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# Participation in day centres for people with psychiatric disabilities – characteristics of the occupations

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## Abstract

People with psychiatric disabilities (PD) are a vulnerable group, and should be offered support and rehabilitation when needed. Day centres that provide individually matched daily occupations are an important link to provide that.

The present study aimed at gaining knowledge about the occupations performed in day centres, in terms of the participants' descriptions of what they were doing.

Eighty-eight persons with PD completed a time-use diary that focused on the most recent day. The participants were selected from six different day centres, meeting place-oriented as well as more work-oriented ones.

By qualitative content analysis six categories were identified, representing the occupations performed; *social occupations, maintenance occupations, creative occupations, manufacturing occupations, service occupations and information-focused occupations*. A main theme termed *being at the day centre means participating in occupations with different levels of demand* was also discerned. The day centres served as a social meeting point and an opportunity to be involved in occupations with different levels of demand.

This study highlights the role day centres could play in the rehabilitation of people with PD, and the potential that lies in the knowledge about the levels of occupational demands when meeting the individual occupational needs and when analysing and planning interventions.

**KEY WORDS** *community mental health, occupational therapy, mental health day services, severe mental illness, activity day centres*

## Introduction

Recent changes in the health and welfare system in Sweden have resulted in people with psychiatric disabilities (PD) increasingly living their lives in their own homes, which besides positive effects, such as autonomy, also brings a risk for social isolation and lack of individually matched everyday-life experiences (1). Society is thus faced with the challenge of providing occupational opportunities for people with PD as support in leading an active daily life (2). Community-based day centres form an alternative for socialising and being active outside one's home (3). People with PD are, according to Pinfold (4), facing two worlds, that constitute two extremes, one concerning social isolation and the other community integration. In this perspective, day centres may be viewed as middle ground, where these two extremes can meet and offer a place where visitors can feel secure, can be in a safe haven and where they may gain self confidence and be ready to meet new demands. Gahnstrom-Strandqvist, Liukko and Tham (5) arrived at a similar conclusion when studying a work-oriented day centre. They also found that the day centre served as a place that made people with PD feel pride, joy and satisfaction. Rebeiro (6) similarly described how the feelings of being in a safe place, of belonging and of feeling self-worth were important in order to facilitate a focus on individually matched occupations. However, research on day centres has also shown that the participants develop a dependency that may foster vulnerability and feelings of alienation from the wider society (7) and are facing a challenge with regard to community integration (4).

Research has shown that being satisfied with daily occupations is associated with quality of life among people with PD (6, 8, 9). In a study by Bejerholm and Eklund (10) it was concluded that the local day centres were important for the experience of meaningfulness and that the most common reason for people with PD to leave their homes was to visit a day centre. It has also been shown that participation in day centres facilitates the development of social interaction among people with PD (3). The latter often look for valued roles outside of the regular employment cultures and look for workplaces that are suitable for them in terms of flexibility in work patterns and an understanding attitude towards mental illness relapses (4). Day centres may offer such a more flexible environment.

The occupational science researchers Christiansen (11) and Matuska (12) maintained that societies and communities should consider strategies for lifestyle changes in order to promote healthy and balanced lives and prevent disease and relapses in sickness. In this sense, day centres could help people with PD to build a more structured and balanced daily life. This is in line with Becker and Kilian (13), who described that people with PD have a need for day structuring services, since it tends to be difficult for them to take advantage of all the opportunities given in society. Furthermore, it has been stated that, depending on different needs for support, there are variations in how and to what extent people with PD participate and integrate socially in day centres (14). This indicates that in order to reach as many people with PD as possible, the heterogeneity among service users needs to be considered in the service planning of day centres (14).

The responsibility for planning and developing day centres for people with PD lies with the local authorities in Sweden, although it is the National Board of Health and

Welfare that issues the guidelines. In order to ensure the quality of the day centres, the guidelines include recommendations for relying on evidence-based knowledge (15). However, evidence of effective methods in the day centre context seems to be completely lacking. Besides, descriptions are scarce, of what participating in a day centre entails, and how the activities are provided and perceived. In a review of this field, Catty, Burns, Comas and Poole (2) found that no randomised controlled trials of day centres had been performed and only a few descriptive studies had been carried out. An overview of the research field also seems to be complicated by the fact that investigators tend to use different terms to denote similar settings. Catty et al. (2) used the term day centre, which we apply in the present study. This term has also been used by Kilian et al. (14), while other terms used to describe this area are, for example, day structuring programmes (13), working cooperatives (5), activity day centres (4) and occupation-based mental health programs (6). However, despite the apparent lack of international consensus regarding how to name what in this study is termed day centres, it may be maintained on the basis of the research cited above that these types of services and programmes exist in different countries but are poorly studied.

