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## **Empowerment and occupational engagement among people with psychiatric disabilities**

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## **Abstract**

**Background:** Empowerment is essential in the rehabilitation process for people with psychiatric disabilities and knowledge about factors that may play a key role within this process would be valuable for further development of the day centre services.

**Objective:** The present study investigates day centre attendees' perceptions of empowerment. The aim was to investigate which factors show the strongest relationships to empowerment when considering occupational engagement, client satisfaction with day centres and health-related and socio-demographic factors as correlates.

**Methods:** 123 Swedish day centre attendees participated in a cross-sectional study by completing questionnaires regarding empowerment and the targeted correlates. Data were analysed with non-parametric statistics.

**Results:** Empowerment was shown to be significantly correlated with occupational engagement and client satisfaction and also with self-rated health and symptoms rated by a research assistant. The strongest indicator for belonging to the group with the highest ratings on empowerment was self-rated health, followed by occupational engagement and symptom severity.

**Implications:** Occupational engagement added to the beneficial influence of self-rated health on empowerment. Enabling occupational engagement in meaningful activities and providing occupations that can generate client satisfaction is an important focus for day centres in order to assist the attendees' rehabilitation process so that it promotes empowerment.

**Keywords:** day centres, psychiatric rehabilitation, community mental health, occupational therapy

## **Introduction**

Empowerment is essential in the rehabilitation process for people with psychiatric disabilities and having occupations that are meaningful and building social relationships play a key role within this process (1-4). A lack of open-market employment is highly prevalent among people with psychiatric disabilities in many countries (5). A literature review reported that between fifteen to thirty per cent of people with psychiatric disabilities had open-market employment (6) whereas a recent Swedish study found that number to be only nine per cent (7). To meet the needs of meaningful daily occupation for this group in Sweden the Social Services Act (8) states that the municipalities are required to provide meaningful everyday occupations for people with psychiatric disabilities, usually organized at day centres (DC). Research has shown that DC have an important role in offering meaningful daily occupations, social interaction and inclusion and in helping the attendees to create structure in their daily lives (9-12). DC have been described as paradoxical in the sense that the attendees can feel safe, socially included and supported through difficult times, but also risk developing dependency which can alienate them from society and counteract empowerment (13, 14). Research has identified powerlessness as a key risk factor for ill health (15) and, conversely, empowerment as a factor having a positive impact on physical and mental health (15-16). Empowerment has been conceptualized at individual, organizational and community levels (17). On the individual level subjective or psychological components of empowerment can be described as: a sense of control, self-determination regarding goals and circumstances that are important to the individual, a sense of self-efficacy and self-confidence, a positive self-concept and a high level of self-esteem (17). On the organizational and community levels behaviours or outcomes refer to strengthening the small group by satisfying a common need or agenda, and taking collective action in the public and political arena (15, 17).

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Empowerment is regarded as a central factor in users' personal recovery process (18). Barret and colleagues (19) found a strong positive relationship between treatment programmes with different degrees of recovery orientation and empowerment.

The current focus on recovery-oriented mental health rehabilitation and care services has led to the recognition of a user perspective of services and of measuring client satisfaction (20).

The study by Barret and colleagues (19) also reported a strong positive association between treatment programmes with a recovery orientation and client satisfaction with services for people with psychiatric disabilities. There is, however, little knowledge about DC attendees and their satisfaction with the support and care at this setting (21). A recent study (12) exploring motivation and satisfaction in people with psychiatric disabilities attending DC found that there was a high level of satisfaction with the rehabilitation, especially concerning receiving help to cope with problems. Further knowledge about possible links between empowerment and client satisfaction would be of importance when planning and attempting to improve the rehabilitation for people with psychiatric disabilities attending DC.

Furthermore, a relationship between empowerment and a number of socio-demographic factors has been identified in people with psychiatric disabilities (22-23). One of these studies (22) reported that a higher level of empowerment was found among people with a college or university education (vs. lower education), among those who were or had been married (vs. never having been married) and among those who currently had regular or sheltered work (vs. not working), whereas another study (23) found no significant relationship between empowerment and marital status. Several other factors have been found to impact positively on empowerment in people with psychiatric disabilities, including health and well-being factors such as subjective quality of life and psychosocial functioning, social network, engagement in daily activities and participation in the community (22-23). In addition

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empowerment has been negatively associated with factors pertaining to adverse health and well-being, including the number of needs for care, perceived stigmatizing attitudes, depressive symptoms and severity of self-reported psychiatric symptoms (22-23).

