothesis (Granqvist, 2002; Granqvist & Hagekull, 1999). Hence, besides IWM correspondence, it has been suggested that religious beliefs and behaviours in the case of secure attachment partly reflect the adoption of a sensitive attachment figure's religious standards whereas insecure offspring are hypothesized to be relatively less likely to adopt their more insensitive attachment figure's religious standards (social correspondence; Granqvist, 2002).

Second, Kirkpatrick (1999, 2005) suggested that the perceived God relation may serve a "surrogate attachment" function (see Ainsworth, 1985) that helps insecurely attached individuals obtain/maintain a sense of felt security, where other attachments have failed (the compensation hypothesis). Hence, regulation of states of distress is at the core of this compensatory use of religion (Granqvist, 2002; Granqvist & Hagekull, 1999).

Rather than viewing the correspondence and compensation hypotheses as mutually exclusive, they may be seen as delineating different developmental pathways to religion as well as to different modes of being religious. One of these paths is via experiences with sensitive, religious caregivers (correspondence) and one is via regulation of distress in the context of insensitive caregiving (compensation; Granqvist & Kirkpatrick, in press; Kirkpatrick, 2005). As was the case with the studies addressing normative aspects of attachment, most of the studies investigating associations between attachment security–insecurity and the God relation have been performed on adolescents and adults (see Granqvist & Kirkpatrick, in press; Kirkpatrick, 2005, for a review). Most of these studies used self-report attachment inventories to assess romantic attachment and parent-related

attachment history, but one study (Granqvist, Ivarsson, Broberg, & Hagekull, in press) employed the Adult Attachment Interview (Main, Goldwyn, & Hesse, 2003), which yielded converging results with the self-report attachment studies. In general, the results have supported the idea of differential pathways for the development of the perceived God relation, one via sensitive parenting (with the God relation reflecting social/IWM correspondence) and one via insensitive parenting (with the God relation reflecting compensation during states of distress).

In the case of childhood (see Granqvist & Dickie, 2006, for a review), the only published study that has used an attachment assessment method found no relation between security with mother and 4–6-year-old children's God images (De Roos, Miedema, & Iedema, 2001). However, a number of studies that used broader questionnaire assessments of the child–caregiver relationship quality (e.g., in terms of discipline styles, child-rearing practices) have produced results suggestive of support for the IWM aspect of the correspondence hypothesis (e.g., De Roos, 2004; De Roos, Iedema, & Miedema, 2004; Dickie, Eshleman, Merasco, Shepard, Vander Wilt, & Johnson, 1997; Eshleman et al., 1999; Tamminen, 1994). For example, child-reports of mothers as nurturant are related to children's views of God as loving and nurturing (Dickie et al., 1997). Three of these studies also found, as expected, positive relations between children's and caregiver's religiosity (De Roos, 2004; De Roos et al., 2004; Tamminen, 1994). However, in the only study (De Roos, 2004) that tested a reported relationship quality by parental religiosity interaction (i.e., as required to test the social aspect of the correspondence hypothesis), no support was obtained for social correspondence. Whereas several child studies have thus suggested support for IWM correspondence, only two studies have provided indirect support for the compensation hypothesis. Lack of parental involvement and father absence from home were linked to children's perceptions of God as nurturant and close (Dickie et al., 1997; Eshleman et al., 1999).

### **Limitations and inconsistencies in extant studies on attachment and religion**

There are several aspects of the child studies conducted that disallow a clear conclusion about the role of attachment in shaping children's perceived God relations. First, the distinction between attachment activating and neutral conditions has been less clear-cut than in the adult studies. For example, the one (semi-projective) study that has come closest to making this distinction (Eshleman et al., 1999) was not a priori set up to distinguish between attachment activating and neutral conditions. Results were instead interpreted post hoc in attachment terms. Consequently, the “attachment neutral” situations included the fictional child stealing things and hurting another child. While such behaviours are not necessarily attachment activating for the misbehaving child, participating children may well have encountered attachment activating consequences to such behaviours, implying an uncertain degree of attachment activation also in the supposedly neutral conditions.

Furthermore, only one of the child studies (De Roos et al., 2001) used an attachment assessment method (Verschueren & Marcoen, 1994, Adaptation of the Doll Stories Completion Task [ADSCT]) to assess attachment security, but the doll story method utilized has not been sufficiently developmentally validated (e.g., in relation to infant strange situation classifications; Solomon & George, 1999), the study did not distinguish between attachment activating and neutral conditions, and used only global God image assessments as religious outcomes. Consequently, these studies do not address whether children's attachment security–insecurity has any implications for their perceptions of God's

availability in emotionally charged situations. Finally, none of the child studies has tested the social aspect of the correspondence hypothesis (i.e., interactions between security and parental religiousness on religious outcomes) in conjunction with well-validated attachment assessments.