It is thus obvious that the context of day centres and their practices need further attention. Research clearly shows that there is a need for occupational opportunities for people with PD (6, 8), that the visitors often need full day structuring (13) and that the great heterogeneity among the visitors requires variations in occupations (14). This needs to be taken into account when planning the occupations within the community day centre services. Besides, the role of day centres has been questioned regarding their ability to support engagement in everyday activities among people with PD (16). With this in mind, the present study aimed at gaining knowledge about the occupations performed in day centres, in terms of the participants' descriptions of what they were doing. A presentation of the types of occupations that form the basis for the visitors' participation can constitute important knowledge for the future developments, evaluations and quality improvements of day centres.

## **Method**

This qualitative study is the first report from a more comprehensive project that aims at investigating community based interventions in order to provide a basis for future development and implementations. Qualitative content analysis was considered appropriate because it allows a focus on both the subject and the context and emphasises both the manifest and the latent content with respect to the phenomena studied (17).

### ***Selection procedure***

In order to recruit participants a request was first made on the unit level, and seven day centres from four municipalities in southern Sweden were invited to take part in the study. All seven units decided to take part, based on consensus decisions among staff and participants. One day centre was, however, excluded since several users/visitors at that unit also visited another of the day centres included. The sample thus consisted of six day centres. Written and oral information was first given to the staff, who then informed those

who fulfilled the criteria for participation about the study both verbally and in writing. The inclusion criteria for the participants were being between 18 and 65 years old and, according to the staff's report, having visited the day centre for at least one month, four hours or more per week. No diagnostic criterion was set since no registry of diagnoses was kept in these units, but a related study showed that most of them had schizophrenia or other psychoses, according to self reported problems (18). For confidentiality reasons, a primary contact person took the initial contact with each individual and asked for their written consent. The consent form was handed over to a group of three trained interviewers; one of whom was the first author of this study, who then contacted the participants for interview appointments. Ethical considerations included the principles of informed consent and the voluntary nature of participation. The study was approved by The Regional Ethical Review Board, Lund University, Sweden (Dnr 303/2006).

### ***The Day Centre Setting***

The day centres were situated in both rural and urban areas. Three day centres were located in an urban area with long distances from the participants' homes to the day centre, which meant that many were dependent on public transport. Three centres were located in a rural area, and these were situated closer to where the participants lived. The day centres were organised in different ways, but were mainly of two types, either meeting place-oriented or work-oriented. Two of the participating day centres were meeting-place oriented, which meant that there was no scheduled time for work. These day centres offered the participants the opportunity to play games, eat and socialise, meet people to do excursions with, or just relax. Another two day centres were work-oriented, implying that they offered scheduled work for the participants. The focus was on producing things to sell, or providing services such as cleaning, and the occupations were formed accordingly. The remaining two day centres combined both orientations. One of them also provided opportunities to practice in work settings outside the day centres or to attend an adult education college. None of the day centres offered any salary to the visitors and all of the day centres had a pre-determined schedule for breaks and meals and provided meals and drinks that could be purchased.

The staff had varying qualifications and while it was common for an occupational therapist to have initially designed the day centre services, the majority of those who currently held leading positions had other qualifications. The rest of the staff were generally trained as nurse assistants or craftsmen and had long experience from work in day centres.

### ***Participants***

A total of 196 individuals were eligible for inclusion in the study, and 93 of these agreed to participate. Five individuals had to be excluded from the present part of the study, because they were unable to complete the data collection. Of the remaining 88 individuals, 37 went to meeting place-oriented day centres and 51 to a work-oriented day centre. The youngest was 22 and the oldest 63 years old. Further socio-demographic characteristics are shown in Table I.

Insert Table I about here

## **Data collection**

In order to register the occupations performed at the day centres, a time-use diary was used. This method has previously been found useful for investigating daily occupations among people with PD (10, 19). The time-use diary was based on the one used in the Profiles of Occupational Engagement in people with Schizophrenia, POES (20). The present version was termed POES-P, where the second P stands for “productive occupations”. The diary sheet has four columns, where the respondents complete *what they do, with whom, where and how they perceived* the occupations performed.

