Studying couplings between patient education and changes in the conduct of everyday life


Introduction

In this paper I discuss multi case study as a research approach in relation to theory and design when constructing a research framework that enables the study of how conditions in everyday life influence the couplings and decouplings between patient education and changes in the conduct of everyday life.

The project is about adults who have been hospitalised on a psychiatric ward with depression and thereafter participate in patient education. The symptoms of depression are among others lowering of mood, reduction of energy and decrease in activity. The capacity for enjoyment, interest, and concentration is reduced. The self-esteem and self-confidence are often reduced and ideas of guilt or worthlessness are often present. Depression is, measured in the number of healthy life years, the most burdensome disease in Denmark (Kjøller 2007) and has the highest score of “healthy life” lost to the disease in Europe (SfR 2007). After one depressive episode the risk of recurrence is 60%, and after two depressive episodes the risk of recurrence is 80%. 70% of patients who are hospitalised in a psychiatric ward due to a depression will develop recurrent episodes, and 60% will suffer more than two recurrent episodes. It seems that the severity and the frequency of depression are increased with the number of episodes. Depression can thus be an episodic disease, and therefore it is recommended to learn to take the disease into account in everyday life (Kessing LV 2006).

Patient education is a form of intentional, non-formal learning that can be defined as:

“Education of patients with a diagnosed disease in a structured education programme targeting individuals or groups of patients and perhaps family members. The education programme may be disease-specific and target patients with a specific disease or generally target patients with different diseases. Patient education is part of clinical prevention.” (Sundhedsstyrelsen 2009:21)
Patient education is assumed to optimize self-care and to build up the competence to take the disease into account in everyday life. This is expected to reduce the resources used in the health-care system and to enhance the well being and quality of life for the individual (Jørgensen 2005). Politically it is a wish to depart from an approach where decision-making about patients’ health-care is in the hands of the health-care professional, and to adopt an approach where they make health-related decisions together. Patient education is seen as a way to make the patient a competent partner in the decision-making (Willaing 2005). Even though the advantages and disadvantages of the self-care approach has been discussed (Dørfler 2005), the health-care system is considered responsible for providing the individual knowledge and skills to practice self-care, and the patient is expected to be active, competent and responsible for their own health-care (Sundhedsstyrelsen 2011).

The educational system in general is built on the assumption that what is learned through education should be applicable in other situations, for example in work life or in everyday life. Kessing et al. (2006) recommend, among others treatments, patient education in groups or individual1 as a method to teach persons with affective disorder to manage their everyday lives2. When interventions in patients’ schools and in group-based patient education are investigated, focus is primarily on efficacy rather than on method and content. This implies a very limited description of the used didactics (Jørgensen 2005; Willaing 2005). The randomised controlled trials measure the effect on outcomes such as pharmacological adherence, relapse and reduction of symptoms. The content of the interventions are not clear in the studies, especially in the meta-analysis where different kinds of educational interventions are pooled, but without descriptions of learning theoretical and didactic approaches. Willaing (2005) considered this to be grounded in the biomedical approach rather than a pedagogical approach.

Patient education is supposed to help participants to take their disease into account in their everyday lives. However there is a lack of knowledge about how conditions in everyday life influence the patient education (Sundhedsstyrelsen 2009; Grabowski 2010). The purpose in the present study is to develop an understanding of the learning processes between participating in patient education targeted persons who have depression and the personal conduct of everyday life related to conditions in the everyday life. This knowledge can be a source of inspiration to didactic considerations when patient education is planned, implemented and conducted. It might also contribute to a discussion of patient education as a method to educate people about how to take a disease into account in their everyday life.

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1 He use the concept psycho-education
2 It is recommended in combination with pharmacological treatment
The research questions

The research design is lead by the research questions asked. In the present study the main question is ‘how do conditions in everyday life influence the couplings and decouplings between patient education and the conduct of everyday life?’ The sub-questions in relation to patient education are: How is the didactics of patient education targeted at persons with a depression? How do people participate in this patient education? The sub-questions in relation to the participants in patient education are: How do they talk about living with depression? How do they live their everyday lives and for what reasons? How do they give meaning to patient education? Have there been any changes in the way they conduct their everyday lives? Where do the changes come from? How do the participants carry out changes? How conditions in everyday life do influences changes in the conduct of everyday life?

Aim of this paper

Case study is referred to as a method, a strategy and an approach (Simons 2009). I use the term approach to indicate that a case study place the study in an epistemological paradigm. The aim of this paper is to argue that a multi-case study is a revealing research approach to answer the asked questions. Further it is discussed how the present study can be designed as a multi-case study in relation to the quintain, contexts, selection of cases and unit of analysis.