In the adult studies, there is one notable inconsistency to the support for the compensation hypothesis that is of importance to the present study. Although individuals who have experienced insensitive care are expected to regulate distress through their perceived God relation, Birgegard and Granqvist (2004) found an increase in the use of God to regulate distress among adult believers who had reported sensitive experiences with parents, thus supporting IWM correspondence instead. An important methodology aspect of this study was that indirect assessments of religiosity (i.e., regression residuals from pre- to post-priming) were used in the context of subliminal primes to activate attachment, compared with control primes. Hence, participants were unconscious of attachment activation, which may have undermined the possibility of a “higher-order” compensatory use of religion in individuals who had experienced parental insensitivity, thus resulting in their withdrawal from God or, put differently, their defensive shift of attention away from attachment. Conversely, presumably via automatic activation of IWMs, individuals with more sensitive experiences drew on God in this situation, or turned their attention to attachment, whereas they typically rely on other means to regulate distress in the context of conscious attachment activation.

### **The present study**

The general aim of the study was to test relations between attachment and perceptions of God’s closeness in children, taking into consideration and improving on the methodological limitations of previous child studies in the domain of parental relationships and religion. To achieve this aim, we used a modified version of Eshleman and colleagues’ (1999) semi-projective God Distance procedure. We used a semi-projective method, rather than up-front questions regarding distance to self, to undermine the likelihood of defensive responding (cf. Birgegard & Granqvist, 2004). Also, to obtain developmentally well-validated assessments of attachment security, we utilized Kaplan’s (1987) adapted Separation Anxiety Test. Moreover, to enable a test of the influence of parental religion, participating children were drawn from both religious and non-religious homes.

We had three specific research questions. The first was to test whether children perceive greater closeness to God in attachment activating compared to neutral conditions (normative attachment hypothesis). The second was to test a moderating role of security–insecurity of attachment in the perception of God’s closeness in attachment activating and neutral situations. With the compensation hypothesis, insecure children are expected to perceive God as closer than securely attached children, particularly in attachment activating situations (i.e., as reflecting the perception of God as a source of distress regulation). In contrast, with the IWM correspondence hypothesis, secure children are predicted to view God as closer, again particularly in attachment activating situations (i.e., as reflecting generalized IWMs of others as available in need). The third aim was to test a moderating role of parental religiousness in relation to the presumed effects of security–insecurity of attachment on the perception of God’s closeness in both types of situations (social correspondence).

For the first question, we predicted greater closeness to God in attachment activating situations, based both on theoretical considerations and previous child findings. We did not make an a priori prediction for the second question, as opposing theoretical possibilities and

empirical findings have been outlined. Finally, in the absence of previous studies addressing the third question in conjunction with attachment assessments in children, we did not formulate an a priori prediction.

## Method

### *Participants*

Forty children and their mothers participated. Ten boys and 10 girls were recruited from Church settings; 10 boys and 10 girls were recruited from non-religious preparatory school settings. The mean age of the children was identical across groups (6.1 years; range: 5–7 years). All child–mother dyads lived in Uppsala, Sweden.

Information sheets were handed out and study lists posted at nine non-religious preparatory schools, in two of which the information sheet was included as part of a weekly information letter to parents. People responsible for Church choirs, Church-related child activities, and open preschools of 18 Churches were contacted. They informed parents verbally, handed out information sheets, or posted study lists. Eleven Churches belonged to the Lutheran Church of Sweden (formerly the Swedish State Church; 11 children), one was catholic (1 child), one Methodist (1 child), two Baptist (1 child), one Pentecostal (3 children), and one belonged to the Salvation Army (3 children). All children and mothers were compensated with a cinema voucher worth approximately US\$11.

### *Procedure*

Children and mothers visited the lab together. Upon arrival, mothers were directed by an examiner (2nd author) to a waiting room, in which they were asked to fill out a questionnaire. The questionnaire took approximately 45 minutes to mark. In the meantime, the child was asked to accompany the examiner to an adjacent lab room. Children habituated themselves with the room and the examiner for approximately 5–10 minutes. The examiner made sure to give the children enough time to settle down before the study tasks began, and emphasized that many children of different ages visit the room and that the child was very kind in helping adults understand how children think.

