Empirical Studies of Christian Prayer: A Review of the Literature

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Christian prayer is a central religious practice which has received scant attention in psychological research. The two major types of prayer are verbal and contemplative prayer. A review of the empirical studies of prayer suggests that the work done in this area can be divided into four categories: (a) developmental studies of conceptions of prayer; (b) research on motivations for praying; (c) studies of the effects of verbal prayer; and (d) studies of the effects of contemplative prayer. The studies on the development of the concept of prayer generally have found patterns consistent with Piaget's stages of moral and cognitive development. Regarding motives for prayer, Welford (1947) supported the hypothesis that prayer is not just a neurotic flight from anxiety. Elkins et al. (1979) found verbal prayer to be generally ineffective in anxiety reduction. Parker and St. Johns (1957) demonstrated that a program of spiritual development that includes verbal prayer can be effective as a therapeutic intervention. The findings of Sacks (1979) suggest that contemplative prayer may facilitate ego development. Opportunities for further research on prayer are discussed.

Nowhere is the longstanding breach between psychology and religion more evident than in the lack of research on prayer. Only a few studies of prayer exist in spite of the fact that prayer is of central religious importance. This article develops a conceptual model for prayer and reviews research related to this religious practice.

Definitions of Prayer

Prayer can be defined as "every kind of inward communion or conversation with the power recognized as divine" (James, 1902/1962, p. 464). As such, prayer can be conceived as similar to all social relationships in that an imaginative social process takes place mentally in which an idea of oneself and an idea of the other are related (Strong, 1909; Sunden, 1974). The nature of prayer differs from religion to religion depending upon the way the divine is conceived. In Christianity God is seen to be essentially all-loving and all-powerful, the one who has revealed himself in Jesus, the Christ. In the Christian tradition prayer is, thus, intimate communication with a benevolent deity. This article will focus on Christian prayer although it will, at times, review studies which have wider implications.

Heiler's (1932/1958) phenomenological analysis of prayer in general, is probably the most comprehensive. He concludes that there are two types of prayer, mystical and prophetic. Mystical prayer in Heiler's
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Prayer: Functions and Processes

A number of writers have considered the function of prayer. Some have viewed it as basically an expression of need (Heiler, 1932/1958; Pratt, 1930, pp. 318-320; Selbie, 1924, p. 220; Johnson, 1945, p. 112, Hodge, 1931). Others have concluded that prayer is essentially an affirmation of faith (Ellens, 1977; Phillips, 1965).

Some theorizing has been devoted to the psychological processes active in prayer. The one that has received the most attention is hypnotic suggestion (Coe, 1900, 1916; Cutten, 1908; Hodge, 1931; Horton, 1931; James, 1902/1963; Pratt, 1930; Relton, 1925; Selbie, 1924; Strunk, 1959; Thouless, 1923/1956; Valentine, 1929). Theoretical discussions of mysticism and meditation are grounds for speculating that additional psychological processes involved in contemplative prayer include regression (Freud, 1929/1961; Allison, 1966, 1968; Arieti, 1967; Committee on Psychiatry and Religion, 1976; Fingarette, 1958; Kris, 1936; Maupin, 1962, 1965; Owens, 1972; Prince & Savage, 1972), a deautomatization of perception and cognition (Carrington, 1977; Deikman, 1966; Goleman, 1971; Ornstein, 1971), a conditioning of a lower level of arousal through induction of a relaxation state (Shapiro, 1980), and desensitization (Goleman, 1971; Carrington & Ephron, 1975; Otis, 1974).

Beyond studies on the frequency of prayer (Strommen, 1971, pp. 553-554, 560), the empirical work that has been done can be divided into four groups: (a) Developmental studies of conceptions of prayer; (b) research on the motivations for praying; (c) studies of the effects of verbal prayer; and (d) studies of the effects of contemplative prayer.