The multi-case study as a research approach

The case study is based on a constructivist paradigm. Constructivism is in opposition to positivism. In positivism it is assumed that the researcher can collect data and thereby find the objective truth. In constructivism it is assumed that the researcher constructs or produces data from a particular perspective and that therefore, truth is relative and situated in cultural, physical and historical settings (Stake 1995; Yin 2009). In studies based on constructivism, the focus of interest is not cause and effect, but merely activities as interrelated and contextually bound (Stake 2006). Flyvbjerg (Flyvbjerg and Aalborg Universitet 2004; 2011) argue that case study is a scientific method by refute the five misunderstandings about case study in regard to theory, reliability, and validity. He points that one of the strengths of case studies are detailed, richness and completeness, understandings of context and process and understandings of what causes a phenomenon, by linking causes and outcomes. Flyvbjerg argue against the separation between qualitative and quantitative methods and say that statistical analyses and case study complement each other (Denzin 2011). In this study the approach are qualitative justified by the existing quantitative studies about patient education and the need to gain insight in knowledge about how conditions in everyday life influence the coupling between patient education and conduct of everyday life (Sundhedsstyrelsen 2009).

Coupling – an alternative to the concept ‘transfer of learning’

There are three major understandings of transfer: task-oriented, individual-oriented and context-oriented. The approach taken to studying transfer will differ depending on the understanding on
which it is based. The understanding of ‘transfer of learning’ reflects both a period of time and the underlying theoretical understanding of learning (Tuomi-Gröhn and Engeström 2003). The way transfer of learning is understood is connected to the way learning and learning processes are understood. The concept of ‘coupling’ refers to a context-oriented approach to the transfer of learning inspired by Dreier (1999; 1999; 1999; 2006; 2008) and Tanggaard (2004; 2004; 2006). Both of these authors have been inspired by the theory of situated learning (Lave and Wenger 1991). Dreier’s theoretical background is in critical psychology, with roots in historical materialism. Lobato (2006) emphasizes the need for researchers to make clear what phenomenon they are investigating and to present their understanding of transfer and how it fits with the object of study. In the following I will argue that the context-oriented approach is a very appropriate and concise approach to studying transfer and that it calls attention to some of the same key issues as the case study approach.

The task-oriented understanding of transfer focuses on the transformation of knowledge from one task to another task. This traditional approach to transfer is based on cognitive-functionalist ideas (Tanggaard 2006) in which knowledge are seen as a set of tools. The tools are stored in a person’s memory. The person can use the tools when appropriate and then store them away again, without changing the tools in the process (Lave 1988). In this approach, knowledge is learned once and for all. Knowledge can be used identically to the way it is learned without being transformed or changed in relation to the context in which it is applied. Furthermore, transfer of knowledge is seen as individualistic and isolated; there is no interaction between the tool, the situation and other persons. This approach implies that something is transported passively from one place to another. The concept of ‘transfer’ is often thought of as described above, although transfer could be understood in different ways (Beach 2003). It is recommended that transfer not be used as a concept in research because it is associated with a passive metaphor (Lobato 2006). If the task-oriented approach were taken, focus would be on near-transfer and of identical elements between patient education and everyday life without taking the context into consideration. Illumination of contexts is one of the key issues in a case study therefore this understanding of transfer is not suitable in a case study.

In the case of individual-oriented transfer, focus is the individual’s ability to change and develop what has been learned in relation to new situations. The approach includes situations outside of school but does not refer to transfer across situations; rather, it refers to the transfer of situations (Tuomi-Gröhn and Engeström 2003). Studies taking the individual-oriented approach could focus on persons’ abilities to change and develop the general strategies they learn in patient education in relation to their everyday lives.

In the context-oriented approach, transfer is understood as the transformation of patterns in a person’s way of participating in various contexts. Within this approach there are three different views: situated, socio-cultural and activity theoretical (Tuomi-Gröhn and Engeström 2003). The
situated view is useful in investigating apprenticeships, the socio-cultural view is useful when individuals move from one community of practice to another and the activity theoretical view can be used when the transfer involves transformations of communities rather than individuals. The context-oriented approach could produce knowledge about how the conditions of everyday life influence the couplings between patient education and the conduct of everyday life. Because of the tendency to associate transfer with the metaphor as a static application that is transported from A to B, Lobato (Lobato 2006) suggests using alternative concepts that have a more dynamic metaphor, such as production or transformation. To avoid these connotations and to clarify the learning theoretical approach, I use the concept of coupling. Tanggaard (2004; 2004; 2006) developed the concept of coupling as an analytical device to understand the participation of apprentices across contexts between school and practice in vocational education. Persons are actively engaged in create couplings, but couplings can be decoupled by other persons through conflicts in practice or through discourse. There are points of couplings for example concrete events. Coupling can be placed in the context-oriented approach to transfer because focus is on the transformation of patterns in a person’s way of participating in various contexts. This understanding of learning indicates that it is not a possibility to see the persons without the contexts. This is alike in a case study where it is a part of the approach to illuminate both the case and the contexts.