Having secured the child's agreement to proceed, the examiner directed the child to a chair at the long-end of a table. The examiner turned on a disc recorder, then collected pictures and instructions for a structured, semi-projective separation interview (see *Instruments*). A microphone was placed on the table at which the child and examiner (by a short-end) were sitting. The interviews lasted approximately 15–30 minutes. After the interview, the examiner placed a two-dimensional felt board, with some figures attached, on the table. The children were encouraged to look at the figures and select one that “can be” God. When a God figure selection was made, the children were asked to hold that figure in their hands while the examiner stacked away the other figures. The examiner then placed a fictional child figure, the same sex as the participating child, on a marked space (bottom, centre) of the felt board and asked the child for approval to tell him/her a few stories. Each story was visually represented by an additional felt board figure. Following each of the six stories, the children were asked where they thought God was and to take their God figure and place it on that location. When the child had made the location selection, the examiner put a small numbered dot on the lower edge of the God figure that was closest to the visually represented child figure. In-between stories, children were asked to hold the God figure in their hands. At the end of the study procedure, the children were acknowledged for their

contribution, given the cinema tickets, and taken back to the waiting room. Mothers were thanked and debriefed.

### *Material*

A mini-disc recorder, placed on a cupboard by the table (out of the child's visual space), was used to record the interview. A small, flat, and unobtrusive microphone was utilized. The six separation interview pictures, which differed by sex of protagonist child for boys and girls, were taken from the Swedish translation of the interview system (Broberg, Wiberg, & Karlsson, 2000). The faces of separating child and parents were affectively neutral.

We used a rectangular felt board (59 × 99 cm) in black cloth. Attached were 10 "God figures" in cloth, inspired by Eshleman et al. (1999). There were five bigger (9–14 cm wide and 7.5–12.5 cm high) and five smaller (but in other regards identical; 5.5–7.5 cm wide and 3.5–8 cm high) figures in two rows, with the larger figures on the top row and the corresponding smaller figures immediately below, in the following order (from left): a cloud, a circle, a heart, a woman, a man. We also utilized a fictional girl in felt cloth when interviewing girls and a corresponding boy when interviewing boys (both 5 cm wide and 8.5 cm high). As no ethnic minorities were represented, their skin was light beige, and their hair brown. The boy had blue pants and a green sweater, the girl a yellow dress. To visually represent the stories (see *Instruments*), a red mouth in felt cloth was attached on the fictional child's face in stories 2 (U-shaped) and 6 (inverted U-shape). A brown dog, a white hospital bed, a red book with white pages, and a blue bike were used to illustrate stories 1, 3, 4, and 5, respectively. These objects were also made out of felt cloth and were placed to the left of the fictional child. Small, numbered (1–6, one for each story) dots were used to mark the distance of the God figure to the fictional child. All figures were sticky on the reverse to stay attached to the felt board.

### *Instruments*

*The adapted Separation Anxiety Test* (SAT; Kaplan, 1985, 1987). In the SAT, the participant is presented with six pictures of varying parent–child separations: (1) the parents go out in the evening and leave the child at home; (2) the parents go away over the weekend and leave the child with relatives; (3) the mother leaves the child for its first day at school; (4) the parents go away for 2 weeks and give the child a gift as they leave; (5) in a park, the parents ask the child to go play so that they can talk; and (6) the parents tell the child goodnight and leave the room in the evening. What is happening during each separation is clearly described by the examiner, and then followed up by questions regarding what the separated child might feel and do.

This method was originally devised for use with adolescents (Hansburg, 1972), but was adapted for 6-year-olds by Klagsbrun and Bowlby (1976). Kaplan (1985) retained six separation photographs and, as in previous versions of the SAT, the examiner asked what the pictured child would feel, as well as what the pictured child would do. In addition, we used the 15 follow-up probes recommended by Kaplan (1985) in four of the situations.

The interviews were transcribed before they were coded according to the Kaplan (1987) coding manual. We used the categorical system in subsequent analyses. First, the SAT text was considered *secure-resourceful* (B) if the child ascribed (a) a feeling of sadness, anger, or some other form of distress to the pictured child, and also (b) was able to provide a

constructive solution for what the pictured child would do in the majority of situations, e.g., persuading the parents not to leave, social play involving peers or relatives, constructive, independent, and detailed play activities.

Second, the text was judged *insecure/avoidant-inactive* (A) if the child gave responses to the “feel questions” implying distress in the pictured child but in the absence of constructive, detailed solutions to the “do questions” (e.g., “I don’t know,” “Nothing,” “Run away,” “Just play”). A small minority of avoidant children also fail to acknowledge the reality of the separation, evidenced in “do responses” such as “go with them.” Third, the text was considered *insecure/ambivalent-aggressive* (C) if the pictured child displayed aggressive or passive aggressive behaviours against parents or contradictory solutions (e.g., hit parents in one picture, seek parental contact in another) or overly sweet, role-reversing behaviours (e.g., bring parents a gift).

