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*Running head: Perceptions of occupation and day centre attendance*

# **Factors influencing subjective perceptions of everyday occupations. Comparing day centre attendees with non-attendees**

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## **Abstract**

*Background:* Subjective perceptions of everyday occupations are important for the well-being of people with psychiatric disabilities (PD) and are likely to vary with factors such as attending a day centre or not, activity level, self-mastery, socio-demographic and clinical factors. *Aim:* To explore differences in subjective perceptions of occupation and activity level between day centre attendees and non-attendees, and to investigate factors of importance for the subjective perceptions of occupations. *Methods:* The study groups held 175 participants; 93 day centre attendees and 82 non-attendees. Data was collected with instruments concerning; subjective perceptions of everyday occupations, activity level, self-mastery, and socio- demographic and clinical factors. *Results:* Day centre attendees perceived higher levels of occupational value and activity level, while the groups perceived a similar level of satisfaction with daily occupations. For the total sample, self-mastery influenced both valued and satisfying everyday occupations while only value was affected by activity level. Satisfaction with daily occupation increased with age and both value and satisfaction increased with lower levels of psychiatric symptoms. *Conclusion:* Day centres provide perceptions of occupational value and stimulate to activity. Non-differences between the groups regarding satisfaction with everyday occupations implied, however, that day centres might not cover all relevant occupational needs.

**Key words** *community mental health, mastery, occupational therapy*

## **Introduction**

Everyday occupations are important for people's health and well-being (1-2). This has been shown not least for people with psychiatric disabilities (PD). Although there are great individual variations, their everyday occupations tend to give very little stimulation, are often quiet and performed in isolation at home (3), and are typically associated with poor quality of life and well-being (4)

A common community-based rehabilitation strategy for people with PD is the provision of day centres, offering different kinds of everyday occupations and social support (5). There is also a general international movement towards community-based models of care within the mental health services (6), and in Sweden the municipalities are given the responsibility for providing meaningful occupations to the target group (7). Intuitively, attending a day centre and taking part in the occupations and social interactions there would infer a different occupational situation compared to those who do not have a structured and regular daily occupation, such as working, studying or attending a day centre. Those who do not partake in such occupations might spend more time at home and perceive and value their everyday occupations differently.. There is, however, limited research regarding how attendees experience the day centres they visit and the effect this type of rehabilitation has on people with PD (8-9). Furthermore, a previous study could not identify any differences regarding satisfying and valued everyday occupations between a day centre group and an outpatient group without a regular daily occupation (10). Thus, whether day centre participation brings any positive subjective occupational perceptions is far from clarified. This type of knowledge is important as a basis for

designing optimal rehabilitation strategies that may help people with PD towards as satisfying an everyday life as possible.

A recent study by Argentzell, Håkansson and Eklund (11), examining the specific criteria that bring meaning in everyday occupations among people with PD, showed that having a sense of control and daily occupational structure and maintaining mental health were crucial in order to derive meaning. Those findings imply that subjective perceptions of occupation are influenced by factors such as level of structure in everyday occupation, a sense of mastery of one's life situation and the severity of illness.

#### *Subjective perceptions of occupation*

Examples of subjective perceptions are the value and satisfaction a specific occupation may bring (12, 13). When describing the type of value a specific everyday occupation has for a person the Value and Meaning in Occupations (ValMO) model may be used (13). The model suggests that the perception of *occupational value* also promotes a sense of meaning, which in turn contributes to health and well being (13). The model further describes occupational value along three dimensions; concrete, symbolic and self-reward value. The concrete value is about the visible features of occupational value, as for example baking a cake or cleaning the house. The symbolic value has to do with what an occupation signifies for a certain person, for example when horseback riding has a specific value for someone who grew up on a farm with horses. The final dimension is the self-reward value which has a focus on immediate rewards and enjoyment, such as when doing creative arts or sports. The way in which people with PD perceive the value linked with their everyday occupations has not been extensively studied. However, in a

study by Eklund, Erlandsson and Persson (14) it was shown that those who had PD scored lower on perceived occupational value than a comparison group without known mental illness, although the difference was moderate in size.

