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Well-being and future sick-leave

Multivariate analyses with regard to preceding sick-leave

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Consistent associations between self-rated well-being and future sick-leave have previously been noted in a selected group of repeated short-term sick-leavers. The object was to retest those associations after ruling out expected influences of preceding sick-leave. Hypothetically the well-being–sick-leave linkages initially observed would thereby overlap with the behavioural conformity over time. Accordingly, they would possibly be erased in a hierarchical stepwise regression analysis. The study group comprised 61 females and 62 males with diffuse reasons for their high repeated sick-leave. Instead of having to present a doctor's certificate on every new sick-leave occasion, they chose to take part in a support programme. Altogether 8 hierarchical multiple regression analyses were run with sick-leave occasions and days the first and second years after the contact as separate dependent variables. In the first step, long-term behavioural proneness to sickness absence was evaluated, i.e. the correlations between the sick-leave parameters the year before and each of the 2 years after the programme were computed. In the second step, the possible additional impact of well-being ascertained at entrance into as well as exit from the clinical contact was established. Sick-leave correlated strongly over the study periods as expected. Yet, fairly consistent associations between well-being and future sick-leave remained. The well-being parameters accounted for another 4–8% of the entire variance in 5 of the 8 regression analyses performed. That increment corresponded to between 25 and 100% of the proportion initially explained by preceding sick-leave. Thus the independent role of perceived self-image for the long-term inclination to sickness absence in the current 'risk' group was underscored. This was particularly so since the influence of several other background and job-related factors have previously proven to be empirically negligible. Moreover, similar prospective correlations have been seen in other study groups.

Key words: sick-leave, well-being, predictive multiple correlations

A group of frequent short-term sick-leavers without evident reasons for their high sick-leave was previously followed-up. Practically none of 20 background or socio-demographic and 10 specifically job-related characteristics assessed turned out to be connected with their future sick-leave. Only a stated wish for a new job exhibited some correlation (*table 1*). In clear contrast, a number of well-being markers were consistently related. The poorer the initial self-rated well-being in various aspects, the greater was the future sick-leave over each of the 2 years after clinical sociomedical support.[1] Although not as strong, these prospective associations were also in accordance with similar trends previously uncovered in alcohol abusers.[2,3]

Even though there was a strikingly consistent longitudinal pattern between well-being and future sick-leave, a major part of the sick-leave remained unexplained.[1] Other aetiological factors may, therefore, interact with well-being in the prediction of the sick-leave behaviour monitored.

The longitudinal relationship found is especially interesting in that it uncovers links between separate sets of variables, i.e. emotional and behavioural sets. Although not entirely trivial, longitudinal intraset links are mostly to be expected and may even be considered as a sort of criteria contamination.[4] The evidence of a genuine impact of a factor *a priori* separate from the criterion is, therefore, further corroborated if it remains even after the expected intracriterion set association is ruled out. That is to say even after the intrabehavioural disposition over time to register as being sick is adjusted for in this context. Breaugh[5] has provided evidence for a fairly strong job absence tendency over time. He studied the absenteeism of 112 research scientists from 1974 to 1977. He noted that although initially predictive to some extent, 3 work attitude parameters lost their predictive power when past absenteeism measures were included in advance in a hierarchical multiple regression model. The parameters tapped job satisfaction and involvement and supervisory satisfaction. The study outcome is an inverted illustration of the reasoning above on the special significance of remaining intervariable set links.

In justifying his study, 3 advantages – all called for by other researchers – were pointed out by Breaugh.[5] One was the longitudinal design applied, the second con-

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cerned the multiple measures of absenteeism used (total days, frequency and supervisory absenteeism rating) and the third dealt with the usually ignored white-collar study group that was followed (blue-collar or clerical employees had generally been focused on). The present study exhibits similar advantages and has an evident prospective longitudinal design, whereas Breaugh's[5] was retrospective and partly cross-sectional. It does not focus on white-collar subjects, but explores sick-leave in a potential 'risk' group of repeated short-term sick-leavers. Finally, the current study contains repeated measures of well-being as well as of sickness absence, which admits replicated analyses of interrelationships.

AIMS AND HYPOTHESES

Based on Breaugh's[5] results, the initial aim of this study was to verify the hypothesis about significant associations between recorded sick-leave before and after a supportive intervention. The intervention was designated and undertaken for subjects with ambiguous repeated short-term sick-leave.[6] Finally and more importantly, the prospective bivariate connections between self-rated well-being and sick-leave previously detected were to be retested after adjustment for the expected intrasick-leave behavioural associations. The hypothesis was that these intervariable set links would thereby vanish as did the links between job parameters and work absenteism in Breaugh's[5] study.

