

## PEOPLE WHO CONSULT ASTROLOGERS: A PROFILE\*

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(Received 10 June 1981)

**Summary**—The aim of the study was to examine the characteristics of people who consult astrologers. Questionnaires were given out by two astrologers to their clients and 67 (approx. 45%) were returned. The demographic data of these consultees were then compared with population data obtained from the census and personality and attitudinal data were compared with those of a control group. Among the consultees there was an over representation of females, people between the ages of 30 and 39, people who were maritally marginal (never-married persons over the age of 30) and people who were either Jewish, atheist/agnostic or of a non-judeo-christian faith. The consultees were also relatively well educated. With regard to the personality and attitudinal variables, these were regressed on group membership in order to control for common variance. The variable which explained the most variance was stress. This was followed by a measure of political control and then a measure of religiosity. No significant differences were found between the groups on the measures of anxiety and self control. After discussing all the results it was concluded that, in many cases, consulting an astrologer is a response by an individual to the stresses with which he or she is faced and that these stresses are mainly linked to the individual's social roles and to his or her relationships. Furthermore, it is suggested that these stresses arise partially as a result of the person's lack of social skills.

### INTRODUCTION

It has become apparent in recent years that there is a widespread interest in astrology and that many people are fully committed to it. Despite this widespread interest, little is known about why people believe in astrology.

In an attempt to explain this belief a few studies have looked at the type of person who believes in astrology. The overall picture which emerges from these studies is that the believer in astrology tends to be someone who is marginal in society (Wuthnow, 1976), somewhat maladjusted and susceptible to outside influence (Plug, 1973, 1975), and who has an external locus of control (Tyson, 1979). In addition, the believer may or may not have strong religious beliefs, depending on his religious affiliation (Tyson, 1979). This profile is of limited value, however, in that it does not really tell us very much about the person who is deeply committed to astrology. This is because all three studies cited above used pencil and paper measures of belief in astrology and hence the question of what exactly was being measured, arises. For instance, it is possible that some of those who were classified as believers may simply have been trying to appear open-minded. It is also probable that many of the subjects who claimed to believe in astrology, are not particularly interested in it and it does not affect their behaviour, i.e. it is a benign belief which only comes into consciousness when the individual is questioned about it. Thus the results cited above do not necessarily tell us very much about those people who actively believe in astrology, i.e. consult an astrologer or cast their own charts, or give us any real insight into the function that astrology is serving for the believer. The aim of the present study was therefore to examine the characteristics of persons who consult astrologers, a behaviour which can be taken as a relatively valid measure of an active belief in astrology.

The independent variables used in the present study were all, with one exception, ones which had previously been found to correlate with belief in astrology, viz. sex, age, marital status, education, religious affiliation, importance of religion, locus of control

\* This study forms part of the work for which the degree of Doctor of Philosophy was awarded by the University of the Witwatersrand, Johannesburg.

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and a measure of maladjustment. The additional variable was a measure of stress as it is commonly held that superstitiousness is a reaction to stress (Plug, 1976) and in the case of astrology it certainly does seem possible that consulting an astrologer could be a palliative mode of coping with stress.

## METHOD

### *Questionnaire*

The questionnaire consisted of four sections. The first section contained questions relating to sex, age, marital status, level of education, religious affiliation and importance of religion, which was measured on a 5-point scale, the points of which were appropriately defined. The second and third sections consisted of Holmes and Rahe's (1967) Social Readjustment Rating Scale (SRRS) and Rotter's (1966) Locus of Control (I-E) Scale, respectively. The fourth section contained the abbreviated version of Taylor's (1953) Manifest Anxiety Scale (MAS), which was used as the measure of maladjustment.

### *Procedure*

Batches of the questionnaire together with a covering letter and a postage-paid return envelope were left with two Johannesburg astrologers who had agreed to give one to each person who consulted them professionally. The questionnaires were anonymous. In order to assess the personality and attitudinal scores of the astrologer consultees, a similar questionnaire was given out to a group of control subjects, who it was hoped would have similar demographic characteristics to those of the consultees. In all there were 136 control subjects (97 female and 39 male) with a mean age of 36.8 (SD = 11.2).

## RESULTS

As the study was essentially an exploratory one, two-tailed tests of significance were used wherever possible in the analysis of the data.

### *Demographic details of the astrologer consultees*

A total of 67 questionnaires were returned during a 6-month period: this representing an approximate return rate of 45%.