*Satisfaction with everyday occupations* forms another angle from which subjective perceptions of everyday occupations may be investigated (15). Kielhofner (1) describes satisfaction as derived from small daily routines. In the present study, satisfaction with daily occupation is viewed as a broad and general feeling of being content with occupations in daily life in comparison to occupational value, which targets more immediate and specific aspects of an occupation. Thus, both these concepts of satisfaction with daily occupation and occupational value complement each other (15). The subjective perceptions of occupation, in terms of occupational value and satisfaction, are crucial for the effect occupations will have in health promoting interventions (12). Therefor, they constitute important goals in psychiatric rehabilitation (16) and should be further explored.

#### *Factors of importance for subjective perceptions of occupation*

Previous research indicates that factors such as activity level, self-mastery, socio-demographic and clinical factors may influence the way in which people with mental illness perceive their everyday occupations. Additionally, it is unclear how attendance at a day centre might influence a client's perception of their daily occupations. *Activity level*, is in the present study described as occupational participation or 'doing' in the broadest sense, as described by Kielhofner (1). Activity level has been addressed in time use studies, showing mainly that people with PD spend more time sleeping and resting



than people who are mentally well (17). Moreover, Eklund and Gunnarsson (18) found that people with PD had a lower activity level than people who were mentally well. In a study based on people diagnosed with schizophrenia, Bejerholm and Eklund (3) found that a high level of involvement in occupation was related to better quality of life and higher levels of self-mastery. Research regarding how activity level and the subjective perceptions of occupation relate to each other is still scarce but needed for the organization and development of psychiatric rehabilitation for people with PD.

*Self-mastery* has been shown to influence how people with PD perceive their daily occupations (19), as well as their activity level (3). This makes self-mastery an interesting personal factor to examine further in relation to subjective perceptions of everyday occupations. The concept of self-mastery has been described as the individual's control over life circumstances that significantly affect his or her life (20) and the basis of self-mastery has been proposed to be the perception of actual power to bring about desired outcomes (21). To perceive having power and being able to influence which kind of occupation to engage in are also in the very core of occupational therapy models (1, 2). Regarding people with PD, self-mastery has been shown to be of importance to health-related factors such as sense of coherence (22), hope (23), empowerment and recovery (24), well-being and quality of life (25), and meaning (11).

Regarding *socio-demographic* and *clinical factors* and their importance to subjective perceptions of everyday occupation research is limited in scope. Eklund, Hansson and Bejerholm (26) did not find any differences between men and women regarding

satisfaction with daily occupation. No studies seem to have been reported regarding gender differences on occupational value among people with PD, but in a study of a healthy sample no gender differences were identified (27). The ValMO model, however, suggests that both gender and age variations are likely (13) and age differences have been found regarding other aspects of daily occupations. For example, Shimitras et al. (17) showed that younger people with PD spent more time socializing than older persons. Regarding clinical factors' relationship to subjective perceptions of occupation those few reports that exist indicate that people who have a psychiatric diagnosis perceive a lower level of satisfaction as compared to people who are mentally well (14, 18). Corresponding studies regarding occupational value seem not to exist. This means that more knowledge is needed about the way in which socio-demographic and clinical factors influence the perceptions of everyday occupations.

Moreover, since day centres should provide the attendees with meaningful and satisfying occupations, it is of importance to examine what participation in day centres means in terms of subjective perceptions of occupation. In addition, since research regarding day centres is scarce, the activity level among day centre attendees and non-attendees should also be investigated.