Finally, the text was judged *insecure/disorganized-fearful* (D) if the child or pictured child seemed inexplicably afraid and unable to do anything about it. Indices of fear included prolonged and repeated silences and whispering, linguistic disorganization (e.g., “yes-no-yes-no-yes-no”), and catastrophic fantasies in which the parents or child died. D classifications are also made based on out-of-control behavioural disorganization in the participating child (e.g., hitting and being mean to the examiner).

Kaplan’s adaptation of the SAT has shown adequate developmental validity in 5–7-year-olds, most notably in relation to the same individual’s infant strange situation classification with mother in three samples (Grossmann, Grossmann, Fremmer-Bombik, Kindler, Scheurer-Englisch, & Zimmermann, 2002; Jacobsen & Hofmann, 1997; Main et al., 1985). Also, SAT classifications based on the Kaplan adaptation have prospectively predicted the same individual’s AAI classification in early adulthood (Main, Hesse, & Kaplan, 2005). Interviews were coded by the first author, who was blind to all other data except participant sex. The coder has been personally trained by and achieved full reliability (>80%) with Dr. Nancy Kaplan across all four categories and more than 30 transcripts.

*God’s perceived closeness.* We adapted Eshleman and colleagues’ (1999) stories to tap God’s perceived closeness in attachment activating and neutral situations. More specifically, we retained but elaborated on their attachment activating stories (1, 3, and 5, below). These stories involve loss through death, illness, and pain, all of which were thought by Bowlby (1969/1982) to activate the attachment system. We created new attachment neutral stories (2, 4, and 6). These were created so as to be able to address and rule out effects from good (2) and bad (6) mood on God’s perceived closeness from the effects of attachment activation. A final neutral situation (4) was constructed to be exploration-related but affectively neutral. The stories were told in the following order to all children:

*This is a boy/girl. . .*

- (1) . . . He/she has had a dog for a very long time. He/she has played with it almost every day. And now the dog has died.
- (2) . . . He/she is out playing. The sun is shining and it’s pretty warm outside. He/she is in a good mood.
- (3) . . . He/she got sick. After a few days, he/she had to go to the hospital. He/she is now lying in a bed at the hospital.
- (4) . . . He/she walks toward a table. There is a book on the table. He/she sits down by the table and starts to read. He/she sits there for a while, reading.

- (5) ... He/she is out biking. Suddenly, he/she drives into a stone. He/she is then thrown off the bike and lands on the street.
- (6) ... He/she does not feel that it's a good day today. It's raining and he/she cannot go out and play. He/she is in a bad mood.

Immediately after each story, participating children were asked, "Where do you think God is then? Take your God figure and place it where you think God is." God's closeness was the shortest distance between the God figure and the fictional boy/girl on the felt board, measured in mm with a benchmark after the lab procedure was finished. Thus, a high value denotes greater distance and a low value denotes greater closeness to the fictional child. We created two *God's closeness* average score variables, one for the attachment activating situations and one for the attachment neutral situations. Both of these had adequate internal consistency reliabilities ( $\alpha = .71$  and  $.66$ , respectively).

Finally, *Maternal Level of Religiousness* was measured with a 6-item version of the Level of Religiousness Scale (Granqvist, 1998), tapping religious beliefs ("I have a religious faith"), commitment ("Religion is important for me in my everyday life"; "I give /will give/ my children a religious upbringing"), activity ("I regularly visit Church [the Mosque, Temple, Synagogue, etc.]"), and behaviours ("I regularly pray to God"; "I regularly read religious literature [the Bible, Koran, etc.]"). Items were scored on a 1–6 scale, where 1 = Strongly Disagree and 6 = Strongly Agree, and summed to create average scores. As in previous studies (e.g., Granqvist, 1998; Granqvist & Hagekull, 2003), internal consistency was high in the present study ( $\alpha = .94$ ). This measure was used in two different ways in subsequent analyses; first as the original continuous scale and second as a classification of low ( $n = 19$ ) and high ( $n = 21$ ) maternal religiousness groups following a split at scale mean. Following the ANOVA analytic strategy (see *Tests of hypotheses and research questions*), the classification into high and low groups was made to allow the use of this variable as an independent variable in subsequent analyses.

## Results

### *Descriptive statistics and preliminary analyses*

The distribution of the attachment classifications was: secure-resourceful (B),  $n = 14$  (35%); insecure/avoidant-inactive (A),  $n = 20$  (50%); insecure/ambivalent-aggressive (C),  $n = 3$  (7.5%); insecure/fearful-disorganized (D),  $n = 3$ , (7.5%). As the research questions concerned secure vs. insecure comparisons and there were so few C and D category assignments, insecure participants were aggregated to one insecure group,  $n = 26$  (65%). The aggregation of the insecure groups was also considered motivated on the basis of a descriptively similar patterning of results on the God's closeness variable in attachment activating as well as neutral situations. Moreover, inferentially, a two-way (type of insecurity X type of situation) repeated measures ANOVA on God's closeness showed no significant effects,  $F(1-2, 23) = .06, .15, \text{ and } .62, \text{ n.s.}$ , for type of insecurity, type of situation, and their interaction, respectively.