Empirical Studies on Prayer

Developmental Studies of Conceptions of Prayer

Regarding the first category of the research on prayer, six studies have been done...
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on the development of the concept of prayer (Brown 1966, 1968; Godin & Van Rooey, 1959; Goldman, 1964; Long, Elkind, & Spilka, 1967; Thouless & Brown, 1964). All of these deal with the period of childhood through adolescence. These studies have been reviewed elsewhere in detail (Godin, 1971, pp. 134-135; Elkind, 1971, pp. 673-675). Patterns consistent with Piaget's stages of moral and cognitive development were generally observed (Godin & Van Rooey, 1959; Goldman, 1964; Long, Elkind, & Spilka, 1967). It was also frequently found that with increasing age, there is a decline in the belief that prayer will have material consequences (Brown, 1966, 1968; Godin & Van Rooey, 1959; Goldman, 1964; Thouless & Brown, 1964). A third conclusion of the research on the development of the concept of prayer in childhood and adolescence is that a child's concept of prayer develops from vague associations with the term "God" to a private conversation with God in which very intimate things are shared (Long, Elkind, & Spilka, 1967). Finally, it has been observed that as a child matures chronologically there is a movement in the content of petitionary prayer from egocentric wish fulfillment for such things as candy and toys to altruistic desires for such things as peace on earth (Long, Elkind, & Spilka, 1967, p. 103).

Motivations for Praying

Few studies have explored the motives for prayer. Welford (1947) investigated the question of whether petitionary prayer in adulthood was a positive means of adjustment to unusual or baffling situations or just a neurotic flight from frustration. He hypothesized that if petitionary prayer was correlated with both positive and negative emotion in addition to frustration, this would support the hypothesis that petitionary prayer is more than a reaction to frustration.

Welford (1947) surveyed 63 male students between 18 and 25 years of age who were all church-goers. The subjects were given descriptions of six situations, three of which were pleasant and three unpleasant. They were told to imagine themselves in the situations and to rank order the anecdotes on three bases. The first ranking was the order in which the situations would stir their emotions and was used as an indicator of affect. The measure of frustration was based on the extent to which the situations would be beyond their power to handle them, except by praying. The third ranking was the likelihood that they would pray in the situation and was the prayer measure.

Correlating rank orders, he found significant relationships \( p < .01 \) between prayer and affect \( r = .51 \), prayer and frustration \( r = .59 \), and affect and frustration \( r = .38 \). When frustration was partialled out from the correlation of prayer and affect, the mean correlation was still significant \( r = .33, p < .01 \). When affect was partialled from the correlation of prayer and frustration, it, too, was significant \( r = .47, p < .05 \). Thus, his hypothesis was confirmed.

The subjects were also asked why they were more likely to pray in some situations and not others. These reasons for prayer seemed to divide into two groups. One group saw prayer as a means of changing the situation, while the other group tended to view it as a way of altering their subjective response to the situation. These qualitative reports also stressed that prayer was a means of adjustment to be used when no other course of action seemed viable.

Welford's (1947) research provides an empirical basis for understanding petitionary prayer as a response to need. Considering the independent correlation of both affect and frustration with prayer Welford concluded, "Any simple hypothesis which regards prayer as a response merely to distressing, threatening forces in the environment is inadequate" (p. 317). His findings suggest that petitionary prayer is motivated both by the need to reduce frus-
Galton noted that members of royal houses had the lowest average life expectancy. This was in spite of the tradition of praying for the sovereign. He went on to point out that the same group of statistics showed that eminent clergy fell behind lawyers and physicians in average life expectancy. He also made reference to the chapter, "Divines," in his work, *Hereditary Genius* in which a pattern of poor health was observed among leading clergy of the day. In Guy’s statistics, clergy as a whole had one of the longest average lifespans of the privileged groups examined, but Galton dismissed this as due to the easy country life of many local clergy.

Galton (1872) also cited other support for his conclusion that there is no objective efficacy to prayers of petition and intercession. He claimed that mortality rates for missionaries were not any better than for the general population and implied that they might be worse. He said that although one would expect parents to be praying for the health of babies soon to be born, the distribution of still-births is the same as that for all deaths. He noted that nobility were particularly subject to insanity and that religious madness was quite common.

Although Galton rejected the hypothesis that there is objective efficacy to petitionary and intercessory prayer, he concluded his article by saying it is of subjective value as a means of ventilating emotional pain and as a way of experiencing a comforting sense of communion with God.

To the modern scientist, it is obvious that Galton’s evidence, while intriguing, does not justify the definitive tone of his conclusion. In many cases, hard empirical data were lacking, and where statistics were provided, they were obviously open to other interpretations. The most glaring of these is the dismissal of the exceptionally long lifespan of all clergy combined. The assumptions about who prays and is prayed for and in what manner are also grounds for challenge. Nevertheless, Galton’s study is noteworthy because of his pioneering courage in doing empirical study of a central religious prac-
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tice in spite of the church’s strong resistance to such scrutiny.