The content of the four columns in the time use diaries thus corresponds to information about the occupational, environmental and personal domains, together shaping an individual’s occupational performance (21) and according to Pierce (22) making up the constituents of an occupation.

The participants were individually asked to complete a time-use diary that encompassed their previous day at the day centre. Most participants needed help from the interviewer to fill out the diary. This meant that the diary was completed on the basis of a dialogue between the interviewer and the participant, and probing questions were put to help the participant recall what he or she had done. The interviews ended with a joint review of the diary content to clarify its correctness. New probing questions were put on the basis of what had been written down, or what might have been forgotten. Each time-use diary took approximately 30 minutes to complete.

## **Data analysis**

The text in the diary reports was analysed by qualitative content analysis (17). First, the information from the four columns of the diary reflecting occupations performed at the day centre became meaning units, such as “sewing, together with others, at the day centre, interesting to do” or “producing bags to be sold in the shop, together with others, needed instruction to get it right”. The meaning units were condensed, which means that they were shortened while still preserving the core such as “sewing, interesting to do” or “producing bags, needed instructions”. The condensed meaning units were then abstracted from the text to a higher logical level and labelled with a code, illustrating the occupation that took place within a certain context (“sewing out of interest” or “producing much of the same”).

Second, the codes were compared with each other to find differences and similarities. Codes with similar content were grouped into units, termed sub-categories. Third, the information about the environment and the reflections helped to define more overarching categories that covered the sub-categories. At this stage the literature was consulted in order to bring some clarity regarding definitions of the concepts of activity and occupation. Pierce (22) defined occupation as a one-time experience, individually constructed and taking place within a unique context. She stated that nearly all definitions of occupation rest on the term activity, defined as a de-contextualised and neutral term for what presumably can be done. In the present study, the design of the time-use diary

allowed the activities and what was done to be described as personal experiences within a day centre's unique context. They should thus be seen as occupations and were named accordingly. Hence, the abstraction and sorting of the sub-categories into groups resulted in occupational categories such as "Creative occupations" and "Manufacturing occupations". By this procedure for analysis, smaller units were first grouped based on similarities and differences, and then set to form sub-categories and categories. This part of the analysis may be seen as a manifest content analysis (17).

Fourth, a main theme linking the categories together was identified. By the identification of the overarching main theme, a second, more latent type of content analysis (17) began. According to Graneheim and Lundman (17), looking for an overarching theme can be seen as moving towards a more interpretive analysis of the text. By the second round of analysis, a certain order among the categories and sub-categories was discerned, indicating a continuum of different levels of occupational demands. Based on characteristics of the occupational levels of demand, demand-related components, e.g. the time allocated to an occupation and the amount of occupations engaged in, were highlighted.

The three authors discussed the categories, sub-categories and the main theme, as well as the subsequently identified continuum of occupational levels and demand-related components, until the solution that best represented the data was found. The fact that the day centres had different orientations was incorporated into the analysis. Interestingly, there were no discernible dividing lines between meeting place-oriented and work-oriented day centres with respect to the occupations performed. Type of unit thus did not form the basis for the categorisation, but was still considered during the analysis.

## Findings

The main theme was termed *being at the day centre means participating in occupations with different levels of demand*. This main theme embraced six categories that emerged from the qualitative content analysis of the occupations performed. These were; *social occupations, maintenance occupations, creative occupations, manufacturing occupations, service occupations and information-focused occupations*. Table II shows an overview of the main theme, categories and sub-categories. The categories are described in the text below, while the main theme will be presented further on in the text.

*Insert Table II about here*

### ***Categories of occupations at the day centres***

#### **Social occupations**

All occupations in this category implied different ways of interacting, being and communicating with other people. The social occupations varied from entailing frequent and intense verbal communication with others to just being with and around others for

recreational and restful purposes. These occupations were often intertwined with other occupations. When characterized as being restful and recreational, these social occupations served as breaks from other, more active, occupations. This was mainly the case when they occurred in between work-like occupations at the work-oriented units, while they constituted the main occupations at the meeting place-oriented day centres.

The most reported occupations for all visitors were those pertaining to the sub-category *being around* (mostly the day centre canteen) *and having breaks* for lunch or coffee, together with or just close to others. The breaks functioned as scheduled time points from which other occupations could evolve. Another example of social occupations was *consuming mass-media*, such as reading the newspaper or watching television. Other more interactive occupations in this sub-category were *using technical devices for communication* such as; sitting by the computer, corresponding by email, surfing on the Internet and sending text messages on the cell phone. Visitors who came to the day centre for these technical occupations were generally in need of staff support.