In order to assess the characteristics of the respondents, their demographic details were compared with the population characteristics which were obtained from census data. Where possible the comparison was made with the population of the metropolitan area of Johannesburg and, as all the respondents were adult, only the census data for persons aged 20 or older were utilized. Of the respondents, 24 were male and 43 female and compared to the population (Government Printer, 1976b) women were significantly over represented  $\chi^2(1) = 4.52, P < 0.05$ . There was no difference between the sexes with regard to age,  $t(65) = 0.03, P > 0.05$  and the overall mean age of the respondents was 36.8 years (SD = 10.8). The distribution of ages differed significantly from the distribution of ages in the population (Government Printer, 1976b),  $\chi^2(4) = 14.37, P < 0.01$ . Inspection of the data showed that this was due to the fact that the respondents were over represented in the age group 30-39 and under represented in the age group 60 and over.

With regard to marital status, 45.8% of the male and 32.6% of the females had never married, 25% of the males and 27.9% of the females were married and 29.2 and 34.9%, respectively, were divorced. In addition, 4.7% of the female respondents were widowed. These distributions of marital status differed significantly from the population distributions for both males and females (Government Printer, 1976b),  $\chi^2(2) = 32.9, P < 10^{-7}$  and  $\chi^2(2) = 32.03, P < 10^{-7}$ , respectively. These differences were due to the relatively low proportion of married people and relatively high proportion of single and divorced persons who consulted the astrologers. In order to test Wuthnow's (1976) marginality hypothesis the sample was divided into marginal and non-marginal groups. In his study, Wuthnow included all never-marrieds in the marginal category but that is misleading, for

if the individual has not reached marriageable age, his single status cannot be regarded as marginal. Hence in the present study only divorced persons and the never-marrieds over the age of 30 were included in the marginal group. Of the males, 50.0% were marginal compared with 46.5% of the females. No exactly comparable data was available for the population but an estimate was made by placing all never-marrieds over the age of 25 and half those classified as 'Other' (widowed and divorced persons) in the marginal category. This resulted in 16.36% of the female population and 13.19% of the male population being classified as marginal. Compared with these figures the marginality amongst both male and female respondents was significantly greater,  $\chi^2(1) = 20.08$ ,  $P < 10^{-6}$  and  $\chi^2(1) = 41.35$ ,  $P < 10^{-10}$ , respectively.

With regard to level of education, there was a significant difference between the male and female respondents, with males being more highly educated,  $\chi^2(2) = 15.18$ ,  $P < 0.001$ . Compared with the population (Government Printer, 1976a), both male and female respondents were more highly qualified,  $\chi^2(4) = 99.74$ ,  $P < 10^{-10}$  and  $\chi^2(4) = 148.48$ ,  $P < 10^{-10}$ , respectively, with 42% of the males and 30% of the females having one or more university degrees.

In terms of religious affiliation, 13.4% of the respondents were Roman Catholic, 28.4% Protestant, 31.3% Jewish, 13.4% atheist/agnostic and 13.4% belonged to a non-judeo-christian religion. This distribution differed significantly from that of the population (Government Printer, 1977),  $\chi^2(4) = 98.11$ ,  $P < 10^{-10}$ . This was due to the fact that amongst the respondents Protestants were under represented and there were almost three times as many Jews and people classified as either atheist/agnostic or non-judeo-christian, than expected.

In the light of previous findings which showed that the importance of religion is only related to belief in astrology amongst Protestant and Catholic subjects (Tyson, 1979), it was predicted that the mean rating of religious importance for Christian respondents would be lower than for Jewish respondents. This was not the case, however, and in fact the mean rating of the Christian respondents was higher than that of the Jewish respondents (3.0 vs 2.4) although this difference was not significant,  $t(46) = 1.83$ ,  $P > 0.05$ . When the respondents were divided into high importance and low importance groups, 28.6% of the Christian respondents fell into the high importance group, compared with 14.3% of the Jewish respondents.

#### *Comparison of consultees with the control group*

*Demographic characteristics.* There were no significant differences between the consultee and control groups in terms of the distribution of sexes, age and education and therefore the effects of these variables were controlled. There was, however, a significant difference between the groups in terms of marital status,  $\chi^2(2) = 17.74$ ,  $P < 0.001$ , with there being a much higher proportion of divorced persons amongst the consultees. This difference is reflected in the marginality figures, with almost half the consultees being classified as marginal (in terms of the criteria used above) as compared with 29% of the controls,  $\chi^2(1) = 6.37$ ,  $P < 0.01$ . There was also a significant difference between the groups with regard to the religious affiliation of the members,  $\chi^2(5) = 19.48$ ,  $P < 0.01$ , with there being fewer Protestant and more Jewish, atheist/agnostic and non-judeo-christian persons amongst the consultees. In the case of both marital status and religious affiliation, the data of the controls were closer to the population than were the data for the consultees.

