

## AGE, GENDER, INTELLIGENCE AND RELIGIOUS WORRIES IN SECONDARY SCHOOL PUPILS

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This study examines the relationships between age, gender, intelligence and religious worries in a sample of 120 pupils aged 11 to 15 years attending a Welsh catholic comprehensive school. The pupils were administered the Raven's Progressive Matrices Test and a religious worries questionnaire. It was found that worries tended to decrease with age. Gender was not related to religious worry. A tendency for high intelligence to be slightly associated with worry in the younger group did not appear in the older group.

In general, it is probably true to say that teachers in secondary schools lack an adequate understanding of children's psychological needs in relation to religion (6). While a certain amount of research has been carried out on the religious beliefs of adolescents (cf 12), little attention has been devoted to their religious doubts and, in particular, to the extent to which such doubts might give rise to worries. In a recent review of research in religious education, Daines (3) has nothing to report on religious worries. Such studies as exist have concentrated on older student populations.

Kuhlen and Arnold (5) and Hilliard (4) have suggested that while adolescence is not necessarily accompanied by a complete repudiation of religion, doubts tend to grow during this period, reaching a peak at 17 years of age. Simon and Ward (12) report that even between the ages of 11 and 15, a clear tendency for an increase in religious uncertainty can be detected. There is some evidence that doubt is gender-related, girls tending to doubt less than boys (1, 7, 9, 12).

In a study of the worries of secondary school pupils, Simon and Ward (10, 11) found a decrease with age in frequency and intensity of worry in general, they did not in this study, however, examine worries related to religion. Cole (2), in her review of the literature on religious attitudes, points to the shortage of data, particularly for the age group 11 to 15 years.

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The small amount of research which has examined the relationship between intelligence and religious worry suggests that doubt is a healthy activity which is uncharacteristic only of the dogmatic or the unintelligent (7)

The present investigation is an extension of a previous one in which the relationships between age, gender, intelligence and religious beliefs were examined in 11 to 15 year old pupils (12). For the present study, the relationships between age, gender, intelligence and religious worries are examined in the same sample, which is composed of catholic pupils living in south Wales and attending a catholic comprehensive school

#### METHOD

##### *Sample*

The sample comprised 120 pupils, divided into age groups, drawn from a catholic comprehensive school. One group consisted of 60 pupils, aged 11 to 12 years (M 142 months, SD 4 13), and the second consisted of a further 60 pupils, aged 14 to 15 years (M 173 36 months, SD 9 30). There was an equal number of boys and girls within each group and there was no significant age difference between the boys and girls in a group. The entire sample covered an IQ range of 75 to 125. The mean for the younger group was 104 25 (SD 15 69), that for the older group, 101 76 (SD 13 48). There was no difference in IQ between the groups and, within each group, mean IQ differences between boys and girls were not statistically significant. Further, differences in intelligence between Group 1 girls and Group 2 girls and between Group 1 boys and Group 2 boys were not significant.

##### *Instruments*

Raven's Progressive Matrices Test (8) is a non verbal test of intelligence in which raw scores are converted into intelligence quotients using the conversion table

Religious Worries Questionnaire is based on a questionnaire of Kuhlen and Arnold (5) and consists of 18 questions concerning worries in relation to religious belief, to which the pupils had to reply 'never worry', 'sometimes worry' or 'often worry' (Cf Appendix )

##### *Procedure*

Pupils were administered the Raven's Progressive Matrices Test and then the Religious Worries Questionnaire. Both instruments were administered to groups

## RESULTS

Table 1, which contains data on the frequency of students' responses by age to the items on the questionnaire, indicates that age is not generally associated with an increase in religious worries. In those cases where there are age related differences in responses to items, there is a tendency for older pupils to report less worry than younger ones about the value of prayer, the hereafter, sin, the meaning of religion and getting help with religious problems.

TABLE 1  
FREQUENCY RESPONSES OF PUPILS IN DIFFERENT AGE-GROUPS TO  
QUESTIONNAIRE ITEMS CLASSIFIED ACCORDING TO CATEGORY  
(N = 120)

Category	Item	$\chi^2$ (df 2)	11-12 year olds (N = 60)			14-15 year olds (N = 60)		
			Never	Sometimes	Often	Never	Sometimes	Often
God	5	3.06	41	17	2	37	16	7
Church	2	1.39	22	35	3	26	29	5
	3	0.76	14	31	15	15	35	10
Prayer	9	12.42**	23	36	1	36	18	6
The Hereafter	11	28.98***	6	21	33	27	25	8
	15	9.32**	5	23	32	11	33	16
Bible	14	8.46*	25	28	7	31	19	10
	18	4.90**	8	26	26	9	41	10
Sin	12	7.12*	4	28	28	10	34	16
Miscell aneous	1	—	32	27	1	34	25	1
	4	4.15	45	10	5	35	14	11
	6	5.17	52	7	1	51	3	6
	7	0.84	25	25	10	22	30	8
	8	0.44	31	14	15	34	14	12
	10	7.84*	17	31	12	28	18	14
	13	5.58	24	23	13	31	25	4
	16	11.06**	19	32	9	37	20	3
	17	4.90**	8	26	26	9	41	10