The last two sub-categories *playing games together*, (e.g. cards, table tennis, billiards) and *occasional socialization* with visitors and/or staff could be initiated when walking around the premises, talking to each other or just being together.

## **Maintenance occupations**

The maintenance occupations were mainly performed to maintain or to look after the day centre or other premises. They could be done as single tasks or in combination with occupations, also from the other categories.

In all occupational categories the occupations could be both supervised and performed independently, but this was an especially noticeable feature of the maintenance occupations. The level of independence could vary from doing one single task, via larger workloads with multiple tasks, to combinations of different demanding occupations covering up to an eight-hour day at the day centre.

When *doing single maintenance tasks for the day centre*, it could concern taking out the garbage, cleaning up after dinner, clearing the table, washing the dishes, making coffee, taking money to the bank or shopping for groceries together with the staff. Occupations within this sub-category were mostly initiated by the staff and the reflections on performing these single maintenance tasks revealed that the occupations were mainly seen as helping the staff.

Maintenance occupations could also be combined with other occupations, forming the sub-category of *doing multiple maintenance occupations for the day centre*. For example, working in the café meant (maintenance) tasks such as collecting and washing the dishes, sweeping the floor, emptying garbage cans, and wiping off the counter and the kitchen doors. These multiple maintenance occupations and more demanding occupations within the day centre premises, such as gardening, were often reported as being work-oriented. Moreover, maintenance occupations could mean *doing commissioned maintenance occupations*, often outside the day centre, for example clearing up woods and parks or working in a car repair shop. These commissioned maintenance occupations resulted in many work hours per day, and also brought a clear structure to the day in terms of fixed breaks for coffee and lunch.



The reflections on maintenance occupations revealed great individual differences. The occupations could be done because others wanted it, because it just felt good to have something to do and to help out or, in the case of more independent tasks, as encompassing responsibility.

## **Creative occupations**

Occupations represented in the third category were characterised by using one's creativity in making something. These occupations made the visitors reflect on their own ability as well as on their interest in the products created. The findings also indicated that the creative occupations were perceived as being performed together with others and allowed for simultaneous communication. Only a few visitors specified a creative task as something done alone, examples of this were painting or renovating furniture.

One of the sub-categories concerned *doing crafts* like weaving, sewing, knitting and crocheting. *Doing computer graphics* was another sub-category and a way of using the computer in a creative manner. Yet another sub-category represented *doing carpentry and painting*. These occupations were carried out in small workshops, and the products were for sale in the day centre shop. *Renovating furniture* was also represented in this category, as it entailed creating an aesthetically attractive product.

The creative occupations could be perceived as work, also in the meeting oriented settings, and it was obvious that they could encompass both high and low levels of demand on the visitors. The creative occupations in work-oriented settings, although primarily reported as "work", could also be single products that were created for the visitors' own personal use or as gifts.

The occupations in this category were intertwined with the manufacturing category (see below) but were distinguishable in terms of how they were perceived and reflected on, such as having a creative and aesthetic appeal.

## **Manufacturing occupations**

Making many products of the same kind, as in mass production or assembly work, formed the manufacturing category. The production of one single product could be perceived as "creative", whereas mass production of the same product was seen as "monotonous" or "easy".

Examples of the sub-category of *assembly work* were preparing pre-packed bags for the day centre shop or commissioned work. This manufacturing process included counting and packaging different objects into bags and then labelling them. Bicycle repairs also belonged to this sub-category of occupations, since it mostly meant assembling parts of old bicycles into sellable ones, often with staff assistance.

Another sub-category involved *mass-production* of craft objects made by weaving, knitting and sewing and mainly sold in the day centre shop. The products that originated from creative work, such as a beautiful bag, could be sold in the shop and become popular, and then be duplicated and mass produced. There were also examples of commissioned mass-production for businesses or private persons, like sewing breast bands for the plastic surgery clinic, and making take-away sandwiches and salads. The

last sub-category was *producing specific objects according to customers' orders*, for example framing pictures and doing carpentry work which demand abilities such as remaining in an occupation that requires the capacity to take on responsibilities, such as delivering a finished product.