Several studies have demonstrated the general benefits of occupational engagement for mental health (9, 24-25). Occupational engagement has been defined by Bejerholm and Eklund (25) as the extent to which a person has a balance between different occupations and routines while also considering continuity over time in these respects. The beneficial characteristics of occupational engagement have been shown to include less severe psychiatric symptoms, higher scores on quality of life, sense of coherence, mastery and locus of control (25), as well as generating intrinsic motivation, and re-establishing a self-concept and identity (9, 24, 26). According to Prillentelesky, Nelson and Peirson (27) settings that provide occupations aimed at increasing personal and practical resources and competencies, such as DC, play an empowering role, thereby promoting wellness. Research findings indicate that occupational engagement at DC can be a means for building competence through the acquisitions of skills, accomplish social inclusion and improved mental health for people with psychiatric disabilities (9, 24, 26). A recent study showed that occupational engagement could predict degree of empowerment among day center attendees (28). Existing research thus indicates that occupational engagement should be addressed when studying important correlates of empowerment, together with client satisfaction and health-related and socio-demographic factors. Such knowledge could be of importance in the development of rehabilitation for the target group. The present study thus addressed a knowledge gap in research concerning how DC attendees perceive their empowerment in relation to the correlates of occupational engagement, satisfaction with the DC and health-related factors, and which of the correlates show the strongest relationships to empowerment.

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We hypothesized that a) more occupational engagement and b) greater satisfaction with DC and c) better self-rated health and fewer psychiatric symptoms would be associated with higher levels of empowerment in people with psychiatric disabilities attending DC. Since previous research has indicated that socio-demographic factors may play a role in empowerment we controlled for factors such as education level and marital status.

## **Material and methods**

### *Setting and selection of participants*

Day centres in Sweden are mainly organized in two types; work oriented or meeting-place oriented (29). In work-oriented DC the activities are scheduled and mainly productive, such as manufacturing and selling goods, cleaning, or providing catering services. The meeting place-oriented DC offers activities such as playing games, eating and socializing. There are also settings that are a combination of both (29). The participants (n=123) in the current study were men and women regularly attending work-oriented or meeting place-oriented DC, with a minimum attendance of four hours per week as an inclusion criterion. Furthermore they were required to have attended the DC for at least one month prior to participating in the study. The inclusion of the participants was based on attendance statistics provided by staff at the day centre. At the actual time of the interview one participant reported only 2 hours attendance due to an episodic decline. Exclusion criteria were: co-morbidity of learning disabilities, substance abuse or dementia. Attendees whose mental status was too poor to allow participation, or whose knowledge of Swedish was too limited, were also excluded. No interpreter was used. The assessments based on these criteria were made by staff who knew the attendees well. No medical records were kept at the DC and thus no diagnoses made by a professional could be obtained. The participants were however asked for their self-reported diagnosis. These were then categorized by an experienced, specialized psychiatrist into ICD-10 diagnoses (30) and subsequently grouped into three categories. The validity of this

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procedure has support in previous research (21). The diagnosis categories were only used for descriptive purposes and not used in further analysis. It was not possible to make a precise calculation of the participation rate, but it was estimated at 50% of the persons who were asked to participate, which is in accordance with previous research on similar samples (21, 31).

#### *Procedure and ethical considerations*

The data were part of a larger longitudinal study approved by the Regional Ethical Review Board (Reg. No. 625/2009). The present study is cross-sectional using baseline data collected from participants that were consecutively included between September 2009 and September 2012.

A director of social services in a county in central Sweden was contacted to obtain information about the type of day centres located in the county. By purposeful selection, four areas with different socioeconomic conditions were chosen. Six DC units, some work-oriented and some meeting place-oriented, were located within these areas. The managers of each DC were contacted by telephone and were given oral information and subsequently also written information by e-mail. All six managers of the DCs contacted agreed to receive a visit with the purpose of providing the DC attendees and front-line staff with information about the study. All DC attendees who met the inclusion and exclusion criteria were offered to participate and were given verbal and written information. They were informed that participation was voluntary, that their confidentiality would be protected and that they could withdraw from the study at any time. Participation was based on written informed consent from the participants. The data was collected by experienced research assistants and the interviews and self-ratings were performed in a separate, private room at the DC. The data collection took approximately one hour, with a break if relevant to avoid exhaustion. In order



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to protect the confidentiality the data was coded with case numbers and kept in a locked and fireproof filing cabinet.

### *Data collection*

Questionnaires were used to collect the data which concerned five areas: perceived empowerment, occupational engagement, client satisfaction, and health-related and socio-demographic factors.