## **Aims**

The aim of the present study of people with PD was to explore the possible differences in subjective perceptions of occupation, as well as activity level, between attendees at day centres and non-attendees. The aim was also to investigate factors of importance for the

subjective perceptions of everyday occupations, operationalized as occupational value and satisfaction with daily occupations. The specific research questions were: Is day centre participation (attending a day centre or not) associated with subjective perceptions of everyday occupations and activity level? Which factors, including day centre participation, self-mastery and socio-demographic and clinical factors, are of importance for the perceptions of having satisfying and valued everyday occupations? This knowledge is needed to further develop relevant rehabilitation strategies for people with PD and to support people with psychiatric illness and disability towards building an as satisfying everyday life as possible.

## **Method**

### *Selection procedure and participants*

The study was approved by the local Research Ethics Committee (No. 303/2006) and the principle of informed consent was applied. Participants were sought in two contexts, those attending day centres for people with PD and those registered at outpatient units for people with psychosis and other conditions that may lead to PD. Having a psychiatric disability was in the present study defined as having difficulties to perform occupations in important life areas due to a mental illness, in accordance with the definition by The National Board of Health and Welfare (28).

First a selection of different day centres was made. The day centres varied in structure but all offered similar occupations that people with PD could engage in, such as; working in the day centre canteen, manufacturing things to sell, doing woodwork or just socialising

by having coffees or playing games. Then a selection of outpatient units was made. Both the day centres and the outpatient units were chosen from four municipalities in southern Sweden, and all units located in those areas were included. Inclusion criteria regarding the participants were having a mental illness with duration of at least two years and being between 18-65 years of age. Additional criteria for the day centre participants were also to have been attending a day centre for at least one month and at least four hours per week, while for the participants from the outpatient clinics the criterion was not to visit day centres on a regular basis (not four hours per week or more) or having paid work or being involved in studies. In order to obtain reliable data some exclusion criteria were set. One was co-morbidity of developmental disability or dementia. The other criteria were having such severe psychiatric disability or inability to understand written and spoken Swedish, as judged by the staff in charge of the clients, that valid information could not be obtained. At the outpatient units, random sampling was used. All eligible outpatients were listed and selected by a random number generator. However, at one unit the information included in the register did not allow for this and the waiting room principle was used, i.e a contact person asked eligible people in the waiting room at the out-patient units if they would like to participate in the study. Of 195 persons approached in the day centre group, 93 accepted and participated, and of 168 eligible persons in the outpatient group, 82 accepted to partake. Most of the participants lived without support and the majority were single. There was a significant difference between the two groups in that the outpatient group had a higher education level ( $p < 0.001$ ). There was also a difference regarding self-reported diagnosis ( $p < 0.001$ ). Although schizophrenia and other psychoses were the most common diagnoses in both groups, fewer in the day centre group and more

in the outpatient group reported these diagnoses, while it was the other way around for mood disorders. Socio-demographic and clinical factors for the groups are presented in Table I.

Insert Table I here.

### *Instruments*

The data was collected using questionnaires. The data collection concerned five areas; subjective perceptions of everyday occupations, activity level, self-mastery, and socio-demographic and clinical factors, the latter in terms of psychiatric symptoms and self-reported diagnosis.

*Subjective perceptions of everyday occupation.* The informants' perceptions of the *occupational value* linked with everyday occupations were measured using the Occupational Value with pre-defined items (OVal-pd) (14). It is a self-rating instrument, developed to measure three different value dimensions; concrete, symbolic and self-reward value, which together form occupational value, as proposed by Persson et al. (13). The 18-item version was used (29). The informant is asked how often he or she has perceived different kinds of value when performing occupations during the last month and a scale ranging from 1 (not at all) to 4 (very often) is used. The sum score ranges from a minimum of 18 to a maximum of 72 points. The OVal-pd has been shown to have good validity and reliability (29). In order to measure the perception of *satisfaction with daily occupations* the Satisfaction with Daily Occupations (SDO) was used (15). It is conducted as a structured interview and consists of nine questions regarding work, leisure, home maintenance and personal care. The subjects answer whether or not they

perform a certain occupation and then value their level of satisfaction with performing or being without that certain occupation, using a scale from 1 (lowest possible satisfaction) to 7 (highest possible satisfaction). The total sum of satisfaction scores gives a minimum of 9 points and a maximum of 63. The SDO was developed specifically for people with mental illness and has shown good internal consistency, good test-retest reliability, good validity and acceptable ability to discriminate between different psychiatric samples (15, 18).