Manufacturing occupations often demanded the ability to be part of a social group. It also demanded the ability to keep a deadline, like delivering sandwiches at a certain point in time. Manufacturing occupations presented both high and low levels of demand on the visitors and were primarily reported in the work-oriented day centres. It was noticeable that an occupation could demand being involved in a process of mass production without necessarily entailing a long working day. Participants who worked a few hours per week could do small amounts of assembly and manufacturing work as well, often when working together in groups. Mass-production and assembly work demanded supervision, help and staff influence at an initial stage.

Reflections concerning mass-production of objects could include that it was pleasurable to do those things, that it did not demand a lot of thought and that it was stimulating if the objects that were manufactured were to be used.

## **Service occupations**

Service occupations demanded the ability to meet someone else's (the customer's) needs, and to serve others and they could be done within as well as outside the day centre. It was also evident that service occupations were combined or intertwined with occupations belonging to the other categories. Examples of sub-categories were *selling things in the day centre shop*, often combined with producing the objects to be sold.

Another sub-category was about *assisting others with office materials*, like cutting and printing material, either for the day centre or as a commissioned service to businesses outside the day centre. Many of those who described these occupations also reported of working independently.

*Serving customers*, for example in the café, was a sub-category that was also seen to be done in combination with other occupations. Someone who worked at the café cash register could also help to make the sandwiches or clean in the café when necessary.

Some service occupations, including handling the café cash register, were reported as a challenge that one had not dared to meet before, especially since this occupation demanded the work to be carried out correctly.

## **Information-focused occupations**

The diaries contained occupations implying that information was exchanged between staff and visitors in both informal and formal ways. These occupations were typically about receiving and giving information and some were more or less educational. The first sub-category was about *attending meetings and receiving information*. Examples of such occupations were the formal day centre meetings that focused on planning the work within each work group or for the whole day centre.

Another sub-category of occupations was for educational purposes and concerned *receiving supervision* in terms of guidance and instructions in order to learn a new skill. This type of occupation, which occurred both within and outside the day centres, was

linked with all the other categories, for example how to learn computer graphics or how to sew a bag. *Attending an adult education college* was another sub-category of occupations. This took place outside the day centre premises and those who took part in the educational occupations did not visit the day centre on the college days. These educational occupations were, however, similar to the day centre occupations in the respect that they were combined with the category of social occupations, such as having a break for lunch or coffee, before or after class. *Teaching others* was another sub-category, possible when the visitor was so skilled in an occupation that he or she could teach someone else to do it. This sub-category of occupations demanded the ability to initiate tasks, and be able to independently combine different occupations.

### ***The main theme: Being at the day centre means participating in occupations with different levels of demand***

The essential ingredient of being at a day centre was participation in occupations with different levels of demand. The increase of levels of demand pertained to both the categories and the sub-categories. As indicated by the arrows in Table II, increasing demands can be traced in the rows (across the categories, especially in the first row) as well as the columns (down the sub-categories within a category). The categories range from low levels of demand (social occupations) on the left side, often represented in the meeting place-oriented day centres, to increased levels of demand on the right (information-focused occupations), more common in the work-oriented units. In a similar way, levels of demand increase from the top towards the bottom of the table. The most obvious example of this can be seen in the maintenance category, where the upper sub-category represented doing one single task with lower level demands, while the sub-category at the bottom represented higher level demands incorporated in doing commissioned work, often amounting up to an eight-hour day's work. The categories and sub-categories did not indicate direct, step-wise increase in levels of demand, but rather a general tendency that moving to the right and down-wards in Table II reflects increasing levels of demand.

The second analysis entailed a deeper look into these varying demands and led to the identification of a continuum with seven levels.

The lowest level of occupational demands inferred from the diaries was that of overcoming the initial barrier to *coming to and being at the day centre* and/or participating in purely social occupations, while the next level was *performing an internally or externally initiated simple occupation*. Accomplishing this second level seemed to be the starting point for occupational involvement and the following level concerned *performing supervised occupations and/or learning new occupations*. The middle level of occupational demands was associated with more independent occupations, performed without guidance from staff, and these entailed *performing self-initiated complex and/or combined occupations*. The next level concerned the capacity for *remaining in occupations requiring responsibility*. The second highest level of demands consisted of *performing service occupations and occupations to help others* and the highest level of demands concerned *performing occupations that meant teaching occupational skills to others*. These levels are illustrated in Figure 1. As above, the

increase in these levels of demand can not be said to be direct, step-wise, but rather indicates a general tendency that moving to the right entails increasing levels of occupational demands.

