The role of practitioners in the implementation of evidence-based practices in mental health services: Attitudes, participation, and experiences

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Abstract

As researchers repeatedly report that evidence-based practices (EBPs) are not utilized in mental health services, there has been an increasing emphasis on the science of implementation. A large number of theoretical approaches have pointed out the determinants that appear to be central in implementing new practices, including the individual practitioners. However, there is still limited knowledge concerning the practitioners’ tendencies and abilities to adopt particular practices. The overall aim of this thesis was to contribute to the understanding of the practitioners’ roles in the implementation of EBPs in mental health services.

The first area of investigation involved practitioners’ attitudes towards using new practices. As the findings concerning the factors affecting practitioners’ attitudes towards EBPs differ substantially, further research was needed in order to gain a better understanding of what factors are the most consistent. A cross-sectional survey study was conducted to measure practitioners’ attitudes towards the use of EBPs. The data consisted of 294 practitioners from primary and specialized mental health services, representing the largest catchment area of the Norwegian health authorities. The study emphasized what appears to be the strongest of all known predictors, namely, that the more experienced the practitioners are the more negative they are towards using new practices. In addition, the results indicated that practitioners in specialized care and/or with higher educational levels are more negative towards EBPs when they are required of them than practitioners in primary care and/or with lower educational levels. The practitioners’ attitudes towards the use of EBPs may play an important part in their decision concerning use of new practices. Implementation efforts should therefore take into consideration their experience, education, and workplace in the tailoring of strategies.

The second area of investigation involved the practitioners’ participation in the implementation of Illness Management and Recovery (IMR), a program for patients with severe mental disorders. Few studies have previously investigated the practitioners’ engagement in the implementation strategy during the implementation process. The study also contributed by providing a thorough description of the implementation strategy used, including fidelity towards it, which is often lacking. The study involved 31 practitioners and 44 patients who implemented IMR into 9 services. The implementation was conducted by an
external team of researchers and an experienced trainer. Data were gathered on fidelity to the intervention and implementation strategy, feasibility, and patient outcomes. The results indicated that the practitioners’ participation in the strategy during the active implementation phase was significantly related to their intentions regarding further use. This highlights the importance of examining the practitioners’ dosage of the strategy during the implementation process, as it may influence their further use. In addition, the practitioners’ active participation in the implementation also resulted in adequate acceptability and adoption, and fidelity and patient outcomes.

The third area of investigation involved the practitioners’ experiences of implementing IMR in their services. This was the first study to examine this in a Norwegian setting. There has also been little examination of a group of practitioners implementing an EBP in which the majority had reached high levels of fidelity, which is the exception rather than the rule. Semi-structured focus group interviews were conducted with 26 practitioners after they had used IMR for about 12 months. Thematic analysis was used. The study highlighted the practitioners as part of a larger whole, as they interact within organizations consisting of both leaders and patients. More specifically, it emphasized the importance of actively engaged leaders, having clear goals and a vision, and of outcome monitoring to sustain the practice in the services. Furthermore, the study contributed to the development of theory by pointing to possible improvements in the core implementation component framework of Fixsen, Naoom, Blase, Friedman, and Wallace (2005).

Collectively, the findings in the thesis contribute to a better understanding of the role of practitioners in the implementation of new practices. Their role is essential in the implementation of new practices in mental health services. On the basis of their own attitudes, engagement, and experiences, they decide whether and how they will make use of the new practices. In addition, they form a part of a larger whole in which both leaders and patients influence the practitioners’ use of new practices. Therefore, service leaders need to facilitate the implementation of new practices in order to ensure that the practitioners will sustain them.
List of studies

The current thesis is based on the following three studies:


III. Egeland, K. M., Hauge, M-I., Ruud, T., Ogden, T., & Heiervang, K. S. Leaders as key for mental health practitioners’ sustained use of new practices: a qualitative focus-group study. (Manuscript submitted for publication.)

