Moeilijke rollen; psychometrisch onderzoek naar de betrouwbaarheid en validiteit van de Groningse Sociale Beperkingenschaal bij psychiatrische patiënten.
Kraaijkamp, Hilbert Johannes Maria

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
1992

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):

Copyright
Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

Take-down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.
PSYCHOMETRIC RESEARCH ON THE RELIABILITY AND THE VALIDITY OF THE GRONINGEN SOCIAL DISABILITIES SCHEDULE WITH PSYCHIATRIC PATIENTS

MENTAL DISORDERS CAN HAVE a significant influence on the daily life of a patient. The Groningen Social Disabilities Schedule (GSDS) has been developed to chart these influences. The study Difficult Roles investigates the reliability, validity and practicality of the schedule. It also closely examines the dimensions of the term 'social role functioning' and discusses the changes in the new version of the GSDS that this research has brought about.

The term 'social role functioning', in this research, refers to the behaviour of a person in the context of a well-defined social role. This definition is a limited description of the term 'social functioning' and excludes definitions such as satisfaction of needs, social competence, social status and burden to the family.

A separate dimension for social functioning is useful and necessary in a classification system. Our definition of social functioning fits in with that of the International Classification of Impairments Disabilities and Handicaps (ICIDH), as it emphasises the consequences of illness and disorders, although there are conceptual problems in relation to psychiatry. One problem refers to the definition of the relationships between the terms impairment, disability and handicap. Another problem refers to the influence of social norms and values on the disabilities stemming from mental disorders.

THE SURVEY

The survey is based on interviews with 131 patients who were being treated at six different centres for mental health care. In two thirds of the cases it was possible to interview a person (informant) who was closely involved in the daily functioning of the patient. Fifty of the patients were questioned by a second interviewer to investigate the reliability. Thirty-six of the original interviews took place in the
SUMMARY

presence of an observer. Audio tapes were made of most of the interviews so that their reliability could be assessed.

THE VALIDITY OF THE GSDS

The GSDS has chosen to measure social role functioning. The measurement of other forms of social behaviour such as social competence, satisfaction and burden on the family, should be separately dealt with using specific tools. This applies especially to specific psychological function disorders.

The GSDS covers all the areas of social functioning, as are listed in the current literature: employment, family, household management, finance, childcare, intimate relationship and other social relationships. Each of these areas are separately evaluated in the GSDS. The GSDS explicitly uses the role theory as starting point, as is shown in terms as reference group, freedom of action, norms and expectations, which are important for judgement criteria. In the GSDS special attention is given to the way that cultural background, financial situation, physical health and if necessary other backgrounds, are taken into consideration in the evaluation of social functioning. The choice to make room for the above in assessing behaviour is beneficial to the validity of the data.

In the GSDS eight social roles form the centre point, whereby psycho-pathology is not taken into consideration. The instrument intends after all to chart the consequences of psycho-pathology. In the present version clearly a problem is created if social disabilities are a result of psycho-pathology which are paired with physical disorders.

THE RELIABILITY OF THE GSDS

The reliability of the GSDS has been studied in various ways by 131 patients from six different mental health institutions. This group form a satisfactory reflection of the various institutional patients.

Two measurements, namely the agreement percentage \( P(0) \) and the Cohen's Kappa have been used to determine the reliability of detecting the presence or absence of a disability. To measure the reliability of the non-dichotomised ratings, in which differentiation is made between five categories, the Finn's \( r \) and the Inter Class Correlation coefficient have been used.

The interview observation (\( N=37 \)), the interview tape (\( N=85 \)) and the test-retest (\( N=50 \)) reliability of the information from the patient appears to be moderated to almost perfect. Not only the reliability of the information from the patient but also the reliability of the information from the informant and the combination of both
was studied. These reliability coefficients were marginally higher in every role except the citizen role.

As well as the influence of an informant on the reliability of a score, the informant information has likewise been checked to see if it changes the role scores. In almost two out of three cases there was indeed occasion to change the score of one of more roles. In 38 percent of the cases a higher score was awarded to one or more roles (that will say worse social functioning), in 6 percent was by one patient not only a higher but also a lower score attributed, and in 21 percent of the cases the score was reduced in one or more roles.

THE PRACTICALITY OF THE GSDS

The GSDS is an instrument with which the social behaviour of people is assessed against the background of their reference group. In other words the social-cultural background is taken into account in the rating of the behaviour. Bearing this in mind, no relationships were expected between the social functioning and variables such as sex, age, level of education or profession. The study confirms this only partly. Women clearly appear to function better than men in the social role. The number of contacts and the degree of intimacy of these contacts were found to be greater by the women examined than by men. Whether this is a consequence of employing the wrong norms for this reference group or that this finding points to a concrete difference in the behaviour of men and women with mental problems remains unclear. The influence of level of education or profession is only noticeable in the citizen role and to a lesser extent in the social role. People with a higher level of education appeared to function better in these roles. Also here one could question whether this is an actual difference or the mistaken evaluation of the norms of the reference group.

As well as the relationship between the GSDS and the above variables, it also appears that there is a positive relationship between the presence of a partner or parenthood and adequate social functioning. One can here observe that these two variables themselves are of course an indication of adequate social functioning. Noticeably the people without a partner and without children appear to function badly. The social functioning did not relate to the hierarchical diagnosis, as was specified by the study group. This is an important observation because it is an indication that social functioning should be considered as a separate dimension or axis in classification.