Table 1 Background and job-related factors previously reviewed and surveyed for significant association with sick-leave after the supportive contact

Variables
Age (years)
Sex
Marital and cohabitational status and their duration
Change in marital status the year before examination (yes/no)
Level of theoretical education
Current smoking habit (being a smoker/not smoking) and years with that habit
Current degree of alcohol intake (sobriety/little/modest/problematic)
Number of children under 16 years
Social welfare support the year before examination (yes/no)
Economic problems reviewed and self-declared (yes/no)
Family, alcohol, sleeping, immigrational and disability problems, all self-declared (yes/no)
Current work status (in a job or study course/out of job) and duration of current job (years)
Shift work (no/partially/solely)
Perceived job stress (yes/no)
Perceived physical work environment (problematic/non-problematic)
Job satisfaction (yes/neither nor/no)
Attitude to current work (approval/neither nor/disapproval)
Wish for a new job (yes/no) *
Wish for an internal job change (yes/no)
Work problem self-declared (yes/no)

* Significant correlate

METHODS

Subjects

The study group comprised 123 subjects, 61 men and 62 women, with a mean age of 31 years.

Due to their frequent short-term sick-leave without a completely satisfactory medical explanation, the local social insurance office had offered them supportive contact at the sociomedical clinic at the University Hospital of Linköping. The participants voluntarily accepted and pursued this contact between 1983 and 1985. The contact was recommended as an alternative to presenting a doctor's certificate on any new sick-leave occasion. Further details of the selection procedure and the treatment programme framework have been described elsewhere.[6] This particular study does not focus on any specific treatment effect and the interested reader is referred to that report as it concerns patient selection and treatment contents in general. Of the 123 subjects entering into the study, 24 left the programme at various stages. Accordingly, 99 pursued it. In addition, internal drop-out of data took place.

Thus, the analyses presented here are based on slightly different subgroups. In all the bivariate intrasick-leave correlations over time, 122 persons were included. In the multivariate analyses of interrelationships between preceding sick-leave – well-being – future sick-leave, the subgroups ranged from a maximum of 112, to a minimum of 72 subjects depending on the well-being assessment occasion, i.e. before or after the contact. The slightly shifting cases in the analyses may make it rather more difficult than easy to detect consistent associations. As regards the supportive contact, 3 physicians, 1 psychologist, 4 social workers and 1 nurse were active in the patient contacts. Firstly, 1 physician verified or excluded somatic disease, thereby, also conducting necessary medical investigations. Possible psychosocial problems were searched for. Secondly, at least another 2 contacts, tailored to the specific need for clarification and support, with anyone of the health care professionals were undertaken. In a few cases treatment of crisis was brought up.

The social background of the participants is outlined in *table 2*. Self-declared and medically reviewed (at entrance

Table 2 Background characteristics of the subjects

Background characteristic	Number of subjects
Civil status	25 married, 21 divorced, 76 unmarried, 1 widow
Cohabitance	53 cohabiting, 70 non-cohabiting
Change in marital status previous year	21 yes, 102 no
Educational degree	60 elementary school, 44 practical post elementary school, 13 college, 6 university
Employment	104 in a job or occupation, 19 out of a job
Smoking	68 non-smokers, 55 smokers
Stated financial problems	39 yes, 84 no
Stated alcohol problem	5 yes, 118 no (18 sober)

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into the supportive contact) primary causes of the participants' sick-leave were upper respiratory infections (75 subjects), gastrointestinal problems (20 subjects) backache (6 subjects), headache (6 subjects), nervousness (6 subjects) and genital tract problems (5 subjects). The remaining 5 subjects stated various diffuse complaints.

Well-being assessment

One hundred and thirteen subjects self-rated their well-being as an initial part of their first contact with the team from the Department of Social Medicine. Eighty-eight patients also made self-ratings after the termination of their supportive contact, mostly in privacy at home.

The rating instrument consisted of 131 statements to be matched with the raters' own perception of themselves and their situations. The items were divided into 9 different scales (originally 11, but 2 were dropped due to unsatisfactory levels of reliability), which measured experience of treatment by other people (16 items), reservation (15 items), loneliness (9 items), inferiority (12 items), tension (17 items), vulnerability (14 items), guilt (8 items), security (15 items) and indolence (9 items).