The next major study of the effects of verbal prayer was published more than eighty years later. In 1957 William Parker’s experiment was reported in *Prayer Can Change Your Life*, a book written in a non-technical style and co-authored with Elaine St. Johns.

Parker’s subjects were forty-five volunteers ranging in age from 22 to 60. They were all suffering from either psychosomatic symptoms or experiencing considerable subjective emotional distress. The subjects were assigned to one of three groups, each containing 15 persons. Group 1 received weekly individual psychotherapy sessions. The people in this group expressed either a preference for psychotherapy or had been advised by their physicians to seek this treatment. Group 2 was labeled the “Random Pray-ers.” The subjects in this group were practicing Christians who agreed to pray daily that their specific problems would be overcome. They prayed in their accustomed manner. Group 3 was the Prayer Therapy group which followed a specified program for religious growth.

The length of the experiment was nine months. Pre-testing and post-testing was done using the following battery of psychological tests: Rorschach, Szondi, Thematic Apperception Test, sentence completion, and word association. An impartial psychometrist compared the scores of each person and arbitrarily assigned a percentage of improvement to each of them. Group 1, the psychotherapy group, showed an average improvement of 65%. Group 2, the Random Pray-ers, showed no improvement. Group 3, the Prayer Therapy group, had an average improvement of 72%.

The popular style in which Parker’s study was reported makes it difficult to know precisely what was done with the Prayer Therapy group. In broad outline, the therapy seems to have consisted of three parts. The first stressed honestly examining one’s mental life. The acknowledgement of any guilt, hate, feeling of inferiority, or fear was encouraged.

The second part of the therapy emphasized the limitless power and love of God. Participants were urged to identify the inadequacies in their conceptions of God and abandon them in favor of the notion of an ever-present God of love.

These first two portions of the therapy were apparently the warp and woof of a weekly two hour group therapy session. There seems also to have been an emphasis on obedience to the Law of Love in these therapy sessions, but the report is quite unclear on this point.

A third aspect of the Prayer Therapy was personal prayer according to very specific guidelines. Based on the psychological pre-testing, each week a sealed envelope was given each member of the Prayer Therapy group. The envelope contained a slip of paper on which was written one detrimental personality aspect revealed by the psychological tests. Each person’s homework was the elimination or improvement of this specific shortcoming through daily prayer. Four guidelines were given for this prayer. First of all, it was to be regular. Secondly, it was to be an act of surrender. The individual was to pray with the attitude of giving up his or her own desires and demands, seeking only to do God’s will. Thirdly, the prayers were to be positive, affirmative statements rather than desperate begging or negative statements. While praying, the subjects were to visualize themselves as they desired to be. Finally, the prayer was to be receptive. Participants in the prayer therapy were asked to pray believing that they had already received what they requested of God.

The experimental design used in this study makes causal inferences inappropriate. There was no random assignment to treatment groups. Since the prayer therapy was a multifaceted program, no conclusions about verbal prayer itself can be drawn. The positive outcome of the Prayer Therapy group does, however, encourage further investigation of a program of religious
development which includes positive petitionary prayer as a therapeutic technique.

The third study of verbal prayer was a brief single-subject design by Sajwaj and Hedges (1973). It was a study of the effects of mealtime prayer on a six year old boy who was moderately retarded. The child was oppositional and an extreme behavior problem in the home. For fifteen days, disruptions and appropriate table behaviors were recorded for ten-second intervals during dinner. The table grace had an adverse effect on the child’s behavior. For the eight days when dinner began with prayer, the median was 63% of the mealtime being disrupted. This median fell to 15% on the no-grace days. Appropriate dinner behavior showed a similar pattern. A comparison of means was much less contrasting, however. On the average, dinners started with grace were only somewhat more disrupted than no-grace mealtimes.

The researchers theorized that the mealtime prayer acted as a discriminative stimulus, signaling to the child that disruptive behavior would evoke parental attention. Qualitative observation supported this thesis. Sajwaj and Hedges (1973) concluded that further research on the stimulus functions of prayer is in order.

Surwillo and Hobson (1978) reported a fourth study on the effects of verbal prayer. They analyzed brain electrical activity during prayer which was primarily adoration and praise. The researchers hypothesized that there would be a slowing of electrocortical rhythms as measured by electroencephalograms (EEGs).