There were no sex differences on any of the study variables according to chi-square and  $t$  tests. Also, there was no difference between children from religious and non-religious homes on secure vs. insecure attachment classification according to a chi-square test. Hence, results were analysed across sexes, and the effects of attachment and type of home were analysed independently. To examine the validity of the religious vs. non-religious home contrast, Maternal Level of Religiousness was compared across the two sub-samples.

Supporting the construct validity of the home distinction, mothers in the religious home group ( $M = 4.49$ ,  $SD = 1.30$ ) had a significantly higher level of religiousness than mothers from the non-religious home group ( $M = 2.53$ ,  $SD = 1.41$ ),  $t(38) = 4.57$ ,  $p < .0001$ . Also, the religious vs. non-religious home contrast was related as expected to the high vs. low maternal religiousness classification groups,  $\chi^2(1) = 12.13$ ,  $p = .0005$ .

#### *Tests of hypotheses and research questions*

The hypotheses and research questions were analysed in a three-way repeated measures ANOVA with security (secure, insecure) and type of home (religious, non-religious) as between-subject factors and type of situation (attachment activating, neutral) as within-subject factor. The dependent variable was God's closeness. For completeness, all effects will be described, although the research questions primarily concern the main effect of type of situation (normative attachment hypothesis), the two-way security by type of situation interaction (compensation vs. IWM correspondence), and the two-way security by type of home interaction (social correspondence). Means and standard deviations on God's closeness by type of situation, type of home, and attachment security groups are shown in Table I.

Regarding main effects, type of situation and type of home displayed significant effects, whereas security did not,  $F(1, 36) = .014$ , n.s. As predicted, children placed the God symbol significantly closer to the fictional child when he/she was in attachment activating ( $M = 126$ ,  $SD = 99$ ) than when in attachment neutral ( $M = 160$ ,  $SD = 119$ ) situations,  $F(1, 36) = 7.43$ ,  $p < .01$ . Also, children from religious homes ( $M = 95$ ,  $SD = 97$ ) placed the God symbol significantly closer to the fictional child than children from non-religious homes ( $M = 191$ ,  $SD = 85$ ),  $F(1, 36) = 9.34$ ,  $p < .01$ .

Concerning the two-way interactions, the type of situation by type of home interaction was non-significant,  $F(1, 36) = .15$ , n.s. Thus, the normative attachment activation effect was not dependent on whether or not the children came from religious homes. However, the interaction between security and type of situation was significant,  $F(1, 36) = 4.50$ ,  $p < .05$ . Thus, attachment security moderated the difference between attachment activating and neutral situations. The interaction between security and type of situation on God's closeness is shown in Figure 1.

As shown in the figure, secure children made a clearer distinction between attachment activating and attachment neutral situations, placing the God symbol closer to the fictional child in the attachment activating situations ( $M_{\text{sec}} = 114$ ,  $SD_{\text{sec}} = 97$ ;  $M_{\text{insec}} = 137$ ,  $SD_{\text{insec}} = 101$ ) and farther away in the neutral situations ( $M_{\text{sec}} = 176$ ,  $SD_{\text{sec}} = 124$ ;  $M_{\text{insec}} = 145$ ,  $SD_{\text{insec}} = 117$ ) than did insecure children. This result supported the IWM

Table I. Means and standard deviations on God's closeness (mm), by type of situation (attachment activating, attachment neutral), type of home (religious, non-religious), and security (secure, insecure) groups ( $N = 40$ ).

	Attachment activating		Attachment neutral	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Religious home				
Secure	70	120	124	160
Insecure	91	83	95	91
Non-religious home				
Secure	158	59	227	71
Insecure	185	100	194	124