A reason for the choice of this particular well-being assessment was the similar prospective findings in another study group based on data collected with this particular instrument.[2,3]

Repeated homogenity tests (Cronbach's α) in persons with and without alcohol abuse have yielded coefficients in the interval of 0.85–0.89 for the treatment, loneliness, inferiority, tension, security and indolence scales. The reservation, vulnerability and guilt scales exhibited coefficients from 0.64 to 0.76.[7]

A posterior update of this well-being rating prototype has also proven to be reliable, valid and sensitive in a number of different settings.[8–10]

Sick-leave and treatment outcome

Data on sick-leave were exclusively based on the records of the local social insurance office. The subjects had a mean of 8 (SD=2.9) sick-leave occasions during the year prior to the sociomedical intervention. The mean for days on sick-leave during that period was 30 days (SD=22, range 5–132). During the first year after the intervention, sick-leave occasions declined to 6 (SD=4.2), while sick-leave days increased to 44 (SD=61, range 0–365).

During the next 1 year period, sick-leave occasions were further reduced to 5 (SD=3.4), and sick-leave days further increased to 47 (SD=79, range 0–365). The median for days on sick-leave before the intervention was 24. This changed to 20 for the first and second years after it. Accordingly, even though a majority reduced their sick-leave, for some it was greater after the intervention.

Fifty-one of the persons referred reported no impact at all of the supportive contacts. The responsible health care professionals reported the same in 54 cases. Nevertheless, significant changes for the better were observable[6] in 2 different types of well-being outcome markers.

Statistical analyses

Pearson's correlations were computed between sick-leave occasions/days during the year before and during the first and the second years after the intervention. Moreover, 8 different hierarchical multiple regression analyses (multiple method subcommands) were also carried out, according to SPSS.[11] That was done to examine whether well-being scale scores also remained predictive after excluding the variance explained by the preceding baseline sick-leave. Hence, 2 analyses dealt with sick-leave occasions in the first year after the contact regressed: firstly, on sick-leave occasions the year before it (enter inclusion) and, secondly, on the well-being scale scores obtained at entrance into and at exit out of it (stepwise inclusions). Another 2 analyses focused on sick-leave occasions during the second year after the contact similarly regressed: firstly, on occasions the year before it and, secondly, on the well-being scale scores ascertained at entrance into, and at exit out of it.

Another 4 corresponding analyses were undertaken applying as criteria sick-leave days during the first and second years after the contact.

The assumptions on the normal distributions of the sick-leave parameters seemed dubious in several analyses. In particular, sick-leave days were positively skewed. It should be noted, however, that striking similarities between the Pearson's and the Spearman's correlational patterns emerged in previous bivariate analyses of the well-being–sick-leave connection (Hörnquist et al.[1], tables I and II).

RESULTS

Intrasick-leave correlations

Registered sick-leave occasions during the year prior to the supportive contact accounted for 24% of the corresponding absenteeism in the first year after it (r=0.49). However, prior occasions only explained 4.4% of that absenteeism during the subsequent second year (r=0.21). The corresponding figures for the day parameters were 16 (r=0.40) and 8.4% (r=0.29), respectively. Occasions during the first year after accounted for 20.2% of the occasions the second year after the contact (r=0.45). As an absolute maximum, sick-leave days during the first year after the contact accounted for 32.5% of the days variance during the immediately following second year (r=0.57).

Thus, pervasive significant correlations emerged between sick-leave before and after the sociomedical contact. Accordingly, the higher the level of sick-leave registered initially, the more the future sick-leave. In addition, the closer the study time periods, the stronger were the correlation coefficients obtained.

Remaining well-being predictors after adjustment for the impact of preceding sick-leave

An overview of the outcome of all the 8 multiple regression analyses is available in *table* 3. The well-being parameters yielded an additional explanation of between 4 and 8% of all the remaining variance in the future sick-

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leave in 5 of the 8 partly overlapping multiple regression analyses. None of the well-being parameters ascertained at entrance into the supportive contact emerged as a significant predictor of the sick-leave occasions over any of the 2 periods after it. However, the tension scale score at exit out of the contact stood out as a recurrent predictor, raising R^2 from 0.24 to 0.32 (more details on this regression equation in *table 4)* and from 0.05 to 0.10. As concerns the complementing sick-leave days criteria, 'insecurity' and 'vulnerability' rated at entrance into the contact turned out to be significantly conducive of future sick-leave. The well-being parameters ascertained at exit from the contact could not add to the prediction of sick-leave days during the first year after the contact. However, the reservation scale score at exit raised the R^2 significantly from 0.09 to 0.15 in the prediction of sick-leave days in the second year after the contact.