Insert Figure 1 about here

The variation in occupational demands was based on six demand-related components, characterizing the occupations. One of these components was the *degree of independence* and another was the *amount of time* that was needed to be allocated to the occupations. Other components were the *number of occupations engaged in* and the *degree of structure* of the occupations. The last two components were the *amount of social involvement* and the *degree of responsibility* that characterized the occupations. Variations in these components together built up the different levels of occupational demands.

## Discussion

The findings showed that the day centres offered social interaction and provided occupations within and beyond their physical premises and that social interaction and occupations formed the two foundations of the day centres.

The social occupations with their meeting oriented character appears to be similar to the drop-in sessions described by Bryant and associates (7) when investigating what brought people together at a day centre. In that study, as well as in the present one, contact was made in the social occupations. Participation in the day centre was based on such social occupations, from which the path towards greater structure in daily life, possibilities for work-oriented tasks and to be socially involved could begin. According to Bryant et al. (7), such a process can counteract occupational alienation. As other research has shown, involvement in occupations and social functioning are associated phenomena, and a sense of efficacy and success in performing occupations has positive effects on social functioning and vice versa (23). In this study the step from participating in social and restful occupations to being more active and contributory seemed to be mediated by single separate tasks that could be initiated and supervised by the staff. Davidsson and Strauss (24) argued that even the simplest of tasks enabled people with PD to rediscover that they could be active and gradually perform more complex tasks.

Occupations were the other basic foundation for the day centres. Matching the level of demand to the individual's ability, was by Rebeiro et al. (6) emphasized as important for continuous development. Moreover, Pierce (25) presented a theory about how to design occupations in such a way that they become therapeutically powerful. She meant that one must consider sources such as the Appeal (the degree to which the individual finds the occupation desirable), Intactness (natural setting of occupations) and Accuracy (to target goals effectively in collaboration with the visitor). Applying this reasoning on the findings from the present study, one example of the Appeal source could concern achieving balance and restoring energy through the highly appreciated social occupations, which often served as breaks and contributed a balance between work and rest. Achieving such a balance between work-oriented occupations and breaks has been shown in previous research (26, 27) to promote well-being and without this balance the

breaks would presumably not have been seen as attractive and purposeful. The appeal of occupations may also be based on the concept of occupational value, which has been proposed to consist of three types – concrete, symbolic and self-reward value (28). The occupations may have brought concrete value when the visitors produced useful and beautiful products and when they learnt something new. Examples of symbolic values could be when the visitors felt like workers when engaged in work-like occupations, and self-reward value would be when they did things they found pleasurable and amusing.

The fact that the same occupations could incorporate different levels of occupational demands and be perceived differently by individuals makes it important to consider the values occupations may bring to the individual. The occupational value he or she perceives may determine why an occupation is chosen and performed (28) and may be vital for the level of occupational demand he or she will be able to meet.

The Intactness of the visitors' occupations was probably influenced by the fact that some of them were performed in natural settings, such as parks and cafeterias, and that most of what the visitors produced would be of use and be appreciated and perhaps bought by someone. It is also noteworthy that the social occupation of eating and drinking in the canteen generated a variety of other occupations, represented in all the other categories, such as buying the groceries, preparing, selling and serving the food and cleaning up, which adds to the intactness of these day centre occupations. Ensuring the intactness of occupations may offer a way for counteracting the risk of feeling separate or unconnected to the wider society, mentioned by Bryant (7) as a possible negative consequence of participating in day centres. It is also important to look forward and question whether the choice of occupations is continuously evaluated and in tune with any changing trends regarding visitors' needs and preferences, or if there is more to do in order to open up for more innovating ideas and maximise the use of day centres.

The Accuracy source needs to be considered when setting individual goals and matching an occupation to the individual visitor's capacities. The occupation should represent a perfect fit in response to the individual's need for the right level of demands (29), and the present study indicated that a wide range of demands may be found in the occupations at the day centres. Some findings from the present study indicated, however, that the level of accuracy was not optimal. This was indicated by comments such as the visitors doing things because others wanted it or they at least had something to do. Although doing something for reasons such as getting them done or doing dull but necessary tasks might bring concrete value to the doer (28), the accuracy with which the individual goals were targeted and the degree of collaboration with the visitor might be improved. The importance of finding the right level of demands and the right challenge creating flow (29) and value (28) in order for occupations to be perceived as meaningful has also been shown in previous research (26).