The subjects in the study were six adults, an equal number of each sex, whose ages ranged from 24 to 70 years. They were all members of the Church of God and regularly attended worship. On a scale of one to four, all subjects gave the maximum rating to the degree to which prayer was a meaningful part of their lives. The regular length of daily prayer for the various subjects ranged from 10 to 60 minutes.

During a twenty-minute prayer session each subject was asked to pray in their accustomed way and to concentrate on adoration and praise. The EEGs of these six subjects, which were recorded during the prayer sessions, showed a shift to shorter duration half-waves. Thus, the EEGs were faster, disconfirming the hypothesis. The EEGs were examined for patterns of drowsiness or sleep and none were found. The subject whose EEG showed the largest shift was also the person who exhibited the most devout behavior. She often got up at 5 a.m. in order to have an hour for prayer. During the laboratory prayer session she reported a flow of tears which was not uncommon for her when she prayed.

In the fifth study of verbal prayer effects, Carson and Huss (1979) examined the use of prayer and Bible reading by the nursing staff in the treatment of chronic undifferentiated schizophrenics who had not responded to psychotherapy. Unfortunately, the study has serious design deficiencies which make the results only suggestive. The treatment group was comprised of volunteers whereas the control group was not. The lack of random assignment to treatment conditions makes it impossible to infer causality. Also, the tool for assessing change was a non-standardized instrument on which no reliability or validity information were reported. Neither were any statistical tests of significance used.

The experimental group was comprised of ten Christian schizophrenics who met individually with nursing students for ten weeks. Each meeting was opened and closed with a written prayer. A passage of Scripture was also read each time. The prayers and Scriptures focused on the love of God and the worth of each individual to God. Thus, this study can be conceived as an investigation of prayer of adoration and praise. After the Scripture reading the students talked with their clients about anything they wished to discuss. The treatment of the control group was simply a therapeutic relationship. Change was assessed with an inventory adapted from “Elements

In contrast to the control group, the experimental group grew in their ability to express anger and aggression. They also became more hopeful about changing their lives, exhibited more appropriate affect, and decreased in somatic complaints.

The last study on the effects of verbal prayer compared the relative anxiety-reducing effects of prayer and muscle relaxation. It was carried out by Elkins, Anchor and Sandler (1979). In comparison to a control group, the muscle relaxation caused significant reductions in objective and subjective measures of anxiety whereas prayer did not.

The 42 subjects were composed of almost equal numbers of males and females, and were members of a Baptist church. Most of them held at least a baccalaureate degree. The anxiety measures were electromyogram (EMG) recordings of the frontalis muscle and Spielberger's State-Trait Anxiety Inventory (STAI).

Subjects were randomly assigned to one of three groups, a prayer group, a relaxation group, or a control group. The prayer group was subdivided into two subgroups. There was an intercessory group in which the participants favored prayer that sought objective divine intervention. The other subgroup preferred a reflective style of prayer in which the focus was on the communication of private feelings to God. Both groups prayed about events in their personal lives which were of concern to them.

The subjects were tested before and after a ten day training period. Analysis of covariance showed the muscle relaxation group to have significantly reduced muscle tension compared to the controls. Analysis of the STAI state anxiety scores revealed a similar pattern. The prayer group did not show significantly greater muscle relaxation as compared to the control group. However, there was a trend toward less subjective anxiety in the prayer group as measured by scores on the STAI. The prayer group participants subjectively experienced a greater amount of tension reduction than was indicated physiologically. There were no relationships between tension reduction in the prayer group and type of prayer style, intercessory or reflective. However, those prayer group members who rated prayer most important showed greater tension reduction on the EMG than did those who rated prayer less important. The researchers concluded that prayer was not shown to be effective in tension reduction although a trend in this direction was observed.

To summarize, there have been six studies of the effects of verbal prayer reported in the literature. Two of these are particularly noteworthy. Parker and St. Johns (1957) pioneered in utilizing techniques of spiritual development, including positive petitionary prayer, as therapeutic interventions. Elkins et al. (1979) investigated the anxiety-reducing effects of verbal prayer of both an intercessory and a reflective style and found that such verbal prayer is inferior to muscle relaxation and probably ineffective as a means to relieve anxiety.

The Effects of Contemplative Prayer

The last category of empirical research on prayer consists of those studies investigating the effects of contemplative prayer.