*Empowerment.* The Empowerment scale (ES) (32) was designed to measure the construct of empowerment as perceived by consumers of mental health services. In the present study the Swedish version of the ES was used (22). The ES involves both interpersonal and societal dimensions and consists of 28 items that are summed and averaged to arrive at an overall empowerment score. It includes five subscales: self-efficacy – self-esteem, power – powerlessness, community activism and autonomy, righteous anger, and optimism – control over the future. The items are rated on a four-point Likert scale from 1 (strongly disagree) to 4 (strongly agree), with higher scores indicating a greater sense of empowerment. The present study used an overall median sum score in the data analysis. The subscales were only used for descriptive purposes. The ES has good test–retest reliability, internal consistency, and construct validity (9, 36). This also applies to the Swedish version (22).

*Occupational Engagement.* To measure occupational engagement the Profile of Occupational Engagement in people with Severe mental illness – Productive occupations (POES-P) (33) was used. Its first part involves completion of a diary covering the previous day at the day centre. It contains a column for denoting the occupation and another three columns corresponding to the personal and environmental (social and physical) domains of occupational performance. These can be used for notes about personal reactions and where and with whom the occupation was performed. The information obtained from the diary is

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assessed according to eight items rated on a four-point scale where 1= not at all and 5= always. Sample items are: *I think I am able to manage the tasks I perform; I think there is a good balance between activity and breaks; I think I am independent.* The total score indicates the level of engagement in daily activities. A study by Tjörnstrand, Bejerholm and Eklund (33) found that the internal consistency of POES-P was good and gave support for construct validity.

*Client Satisfaction.* The participants' perceived satisfaction with the DC was measured with the Swedish version of the CSQ-8 which is a short version of the Client Satisfaction Questionnaire, CSQ-18 (34). The eight items are rated on a four-point Likert-type scale ranging from 1(very dissatisfied) to 4 (very satisfied), from which a global satisfaction score is obtained. A study by Attkisson and Zwick (35) showed that the CSQ-8 had excellent internal consistency and performed equally as well, and often better in comparison with the CSQ-18 (35).

*Socio-demographic factors.* Socio-demographic factors, such as gender, age, civil status, education level, whether the person had a close friend or not, and also time spent weekly at the DC, were collected with a questionnaire devised specifically for this study.

*Factors pertaining to health.* Self-rated health was measured with the first item from the SF-36 (36) which asks the respondents to evaluate their overall health using a five-point scale where 1= excellent and 5= poor health. The single item has been proposed as suitable for assessing global self-rated health (36, 37). Since the authors wanted an outside perspective of health as a complement to the SF-36 item, the GAF-S was used in the present study. The GAF-S is one of the scales in the Global Assessment of Functioning, GAF (38), which consists of separate scales for symptoms (GAF-S) and functioning (GAF-F). The scale has 100 scoring possibilities, from 1 to 100; a higher value on GAF-S indicates fewer and/or less

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severe psychiatric symptoms. The research assistants had received specific training and gone through calibration for the GAF rating. Psychometric research has found the GAF to be reliable after very little rater training (39).

### *Data analysis*

The data were mostly of an ordinal nature, thus non-parametric statistics were used. Spearman's rank correlation test was used to calculate relationships between empowerment and the variables based on occupational engagement, client satisfaction and health-related factors. The Mann-Whitney U-test and the Kruskal Wallis test were used to investigate differences between groups based on gender, civil status and education level. To further analyze which of the investigated variables could best explain the level of empowerment, a logistic regression analysis was made. A dichotomous variable was created for the variable empowerment according to a median overall sum score cut-off (*median=2.8*). The variable was set as the dependent variable and the variables pertaining to occupational engagement, client satisfaction, and health-related and socio-demographic factors were set as independent variables in a logistic regression model, based on the Forward Likelihood Ratio. Independent variables were included in the logistic regression if they showed a relationship with the dependent variable at  $p < 0.10$ . The data analyses were performed with the SPSS software, version 21. The level of significance was set at  $< 0.05$ .

## **Results**

### *Descriptive statistics*

Table I in about here

The average age of the DC attendees (Table I) was 51 years, with a range from 24 to 72 years. According to self-reported diagnostic data the largest number of respondents had depression

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and/or anxiety, followed by schizophrenia or other psychosis. The median overall empowerment score was 2.8, with a range of 2.3 to 3.5. The median scores for each of the five subscales, self-efficacy – self-esteem, power – powerlessness, community activism and autonomy, righteous anger, and optimism – control over the future, are presented in Figure I.

