TYPE A BEHAVIOUR PATTERN AND PERFORMANCE AS INSURANCE REPRESENTATIVE

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ABSTRACT
Participants were 155 insurance representatives and 116 of them who were still in the same position one year later. The performance criterion represented commission on policies and annuities sold; data were obtained for the year of testing and the next year. The Jenkins Activity Survey was administered. The Type A (M = 6.26; SD = 7.90) was not excessively high. The Factor H score correlated r (114) = 0.23, p = 0.05 with the criterion for the second year; no other score correlated significantly with criterion scores. Interventions to reduce Type A behaviour for health reasons seem unlikely to reduce business performance.

OPSOMMING
Die deelnemers was 155 assuransieverteenwoordigers en 116 van hulle wat een jaar later nog in dieselfde pos was. Die prestasiekriterium het kommissie op polisie en annuitete verteenwoordig; gegevens is vir die jaar van toetsing en die volgende jaar verkry. Die Type A (X = 6.26; SA = 7.90) was nie buitegewoon hoog nie. Die Faktor H-telling het r (114) = 0.23, p = 0.05 met die kriterium vir die tweede jaar ge-korreleer; geen ander tellings het beter met die kriteriumtellings gekorreleer nie. Dit lyk omwaarskynlik dat interventies om Type A gedrag om gesondheidsredes te vermindere besigheidsprestatie sal verlaag.

The Type A behaviour pattern (TABP) is not a personality type but a set of behavioural responses learned through socialization, and which emerges whenever it is elicited by challenges and demands from the environment (Rosenman & Chesney, 1982). Business and industry, in particular provide an environment characterized by such challenges and demands; it typically encourages Type A tendencies by means of both extrinsic and intrinsic rewards.

It has been speculated that the sales function may be good stamping ground for hard-driving, self-centred 'Type A' (Howard, Rechnitzer & Cunningham, 1977). Indeed, among the six subsamples of the standardization group of the Jenkins Activity Survey (IAS; Jenkins, Zyzwinski & Rosenman, 1979) a small subsample of salesmen did obtain the highest mean Type A score. Furthermore, although chief executives of small business firms cannot be categorized with sales persons, they probably are closer to the sales function than general managers of large firms; it is then significant that Boyd (1984) reported the highest American Type A mean score for a sample of small business chief executives. The present study was undertaken, firstly, to establish the relative position of insurance representatives in the hierarchy of TABP scores among business-related occupations.

The interaction between the intrinsic and environmental components of the TABP is perhaps best illustrated by Type As' high concern with maintaining control over the demands and requirements of their environment (Glass & Carver, 1980). The Type A individual's reaction to uncontrollability is initially to try much harder than a Type B in the same situation; however, when these attempts prove ineffective, the Type A person overreacts in an alarmistic way, by showing hyporesponsive-ness. This is also the process which Seligman (1975) has described as "learned helplessness"; that uncontrollable failure will be followed by lowered response initiation.

Seligman and Schulman (1986) considered selling life insurance as a job particularly suitable for the investigation of learned helplessness (as well as explanatory style) since, "sales agents repeatedly encounter failure, rejection, and indifference from prospective clients" (p. 832). These authors took as their point of departure the reformulation of the learned helplessness model (Abramson, Seligman & Teasdale, 1975) that "individuals with a 'pessimistic' explanatory style are more likely to display helplessness deficits when confronted with a bad event than individuals with an 'optimistic' explanatory style" (Seligman & Schulman, 1986, p. 832). In two studies, one cross-sectional on experienced agents, the other a one-year longitudinal study on newly hired agents, the authors indeed found that a pessimistic explanatory style led to poor productivity and quitting.

In the present study the IAS Type A scale was considered as an alternative way to operationalize learned helplessness; it was assumed that a significant correlation between this scale and performance as an insurance representative would tend to support the learned helplessness hypothesis. The second purpose of this study was thus to investigate that relationship.

The third set of considerations in the study dealt with the possibility of changing the TABP. White South African executives show an extraordinary excess of TABP when compared to samples from the rest of the world and with South African non-executive samples (Strümpfer, 1989). In view of the coronary proneness of the TABP, such data could constitute grounds.

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for intervention to reduce the TAPB. However, if there is a significant relationship between the TAPB and performance on the job, both the individual and the employing organization could legitimately resist such intervention. In the short term, financial and corporate health are likely to be considered more important than the fairly indeterminate risk of cardiac health. The present study was therefore undertaken to determine whether the TAPB is correlated with financial performance, which is of material importance to both the representative and the company.

METHOD

Participants
The participants were a sample of convenience: insurance representatives, all of whom were employed by the same company but worked in branches throughout the country. They were all male, white, predominantly Afrikaans-speaking and between the ages 23 and 64 years. They sold mainly life insurance, endowment policies, and annuities, and also provided general financial advice to clients. Two samples were used, the smaller (Group 2, n = 116) being part of the larger (Group 1, n = 155); the difference reflected attrition as a result of promotion to branch manager (n = 10) and as a result of turnover (n = 29) after one year. Only persons who had had at least one year of experience as a representative were included, in order to allow for basic training and a modicum of experience. Descriptive biographical statistics appear in Table 1.