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<tr>
<td>Ahus</td>
<td>Akershus University Hospital</td>
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<tr>
<td>ASHS</td>
<td>The Adult State Hope scale</td>
</tr>
<tr>
<td>CCT</td>
<td>Community Collaborative Treatment</td>
</tr>
<tr>
<td>CSQ-8</td>
<td>The Client Satisfaction Questionnaire</td>
</tr>
<tr>
<td>EBPAS</td>
<td>Evidence-Based Practice Attitude Scale</td>
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<td>EBPs</td>
<td>Evidence-Based Practices</td>
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<tr>
<td>EPIS</td>
<td>The Exploration, Preparation, Implementation, and Sustainment model</td>
</tr>
<tr>
<td>GOI</td>
<td>The General Organizational Index</td>
</tr>
<tr>
<td>HoNOS</td>
<td>Health of the Nation Outcome scale</td>
</tr>
<tr>
<td>ICC</td>
<td>Intraclass Correlation Coefficients</td>
</tr>
<tr>
<td>IMR</td>
<td>Illness Management and Recovery</td>
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<tr>
<td>IMR fidelity</td>
<td>The Illness Management and Recovery Fidelity Scale</td>
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<tr>
<td>IMRS</td>
<td>The Illness Management and Recovery scale</td>
</tr>
<tr>
<td>IT-IS</td>
<td>The Illness Management and Recovery Treatment Integrity Scale</td>
</tr>
<tr>
<td>NIEBP project</td>
<td>The National Implementing Evidence-Based Practices project</td>
</tr>
<tr>
<td>QoL5</td>
<td>Quality of Life</td>
</tr>
<tr>
<td>REK</td>
<td>The Regional Committee for Medical and Health Research Ethics</td>
</tr>
<tr>
<td>S-GAF</td>
<td>The split version of the Global Assessment of Functioning</td>
</tr>
<tr>
<td>TPB</td>
<td>Theory of Planned Behavior</td>
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1. Background

1.1 Scope of the problem

Over the years, researchers have repeatedly reported that well-researched treatment interventions and practices are not adequately utilized in mental health services (Drake et al., 2001; Girlanda, Fiedler, Becker, Barbui, & Koesters, 2017; Palinkas & Soydan, 2012). This gap between research and practice results in mental health practitioners not providing optimal care to their patients, as patients are not given treatment that complies with best practice. As a result, there has been an increasing emphasis on the science of implementation, both in mental healthcare and in other professions within human services. Implementation science is: “the scientific study of methods to promote the systematic uptake of research findings and other evidence-based interventions into routine health practice, and, hence, to improve the quality and effectiveness of health services” (Eccles & Mittman, 2006, p. 1). Research has indicated that the better implementation, the better the practice outcomes which can lead to stronger benefits for patients (Durlak & DuPre, 2008; Schoenwald, Sheidow, & Letourneau, 2004).

Mental health practitioners play a central role in the implementation of new practices. They form part of a dynamic interplay in the services within which they work, which consist of leaders, coworkers, and patients. They are not passive recipients of new interventions, but interact purposefully and creatively with them (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004). New practices influence the patients indirectly through the practitioners (Michie et al., 2005). Nevertheless, we have limited knowledge concerning the practitioners’ ability and inclination to adopt particular practices (Blow, 2017; Greenhalgh et al., 2004).

The attitudes of practitioners towards the use of new practices can provide insights into their readiness to implement evidence-based practices (EBPs) in their services, and can contribute to the tailoring of better implementation strategies that strengthen EBP uptake (Aarons, Green, & Miller, 2012). However, the findings on attitudes have been inconsistent (van Sonsbeek et al., 2015). More research is needed in order to discover whether some factors are more prominent in the prediction of practitioners’ attitudes than other factors.

In addition, the study of practitioners’ participation in implementation, and the gaining of knowledge concerning their experiences in adopting a specific practice, can provide insight
into their role in the implementation of a practice, both in relation to how they influence the implementation in the services, and how other factors influence their adoption.

Furthermore, studying practitioners’ implementation of a specific EBP can provide knowledge concerning the feasibility of a particular practice in a Norwegian context. Illness Management and Recovery (IMR) is an evidence-based practice designed to help people with serious mental illnesses manage their illness and achieve their personal goals (McGuire, Kukla, et al., 2014). However, no study to date has examined the role of practitioners in the implementation of IMR in a Norwegian mental health setting.

The aim of the thesis is to contribute to the understanding of the role of practitioners in the implementation of new practices. The thesis is based on three studies (see the appendix), and the themes examined include; 1) the practitioners’ attitudes towards using new practices, 2) the practitioners’ participation in the implementation of IMR in their services, and 3) the practitioners’ experiences of implementing IMR in their services and how this may influence its further use.