The level of social functioning is indeed related to the nature of the treatment. Results show that a link exists between the depth of social disfunctioning and the institution where the patient is treated. One could hypothetically suggest that the
degree of care and therefore the choice between admission to hospital and outpatient treatment could be made on the basis of social functioning and not on the basis of a psychiatric diagnosis.

THE DIMENSIONALITY OF THE GSDDS
The GSDDS has arranged disorders in eight different roles. Earlier research showed that these eight social roles form a one dimensional scale. The dimensionality of the GSDDS has been examined to confirm this finding. To do this, use has been made of factor analysis as well as Mokken analysis (a one dimensional scale analysis). Further, with the assistance of cluster analysis, was examined if groups of respondents could be distinguished by whom the role scores revealed a certain pattern. The factor structure is examined from the dimensions as well from the roles. The analysis of the dimension scores produces a structure in which the roles are clearly retrievable. The analysis of the role scores resulted in one clear factor that explained almost half of the variance. Further using Mokken analysis it could be shown that the GSDDS has a reasonably good, one-dimensional hierarchical structure (Mokken analysis $H=.51$). Nevertheless the hierarchy did not appear to be stable for all groups or studies. The Mokken analysis offers not only the possibility of defining the hierarchy on the basis of the dichotomy scores, the presence or absence of disabilities, but one can with this method, also make use of several response categories with which the information about the gravity of the disability, is put to better use. Given our findings, dichotomisation does not appear to offer any advantages for determining the strength of the hierarchy. Therefore in order to work out an overall or scale score, use can be made of the information about the severity of the disability. Cluster analysis consequently offers the possibility of differentiating between groups of people with similar role score pattern. It can be concluded from this cluster analysis that the role hierarchy deviates by certain sub-groups. On the basis of the results of the cluster analysis, we come to the conclusion that the replacement of the eight role scores for one scale score would therefore, in some cases lead to a loss of essential information.

THE USE OF ONE SCALE SCORE
The use of one overall measure has the advantage that the reliability increases and that such a measure is more suitable for analysis in which an interval level is required such as by the calculation of correlations and by analysis of variance. The results of the factor and Mokken analysis indicate that there is suggestion of one factor and that a scale score gives a very good impression of the general social role
functioning. In order to calculate the scale score one can, in the light of the results of the Mokken analysis, better employ the trichotomized role scores. The reliability of the overall score is high. The ICC’s for the interview observation (n=37) and test-retest (n=50) reliability amount to .91 and .78 respectively.

A strong correlation exists between the number of roles that are limited and the scale score (r=.95) This means that this score shows a clear indication of the scope of the disfunctioning. In the view of the reliability and validity of the scale score, one can use this measure as an indication of the severity and scope of disabilities in the general social role functioning.

**ISSUES THAT HAVE LED TO CHANGES IN THE GSDS**

The GSDS was initially developed for the assessment of social dysfunctioning which should take place independently from the psychiatric symptomatology. Disorders caused by somatic illness were disregarded. The social disabilities found could therefore be attributed to psychological illness or disorders. In practical use it appeared that there were reasons to let the assessment not only take place independently of psychiatric symptomatology but also of somatic pathology.

This change, that can be found in the new definition of the term freedom of action (GSDS-II, 1990), prevents problems in judgement if physical and psychological illnesses are paired. It makes the independent assessment of social functioning possible. Social functioning fits better as a separate axis in a multi-axis classification. The application of the instrument increases greatly because it can, in principle, be used in all fields of medical inquiry.

A disadvantage of this change, is that one now can no longer declare that the disabilities are a direct consequence of psychological disorders. Psychological and somatic disorders should therefore be separately established.

Another important suggestion for improvement of the GSDS is created by the changes in the domains of functionality of the various social roles. First of all research shows that the dimensions on which the functioning in hospitals is rated, cannot be used reliably. These dimensions are therefore no longer included in the GSDS-II. Secondly some of the dimensions have been changed so that they are the same for everybody. This has led to introduction in the GSDS-II of separate dimensions for single persons. It is expected that this distinction will increase the reliability of the dimension scores on the family role, for example. The structure of the citizen, social and professional role is for the most part taken over from the version used in this study. As the reliability of the citizen role is not adequate, improvement has been made attempted by formulating anchor points for the assessments.

An argument for the retention of this role is the decision that the GSDS must
SUMMARY

chart all the important areas of functioning. The rules for assessment of the dimensions of the citizen role are defined in such a way that they should, in the new version, be applicable to more situations, for most people.

Not only in this dissertation research, but also in other studies on the GSDS, it appears that two scoring categories were unsatisfactory: the scoring category (0) excellent and the category (4) maximum disability. Both categories were seldom used. Also it appeared that assessors use of category (0) varied extremely. These findings have led in the GSDS-II to the scrapping of the category excellent and to the redefining of the category maximum disability.

This study has also shown that the information of an informant can be of value. The instrument has not been altered on this point.

SUGGESTIONS FOR FURTHER STUDY

Further study on the practicality of the GSDS is very important, because the changes in the freedom of action have made GSDS-II suitable for use by somatic illness as well. In the light of this change one could consider using the GSDS for assessing the consequences of chronic illnesses, such as asthma and rheumatism, on everyday life.

Also within the framework of research into home care instead of hospital admittance, the instrument could be useful for evaluating effects.

The more the quality of life is seen to be increasing importance, the more significant are the consequences of illness and disorders and it is therefore desirable that medical and social training courses devote attention to social diagnosis.