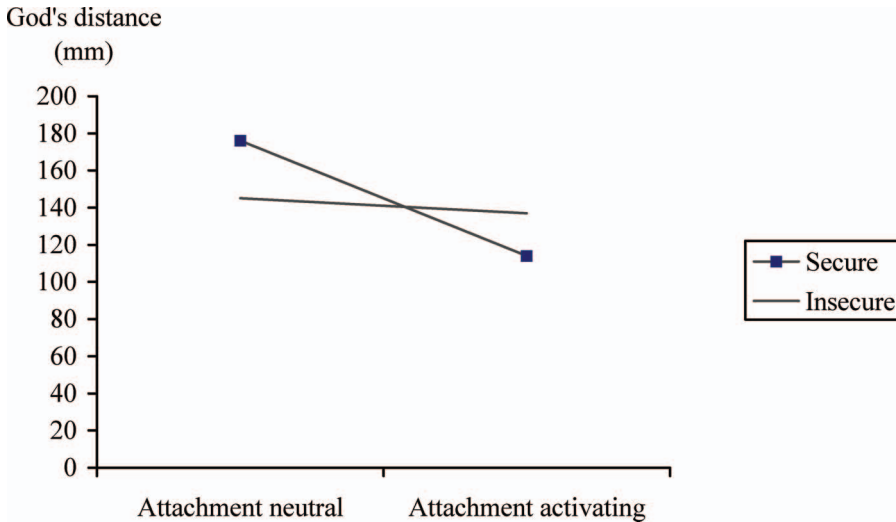


Figure 1. Interaction between security of attachment (secure, insecure) and type of situation (attachment activating, neutral) on God's closeness,  $F(1, 36) = 4.50, p < .05$ .

aspect of the correspondence hypothesis, as securely attached children, to a larger extent than insecurely attached children, perceived God as closer in attachment activating than attachment neutral situations ( $M_{\text{diff-sec}} = -62$ ;  $M_{\text{diff-insec}} = -08$ ).

The remaining two-way interaction (security by type of home) failed to reach significance,  $F(1, 36) = .00$ , n.s., as did the three-way interaction (type of situation by security by type of home),  $F(1, 36) = .03$ , n.s. Hence, no support was obtained for the social correspondence hypothesis, nor was the moderating influence of attachment security on God's closeness in attachment activating and neutral situations dependent on whether or not the children came from religious homes.

An additional three-way repeated measures ANOVA was performed using maternal religiousness groups instead of the religious vs. non-religious home contrast as an independent variable. Hence, besides low and high maternal religiousness, security (secure, insecure) was another between-subject factor and type of situation (attachment activating, neutral) was a within-subject factor, with God's closeness as the dependent variable. This analysis yielded a virtually identical patterning of results to that reported above. First, there was a significant main-effect of maternal religiousness ( $p < .001$ ). Second, the two-way interaction of maternal religiousness and type of situation was non-significant, as was the three-way interaction between maternal religiousness, type of situation, and security. Finally, the two-way interaction between maternal religiousness and security was approaching significance ( $p = .054$ ). The pattern of this interaction was virtually identical to that shown in Figure 1.

## Discussion

The study results supported the normative tenets of attachment theory as applied to children's views of God, in that God was perceived as closer in attachment activating than attachment neutral situations. Moreover, this normative attachment activation effect on perceptions of God's closeness was independent of whether or not the children were brought up in a religious home. However, the normative attachment effect was moderated by attachment security, thus that secure children distinguished more between attachment

activating and neutral situations in their perceptions of God's closeness, viewing God as closer in attachment activating situations and more distant in attachment neutral situations than did insecure children. This moderating effect of attachment security supported the notion of generalizing secure working models to the perception of God as available in times of need. However, no support was obtained for the idea that secure children are more receptive to adopt their caregivers' views of God than insecure children (social correspondence).

Generally, the findings supported the proposal that attachment processes are involved in children's perceptions of God. More specifically, the results suggest that God is viewed as a potentially available safe haven during distress, in that the perceived proximity to God is greater in attachment activating situations than in good-mood, bad-mood, and affectively neutral exploration situations. These findings converge with the findings of several other child studies (e.g., Eshleman et al., 1999; Tamminen, 1994). One way to understand these results is in terms of attentional processes. As attachment concerns are activated, children's attention is switched to physical proximity between the child whose attachment system is active and an attachment-like figure (i.e., God) that is available in the situation.

However, this normative scenario is importantly modulated by individual differences in attachment security, as deriving from differential experiences of caregiver sensitivity to the child's needs. In line with Main's (1991; Main et al., 1985) idea of attentional organization, it was particularly secure children who switched their attention to physical proximity with the attachment-like figure during attachment activation, whereas insecure children did not make such a clear distinction between attachment activating and neutral situations. These findings imply striking similarities to secure and insecure children's behavioural organization in the strange situation (e.g., Ainsworth et al., 1978). Secure children focus on proximity during attachment activation and explore other aspects of the surrounding with relative ease when the attachment system is less active, whereas insecure children behave more similarly across levels of attachment activation, either clinging to the caregiver or engaging in defensive exploration in both types of situations.