DISCUSSION

Intrasick-leave correlations

As expected, sick-leave over the study periods was fairly closely intertwined, depending primarily on time lag. Contrary to Breaugh's[5] findings, sick-leave occasions appeared not to be much more stably interrelated over the study years than were sick-leave days. The different outcome here may be due to the fact that Breaugh[5] assessed total absenteeism, i.e. the criteria were not confined to sickness absence. However, it may also be that his conclusion concerning a clear non-isomorphy between 'frequency' and 'days' measurements is, in fact, less generalizable. Interestingly, the magnitude of the corresponding correlational coefficients in the current study and in Breaugh's[5] retrospective follow-up, were at approximately the same level, with a few higher figures in his study. This is so despite there being a certain time displacement in the current follow-up, since the time period for the supportive contact varied between the subjects.

Remaining well-being predictors after adjustment for preceding sick-leave

Of all the initial unadjusted bivariate well-being correlates[1], tension scores at exit from the contact exhibited the strongest association with sick-leave occasions (15% of the variance the first year after the clinical contact explained), while vulnerability scores at entrance into the contact were the strongest bivariate predictor of the days criterion (9% the second year after). The corresponding second-order correlates revealed in the current study still explained as much as another 4–8% after the adjustment for preceding sick-leave. Therefore, the overlap between preceding sick-leave and well-being in their impact on future sick-leave seems to be modest.

Thus contrary to our anticipation, those subjects with medically obscure and greater sick-leave than usual, manifested a residual, fairly consistent, longitudinal pattern of associations between self-rated well-being and subsequent sick-leave. This outcome contrasts in particular with Breaugh's[5] findings as to the partly retrospective and partly cross-sectional nonsignificance of his 3 initial work attitude correlates, when the effect of absenteeism measures was accounted for. It is to be noted here that Breaugh[5] has been criticized by Clegg[12] for inappropriate timing of data collection. The hypothesized effect (absence) was measured for a period, at least partly, prior to the hypothesized cause (work attitudes).

In Clegg's[12] sharply critical and most interesting review of the literature on the partly overlapping field of employee lateness, absence and turnover, major pervasive flaws in the methodological prerequisites for causal inferences were unravelled. Besides inappropriate timing of data collection, there was also the question of whether or not findings were attributable to the presence of either reverse causation (behaviour affecting affect rather than the reverse) or 'third' factors.

The pervading and embarrassing research deficits with regard to the influence of third factors and timing of data collection pointed out by Clegg[12] are not applicable to the current study. The issue of reversed causation will be even more closely analysed in another paper. Moreover, this study meets quite a few, but not all, of the 7 sharply critical, mainly statistical, points raised by Reidy[13] on the sickness absence research carried out over the 3 decades after 1956.

The methodological criticism raised by Clegg[12] was further underscored in his own empirical 20 month follow-up of employees in a factory of an American-based

Table 3 Significant associations between well-being parameter and absenteeism measures the first and second years after the supportive contact (SC), after adjustment for previous sick-leave

	Absenteeism measures (number of occasions and days)			
Well-being assessment occasion	Occasions first year	Occasions second year	Days first year	Days second year
Entrance to SC	None	None	Insecurity (0.16 →0.20)	Vulnerability (0.09 →0.17)
Exit from SC	Tension (0.24 →0.32)	Tension (0.05 →0.10)	None	Reservation (0.09 →0.15)

Outcome of 8 hierarchical multiple regression analyses
Increment of R^2 within brackets

Table 4 Recorded sick-leave occasions during the first year after the supportive contact, predicted firstly by occasions the year prior to it and secondly by well-being self-rated at exit out of it

	Occasions the first year					Change	F-test	
Predictor variable	Mean	SD	r	R	R^2	in R^2	at entrance	β [a]
Occasions before	7.97	2.85	0.49	0.49	0.24	0.24	21.95	0.42***
Tension after	3.13	3.31	0.39	0.56	0.32	0.08	16.0	0.29**

Minimum pairwise = 72
a: The β-weights are significant below the 0.01 ** and 0.001 *** level

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multinational corporation in northern England. In this, a pattern of significant findings that replicated previous research failed to survive more rigorous testing. Clegg[12] himself admitted, however, that the lack of relationship he noted between affect (organizational commitment and job satisfaction) and subsequent lateness and absence may have been due to focusing on the wrong affective variables. Therefore he urges researchers to cast their nets wider than he did.