*Activity level.* The SDO was also used to measure *activity level*. In the instrument, the number of occupations in which the participant is involved gives a score of the person's present activity level with respect to everyday occupations. Every affirmative response to the questions about whether or not the person performs a certain occupation gives a score of one. Thus, the measurement score ranges from a minimum of 0 points to maximum of 9 points, where a higher score indicates a higher activity level (15). The measure of activity level has been shown to have good test-retest reliability (18).

*Self-mastery.* The Pearlin Mastery Scale (21) is a self-report assessment intended to measure the individual's *self-mastery* in terms of control over things that happen in his/her life. Seven items are rated from 1 (strongly disagree) to 4 (strongly agree). The total score ranges from 7 to 28, where higher scores indicate a higher degree of feeling in control. The Mastery Scale has shown satisfactory psychometric properties concerning both validity and reliability (20, 21)

*Socio-demographic factors.* *Socio-demographic factors* such as gender, age, type of housing, civil status, educational level and whether or not the persons were living together with children of their own were collected by means of a questionnaire devised specifically for this study.

*Clinical factors.* The 18-item version of the Brief Psychiatric Rating Scale (BPRS) (30) was used when rating the informants' *psychiatric symptoms*. On the basis of an interview and observation each item is rated on a scale from 1 to 7, where a high score indicates more severe symptoms. The items include symptoms such as disorganization, disorientation and depression and may be divided into sub-scales of positive, negative, and depressive symptoms and general psychopathology. Studies have shown that the BPRS has good inter-observer and intra-observer reliability (30, 31) especially when the interviewer acquires special training (32) and uses a structured interview guide when conducting the interview (33). These precautions were taken in the present study and a test of inter-rater reliability resulted in alpha coefficients of 0.80 or more. For the participants visiting day centres, diagnoses were not available, and since all participants, by definition, and had received a diagnosis at some time, they were asked to fill in *self-reported diagnosis* as a part of the socio-demographic questionnaire. This data was then “translated” by an experienced psychiatrist into ICD-10 diagnoses (34). For further description and analysis these were then grouped into four categories – Schizophrenia and other psychoses, Mood disorders, Anxiety, phobia and stress disorders and Other disorders.

### *Procedure*

In all units a contact person served as the link between the research group and the participants. When possible this person was an occupational therapist, but not all day centres were staffed with occupational therapists. The research group informed the contact person about the aim of the study and the inclusion criteria. The contact person then gave oral information about the study to eligible participants and asked if they would like to participate in the study. Participants who were interested received written information about the study and upon agreement gave their written consent. The data collection was carried out in a private room at the day centre or outpatient unit by project assistants, which were occupational therapists trained in using the instruments. The data collection took approximately one and a half hour for each participant. When appropriate, the project assistant could help clarify questions and assist in completing responses to self-report questions.

### *Data analysis*

As the data were of an ordinal and categorical nature, nonparametric statistics were used. Comparisons between the day centre group and the outpatient group were based on the Mann-Whitney U-test and for comparisons between more than two groups the Kruskal Wallis test was used. Calculations of relationships between variables were made by the Spearman's rank correlation test. In order to analyse which of the investigated factors could explain the degree of perceived satisfaction and value in everyday occupations, these latter variables were set as dependent variables in two separate logistic regression models. The independent variables were participation in day centres (being an attendee or not), level of activity and self-mastery and the different socio demographic and clinical



factors. Dichotomous variables were created for the perceptions of occupational value, satisfaction with occupations, activity level, mastery and the different BPRS scales, according to a median cut. The age variable was divided into three intervals; 22-40, 41-51 and 52-65 years of age, each comprising approximately equal numbers of participants. The categorical variables showing a relationship with the dependent variables with a p-value  $<0.10$ , were used for the logistic regression analyses, which were based on the forward conditional model. The data analyses were performed with the SPSS software, version 17.0.