The case study in relation to research questions, issue and theory
At the outset of a research project, it is important to consider whether the case study is an appropriate research approach in relation to the research question and the study setting. The case study is the preferred research strategy when the researcher: 1) is asking how and why questions, 2) is conducting an empirical inquiry focusing on contemporary phenomena in a real-life context and 3) is studying a natural setting with many variables that the researcher cannot control (Stake 1995; Stake 2006; Bassey 2008; Baxter 2008; Simons 2009; Yin 2009). The main research questions asked are ‘how do conditions in everyday life influence the couplings and decouplings between patient education and the conduct of everyday life?’ which is a how question just as the sub-questions. The above-mentioned research aim and questions imply a focus on everyday life. In a study about what was at stake in everyday life for families with Huntington's Disease everyday life is described as:
‘Everyday life is complex and full of contradictions and dilemmas, because everyday life is not just about persons in isolation with individual interests and needs. With rare exceptions, we live our lives in complex social relations and these are part of what may be the more responsible way of conducting life in any particular circumstance.’ (Huniche 2003:267)

This is obviously a setting that cannot be controlled by the researcher. Everyday life has to be studied in a real life context. It would be possible to experiment with the teaching in patient education; the researcher could, for example, evaluate different didactic approaches that are assumed to enhance transfer. If this were done, a controlled and comparative research strategy
would be needed with specific variables to measure the effects in everyday life. Such a study would have to be in a third person perspective because of the focus on teaching and school premises. As mentioned above, the present study is inspired by Dreier’s theory of persons in social practice (1999; 1999; 2006; 2008). Dreier’s theory is based on Holzkamp’s critical psychological approach in which learning is seen as part of daily living (Holzkamp 1998). The theory is also inspired by situated learning (Lave and Wenger 1991), which involves the study of individuals as participants in structures of social practice. Finally, the theory is developed on the basis of empirical studies of families participating in family therapy. An important point is that people who are in family therapy live the majority of their lives elsewhere than in the context of therapy. It is in those other contexts that the therapy is supposed to be useful. To examine couplings across contexts it is important to understand the participants’ feelings, thoughts and actions in social relationships and contexts, which should also be related to the structure of social practices. Therefore, a first person perspective is needed, in which participants are followed over time and space from their point of view in a natural setting with many variables the researcher cannot control. Thus the present study complies with the three preconditions for conducting a case study.

**Intrinsic or instrumental case studies**

There are different types of case studies, which are described using various terminologies. It is important to determine at the outset what type of case study to use (Stake 1995; Stake 2006; Bassey 2008; Baxter 2008; Simons 2009; Yin 2009). I draw primarily on Stake and Bassey, who write about case studies in educational settings. Stake (1995; 2006) divides case studies into three types: the intrinsic case study, the instrumental case study and the collective case study/multiple case study. The intrinsic case study is a study of one particular case that the researcher wants to understand better. The interest is not in general issues. This is what Bassey (2008) defines as a story-telling and picture-drawing case study. In the instrumental case study, focus it is not on the specific case, but the issue. The purpose is to gain insight into a larger issue or phenomenon or to test, refine or build a theory. This can be compared to theory seeking and theory testing case studies (Bassey 2008). The collective/multiple case study is an instrumental case study with a number of cases. The multi case study enables the exploration of differences between cases and the comparison of findings across cases. In the present study I am interested in producing knowledge that goes beyond the single case. Furthermore, I have theoretical assumptions that participation, concerns, co-participants, contexts and structures of practices have significant influence on couplings between patient education and the conduct of everyday life. That makes it relevant and interesting to be able to explore variables in cases and compare the findings across different cases. This should make it possible to produce knowledge about the significance of different conditions in everyday life.
The quintain, context, case and unit of analysis
In conducting a case study it is important to be very specific in the definition of the whole, the cases and the unit of analysis (Stake 1995; Stake 2006; Bassey 2008; Baxter 2008; Simons 2009; Yin 2009). In a multi-case study the cases are interesting because they belong to a particular collection of cases with something in common and thereby reveal something about the whole. Stake (2006) calls the whole the ‘quintain’, which is an ‘umbrella’ over the cases, for example, an object, a phenomenon or a condition. A quintain is often better understood by looking at the way things are handled than by looking at efficiency or outcomes. The quintain I want to produce knowledge about is ‘how conditions in everyday life influence the couplings between patient education and the conduct of everyday life’.