The moderating influence of security hence supported the IWM aspect of the correspondence hypothesis. Children with secure IWMs viewed God as closer during attachment activation, and as less close in attachment neutral situations than did insecure children. The results for the attachment activating situations are conceptually in line with previous suggestive findings in the domain of child-parent relations and religion, showing reports of positive parenting linked to reports of a positive God image (e.g., De Roos et al., 2004; Dickie et al., 1997; Tamminen, 1994). However, none of the previous studies distinguished between attachment activating and neutral situations, thus failing to take into consideration the differential God views of children with positive and negative experiences in relation to whether or not attachment concerns were active. In the present study, there was no main effect of attachment security on global perceptions of God's closeness (i.e., independent of attachment activation). Thus, the results of this study had a higher degree of theoretical precision. One important reason for this may be that we used semi-projective assessments, whereas the previous studies relied solely on global self-reports of parenting and God-image. The only previous study that used an established attachment assessment method showed null-relations between security with mother and global reports of God image (De Roos et al., 2001). If that study had distinguished between views of God during attachment activation and neutral conditions, its results might have come out differently.

Logically, the results supporting IWM correspondence were in opposition to the compensation hypothesis; insecure children did not view God as a source of distress

regulation. One important reason for the support of IWM correspondence at the expense of compensation may be the indirect, semi-projective mode of measuring both attachment and God's perceived closeness. Similarly to using subliminal priming (Birgegard & Granqvist, 2004), this assessment technique may have undermined the use of a higher order compensation strategy in insecure children, leading instead to automatic activation of IWMs (cf. assimilation effects in priming studies; Wheeler & Petty, 2001). Another reason may be that a higher degree of stress than introduced here is required to produce compensation effects, for example, stress more directly targeting the children themselves rather than imaginary peers (cf. Dickie et al., 1997; Eshleman et al., 1999; Granqvist, 2003). A final reason may be age-related. Perhaps a compensatory use of religion for insecure individuals emerges somewhat later in development when their reliance on a conditional attachment strategy (Main et al., 1985) proves insufficient for dealing with new and larger stresses, such as the emotional demands of a romantic partner or relationship break-ups (e.g., Granqvist & Hagekull, 2003). Hence, the use of religion to regulate distress may require that the conditional strategy, particularly the minimizing strategy characteristic of the most common insecure category (i.e., avoidant attachment), momentarily breaks down and that the individual has acquired the maturational flexibility to seek support through compensatory means outside of "earthly" attachment relationships.

Neither the normative attachment activation effect nor the moderating influence of attachment security was modulated by whether or not the children were brought up in religious homes. This implies that attachment activation and security act independently of parental religiousness in children's perceptions of God's availability as a safe haven. How can one understand the fact that children who were not brought up religiously nevertheless viewed God as closer in time of stress? Unlike other surrogate/transitional objects (e.g., blankets, dolls), God is a culturally sanctioned creature outside of the immediate home (e.g., through bible stories in school) and is taken seriously by adults. God may be brought up also within non-religious homes in the context of adversities, such as loss through death, when a non-believing caregiver may want to give the child a (false but hopeful) message of a just world, the possibility of continued existence, reconciliation after death, etc. Of course, this message will be equally hope inspiring for a non-religious parent who may not know what to expect following, for example, death of a loved one. After all, there are few (internally consistent) atheists in foxholes. Hence, the child would learn a concept of God, regardless of whether the caregiver embraces and lives in accordance with an intellectual belief in God. Similarly, an object relationist, Rizzuto (1979), has claimed that everyone as a child will acquire a cognitive-affective-representation of God, which is, as other similar representations, partly unconscious and not necessarily corresponding to an intellectual embracement of the postulate of God's existence. This "God representation" is presumably partly shaped by attachment-related experiences and activated by attachment system activation (see also Granqvist, 2006), independently of whether the individual and his/her caregiver intellectually believe in God.

The absence of moderating support for the religious vs. non-religious home contrast in relation to the effect of security on children's views of God's closeness means that the social correspondence aspect of the correspondence hypothesis was not supported. At the same time, the religious vs. non-religious home contrast displayed main-effects such that children from religious homes placed God closer to the fictional child regardless of whether the situations involved attachment activation. Jointly, this suggests that early social learning of religion may not specifically affect the protective (as opposed to affiliative) components of the God relation, in contrast to the effects of attachment-related experiences and representations. Also, the affective quality of the attachment relationship with caregivers

seems not to make a contribution to the receptivity of the offspring to adopting parental religious standards at these young ages. This is unlike the case with adolescents and adults, for whom security-related experiences have presumably increased the receptivity to adopting parental religious standards (Granqvist, 2002; Granqvist & Hagekull, 1999; Granqvist et al., in press; Kirkpatrick & Shaver, 1990). Again, there may be maturational reasons for this discrepancy. An older individual may have the possibility, behaviourally and intellectually, to affirm or not affirm the preaching of parents, and this is importantly affected by the emotional quality of the offspring's attachment history with parents. In contrast, young children may not be able to guard themselves even against the preaching of insensitive attachment figures, as these figures (and early on, almost exclusively these figures) importantly contribute to the child's worldview. Thus, the affective tone of the relationship determines perceptions of whether God is available specifically in times of stress, but would not modulate the offspring's general receptivity to the attachment figure's religious outlook until later in development.