Figure I in about here

#### *Associations between occupational engagement, client satisfaction and health-related factors and empowerment*

Occupational engagement and client satisfaction were significantly correlated with empowerment as hypothesized (Table II). Furthermore, there were statistically significant correlations between both self-rated health and symptoms as measured by the GAF-S((39)) and empowerment. Occupational engagement showed the strongest association with empowerment (Table II).

Table II in about here

#### *Multivariate analysis*

The socio-demographic variables tested for associations with empowerment were age, gender, education level, marital status and having a close friend. Only having a close friend showed an association at  $p < 0.10$  ( $p=0.059$ ). Time spent weekly at the DC was also tested for, but showed no significant association with empowerment. Logistic regression was thus performed with five independent variables in the model (client satisfaction, occupational engagement, self-rated health, GAF-S and having a close friend). Three of the independent variables made a statistically significant contribution to the model. The strongest indicator for belonging to the group with the highest scores on empowerment was self-rated health, showing an odds ratio of 1.9 (95% C.I. 1.19- 3.01), followed by occupational engagement showing an odds ratio of 1.4 (95% C.I. 1.09-1.42). The third variable in the model was GAF-S, showing an odds ratio of 1.04 (95% C.I. 1.01-1.08). Client satisfaction and having a close friend showed

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to be non-significant. Thirty-eight percent (Nagelkerke R-Squared) of the variance in empowerment could be explained by the model as a whole, and correctly classified 72.9% of the cases (46). The Hosmer-Lemeshow test showed a significance level of 0.083 thus indicating support for the model (40).

## **Discussion**

The results supported the hypotheses. Empowerment showed to be associated with occupational engagement, client satisfaction and factors pertaining to health. This is in line with a study by Bejerholm and Björkman (23) who found that a high level of empowerment was associated with less severe symptoms and high levels of occupational engagement in daily activities and community life in people with psychiatric disabilities entering supported employment. Those who participate in supported employment may differ from DC attendees in terms of, for instance, symptom severity and perceived health, and it is interesting that studies in such different contexts have yielded similar results. Furthermore the logistic regression analysis clearly indicated that occupational engagement was of importance for empowerment. Several other factors reported to impact on empowerment in people with psychiatric disabilities, e.g. quality of life and the quality of the social network (6, 15) are complex and difficult to influence for community mental health professionals such as staff at DC. They have the potential to support the attendees' engagement in the DC occupations, however, by providing meaningful occupations directed towards increasing personal and practical resources and social interaction. In light of the present study's finding of a significant link between occupational engagement and empowerment it seems important for the staff to consider how the DC attendees perceive their occupational engagement and their access to meaningful occupations.

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Client satisfaction showed to be important for empowerment, although only in the bivariate correlations. Echols-Hurst (41) reported that previous satisfaction with overall health care and satisfaction with current health care encounter was associated with empowerment in patients with psychiatric disabilities and substance abuse, and the present study's bivariate analyses thus corroborated their findings. Another study found a strong positive relationship between treatment programs with different degrees of recovery orientation and empowerment and satisfaction with services among people with psychiatric disabilities (19). Very few studies have been conducted regarding empowerment and client satisfaction, but findings so far indicate that it could be important to assess client satisfaction when evaluating the DC's role in increasing empowerment as a means of promoting rehabilitation and recovery in this group.

Finally, the present study showed that self-rated health was the strongest indicator for belonging to the group that scored highest on empowerment among the DC attendees. No studies have been found regarding self-rated health in relation to empowerment in the target group. Even so Roher and colleagues (42) found, in a study of primary care patients, that good self-rated overall health was related to high levels of empowerment. Further, both bivariate and multivariate analyses in the present study showed that less symptom severity was associated with more empowerment, which corresponds with previous research (23, 42-43). An improvement in symptom severity is commonly referred to in the literature as a part of clinical recovery (2, 44), whereas personal recovery in contrast involves working towards improved mental health and a satisfying life regardless of the presence of symptoms (44). The findings of the present study emphasize the primacy of the client-centred perspective and the importance of acknowledging the clients' perspective on health when attempting to promote empowerment and recovery in people with psychiatric disabilities.

*Methodological considerations*

The generalizability of this study is an issue, particularly since the number of non-participants could only be roughly estimated and no dropout analysis could be performed. Although the estimated participation was comparable to that of other research on similar populations (21, 31), it is likely that the DC attendees who were among those most affected by their illness or psychiatric disability chose not to participate, thus limiting the external validity of the study. There were also missing data for some variables, accounted for in Table I, but this was a result of an administrative failure. On one occasion in the process of consecutive inclusion a section was missing in the background questionnaire and 21 participants were not asked about, e.g., self-reported diagnosis and education level. For some participants this information could be retrieved in retrospect, mainly through the staff. Since these missing data were not due to any systematic attrition, they should, however, not have affected the generalizability of the study. Besides, DC in Sweden does not keep medical records, and we had to rely on self-reported diagnoses. Previous research has shown that day centre attendees represent a variety of psychiatric conditions, however, and that they all have some sort of severe and disabling mental illness (31). Prior research also gives some support to the validity of self-reported diagnoses (31). Moreover, the participants were recruited from six different DC that varied with respect to geographical location and socio-economic circumstance, and the participants showed socio-demographic and clinical characteristics similar to those reported in other studies on this target group (21, 31). These circumstances would give some support to the external validity of the study.