*Locus of control, anxiety, stress and religious importance.* In view of the multidimensionality of the I-E scale (Little, 1977; Mirels, 1970; Reid and Ware, 1973, 1974) the responses of all the subjects were factor analysed in order that a more specific measure of control could be obtained. A principal factoring method was used to extract the initial factors and this produced only two factors with eigen values exceeding 1.0. In order to facilitate the interpretation of the factors an equimax rotation was performed. Factor 1, which accounted for 39.5% of the variance, was found to be a political/ideological factor on which items 3, 12, 17, 22, 29 loaded. The second factor accounted for 19.3% of the

variance and was more concerned with personal control; the items loading on it being 5, 9, 11, 15, 16, 18, 21, 25.

Initially, it was the intention to use only the second factor, which was labelled self control, in this study. However, when the data was first run through the computer, it was found that the overall I-E scale score correlated higher with group membership than did the self-control score. This indicated that a factor other than self control was also operating and it was therefore decided that Factor 1, which was labelled political control, would also be included in the analysis, even though there was no theoretical justification for such a step. The scores for both scales were obtained by summing the number of external statements endorsed on the items making up the scales. In the case of the stress measure, only events which were considered to be undesirable by five independent raters, were used in the calculation of the stress score, in view of the finding that scores based on undesirable events are a better predictor of behavioural measures than scores based on all the life events (Vinokur and Selzer, 1975). The scores were calculated using the Life Crises Units of Holmes and Rahe (1967).

There were no sex differences in any of the personality, religious or stress measures in either the consultee or control groups. Consequently the data for males and females were combined.

The differences between the scores of the consultees and the controls were not significant on the measures of anxiety, ( $M = 9.24$ ,  $SD = 5.00$  and  $M = 8.29$ ,  $SD = 4.55$ , respectively),  $t(199) = 1.34$ ,  $P = > 0.05$ , and self control, ( $M = 3.80$ ,  $SD = 1.91$  and  $M = 3.26$ ,  $SD = 1.77$ , respectively),  $t(199) = 1.96$ ,  $P > 0.05$ . However, in both cases the differences were in the expected direction and in the latter case the difference would have been significant at the 0.05 level if a one-tailed test of significance had been used. Significant differences between the consultees and the controls were found on the measures of political control ( $M = 3.36$ ,  $SD = 1.67$  vs  $M = 1.62$ ,  $SD = 1.62$ ),  $t(190) = 3.31$ ,  $P < 0.001$ ; stress ( $M = 85.82$ ,  $SD = 64.00$  vs  $M = 43.51$ ,  $SD = 44.22$ ),  $t(201) = 5.47$ ,  $P < 10^{-5}$ ; and religious importance ( $M = 2.72$ ,  $SD = 1.23$  vs  $M = 3.10$ ,  $SD = 1.24$ ),  $t(203) = 2.05$ ,  $P < 0.05$ . As the two groups differed in terms of religious affiliation and marginality, analyses were performed in order to check whether or not the significant results were due to these differences. Marginality was found to be related only to religious affiliation,  $\chi^2(4) = 17.68$ ,  $P < 0.001$ , but religious affiliation was related to stress,  $F(4,197) = 3.264$ ,  $P < 0.05$  and hence may have influenced the results pertaining to stress.

In order to partial out the effects of religious affiliation and to control for common variance, a multiple regression analysis in which the independent variables were regressed on group membership, was performed. The dummy vectors representing the religious groups were entered into the equation first. The other independent variables were then entered by means of a stepwise procedure, as there was no theoretical reason to give precedence to any one variable. After all the independent variables had been entered, the interactions were entered as a set (Cohen, 1968). In order to determine the importance of each independent variable, the method of assessing the increase in explained variance, i.e. the squared semi-partial correlation, by means of the  $F$  test, was used (Kerlinger and Pedhazur, 1973). The regression produced an  $R$  of 0.553 which was significant,  $F(23,167) = 3.20$ ,  $P < 10^{-5}$ . A summary of the results is given in Table 1.