## **Results**

### *Comparisons between day centre attendees and non-attendees regarding subjective perceptions of occupation and activity level*

The day centre attendees and the non-attendees from the outpatient units were compared with respect to subjective perceptions of occupation and activity level (Table II). Differences were indicated regarding the summarized occupational value score ( $p<0.005$ ), where the day centre group had a higher score. There was also a difference between the day centre group and the outpatient group regarding activity level ( $p<0.001$ ), showing that people in the day centre group were more active than people in the outpatient group. No difference was found regarding satisfaction with daily occupations.

Insert Table II here

*The importance of activity level, self-mastery and socio-demographic and clinical factors to subjective perceptions of occupation*

Activity level was significantly related to only one of the subjective perceptions of occupation, namely occupational value, while self-mastery was related to both the perception of occupational value and satisfaction with everyday occupations (Table III).

Insert Table III here

Table III also shows that older age was related to better satisfaction with everyday occupations, but not to perceived occupational value. Depressive symptoms showed a negative relationship to both the perception of occupational value and satisfaction with daily occupation. In addition, general psychiatric symptoms had a negative relationship to both the perception of occupational value and satisfaction with daily occupations. Furthermore, having more severe negative symptoms was associated with being less satisfied with daily occupations. No other socio-demographic variables, such as gender, type of housing, civil status, educational level or living with children or not, seemed to affect the perception of occupational value or satisfaction with everyday occupation; nor did self-reported diagnosis or positive symptoms.

*Factors of importance for subjective perceptions of everyday occupations*

Logistic regression analysis was performed to further assess the importance of those factors which in the previous analyses had shown to be related ( $p < 0.10$ ) to the perception of occupational value or satisfaction with everyday occupation (Table IV). The first model had occupational value group (high/low) as the dependent variable and six

independent variables (activity level, level of self-mastery, attending a day centre or not, and negative, depressive and general symptoms). The model as a whole explained 19.8 % (Nagelkerke R squared) of the variance in occupational value group, and correctly classified 67.3 % of the cases. The Hosmer-Lemeshow test showed a significance level higher than 0.05 (0.994), indicating support for the model. The strongest predictor of belonging to the high group of occupational value was being in the low group of depression, as indicated by an odds ratio close to four. The model further suggested that having a high activity level more than doubled the chance of experiencing a high level of perceived occupational value. Moreover, belonging to the high group regarding mastery doubled the chance of reporting a high level of occupational value.

Insert Table IV here

The next model (Table IV) contained the perception of satisfaction with daily occupation as the dependent variable and seven independent variables (activity level, self-mastery, age and positive, negative, depressive and general symptoms). The model explained 27.9 % (Nagelkerke R Squared) of the variance in satisfaction with daily occupation and 73.5 % of the cases seemed to be correctly classified. The model was supported by a Hosmer-Lemeshow test of  $p > 0.05$  (0.112). The strongest indicator of being satisfied with daily occupations was having a high level of self-mastery, which was associated with a fourfold chance of belonging to the high group of satisfaction with daily occupation. Being in the oldest age group (52-65 years) increased the chance of perceiving a high level of satisfaction with daily occupations, as compared to the youngest age group, by more than four times. Moreover, being in the low group regarding general

psychopathology more than doubled the chance of experiencing a high level of satisfaction.

## **Discussion**

The present study provided knowledge of how subjective perceptions of occupation may be influenced by different factors, and this knowledge may give guidelines for how to develop rehabilitation for people with PD. Those who attended day centres scored higher on activity level and more often perceived occupational value than the non-attendees.

These results might not be so surprising since the day centre attendees are presented with occupations at the day centre, from which they can get the immediate perception of value.