The present study had a cross-sectional design and it is not possible to make any assertions about causality, only about relationships. A longitudinal design would be necessary to investigate hypotheses of causal relationships, but the findings may serve as a basis for hypotheses for future research.

### *Conclusion*

This study has contributed to the knowledge about some factors of importance to empowerment in people with psychiatric disabilities attending DC. Enabling engagement in meaningful occupations and providing occupations that can promote client satisfaction and health-related factors is an important focus for day centres. Such strategies can assist the attendees' rehabilitation process by increasing a feeling of empowerment.

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### **Declaration of interest:**

We disclose no conflict of interest. The authors alone are responsible for the content and writing of the paper.



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*Table I. Sociodemographic and health characteristics of the participants.*

Characteristics	
Mean age; <i>n (min.-max.)</i> <sup>a</sup>	51 (24-72)
Gender: male/female; <i>n (%)</i> <sup>b</sup>	56 (46%) / 66 (54%)
Civil status; married or cohabitant/single; <i>n (%)</i> <sup>c</sup>	14 (12%) / 105(88%)
Education level: <i>n (%)</i> <sup>d</sup>	
not completed compulsory school	8 (7%)
completed compulsory school	28 (25%)
completed sixth-form college	52 (46,5%)
completed undergraduate studies	24 (21,5%)
Having a close friend: <i>n (%)</i>	
yes	98 (80%)
no	25 (20%)
Hours per week at DC, mean; <i>n (min.-max.)</i>	15 (2-35)
Self-reported health, median; <i>n (min.-max.)</i> <sup>1</sup>	3.0 (1.0-5.0)
Symptom severity, mean; <i>n (min.-max.)</i>	
GAF-S	52.0 (20.0-90.0)
Self-reported diagnosis: <i>n (%)</i> <sup>f</sup>	
Depression and/ or anxiety	53 (52%)
Schizophrenia or other psychosis	29 (28%)
Other	21 (20%)

Notes: Due to missing data the total number of participants varies between the variables.

<sup>a</sup>13 missing values; <sup>b</sup>one missing value; <sup>c</sup> four missing values; <sup>d</sup>eleven missing values,

<sup>e</sup>three missing values, <sup>f</sup>20 missing values. <sup>1</sup>Self-rated health is graded 1=excellent, 5=poor.

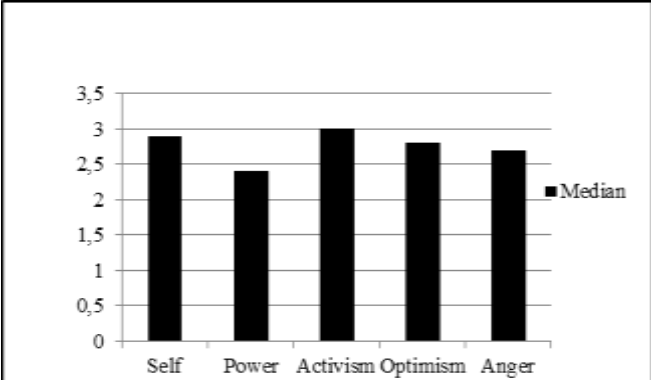


Figure 1. Empowerment sub-scales median scores.

## Running head: Empowerment among day centre attendees

*Table II.* Intercorrelations between empowerment and occupational engagement, client satisfaction, self-rated health and symptom severity.

	Empowerment <sup>a</sup>
Occupational engagement <sup>b</sup>	0.425**
Client satisfaction <sup>c</sup>	0.302*
Self-rated health <sup>1</sup>	-0.342**
GAF-S <sup>d</sup>	0.302*

Note: \* $p < 0.001$ . \*\*  $p < 0.000$ . Due to missing data the total number of participants varies between the variables .<sup>a</sup>Three missing values; <sup>b</sup> four missing values; <sup>c</sup> one missing value, <sup>d</sup> three missing values, <sup>e</sup> three missing values. <sup>1</sup>Self-rated health is graded 1=excellent, 5=poor.