Drawing upon the outcome of this study with a broader net – although based on quite another minor group of short-term sick-leavers – it may well be that Clegg would have reached other results and conclusions if he had operated with indices similar to the ones used here. These must certainly be viewed as more closely associated with affect in general than are organizational commitment and job satisfaction.

It should be recognized that there may be a re-reversed causation complexity around affect and behaviour which is even more delicate than has been penetrated and outlined by Clegg.[12] Well-being might, for instance, in early stages affect sick-leave which in turn lowers well-being, which then affects sick-leave, and so forth. Such causal circuits with diffuse starting points instead of either sick-leave or well-being as the original trigger key may well be assumed.

Hence, some well-being predictors also remained in this study after the influence of preceding sick-leave was ruled out. Accordingly, the way the subjects look upon and describe themselves definitely seems to have a genuine bearing upon their sick-leave behaviour in the longer term.

As outlined in the introduction, the concurrence between the current and similar findings in alcohol abusers may indicate a broader generalizability about the longitudinal relationships found than would be justified by separate reviewals of these study outcomes.[2,3] The specific sick-leave pattern of the current study group should be recognized, though. This potential risk group with high repeated sick-leave is not representative of all short-term sick-leavers.[6] Therefore, the findings cannot be generalized without great caution. However, as has been pointed out, this particular study group may be of a key 'risk' character in an overall analysis of sick-leave, since more of those with repeated short-term sick-leave usually turn up eventually as those on long-term sick-leave, the group which really accounts for the most part of the sick-leave registered.[1]

Study outcome in relation to previous research findings

As referred to above,[1] of the 20 background factors and 10 job-related characteristics surveyed and scrutinized, only the expressed wish for a new job was weakly related to more future sick-leave periods (*table 1*). This unexpectedly poor outcome (only vaguely underlining the relevance of the expressed wish for a new job) concurs, however to some extent, with the findings of Cheloha and James.[14] They found a superiority of job involvement over job satisfaction as a significant correlate of absenteeism. In this context, it may also be worth noting that of the 90 health, personal, social and industrial attributes examined, only alcohol habits and adverse attitudes to pay discriminated repeated absenteers from those rarely absent among telegraphists in Sydney.[15]

By using the Eysenck personality inventory, Taylor[16] found that extraversion was more marked in the group of short-term sick-leavers. Taylor[16] refers to Eysenck's hypothesis implying "that extroverts condition poorly and therefore find it more difficult to settle in more routine jobs ..." (p. 117). That may be the case in some settings perhaps, but seems not to be applicable to the frequent sick-leavers examined here. The reason here is that those who exhibited greater reservation, 'vulnerability' and 'insecurity' also demonstrated more future sick-leave even after the control of the baseline sickness absence influence (each scale score appearing in 1 of the 4 regression analyses of sick-leave days). In addition, tension also turned out to be a residual recurrent significant well-being predictor of sickness occasions.

Accordingly, it would appear that it is the persons who experience themselves as somewhat tense, insecure, vulnerable and introverted in this context who tend to be more inclined to register as being sick in the long run. Along the same lines, several other studies point at neurosis as a crucial intervening state variable between individual well-being and absence.[15,17–19]

A multifactorial setting

A detailed multifactorial model of the factors behind sickness absence remains yet to be outlined and tested empirically. This is so even though Kristensen[20] recently launched and partly tested one 'medical-sociological' framework with 5 central theses. In 1 of these, it is suggested that sickness absence is not a simple function of sickness, but rather a reflection of a "person's general subjective perception of his/her own health and the factors that influence it" (p. 18). Kristensen[20] also confirmed empirically the existence of such a 'reflection' in his retrospective study of only sickness absence days over the previous year self-declared by slaughterhouse workers (Clegg's[12] criticism concerning inappropriate timing of data collection appears to be applicable to this study as well). Without any explicit rationale or empirical test of his various data sets, though, Kristensen[20] promptly takes it for granted that the perceived health symptoms assessed were largely attributable to the nature of the job held. In this way, they become conceptualized as intermediate variables between working conditions and absence. Thus, Kristensen[20] ended up in a somewhat opaque job-biased interpretation of the state of art, despite claiming and advocating a comprehensive multifactorial approach. This also appears in his further extensive, somewhat speculative, underscoring of deleterious working conditions as the key variables behind sickness absence. Sickness absence is finally interpreted as coping behaviour.