Instrument
Each participant received a covering letter from a senior manager in the organization, indicating that the study concerned stress, work and life-style and requesting the person's co-operation, whilst indicating that there was no obligation. Participants were requested to provide their names, as well as the branches where they worked; they were, however, assured that all data would be used for research purposes only and that no information would be fed back to the organization. Identification was required for the purpose of obtaining criterion data.

The JAS, Form C (Jenkins et al., 1979) was used to collect TAPB data. An Afrikaans translation was made by the first author and the translation was reviewed by a bilingual-writing journalist, as well as two persons who had majored in Afrikaans-Nederlands. During the translation reference was also made to a Flemish translation obtained from Professor M. Kornitzer (see e.g. Kornitzer, Kittel, De Backer & Dramaix, 1981). Blind back-translation was, however, not undertaken, in view of past experience that it is very difficult to decide whether the original meaning had been retained; if a different English word is used in the back-translation from the one used in the original English version, the decision as to whether the two words have the same meaning is still subjective (see also White, 1982).

The JAS provides four scores, viz. the Type A scale and three factor analytically derived scales: Speed and Impatience (factor S), Job Involvement (Factor J) and Hard-driving and Competitive (Factor H). Strumpton (1989) reviewed the literature on the validity of the JAS in terms of coronary heart disease (CHD) criteria; a meta-analysis by Booth-Kewley and Friedman (1987) showed that the Type A and Factor H scales have shown strong association with disease endpoints. Both of these scales primarily measure "pressured drive" (Matthews, Krantz, Dembroski & McDougall, 1982), or the person's perception of heavy job demands and time pressure. Vickers, Herrig, Rahe and Rosenman (1981) recalculated data published by Jenkins, Zyanski and Rosenman (1971) and showed that CHD risk was elevated only when the Type A and Factor H scores were both high, but as an interactive, rather than simple additive effect.

Criteria
Two sets of criterion data were obtained, viz. performance during the year when the JAS was administered and during the following year. Testing took place during September, so that the composite performance figure for that year provided about eight months of postdiction and about three months of prediction. The data for the next year provided a predictive criterion.

For both years, the performance data consisted of the so-called "Management Commission per Month". When a policy was sold, the representative received 72 per cent of the commission on that policy during the first year and the rest of the commission during the second year; however, when annuities were sold, the commission was paid in equal parts over a five-year period. A monthly performance figure that was used for managerial purposes was, however, obtained by adding to the commission earned on policies an arithmetic adjustment of the commission earned on annuities (x 36); this figure, averaged over a 12-month period, constituted the performance criterion score for each participant.

RESULTS
Table 1 also presents means and standard deviations for Groups 1 and 2 for the JAS scores and the two criterion scores. JAS scores are expressed in standard scores with a mean of zero and a standard deviation of 10; scores between -5 and +5 are considered to be in an average range.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group 1</th>
<th>Group 2</th>
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<tr>
<td></td>
<td>X</td>
<td>s</td>
</tr>
<tr>
<td>Age</td>
<td>35,60</td>
<td>8,36</td>
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<tr>
<td>Years service</td>
<td>4,70</td>
<td>5,50</td>
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<tr>
<td>Education*</td>
<td>3,85</td>
<td>2,72</td>
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<tr>
<td>Type A</td>
<td>6,26</td>
<td>7,90</td>
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<tr>
<td>Factor S</td>
<td>3,42</td>
<td>9,41</td>
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<tr>
<td>Factor J</td>
<td>2,47</td>
<td>6,74</td>
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<td>Factor H</td>
<td>1,66</td>
<td>10,52</td>
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<tr>
<td>Criterion 1</td>
<td>170,99</td>
<td>2,299,56</td>
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<td>Criterion 2</td>
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* Coded according to JAS Item 51: 1 = 0-4 years' schooling; 2 = 5-8 years; 3 = some high school; 4 = completed high school; 5 = trade school, technical college or business college; 6 = 3-year qualification, e.g. Bachelor's degree or technikon diploma; 7 = Honours degree or 4-year degree; 8 = postgraduate work at a university or 5 years and longer (e.g. Medicine).

Table 2 presents, for Groups 1 and 2 separately, the correlation coefficients between the performance criteria and the JAS scores, as well as the biographical variables; it also shows the intercorrelations of these independent variables, which will not be discussed here.