Techniques of meditation common to the world's major religions are often used as vehicles of contemplative prayer. Research on meditation (Shapiro, 1980) and mysticism (Hood, 1977; Hood, et al., 1979; Strunk, 1965) provide further elucidation of the concept of contemplative prayer but a detailed discussion of these is beyond the scope of this article.

Only two studies of the effects of contemplative prayer have been carried out. The first, by Marilyn Mallory (1977) was a multi-faceted study of members of the Discalced Carmelite Order whose central enterprise is contemplative prayer. The
teaching of St. John of the Cross is a primary theological resource for this group. Mallory’s central hypothesis was that asceticism would not correlate with mystical development whereas psychological and religious factors would do so.

Participants in the study were 53 nuns and friars from Holland and Dutch-speaking Belgium. There were 44 females and 9 males. Their ages ranged from 24 to 77.

The subjects were given an 187 item questionnaire on spirituality which contained six sections: prayer experiences, distractions in prayer, ascetical views, attitudes toward John of the Cross, ideas of God, and personal assessment of one’s level of advancement in contemplation. Responses were on a six point scale except in the ideas of God section in which an eight point scale was used. A large number of the items in the questionnaire were drawn directly from the writings of John of the Cross.

Participants in the study were also given a number of psychological tests: the Amsterdamse Biographische Vragenlijst by G. J. Wile, which is a Dutch adaptation of H. J. Eysenck’s Maudsley Personality Inventory; an adapted version of Barron’s Ego-Strength Scale; The Scale of Inter-Personal Values which has subscales for degree of conformity, degree of independence, altruism, leadership qualities, need for group support, and need for recognition; the Vragenlijst over Positief Innerlijk Welbevinden by H. J. Hermans which measures happy and unhappy emotionality; and the hysteria scale of the MMPI. The EEGs of a portion of the participants were also recorded during prayer.

The first section of the questionnaire, which was on prayer experiences, contained 68 items. It was factor analyzed with an oblique rotation. Fifteen factors were identified and named by two neutral judges.

Factors 1 and 8, which were labeled emotionally pleasurable mystical experience and emotional contemplation, were used as indicators of mysticism.

Correlating prayer experiences and psychological/sociological variables, a canonical correlation significant at the .01 level showed the sumscores of the mystical prayer factors, 1 and 8 together, correlated with the psychological variables of extraversion \((r = .23)\) and happy emotionality \((r = .41)\) as well as a number of other variables. This finding suggested that mysticism is associated with positive mental health.

Mallory (1977) also performed a canonical correlation with the sumscores of factors 3, 6, and 10, which were active visual prayer, active rational prayer, and troubled/distressed prayer. These together correlated \((p < .05)\) with the following psychological variables: neuroticism \((r = .43)\), psychosomatic neuroticism \((r = .32)\), introversion \((r = .43)\) and unhappy emotions \((r = .45)\). These correlations suggest that prayers involving rational processes are associated with mental distress.

A third major finding of Mallory’s study was that factors 1 and 8, the mystical factors, together correlated with the mild views of asceticism but not the strict views. Mild asceticism means trusting God and a passive receptivity to God’s love. For prayer, it implies a rejection of rational activity as a vehicle to divine communion. Severe asceticism implies such things as self-inflicted physical pain. The canonical correlation of the sumscores of the mystical prayer factors 1 and 8 and the mild asceticism items of the questionnaire was, however, marginally significant \((p < .20)\) and so cannot be considered very meaningful.

From the original 53 subjects, 14 were enlisted for EEG recordings during prayer. A significant reduction in alpha abundance during prayer was found \((p < .04)\). However, since this finding was based on a visual assessment of the EEGs and also because the laboratory facilities were grossly inadequate, the results can only be considered suggestive.

It is most unfortunate that the statistical procedures used by Mallory make her results untrustworthy. The factor analysis of
the first section of her spirituality questionnaire is the prime deficiency. She factor analyzed 68 items with only 53 subjects. Nunnally (1967, p. 421) has recommended at least ten times as many subjects as variables in order to guard against taking advantage of chance, while Gorsuch (1983, p. 148) requires 5 to 10 times as many subjects as variables and at least several hundred subjects. Mallory did not even have a 1:1 ratio of subjects to variables, and the total number was far less than even 100.