In contrast to Kristensen's[20] conclusions, the sickness absence in workers from 5 different factories in Israel was recently found to be related to their overall subjective

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stress experience (reported job dissatisfaction and somatic complaints) and not directly to a number of adverse work and environmental conditions, termed ergonomic stress level (ESL).[21]

The comprehensive background of sick-leave is by all means often multifactorial, with potentially interacting biological, psychological, social, work environment and random factors. In addition, the actual implications of the current economic policy and labour supply constitute an important framework. Furthermore, the designation of the social security system, e.g. as regards sick pay, certainly affects people's sick-leave behaviour.[1]

In spite of the outcome of the present study, it is still not to be taken for granted that preceding sick-leave and well-being play the most crucial parts in a complex causal setting or chain behind sickness absence. All potential predictors at different levels have not yet been simultaneously and appropriately reviewed and perhaps never will be. Such a broad interdisciplinary study is nearly impossible to set up and pursue. Moreover, a major part of the sick-leave monitored in the current study required further explanations beyond preceding sickness absence and initial well-being. As is also often referred to, Taylor[22] found that a substantial proportion of those who were never absent through sickness had some organic disease. It may, under all circumstances, be considered as quite a successful analysis outcome to reach such a prospective explanational level of sick-leave in the long-term as was obtained in this study.[12,14,23]

Eventually, it may even be quite difficult to identify and evaluate empirically additional significant determinants of future sick-leave than were found in the current study. Naturally, the future behaviour of the human being is not predictable beyond a certain degree. As was also put forward by Avery and Hotz[24] (p. 159) as a generally accepted statement about the absence process, "There is a large component of the occurrence of any absence that is random and cannot be predicted by either the individual or those who are trying to analyze the individual's data".

CONCLUSION

In 5 out of a possible 8 instances, some of the well-being parameters were found to have a significant association with future absenteeism, after adjustment for the influence of preceding sick-leave. Associations were discernible almost regardless of the type of absenteeism measure used and the time at which the parameters were ascertained. Therefore, the way the subjects perceive themselves certainly seems to have a genuine bearing upon their sick-leave behaviour in the longer term. Thus, the relationship cannot only be ascribed to their baseline sick-leave behavioural proneness. Neither can it be attributed to a number of background and job-related characteristics.

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Appendix 1 Summary of the contents of the well-being scales

The items within the 'treatment' scale dealt with

Being accepted, respected, kindly treated, liked and appreciated, being judged impartially, listened to with a sensitive ear and with understanding and being able to express oneself freely

The 'reservation' scale tapped the following features

Being taciturn, slightly suspicious of those around and being reserved, not taking initiative in social contacts and not intruding and preferring peace and quiet and a few selected friends

The 'loneliness' items covered the following circumstances

Missing social contacts, company, someone to talk with or someone who cares, feeling lonely, isolated, cut off or left out of things and wishing for more friends

'Inferiority' included perceptions such as

Being unsure and doubtful of one's self and what one is doing and feeling oneself unimportant, useless, unwanted, inferior and a nuisance

The 'tension' scale circled around having diffuse psychosomatic troubles such as

Palpitation, stomach ache, aches and pains, headache or trembling bouts, having difficulties in concentrating, with sleep or being anxious on being confined, being irritated, nervous, restless and dependent on support from those around and being emotionally highly strung

The 'vulnerability' scale touched upon the following

Lacking confidence and having difficulties in maintaining one's position, being easily hurt and easily getting stuck in earlier failures, adjusting exaggeratedly to others and avoiding threatening situations and being insensitive to and dismissing criticism

The items within the 'guilt' scale had to do with

Feeling ashamed, having a guilty conscience or feelings of guilt and experiencing oneself as unfair and brooding about and behaving in exaggeratedly strict conformity with conventional norms

The contents of the 'security' scale were

Feeling good and satisfied with life, harmonious and secure, being able to shape one's own life according to one's wish and experiencing life as sufficiently rich and varied and not perceiving one's situation as insecure, not losing control of it, not worrying about what can happen or wishing for a more stable and secure existence

The 'indolence' scale tapped

Feeling down-hearted, in conflict with oneself, tired, indolent and bored, looking upon life as 'grey and uneventful' and being unable to do anything stimulating

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