The day centre group was given the opportunity to engage in different types of occupations, and hence perceived, for example, concrete value, which the group of non-attendees might lack. These findings imply that the services did meet the needs of the attendees of being occupied and finding values in these occupations. However, the result also showed that there were no differences between the samples regarding satisfaction with daily occupations, which is in line with the findings by Eklund et al. (10). This might indicate that day centres were not able to offer occupations that suit everyone in the heterogeneous target group, as suggested by Eklund et al. (10). Another explanation might be related to the difference between the phenomena of perceived occupational value and satisfaction with daily occupations, where occupational value is linked with the immediate perception of occupation while satisfaction with everyday occupations has to do with contentment in a broader sense. It could be that the day centre group and the non-attendees were equally able to engage in satisfying occupations when they were on their own. It could also be that both had the type of daily structure they wanted and needed.

The present study further showed that self-mastery was strongly related with both occupational value and satisfaction with daily occupations in the sample as a whole, which supports previous research (19). Self-mastery has also been emphasized as a factor of importance for health-related aspects (22), empowerment and recovery (24) and a high activity level (35) among people with PD. This prominent role of self-mastery makes it a key factor in achieving positive subjective experiences from participation in everyday occupations.

In addition, the present study indicated that the experience of occupational value was influenced by the participants' activity level. However, activity level did not seem to have any significant relationship with the experience of satisfaction with daily occupation. Again, this variation may be due to differences between the constructs of perceived occupational value and satisfaction with daily occupations.

Regarding the importance of socio-demographic factors to the subjective experience of occupation, the only statistically significant factor seemed to be that satisfaction with daily occupation increased with age. This finding, which is in the direction of the ValMO presumption that the occupational value may be related to age (13), indicates that the more mature participants might have come to terms with their life situation to a greater extent than the younger ones, who might recently have had to face the difficulties of a mental illness. Otherwise the experience of subjective experiences of occupation did not seem to be influenced by living conditions or further socio-demographic factors. The

fact that no gender differences were found confirms previous studies regarding satisfaction with daily occupations (26, 27) and perceived occupational value (27).

The results of the study showed that some aspects of PD, such as having low levels of depression, negative symptoms and general psychopathology, were positively related to the subjective experiences of occupations. This is in line with Eklund and Gunnarsson (18) who showed that people without PD perceived a higher level of satisfaction with occupation as compared to people who were mentally ill. In particular, more depressive symptoms were associated with perceiving less valued occupations while more general psychopathology was related to worse satisfaction with daily occupation. The finding that more severe psychiatric symptoms were linked with less occupational value and satisfaction could indicate that the target group, along with perceiving worsening mental problems, decrease their engagement in social contacts and everyday occupations, as reported elsewhere (36).

#### *Methodological concerns*

Random sampling was used for selecting out patient participants at all units, but one, where this was not feasible. It was seen as valuable to include this unit in order to get data from the various geographical areas selected, and therefore the waiting room principle was used. The different selection procedures should not have affected the outcome of the study but led to difficulties in calculating non-participation, which is a limitation of the study. Furthermore, being as the participants were rated as generally having a moderate level of psychopathology, it is likely that those who had more severe symptoms may have been among the non-participants. This means that the sample might

not be fully representative of the target group. Another limitation was the limited knowledge of how the non-attendees from the outpatient units spent their days. It is possible that the participants registered at the outpatient units did similar occupations as the day centre group, on their own hand, which may explain few differences found. However, few or no alternatives to day centres were available in the studied areas and it is more likely that the outpatient group did things that were different in character compared to the day centres but gave similar satisfaction. Moreover, the fact that the non-attendees contained a greater proportion of people with schizophrenia than the day centre group could make the comparisons unreliable. However, according to the logistic regression analyses, self-reported diagnosis did not explain any of the variance in subjective perceptions of occupation. This is in line with previous research, where diagnosis made by psychiatrists did not show to be an important factor for subjective perceptions of occupation (10).