Table 1. Summary table of the multiple regression on group membership

| Source                | $R$   | Proportion<br>of variance | $df$   | $F$    | $P$         | $r$    |
|-----------------------|-------|---------------------------|--------|--------|-------------|--------|
| Religious affiliation | 0.260 | 0.068                     | 3,187  | 4.513  | $< 0.01$    | —      |
| Stress                | 0.427 | 0.115                     | 1,186  | 26.164 | $< 10^{-6}$ | 0.374  |
| Political control     | 0.469 | 0.038                     | 1,185  | 8.955  | $< 0.01$    | 0.226  |
| Religious importance  | 0.488 | 0.018                     | 1,184  | 4.320  | $< 0.05$    | -0.159 |
| Anxiety               | 0.489 | 0.001                     | 1,183  | 0.139  | $> 0.05$    | 0.088  |
| Self control          | 0.489 | 0.000                     | 1,182  | 0.067  | $> 0.05$    | 0.131  |
| Interactions          | 0.553 | 0.067                     | 15,167 | 0.980  | $> 0.05$    | —      |

Inspection of the table shows that even with the effects of religious affiliation and common variance controlled, three variables still made a significant contribution to the explained variance. The one which made the greatest contribution was stress which explained 0.115 of the variance, which was almost a third of the total explained variance. The other two which made significant contributions were political control (0.038) and importance of religion (0.018). In other words there were significant differences between the two groups in terms of their stress, political control and importance of religion scores, but there were no differences in terms of anxiety and self control. In addition, there were no significant interactions.

## DISCUSSION

The results of this study indicate that the astrologer consultees differed from the general population and the control group in a number of ways. The most important variable differentiating between the consultees and controls was stress, a finding that gives strong support to the idea that consultation of an astrologer is a means of coping with stress. However, it appears that it is not just any type of stress that is likely to lead to a consultation with an astrologer. An examination of the proportion of consultees and controls who experienced the various events indicated that there was a strong tendency for many more of the consultees to have experienced events which reflect a breakdown of social relationships or a lack of social skills, e.g. divorce, separation, troubles with the boss etc. On the other hand for unpleasant events which do not require social skills, e.g. death of a spouse or family member, there was no difference between consultees and controls. Thus it appears to be stresses relating to social relationships which are most likely to motivate a person to consult an astrologer. This certainly ties in with the fact that horoscopes often seem to focus on future relationships and that astrologers are frequently asked about romantic attachments.

Support for this idea that consulting an astrologer is related to social stresses is provided by some of the demographic variable results. In the case of marital status, almost half of the consultees were marginal, a finding which concurs with that of Wuthnow (1976). This is of particular significance for the measure of marital marginality used in this study is very similar to the measure of status integration used by Martin (1976), who showed that the prevalence of mental illness is inversely related to status integration. According to Martin, low levels of status integration, which basically is a measure of the amount of role conflict experienced by an individual, impede social relations and he suggests that the absence of social relations "is one of the most stressful of human conditions" (Martin, 1976, p. 285). Thus it could be said that almost 50% of the consultees were probably experiencing role conflict and had inadequate social relationships both of which are likely to cause stress.

The results pertaining to sex also seem to reflect the influence of stress. As has been found in previous studies (Gorer, 1955; Plug, 1975; Wuthnow, 1976), many more women than men were interested in astrology and this may well indicate that women experience more stresses than men. Certainly there is evidence which suggests that women have more worries and distress (Garai, 1970), have higher rates of depression (Kramer *et al.*, 1972), are less psychiatrically well adjusted (Warheit *et al.*, 1976) and that they experience a high degree of role strain (Angrist, 1969). All of these would seem to be associated with stress and hence women would have a greater need than men for coping behaviours. Furthermore, as women are apparently more suggestible and persuasible than males (McGuire, 1969), this would make them more likely to believe the claims of astrology and therefore more likely to use it as a means of coping.

Many of the discrepancies between the results of this study and those of previous studies seem to be explicable in terms of the influence of stress. For instance, in the case of locus of self control there was a tendency for the consultees to be more external when self control measure was examined in isolation, but it lost all its discriminating power when used in conjunction with the other independent variables. Previously it had been found to be one of the more important correlates of belief in astrology (Tyson, 1979). A

possible explanation for this is that the effect of locus of self control diminishes in times of stress. Some support for this idea is provided by the findings of Manuck *et al.* (1975) that under low stress conditions more externals than internals sought treatment for physical complaints, while under high stress conditions there was no difference in treatment seeking between externals and internals.

In the case of age, the results show a trend which is the opposite of that found by Wuthnow (1976). He found that belief was highest amongst those over 60 years and relatively low for those below 40, whereas in the present case belief was most prevalent between the ages of 30 and 39 and only one person over the age of 60 consulted an astrologer. The explanation for this would seem to lie in the nature of the stresses facing the different age groups. In the older person the future would seem to be tied up increasingly with illness and death and even though they believe in astrology, consulting an astrologer is not going to lessen the feelings associated with these events. On the other hand, in younger people many more of the stresses they face are likely to be linked to social relationships and, as suggested above, these are the sorts of stresses which are likely to motivate an individual to consult an astrologer.