There were examples of meeting place-oriented centres that offered manufacturing tasks and gave opportunities for having a high workload during the week. Moreover, some visitors in work-oriented units devoted most of their time to occupations with low levels of demand. This indicates that in order to meet the visitors' needs, the two orientations should not be too downright. There is need for both high and low levels of demand, and the open access that meeting place-oriented day centres often stand for is appreciated and needed, especially in an initial phase of the rehabilitation process. Furthermore, having both orientations within the same day centre may be a way of

accomplishing a better balance among people's occupations and achieving more structure in daily life. The structure in Figure 1 can be used to meet the individual visitor's shifting needs and guide the development of interventions within a day centre that encompasses both orientations.

### ***Clinical implications***

This picture of the occupations used in day centres provides some ideas of how the results can be used in clinical practice. The identified range of demands could be utilised for accomplishing the perfect fit of the right challenge for each individual visitor and how to adjust the level of demands as the capacity of the visitor may fluctuate over time. Facilitating this kind of movement towards an accomplishment of higher levels of demand and feeling increasingly capable might open up for a rehabilitation pathway.

Knowledge about the demands occupations make on the visitors and their potential therapeutic power also needs to be transformed into staff planning and the provision of day centre services. There is, thus a need for adequate staff education and transdisciplinary training (30), in order for the staff to be able to utilise the potentials of occupations in such a way that the day centres can meet the heterogeneity of the target group (14) and value and support the individual's choices, involvement and abilities (31). The fact that a certain task can be perceived differently by different visitors underlines that the interplay between the individual visitor, the context and the task performed needs to be considered. The time-use diary may be used for that purpose with the client, as a clinical tool for analysis and discussion in day centres (27). Moreover, the structure presented in Figure 1 may be used to find a balance between the individual's capacities and the occupational demands.

If those who work in day centres get the right tools in terms of relevant and sufficient knowledge and methods, the local authorities could further develop existing units. Furthermore, describing the ingredients of rehabilitation programmes, as proposed by Farkas and colleagues (31) and as seen in the present study, can make it easier to evidence base such programmes in the future.

Research has shown that the target group has overall needs for day structuring (13) and unmet needs in daily life (18) and developing the day centre into a base for different interventions could make a resource in accomplishing a better life balance for people with PD.

### ***Methodological considerations***

In order to consider the trustworthiness of this study we apply the criteria of credibility, transferability, dependability and confirmability (32). The credibility, the truth value, was strengthened by the large sample size. But at the same time it could be said that the size was at the expense of in-depth information, as the diaries contained fairly short descriptions of the participants' involvement at the day centres. On the other hand, the data collection method with a diary supplemented with an interview facilitated a form of

immediate member check by the diary being read out loud to the participant in order to validate its content.

Transferability, the applicability to other contexts, was enhanced by the diary method, which made it possible to include many participants and cover day centre services outside the premises of the day centre setting. Taking the variety of contexts into account and mirroring both meeting place-oriented and work-oriented day centres, as well as real work settings, provided rich descriptions of day centres. The transferability of the findings is, however, limited to similar contexts and cultures.

The dependability, which is concerned with consistency and whether the findings can be repeated, was improved by allowing researchers outside the research group check the accuracy of the findings in seminars and discussions.

An audit trail was established by describing the method and the findings, thus strengthening both the study's dependability and the fourth aspect of trustworthiness, confirmability, which concerns the neutrality of the researcher. The difficulties associated with maintaining a neutral approach as a researcher were counteracted by several measures; the immediate member check, the audit trail and important feedback from other researchers.

## **Conclusion**

Knowledge of the occupations that occur at day centres can be useful for goal setting, evaluation and development in planning and working in day centres and with the individual visitors. The findings of the present study contribute to this knowledge, as one of very few studies that focus on day centres, not least by identifying the potential of displaying occupations with different levels of demand. The present study indicates that day centres could play a role in the rehabilitation of people with PD and implies that designing occupations and considering their therapeutic potentials and intrinsic value dimensions are important when designing day centres. The structure presented in Figure 1, with its continuum of different levels of occupational demands, and demand-related components, may be used for that purpose, and may also be considered when matching occupations to individual needs. This may contribute to a discussion about the occupations' timeliness and whether they are up-to-date and meet current and expected needs among the visitors, as well as a debate regarding future opportunities and alternative occupations.