\*\*\*  $p < .001$    \*\*  $p < .01$    \*  $p < .05$

The significance of differences between the responses of boys and girls was tested using the chi squared test. No differences were found except on item 18, where boys more frequently reported worrying about keeping the commandments than did girls ( $\chi^2 = 5.88$ , df 1,  $p < .02$ )

Students were divided into 'high' intelligence and 'low' intelligence groups, the former being students with IQ scores of 110 and over and the latter students with IQ scores of 90 and below. The relationship between intelligence and reported religious worries was also examined using chi squared tests. From Table 2 it can be seen that in the younger age group, the more intelligent worry more than the less intelligent about disliking church services (item 2), failing to attend church (item 3) and doubting the value of prayer (item 9). There is only one difference between the more and less intelligent pupils in the older group - loss of faith (item 7) is worried about by more students in the less intelligent group.

TABLE 2

FREQUENCY OF RESPONSES PRODUCING SIGNIFICANT  $\chi^2$   
VALUES FOR HIGH AND LOW IQ GROUPS

Item	Frequency in high IQ group (N 20)		Frequency in low IQ group (N 20)		$\chi^2$ (df 1)
	Never	Sometimes/Often	Never	Sometimes/Often	
<b>11 - 12 year olds</b>					
2	3	17	11	9	5.43**
3	1	19	10	10	8.02***
9	4	16	13	7	6.53**
<b>14 - 15 year olds</b>					
7	3	17	10	10	3.43*

\*\*\*  $p < .01$ \*\*  $p < .02$ \*  $p < .10$ 

## DISCUSSION

Our findings on the relationship between age and religious worry support earlier findings that worries in general decrease during early adolescence (10). It would also appear that though doubts concerning religious beliefs increase as reported elsewhere for this sample (11), such doubts are not necessarily accompanied by worry. In the sample studied by Hilliard (4), which was in

the age range 15 to 18 years, there was an increasing incidence of religious doubts and worries, though by 18 years of age, there was a resolution or abandonment of these worries

In general, our investigation revealed no difference between boys and girls in their responses, with the exception of one item and, on this, more boys than girls reported worrying. This contrasts with the findings of a study with older college students, among whom, girls were found to worry more than boys (7)

The fact that the present sample was catholic may be relevant to our findings that few differences in religious worry were related to the intelligence of the students. That these findings conflict with previous investigations of college students (7) may be because of age differences in the samples investigated, it may also be that doubts and worries occur less in families, such as catholic ones, where effective foundations of belief have been laid

#### REFERENCES

- 1 ALLPORT G W GILLESPIE J M and YOUNG J The religion of the post war college student *Journal of Psychology* 1948 25 3 33
- 2 COLE L *Psychology of adolescence* New York Holt Rinehart 1954
- 3 DAINES J W A review of unpublished theses in religious education 1968 72 *Learning for Living* 1973 12 16 21
- 4 HILLIARD F H The influence of religious education upon the development of children's moral ideas *British Journal of Educational Psychology* 1959 29 50 59
- 5 KUHLEN R G and ARNOLD J Age differences in religious beliefs and problems during adolescence *Journal of Genetic Psychology* 1944 65 291 300
- 6 MITCHELL J M The priest as teacher of religion in the senior classes of Irish secondary schools Unpublished PhD thesis National University of Ireland 1965
- 7 PUTNEY S and MIDDLETON R Religion normative standards and behavior *Sociometry*, 1962 25 141 152
- 8 RAVEN J C *Progressive Matrices Test* London Lewis 1947
- 9 ROSS M G *Religious beliefs of youth* New York Association Press 1950
- 10 SIMON A Simon's Worry Response Survey In Johnson O G *Tests and measurements in child development Handbook II Vol I* Pp 597 599 San Francisco Jossey Bass 1976
- 11 SIMON A, and WARD L O Variables influencing the sources frequency and intensity of worry in secondary school pupils *British Journal of Social and Clinical Psychology* 1974 13 391 396
- 12 SIMON A and WARD L O Age sex intelligence and religious beliefs in 11 to 15 year old pupils *Irish Journal of Education* 1975 9 108 114

## APPENDIX

## RELIGIOUS WORRIES QUESTIONNAIRE

- 1 Do you worry about having a different religion from others?
- 2 Do you worry about disliking church services?
- 3 Do you worry about failing to go to church?
- 4 Do you worry about being forced to go to church?
- 5 Do you worry about changing your idea of God?
- 6 Do you worry about disliking your parents' religion?
- 7 Do you worry about losing your faith in religion?
- 8 Do you worry that your parents would object if you wanted to change your religion?
- 9 Do you worry about doubting that prayers will bring good?
- 10 Do you worry about wanting to know the meaning of religion?
- 11 Do you worry about Heaven and Hell?
- 12 Do you worry about being sinful?
- 13 Do you worry about being teased about your religion?
- 14 Do you worry about the conflicts of science and religion?
- 15 Do you worry about what happens to people when they die?
- 16 Do you worry about getting help on religious problems?
- 17 Do you worry about all the suffering in the world today?
- 18 Do you worry about keeping the commandments?