The results pertaining to education are also contrary to those of Wuthnow (1976) who found that belief decreased with education. In the present study a relatively large proportion of the consultees were relatively highly educated which possibly indicates that under stressful conditions the rationality imposed by education is dropped. Alternatively, it may be that the less well educated believer is satisfied with newspaper-type horoscopes, whereas the educated believer prefers the more 'scientific' procedure of having his chart cast. This result is also probably due to the fact that those with a better education are more likely to have money to spend on consulting an astrologer.

With regard to the religious variables, the results for religious affiliation by and large concur with those of Tyson (1979) and thus lend support to the hypothesis that the different meaning systems of religious groups will affect belief in astrology (Tyson, 1979). The fact that the control group scored slightly higher on the measure of religious importance also concurs with previous findings (Plug, 1973; Tyson, 1979; Wuthnow, 1976), although the influence of religious importance was not as strong as demonstrated by the fact that it only accounted for 5.9% of the variance explained in the multiple regression. This reduced influence of religious importance together with the fact that there was no interaction between religious affiliation and importance of religion, as was expected in the light of previous findings (Tyson, 1979), tends to suggest that while religious importance, in conjunction with religious affiliation, is a very important mediator of belief in astrology, it does not exert as strong an influence on behaviour. Possibly, increasing stress outweighs the negating influences of high religious commitment amongst some Christians, although this would depend largely on the degree to which they felt their religion was helping them cope with the stress.

The fact that there was no difference between the consultees and controls on the measure of anxiety is rather surprising for measures of maladjustment have frequently been shown to be related to superstitious behaviour and, more specifically, to belief in astrology (Plug, 1973; Tyson, 1979). The reason for this lack of difference is not clear. It could be due to the measure used in this study not being sufficiently sensitive. Alternatively, it may be that the measures of maladjustment used in previous studies have been partially reflecting the effects of stress and the fact that they have related to superstitious behaviour is due to this. Some support for the latter idea is given by the fact that there was a significant correlation between the stress and anxiety scores in the present study.

The most unexpected result was that concerning locus of political control which, after stress, explained the most variance in the multiple regression analysis. Why people who consult an astrologer should feel that they have little control over political events is not obvious, but it is possible to rule out a general personality factor regarding control, for if there were such a factor the self control measure would also have discriminated between the groups. The most likely explanation of this result is that the political control factor is a reflection of concern about economic matters. Astrologers are frequently asked about

financial matters (West and Toonder, 1973) and in South Africa the economy is closely linked to politics and hence a person who feels that he has little influence over political events may become concerned about his economic future if he perceives the political situation to be unsatisfactory. Some support for this idea comes from the fact that a higher proportion of consultees than controls had experienced a major change in financial state. While the direction of change in financial state was not specified, it seems likely that in most cases it was a change for the worse and hence there would be concern about the financial future.

From these results a profile of the typical type of person to consult an astrologer can be tentatively drawn. However, it must be stressed that the profile is based only on the data of those consultees who returned the questionnaires. It is possible that those who did not return the questionnaire may be very different from the typical consultee described here. The overall picture which emerges is that those who consult an astrologer are most likely to be female, young and maritally marginal and the consultation is likely to be a response to stresses with which they are faced. These stresses appear to be mainly linked to the individual's social roles and to his or her relationships and appear to arise as a result of the individual's inability to relate well to others. A secondary source of stress appears to be financial problems. Consultation of an astrologer seems thus to be an attempt to cope with these stresses by finding out more about oneself, i.e. trying to clarify one's self concept, and/or about what the future holds. Furthermore it appears that when stress is great, the effect of other factors such as religion and locus of self control which are strongly linked to expressed belief in astrology, are diminished. In other words it seems that under conditions of high stress the individual is prepared to use astrology as a coping device even though under low stress conditions he does not believe in it. This is probably because relative to other means of coping, astrology is very attractive. Not only does it give people a lot of supposedly objective information about themselves but it also predicts the future, thereby relieving or reducing feelings of uncertainty and anxiety about the future. In addition, unlike most other forms of coping it requires no effort or input on the part of the individual. For instance, in the case of psychotherapy or religion, the individual has to work, psychologically, to obtain the benefits, whereas with astrology he merely has to supply the relevant information. He therefore has little to lose and much to gain by consulting an astrologer.

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