The study was comparative and cross-sectional in nature and therefore no causal relationships could be explained. This should be borne in mind when interpreting the findings, and just as well, the independent factors influenced the subjective perceptions of occupation, these perceptions may have influenced some of the independent factors, such as activity level, self-mastery and psychopathology. Thus, a circular relationship is possible. However, the scenario of independent and dependent variables assumed in this study was in line with the theory behind the variables. For example, self-mastery is seen as a self-variable (20), not so easily influenced by the external life situation.

The phenomena that were studied occurred naturally among the participants. The sample size of 93 participants in the day centre group and 82 participants in the out patient group was regarded large enough to detect statistically significant differences of clinical interest (37), corresponding to effect sizes of about 0.5. However, because of the lack of research in the field, no specific power calculations were made, and it could be that larger samples would have been needed to detect important differences between the groups regarding such naturally occurring phenomena. The present study's naturalistic design provides, however, a way of studying the target group without manipulating or intruding into these people's lives more than necessary, which is seen as positive (38) and must be considered a strength of the study.

### **Clinical implications**

The present study implies that the investigated day centres might not have been able to provide sufficient support regarding satisfying daily occupation for the target group. This would be in line with reports showing that many people with PD lack community integration and everyday occupations that they perceive as meaningful (7, 39). Thus, alternative strategies should be considered. In order to increase the attendee's opportunities to experience occupational value and satisfaction with everyday occupations an approach which is more client-centred and individually based could be valuable. In such an approach the community mental health service providers could introduce occupations to the client in a broader environmental context, that is, occupations that take place outside the day centre and/or in the client's home should be considered. This could lead to more satisfying occupations for the attendee. Munroe et al. (40) advocate this type of rehabilitation in a broader context, which is also in line with



Merryman et al. (41) who criticize the fact that community mental health programmes generally do not go beyond skill building to actual assistance of the individual client's personal development outside the structured programmes. Munroe et al. (40) also discuss a more holistic community care and argue that there is a lack of appropriate service available to sustain people with PD once transitioned to community living. Thus, research indicates that, further development of this type of rehabilitation in a broadened context is needed. This does not exclude the fact that it is also of importance to further develop the occupations offered at the day centre to make them fit individual needs and also to offer a place for belonging and social connection. Also, since the present study showed that activity level was of significance for the experience of occupational value, the importance of providing stimulating activity in general should be highlighted. Occupational therapists should be seen as a valuable recourse in such occupation-based and contextually flexible rehabilitation, as occupational therapists traditionally focus on both the subjective experience of occupation and the individual's level of activity, while they also generally work in an empowering and recovery-oriented manner (42).

Another clinical implication would be to enhance the individual's sense of self-mastery. This requires his or her engagement and involvement in the rehabilitation process. An empowering and recovery-oriented approach from staff members is crucial, as self-mastery has been shown to be related to both of these phenomena (24). Moreover, social skills training has been recommended to strengthen people's self-mastery, since it increased with higher levels of social interaction (43)

The findings also indicate that younger people should be highlighted as a risk group for low levels of valued occupations. Merryman and Riegel (41) showed that young persons who recently had fallen mentally ill were without sufficient support and were in need of mobilizing coping skills and might also need support for all occupations in everyday life. This was in contrast to older people with PD who generally seemed more content with their community-based care and gradually had become more active in their own rehabilitation process. These facts should be considered in psychiatric rehabilitation contexts, not least in day centres for people with PD. The great importance of peer support has been addressed as well (44), and Grant (45) highlighted the value of engaging consumer survivors as educators in community services.