Concerning methodological considerations and future studies, it was not practically feasible time wise in the present study to add other figures besides God to the felt board procedure, as children were interviewed on the SAT, and did other tasks as well. This is an obvious methodological limitation of the study. Future studies should test the theoretical specificity of the findings reported here by comparing God symbol placement in attachment activating and neutral situations: first, with the placement of symbols that are definitely not thought to involve attachment (e.g., most inanimate objects, distant relatives) and, second, with the placement of symbols that do not involve attachment figures but are nevertheless used to regulate affect (e.g., blankets, dolls). While the first test is imperative on grounds of discriminative validity, the second test may be theoretically informative of the role that perception of God fills compared to other transitional objects in the child's life. Similarly, in the present study, the children had no options except different God symbols to choose from, implying that they had to make God placements even if they actually had no "living" God representation (Rizzuto, 1979). Consequently, the results of the present study cannot address this issue. It would be theoretically informative in future studies to have different symbols (e.g., God vs. blanket) compete for the child's selection.

Even though the present results show that children view God as a potentially available safe haven during attachment activation, they cannot be interpreted as showing that the children themselves use God as an attachment figure. First, the methodology used was semi-projective, implying that self-relevance can only be inferred. We performed a post hoc test to examine whether such an inference is valid by correlating an aggregated God's closeness variable (i.e., across attachment activating and neutral situations) with the child's own view of God as loving and caring (De Roos et al., 2001). The correlation was negative ( $r = -.52$ ) and highly significant ( $p < .001$ ), showing that children who placed God closer to the fictional child also personally viewed God as more loving and caring than children who placed God farther away, thus supporting the inference of self-relevance. Notably, though, the loving/caring God image scale was not related to the attachment categories, in line with the null results of De Roos et al. (2001). Second, the study only addressed the proximity and safe haven functions of "attachment to God," and not other aspects of attachment (e.g., separation anxiety, secure base). Through modifications of the felt board procedure, future studies could address these additional aspects as well.

A majority (65%) of children in the present study were insecurely attached. This might be surprising if seen in the light of the normative distribution of infant attachment classifications, where a majority of children are securely attached. However, normative SAT data are absent and a high proportion of insecurity is not uncommon when the

preschool systems are employed (e.g., Solomon & George, 1999), possibly due to maturational transitions. The cross-cultural generalizability of the present findings, as well as the entire attachment conceptualization of religion, should be addressed in future studies. Hitherto, almost all attachment and religion studies have been conducted within a Christian context (for an exception, see Gurwitz, 2004), and more studies are needed in other religions that express belief in an anthropomorphic, personal God who is involved in the individual's life (e.g., Islam, Judaism). As for the present findings, the normative attachment activation effect on God placement replicated, with a more clear-cut distinction between attachment relevant and irrelevant situations, previous findings obtained in a very different Christian context than the liberal theology context of Sweden, namely the US "Bible belt" (Eshleman et al., 1999). The attachment normative finding of the present study has also recently been replicated in an additional US sample (Dickie, Charland, & Poll, 2005). However, in the latter study, which included mostly highly religious parents and in which God-distance-to-self assessments preceded the God-distance-to-the-fictional-child assessments, the moderating role of attachment security displayed a different pattern. It is difficult to locate the exact source(s) of this discrepancy. Needless to say, future studies are needed to explain and resolve this issue.

Regarding methodological strengths, the present study was the first attachment and religion study to use a developmentally well-validated mode of child attachment assessment while making clear-cut theoretical distinctions between attachment relevant and irrelevant situations. We believe that both aspects of methodological improvement enhanced the possibility of submitting the hypotheses of attachment processes involved in religion to the test, and that it is vital for future studies in this domain to take advantage of and further enhance this level of methodological sophistication. Consequently, and to conclude, we have seen that children view God as closer in situations involving attachment activation than in simply good-mood, bad-mood, and neutral situations. Moreover, this normative effect is independent of parental religiousness, but moderated by security of attachment along the lines suggested by IWM correspondence. Thus, just as the attention and behaviours of secure children flexibly shift, depending on attachment system activation, between attachment and exploration, so do their perceptions of God's closeness.

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