The context
In multi-case studies a case is seen in relation to contexts where historical, cultural and physical contexts are of interest. One of the purposes of a multi-case study is to illuminate some of those contexts. Within this quintain and the above-mentioned research questions, there are different contexts that should be illuminated. First, there is the context of patient education, which has societal, historical, cultural, physical and didactic contexts of interest for this study. The patient education context is in a didactic view the same for all the cases, even though I follow ten patient education courses. Without a description of those contexts it would be difficult to understand the couplings between patient education and everyday life. Second, the everyday life for every single case is related to different contexts, for example, home, leisure activities and the workplace. For each case this is taken into account. Dreier (2008) assumes that people do not live in a homogeneous life world, but instead in different contexts, which have different possibilities, concerns and opportunities for co-participation for individual people. Social practice is composed of different social contexts that are connected in a structure of social practice. Social contexts are places where people, activities and objects associate with each other. A social context may be stable or momentary and it often has a purpose, for example, to learn something in a training session, to deliver a product at a workplace or to keep the household together. Patient education is a momentary social context and the everyday lives of the participants are stable, even though changes do occur. Structures in social practices and social contexts are interdependent and influence each other. Participation in various contexts implies different ways of conducting participation. People cannot act freely in a social context; the way they act is influenced by the structures. They affect and change each other. People participate differently in distinct social contexts depending on their trajectory, needs, interests and concerns (Dreier 1999; 2006; 2008). Hence the contexts of the single cases are taken into account.

Selection of the case
A case is a real thing that is easy to visualize. It is not a process or a function. For example, ‘training modules’ can be a case, while training is not. Cases enable an examination of a function or a
phenomenon. The case can be the arena or the host of the function or phenomenon under study (Stake 2006). In the present study there are three different kinds of objects or phenomena in play: 1) patient education sessions, 2) conduct of everyday life and 3) the couplings between them. The cases must be trajectories of persons who participate in patient education after being discharge from psychiatric ward with depression. They participate in patient education, they live their everyday lives and they have different conditions in their everyday lives. By following these people it will be possible to analyse patterns of participation processes across contexts. If the patient education sessions or the everyday life had been chosen as the case the research would not cross contexts and the approach to transfer would not be oriented across contexts. In a multi case study with the quintain ‘didactics in patient education’, different patient education programs should be followed. It is a possibility but something else than the quintain in present study.

In a multi-case study data about the cases are produced to gain insight into the quintain by looking at similarities and differences in the cases. The purpose of patient education is to teach people how to live better with their disease; it thereby aim to changes everyday lives. The changes may, for example, be in routines in the context of the home, for example, living a regular life in relation to patterns of sleep, exercise and eating. They may also be about patients learning how to consider their own wants and needs, which might mean saying no to family and friends sometimes and doing things they want to do rather than things they are supposed to do. This also involves the people living close to you. Even after their symptoms disappear, adults with affective disorders can continue to experience negative effects on their mental and physical functioning in relation to spouses, children, other family members, friends, leisure activities and satisfaction (Kessing LV 2006). A depression can be maintained or exacerbated by inadequate support from personal networks and by social isolation. The social environment, including the perceptions of illness, strategies and habits in the family, affect how the illness is handled (SfR 2007; Sundhedsstyrelsen 2009). Studies of self-management in everyday life in relation to people with depression (Jerant, Friederichs-Fitzwater et al. 2005) and chronic heart failure (Riegel and Carlson 2002) expose that lack of family support prevents patients from practising active self-care (Jerant, Friederichs-Fitzwater et al. 2005) and that personal struggles with, for example, family and friends influence the patients’ self-care ability (Riegel and Carlson 2002). Tanggaard (2004) concludes that other people contribute through discursive or concrete practices to either couplings or decoupling in participation across contexts. Participation is an important concept in theory of people in social practice, which may, for example, refer to people’s partial influence on social practice. Nobody can stand outside of and nobody can control social practices on their own. Everybody participates. When people participate in social practices they are connected with co-participants and dependent on how they participate. This involves coming to an understanding with the co-participants about the conduct of life in relation to each other (Dreier 2008). I assume that conditions in everyday life related to the family structure could be an important variation to grasp in this study. Is it different to live alone, with a partner or with children in relation to the quintain of this study?
There are other conditions that could also be considered important variables, such as the level of education, gender, the number of episodes of depression, age, treatment with electroconvulsive therapy, severity of the disease, individual abilities and gender. Especially I wonder if employment/not employed could be an important variation, because whether you work or not, structure the conduct of the day. Another variation may be whether the persons have several years of experiences of living with depression. In some studies patient-education was not associated with developing self-care competence, because self-care was learned through daily life experiences (Kralik, Koch et al. 2004). The patients had an experience of ‘being on your own’ because the health professionals cannot tell exactly what to do and not to do (Riegel and Carlson 2002), they had to learn to adapt and doing things, in their everyday life (Riegel and Carlson 2002; Kralik, Koch et al. 2004). This could be a meaningful variation as well, but the group of persons who participate in patient-education and volunteer to the study is primarily persons diagnosed with recurrent depressive disorder or bipolar affective disorder and the two persons diagnosed with single depressive episode told me they had experiences dealing with depression for many years, but they had not been hospitalized before.

