CHANGES ACROSS AGE GROUPS ON MEASURES OF KNOWLEDGE, FAITH, AND BELIEF OF GOD'S PERSONAL CONCERN¹

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Summary.—One hundred Protestant, church-going children were surveyed concerning knowledge about the Bible, faith in God, and belief of God's personal concern. Statistically significant increases were found over five age groups (3–5 yr., 6–8 yr., 9–12 yr., 13–15 yr., 16–18 yr.) for the three variables: strong increases for knowledge and moderate increases for faith and belief of God's concern. These and other results are discussed.

A provocative article was recently published in Psychological Reports by Pierce and Cox (1995) dealing with the comparative development of young children's knowledge about God and the Bible (referred to as "Knowledge"), and their development of faith in God ("Faith"). Three age groups (3-5 yr., 6-8 yr., and 9-12 yr.) were tested; results indicated that Knowledge increased significantly with age across the three groups, while Faith did not. In the present study the authors duplicated the Pierce and Cox study and expanded it in two ways. First, two additional age groups (13-15 yr. and 16-18 yr.) were added since published research and the observations of many church workers suggest that during adolescence there is often a decline of faith in God (e.g., Francis, 1989; Anderson, 1990; Benson & Donahue, 1990). Second, in a study of 1700 school-age children (Anderson, 1990) faith in God was closely associated with an individual's belief in God's personal involvement and concern ("Personal Concern"). A longitudinal study conducted by Venden (1992) produced similar results. Questions to measure a Personal Concern variable were, therefore, included.

It was hypothesized that, congruent with the study by Pierce and Cox (1995), there would be a significant increase in knowledge over the five age groups. Next, while no changes were anticipated for the first three age groups, a significant decline for both faith and personal concern during the teen years was anticipated. Finally, it was hypothesized that faith would correlate significantly and positively with personal concern.

Method

Pastors from three Central Alberta Protestant churches (a United

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Church, a Pentecostal Church, and a Seventh-day Adventist Church) after hearing a description of the study, gave permission for experimenters to interview children in their Bible classes. One hundred subjects (10 boys and 10 girls in each of the 3–5 yr., 6–8 yr., 9–12 yr., 13–15 yr., and 16–18 yr. age groups) were selected from among children attending the Bible classes. Data were collected on four consecutive weekends.

Each child was individually asked to respond to a set of 30 open-ended questions: the 20 questions from the Pierce and Cox study that measured Knowledge (example, "Who was Noah?") and Faith (example, "Does God answer people's prayers?"), and 10 additional questions designed to measure the Personal Concern variable (example, "Do you have a real sense that God is guiding you?"). The Personal Concern items were selected by the authors from three other surveys (Parkins-Baumbach, 1987; Benson & Donahue, 1990; Venden, 1992) based on the appropriateness of questions for the subjects being tested.

Three interviewers, experienced in dealing with children, were given instructions to allow consistency of presentation to all subjects and were provided alternative wording for two of the questions to assist the youngest subjects. Based on the responses of the children, interviewers scored each question on a 3-point scale of little or none (0), moderate (1), and high (2), the same scale used by Pierce and Cox.

RESULTS AND DISCUSSION

The values for the three primary variables were approximately normally distributed (kurtosis and skewness values between ± 1.0) and internal consistencies ranged from excellent to acceptable (Knowledge, $\alpha = .90$; Faith, $\alpha = .59$; Personal Concern, $\alpha = .66$).

Ten questions for each variable (Knowledge, Faith, and Personal Concern) were designed to measure the three constructs. The scores for each of the 15 groups (5 age groups × 3 variables) were then calculated as follows—the Knowledge variable for 3- to 5-yr.-olds serves as an example. Each of the 20 3- to 5-yr.-old children received a Knowledge score that was the sum of the 10 items that measured Knowledge, yielding a value that varied between 0 and 20. The distribution of those 20 values was then compared with distributions for other groups.

Multivariate analysis of variance showed significant differences among all groups ($F_{12,285} = 9.53$, p < .0001). Univariate one-way analysis of variance was then conducted for each of the three variables to indicate whether differences between age groups were significant. For all three variables significant differences were found as reported below. *Post hoc* analyses using the *LSD* test (alpha value of .05) indicated between which groups significant differences occurred.

Results for Knowledge supported the first hypothesis and extended the findings of the Pierce and Cox (1995) study. For all five age groups the means (in Table 1) increased from younger to older children, and each of the five groups differed significantly from each other ($F_{4,95} = 114.71$, p < .0001). It seems apparent that, for this church-going sample of Protestant young people, increased knowledge about God and the Bible continues well into the teen years.

TABLE 1
Means and Standard Deviations For Five Age Groups
on Knowledge, Faith, and Personal Concern

Age Group	Knowledge		Faith		Personal Concern	
	M	SD	M	SD	M	SD
3–5 yr.	3.9 (4.3)*	2.5 (2.7)*	16.0 (18.2)*	2.0 (1.3)*	14.3	4.0
6–8 yr.	9.1 (11.6)	2.4 (2.9)	17.5 (18.7)	1.9 (1.3)	16.1	2.4
9–12 yr.	13.5 (14.6)	3.3 (3.2)	18.1 (18.8)	1.5 (1.1)	16.4	2.3
13-15 yr.	16.3	1.9	18.6	1.2	17.2	2.4
16–18 yr.	17.9	1.4	18.8	1.8	17.2	2.9

^{*}Results from the Pierce and Cox study (1995) are included in parentheses.

Contrary to the second hypothesis, scores on neither Faith nor Personal Concern declined during the teen years. In fact, mean values for faith (shown in Table 1) actually increased over the five age groups. *Post hoc* tests showed that all groups scored significantly higher in faith than the youngest group, and the two adolescent groups scored significantly higher than the two youngest groups ($F_{4,95} = 9.14$, p < .0001). This finding contrasts with both the Pierce and Cox study (1995) in which faith did not change for the three younger groups and with the Francis research (among a sample of 3600 students in nonchurchrelated state-maintained schools in England) that indicated a lessened interest in religious activities (and corresponding decrease in belief) during adolescent years (Francis, 1989).

For Personal Concern, means increased from the younger to the older groups (in Table 1), but the only statistically significant finding was that the four older groups scored higher than the youngest group ($F_{4.95} = 3.36$, p < .01). The trend, however, is consistent with modest increases for Faith. The correlation between Faith and Personal Concern, as anticipated, was .53 (p < .001) but not high enough to suggest linear dependency. Interestingly, there were no sex differences for any of the three variables either for the entire group or for any of the five subgroups.

The fact that the prior studies showing a decrease in religiosity during adolescence acquired participants from general academic settings (e.g., Francis, 1989; Anderson, 1990; Benson & Donahue, 1990) suggests that the strong increase in Knowledge and the modest increases in Faith, and belief

of Personal Concern found in the present study, may be related at least partially to the subjects being regular participants in church activities. This observation is not without practical application. A number of studies have shown that church participation by adults is positively associated with mental and emotional health indices (e.g., Donahue, 1985; Bernt, 1989; Heaven, 1990). In light of these findings, it might be well for parents to encourage continued church involvement to nurture similar qualities in their children.

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