<table>
<thead>
<tr>
<th>Variable</th>
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<td>2. A</td>
<td>.08</td>
<td>.53</td>
<td>.17</td>
<td>.51</td>
<td>.17</td>
<td>.06</td>
<td>.07</td>
<td></td>
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<tr>
<td>3. S</td>
<td>.06</td>
<td>.51</td>
<td>.11</td>
<td>.06</td>
<td>.25</td>
<td>.13</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>5. H</td>
<td>.14</td>
<td>.51</td>
<td>.02</td>
<td>.16</td>
<td>.22</td>
<td>.11</td>
<td>.12</td>
<td></td>
</tr>
<tr>
<td>6. Age</td>
<td>.18</td>
<td>.15</td>
<td>.19</td>
<td>.24</td>
<td>.17</td>
<td>.59</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>7. Service</td>
<td>.42</td>
<td>.07</td>
<td>.09</td>
<td>.23</td>
<td>.11</td>
<td>.56</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>8. Education</td>
<td>.10</td>
<td>.13</td>
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Note: for df = 153: *p < 0.05 For df = 114: $p < 0.05$

$p < 0.01$ $p < 0.001$
In Group 1 none of the JAS scores showed a significant correlation with the performance criterion; scatterplots showed no indications of curvilinear relationships either. Age and number of years service correlated significantly with performance, as could have been anticipated: performance is, up to a point, dependent upon the performer’s level of experience.

In Group 2 the Factor H score correlated significantly ($p < 0.05$) with the performance criterion; again, scatterplots did not suggest curvilinear relationships. Number of years of experience also correlated significantly with performance in this group.

Stepwise multiple regression analyses were attempted too. No predictor achieved a significant improvement in prediction over and above the zero-order correlations.

In view of the report by Vickers et al. (1981), regression analyses were carried out to test the effect of Type A and Factor H scores and their interaction (using $A \times H$ as a product vector) on each of the performance criteria. The unique variance component due to interaction was nonsignificant for both criteria.

During the follow-up year 10 representatives were promoted to branch manager positions. Their JAS scores were compared to those of the remaining sample by means of $t$ tests but no significant differences were found. Similarly, the scores of the subgroup lost through turnover were compared to the rest; the mean Factor J score of the remaining group was significantly ($p = 0.012$) higher than that of the quitting group, but none of the other scores differed significantly.

**DISCUSSION**

The mean Type A score of the present sample of insurance representatives was much higher than that of administrative personnel in the head office of the same organization ($M = 2.28$; $SD = 7.61$). However, it was lower than those of the head office managerial samples (lowest scoring sample; $M = 7.00$; $SD = 7.37$) and also lower than that of branch managers ($M = 9.95$; $SD = 7.26$) in the same organization; it was also lower than those of most other South African executive samples reported elsewhere (Strümpfer, 1989). To the extent that the present sample is representative of this occupation, the TABP thus does not seem to be unusually prevalent among marketing representatives. This finding was contrary to the opinion of Howard et al. (1977) which led to the anticipation of high levels of Type A behaviour.

The negative findings with respect to the relationship between the Type A scores and the performance criteria are in line with those of Mattieison, Ivanchevich and Smith (1984). They found no significant differences on three measures of insurance sales performance between persons classified as Type A or Type B on the Framingham Type A scale (Haynes, Levine, Scotch, Feinleib & Kannel, 1978).

The present findings also do not confirm those of Seligman and Schulman (1986); however, they are not disconfirmative either, since a global Type A score necessarily has to be interpreted more broadly than the theoretically more sharply focussed questionnaire scores used by those researchers. It seems simplest to conclude that the “pressured drive” component of the TABP, as measured by the JAS Type A score, seems unrelated to performance as an insurance representative.

Among the JAS scores, it is the Type A score which has most consistently shown relationships with CHD criteria; it is also Type A scores that have been reported to be excessively high among South African executives and which thus could cause an occupational health psychologist to consider the practicability of interventions to reduce Type A behaviour. In the present sample of insurance representatives this score showed no significant relationship with a “hard” criterion of performance used by the industry. It would thus seem possible to set the minds of both individual representatives and their employers at ease, that it is unlikely that reduction in Type A behaviour would reduce their business performance significantly.

In the predictive study on Group 2, the Factor H score showed a low but significant correlation with the performance criterion, explaining 5.38 per cent of the common variance. It is also of interest that the Factor H score showed a negative correlation of about the same order with age, reflecting a decrease in hard-driving, competitive behaviour with increasing age. Although a slight reduction in performance could perhaps be anticipated if an intervention could reduce this kind of behaviour, it would be of the same order as that resulting from the normal process of growing older and perhaps mellower. At the same time, it may be rather difficult to find an intervention that would alter character traits and values that are deeply ingrained by socialization. At most, it may be necessary to evaluate the conceivable effect of potential activities in a Type A intervention programme from this point of view, and to test for score changes in an experimental administration. This single positive finding of the present study thus does not seem to be a serious warning against the eventual-ity of personal and corporate financial health suffering from attempts at reducing behavioural threats to cardiac health.

**REFERENCES**