## **Conclusion and further research**

The findings showed that the participants who attended day centres more often than the comparison group perceived value in daily occupations and had a higher activity level, but there was no difference regarding satisfaction with daily occupation. Thus, the day centres seemed to meet some, but not all, of the visitors' occupational needs. Promoting valued and satisfying occupations both within and outside the day centre arena could be a strategy for boosting the attendees' occupational perceptions. Activity level was of significance for the perception of occupational value, suggesting the importance of stimulating activity in general. Further, the study highlighted the importance of enhancing the target group's sense of self-mastery, which could be accomplished by, for example, working in an empowerment promoting manner. Psychiatric symptoms were generally linked with lower levels of valued and satisfying occupations, underlining the

importance of not neglecting strategies to reduce symptoms. In general, because of the profession's occupation-based and client-centred view, occupational therapists should play an important role in the community-based psychiatric care in general, not least in day centres. Further research regarding the subjective perceptions of occupation and how it may be promoted, for example the role of social interaction, should be undertaken.

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Table I. Description of socio-demographic and clinical factors for the day centre group and the comparison group.

Characteristics	Number of subjects	
	Day centre group (N=93)	Comparison group (N=82)
Gender: male/female	55 (59 %)/38 (41 %)	36/45 (44 %/56 %)
Age; mean (min – max)	46 (22 - 63)	Mean 47 (24 - 65)
Type of housing		
Own apartment/house without support	58 (64 %)	58 (71%)
Own apartment/house with support	27 (30 %)	16 (20 %)
Sheltered living	6 (7 %)	8 (10%)
Civil status		
Married/living together	17 (19 %)	18 (22 %)
Single	72 (81 %)	63 (78 %)
Education level		
Not completed nine-year compulsory school	5 (6 %)	2 (3 %)
Completed nine-year compulsory school	35 (41 %)	10 (13 %)
Completed 6th form college	41 (47 %)	42 (53 %)
University or college degree	6 (7 %)	25 (32 %)
Lives with children	10 (12 %)	13 (18 %)
BPRS negative symptoms mean (min-max)	2.1 (1-4.5)	2.4 (1-5)
BPRS positive symptoms mean (min-max)	1.7 (1-3.8)	1.8 (1-4.2)
BPRS depressive symptoms mean (min-max)	2.7 (1-5)	2.6 (1-6)
BPRS general psychopathology mean (min-max)	2 (1.2-4.8)	1.9 (1-3.5)
Self reported diagnosis %		
Schizophrenia and other psychosis	43.5	81.8
Mood disorders	22.4	5.2
Anxiety, phobia and stress disorders	18.8	5.2
Other disorders	15.3	7.8

Table II. Description of the day centre group's and the comparison group's subjective perception of occupation and activity level.

	Day centre group Mean (min-max)	Comparison group Mean (min-max)	<i>p-value</i>
Occupational value	46.5 (25-71)	42 (22-63)	0.005
Satisfaction with daily occupation	48 (19-63)	46.5 (11-63)	n.s.
Activity level	4.9 (2-8)	4 (1-7)	$p < 0.001$

Table III. Intercorrelations between the subjective perceptions of occupation and activity level, self-mastery, age and clinical variables.

	Occupational value	Satisfaction with daily occupation
Activity level	0.255**	0.123
Self-mastery	0.387***	0.367***
Age	-0.045	0.152*
BPRS negative symptoms	-0.141	-0.151*
BPRS positive symptoms	-0.062	-0.133
BPRS depressive symptoms	-0.311***	-0.374***
BPRS general symptoms	-0.186*	-0.330***

Note. Spearman's correlation test was used. \* $p < 0.05$ . \*\* $p < 0.01$ , \*\*\*  $p < 0.001$



Table IV. Results from logistic regression analyses with perceptions of value and satisfaction in everyday occupations as dependent variables and activity level, mastery, age and clinical factors as independent variables in the models.

	Odds ratio	95 % CI	<i>p-value</i>
Occupational value			
High level of activity	2.113	1.092-4.086	0.026
High level of mastery	2.019	1.035-3.938	0.039
Low level of depression	3.725	1.670-8.303	0.001
Satisfaction with daily occupation			
High level of mastery	4.270	2.113-8.627	0.000
Being in age group 52-65	4.306	1.074-4.324	0.001
Low level of general symptoms	2.154	1.074-4.324	0.031