However, I assume that the variations 1) living alone, 2) living without a partner with resident children, 3) living with a partner without resident children and 4) living with a partner and with resident children, will create the best possibility to select cases with similarities and differences of relevance to gaining a better understanding of the quintain ‘how conditions in everyday lives influence the couplings between patient education and the conduct of everyday life’. This decision is based on first, the fact that the kinds of changes patient education is directed at affect the conduct of everyday life in ways that involve the patients’ immediate family. Second, it is based on existing knowledge, and third, it is based on the theoretical concept of ‘participation’ in social practices in which co-participants are crucial.

### The quintain: how conditions in everyday live influence couplings and decouplings between patient-education and conduct of everyday life

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Figure: The quintain and the four different conditions in everyday life contexts for the cases
The unit of analysis
The unit of analysis are sometimes identical with the case, but is may demarcate the focus. For example if the case is a person, focus may be at something specific related to that person. In present study unit of analysis is situations or issues with couplings and decouplings between patient education and conduct of everyday life in relation to the four variations in family structure.

Conclusion
First it is concluded that multi case study is a revealing approach to answer the main question ‘how do conditions in everyday life influence the couplings and decouplings between patient education and the conduct of everyday life? This conclusion is reach based on first the kind of knowledge I aim to produce and which is indicated in the way the questions are asked as ‘how-questions. Second because I conduct an empirical inquiry of everyday life, there is a real-life context. Third because the theoretical approach to learning were it is assumed that a 1. person perspective is necessary, which is to follow the persons in a natural setting with many variables the researcher cannot control. Fourths context is considered a key element in both the learning theoretical view the concept couplings refers to, and in the case study as a research approach.

Second it is concluded that the quintain of the study is how conditions in everyday live influence couplings between patient-education and conduct of everyday life. That the contexts there are important to illuminate is patient education in relation to society, history and didactics. Further the contexts of every case should be taken into account.

Third it is concluded that the cases should be persons who participate in patient education after being discharge from psychiatric ward with depression. They participate in patient education, they live their everyday lives and they have different conditions in their everyday lives. By following these persons it will be possible to analyse patterns of participation processes across contexts. The cases are selected with intend to grasp variations in the everyday conditions and it is assumed that variation in structure of the household members can gain a better understanding of the quintain. This decision is based on first, the fact that the kinds of changes patient education is directed at affect the conduct of everyday life in ways that involve the patients’ immediate family. Second, it is based on existing knowledge, and third, it is based on the theoretical concept of ‘participation’ in social practices in which co-participants are crucial.

Fourth it is concluded that the unit of analysis suggested is situations or issues with couplings and decouplings between patient education and conduct of everyday life in relation to the four variations in family structure.
References


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1 “Misunderstanding 1: General, theoretical (context-independent) knowledge is more valuable than concrete, practical (context-dependent) knowledge.

Misunderstanding 2: One cannot generalize on the basis of an individual case; therefore, the case study cannot contribute to scientific development.

Misunderstanding 3: The case study is most useful for generating hypotheses; that is, in the first stage of a total research process, whereas other methods are more suitable for hypotheses testing and theory building.

Misunderstanding 4: The case study contains a bias toward verification, that is, a tendency to confirm the researcher’s preconceived notions.

Misunderstanding 5: It is often difficult to summarize and develop general propositions and theories on the basis of specific case studies.”