Further descriptive studies are warranted in order to fully comprehend the field of participation in day centres. It is, for example, important to know more about the visitors' personal experiences from participating in various occupations at day centres.

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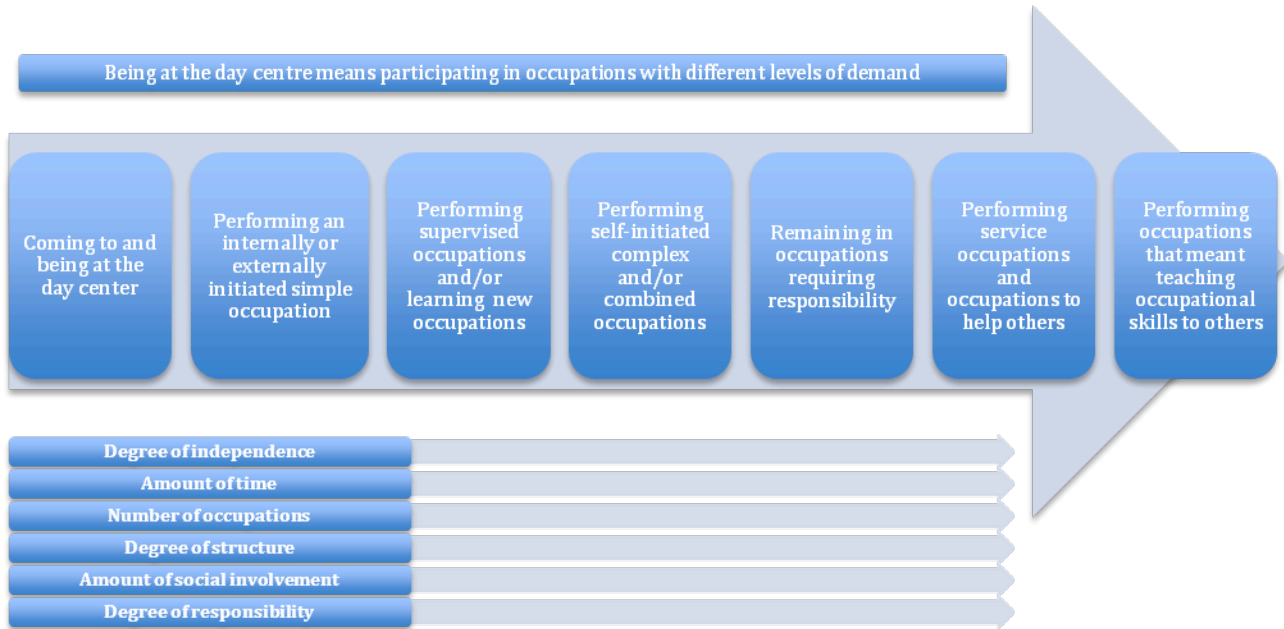


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## Figure legend

Figure 1. The main theme, the seven levels of demand and the six demand-related components.



**Table I** Socio demographic characteristics of the participants included in the study (n = 88).

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Age (mean)	45.3
Gender (male/female)	52/36
Day centre attendance	
Meeting-/work-oriented day centre	37/51
Attendance hours/week (Mean, min. - max.)	13.3, 2 – 40
Civil status; %	
Living alone	85
Cohabitant/married	15
Living with children (yes/no)	13/87
Type of housing; %	
Own apartment/villa	93
Sheltered living	7
Educational level; %	
Not completed comprehensive school	6
Completed comprehensive school	38
Completed 6 <sup>th</sup> form college school	49
Completed university studies	7

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Note: Internal attrition in number of subjects between 0-11 occurred on the variables

**Table II** Main theme, categories and sub-categories.

Being at the day centre means participating in occupations with different levels of demand						
Categories	Social occupation	Maintenance occupations	Creative occupations	Manufacturing occupations	Service occupations	Information-focused occupations
Sub-categories	Being around and having breaks	Doing single maintenance tasks for the day centre.	Doing craftwork	Assembly work	Selling things in the day centre shop	Attending meetings and receiving information
	Consuming mass media and using technical devices for communication	Doing multiple maintenance occupations for the day centre.	Doing computer graphics	Mass-production	Assisting others with office materials	Receiving supervision
	Playing games	Doing commissioned maintenance occupations.	Doing carpentry, painting	Producing specific objects in accordance with customers' orders	Serving customers	Attending an adult education college
	Occasional socialization		Renovating furniture			Teaching others

From lower to higher levels of demand

From lower to higher levels of demand