Further criticisms of Mallory's (1977) statistical procedures are these: She failed to consider the prodigious instability of canonicals; she seems to have treated factors as scales without giving any consideration to the general tendency for the internal consistency of factor scales to reduce as one moves from the initial to later factors; no Eigenvalues are given to know how far the major factor analysis of the study was carried; no justification was given for doing an oblique rotation.

Mallory's (1977) work must also be criticized because her conclusions do not follow from her data in some cases. For instance, she argued support of a particular chronology of prayer development from the intercorrelation of factors (pp. 40-41). Correlations are indications of association and imply nothing about sequence of events. She also stressed the correlation of mystical prayer with mild asceticism even though the canonical correlation was nonsignificant at the .05 level.

Howard Sacks (1979) also studied the effects of contemplative prayer. He examined the effect of Ignatius Loyola's spiritual exercises on the integration of the self-system. He hypothesized that the thirty day retreat required of those joining the Jesuit order would result in increased cognitive integration. An increase in integration was observed, but it only bordered on being statistically significant.

Sacks (1979) studied 50 male subjects who made their retreats in six Jesuit centers throughout the United States and Canada. The mean age was 22. All subjects had at least a high school education. Eighteen had an undergraduate college degree, and one had completed a master's degree. Four of the subjects dropped out and were omitted from the analysis.

Loevinger's test of ego development, which has a sentence completion format, was used in modified form. The altered inventory had a test-retest reliability of \( r = .92 \). The questionnaire was administered two months prior to the beginning of the retreat, two weeks before it, and one month after the end of the retreat. During the time of the retreat, novices were isolated from the outside world.

The mean scores for the three testings were 5.50, 5.48, and 5.78 in chronological order. The difference between the latter two means bordered on statistical significance \( (t = 1.63, (45), p < .058) \). Sacks noted that it is impossible to identify which aspect of the retreat was responsible for the results. In particular, the God-self interaction and the new social structure might both be major contributors to the increase in integration of the self-system.

Conclusions

This article has reviewed the empirical studies of prayer since 1872, about the time of the birth of psychology. They have been meager, to say the least, both in number and substantial findings. Nevertheless, several aspects of the work done to date on prayer are noteworthy. First, the studies of the development of the concept of prayer provide the most conclusive findings since their results were convergent. From childhood through adolescence patterns consistent with Piaget's stages of moral and cognitive development were observed (Godin & Van Rooey, 1959; Goldman, 1964; Long, Elkind & Spilka, 1967). Second, Welford (1947) gave empirical grounds for considering verbal petitionary prayer as more than just a neurotic flight from anxiety. His work also demonstrated one creative approach to studying motives for prayer with his rank
ordering of situations as to the extent to which they would evoke emotion, frustration, and prayer. Third, a beginning has been made to empirically assess the potential of verbal and contemplative prayer to enhance psychological health. Significant research on this issue has been done by Elkins et al. (1979), Parker and St. Johns (1957) and Sacks (1979). Elkins and associates found that verbal intercessory and reflective prayer are probably not effective in reducing anxiety. Parker's research raised the possibility that verbal positive petitionary prayer could form an effective core for group therapy. From Sacks it can be inferred that perhaps contemplative prayer may facilitate integration of the self-system.

There is opportunity for much further empirical investigation of prayer. Of course, replication and extension of the work done so far is needed. This would include investigation of the motives for prayer, the differential effects of the various kinds of prayer, and the psychological processes active in prayer. A second research area is the effects of prayer on religiosity and spiritual development. There seems to be no published work in this area. Finally, the relationship of Christian prayer to prayer of the other major world religions is waiting to be done. All of the studies identified to date have been of prayer in the Judeo-Christian tradition. Prayer of the other world religions has been virtually ignored unless one is willing to think of the meditation studies as investigations of prayer. This seems inappropriate, however, because no consideration has been given to the techniques of meditation as being viewed by the participants as means of relating to the divine. Prayer is a core religious practice and should not be neglected any more as a subject of research by those interested in the psychology of religion and the integration of psychology and Christian theology.

It should be remembered that Galton (1872) evoked a great deal of resistance from the religious community in studying prayer. This may still be the fate of the contemporary researcher. To some degree prayer is a sacrosanct subject. Some religious persons are reluctant to subject it to empirical investigation. Nevertheless, the subject is of such import that prayer research should proceed.

REFERENCES


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