In the following section of this background chapter, the theoretical approaches to implementation are presented, with particular attention to the individual adopters (1.2). Furthermore, the key research findings and frontiers in the field that are relevant to the research questions are presented. Section 1.3 presents the practitioners’ attitudes towards evidence-based practices. Section 1.4 discusses their participation in the implementation strategy, and Section 1.5 discusses their experiences with adopting IMR, which includes a description of the program (1.5.1) and of the Norwegian mental health services (1.5.2).
1.2 Theoretical perspectives

Implementation has been defined as: “a specified set of activities designed to put into practice an activity or program of known dimensions” (Fixsen et al., 2005, p. 5). Many interrelated and overlapping terms have been used, such as translational research, knowledge transfer, diffusion, dissemination, and implementation. The latter three have often been seen as a continuum, with gradual transitions between them (Lomas, 1993). Diffusion is derived from Rogers’ (2003) well-used theory of Diffusion of Innovation. In this context, it is referred to as the passive spread of innovations. Dissemination refers to active and planned efforts to produce uptake and effective use, while implementation is the mainstreaming of an innovation within an organization (Lomas, 1993). In implementation science, most of the practices being implemented are interventions, programs, or treatments that have been shown to be scientifically efficacious or effective, and are often referred to as evidence-based practices (EBPs) (Drake et al., 2001).

Implementation is a process that is often divided into several stages, steps, or phases (Durlak & DuPre, 2008; Fixsen et al., 2005; McGovern, McHugo, Drake, Bond, & Merrens, 2013). In the search for the successful implementation of interventions, researchers have looked for barriers and enablers, which are also referred to as factors, concepts, or determinants, that are shown to hinder or facilitate the desired implementation outcomes. However, implementation has been shown to be influenced not only by a few key factors, but also by many other factors at various levels, both outside the service environment (e.g., policies, resources, legislation) and inside it (e.g., individual adopters, leadership, organizational culture and climate) (Aarons, Horowitz, Dlugosz, & Ehrhart, 2012; Aarons, Hurlburt, & Horwitz, 2011).

Moreover, the successful implementation of interventions also depends on the desired outcomes. In their conceptual advancement, Proctor et al. (2011) distinguished between three types of outcomes. 1) Implementation outcomes are the effects of deliberate and purposive actions taken to implement new practices. They can be divided into acceptability (practitioners perceive EBP as satisfactory), adoption (uptake of EBP), appropriateness (perceived fit), feasibility (actual fit), fidelity (delivered as intended), cost, penetration (integration within a service), and sustainability (maintained within a service). 2) Service outcomes are the quality improvement of the service. 3) Client outcomes are improvements in
patient well-being, and are often seen as the most important criteria for implementation success (Proctor et al., 2011). If we fail to improve patient well-being, we need to reconsider our intervention or implementation strategies.

The implementation of EBPs in service settings has been shown to be complex and challenging. This is particularly true in the human service technologies, in which they are delivered through the actions of individuals (Aarons et al., 2011). Theory is needed to guide implementation research and many theoretical approaches have been produced over the years. However, there are now so many that researchers have difficulty choosing the most appropriate ones (Mittman, 2012; Nilsen, 2015). Different theoretical approaches emphasize different factors and aims. Nilsen (2015) distinguished between three overarching aims of theoretical approaches. 1) To understand and/or explain what influences implementation outcomes, often by using determinant frameworks, classic theories, or implementation theories. 2) To describe and/or guide the process of translating research into practice, often through the use of process models. 3) To evaluate implementation efforts, usually by means of evaluating frameworks. Using a different categorization, Moullin, Sabater-Hernández, Fernandez-Llimos, and Benrimoj (2015) reviewed the frameworks, theories, and models that have been used in implementation research, and called them all frameworks. They divided them into four groups according to their aims, namely, descriptive (descriptions of the properties, characteristics, and qualities of implementation), prescriptive (direction of the implementation process via a series of steps), explanatory (specifies linkage and/or relationships between concepts), and predictive (hypothesize/propose directional relationships between concepts). The researchers found that frameworks were more often descriptive and explanatory than prescriptive and predictive, due to the early stage of development of the field of implementation (Moullin et al., 2015).

Because of the different aims of the theoretical approaches, the individual adopters (referred to as the practitioners in the thesis) have been given different attention. Rogers (2003) was one of the first to highlight the characteristics of individual adopters, and believed that these characteristics were important in the diffusion of innovations. The theory of diffusion is considered one of the most influential theories within implementation science (Nilsen, 2015), but has also been criticized for putting too much weight on the patterns of adoption by individuals (Greenhalgh et al., 2004).
The theory of planned behavior (TPB) (Ajzen, 1991), which was used in Study I of this thesis, focuses mainly on the individual adopters. It is a classic theory in psychology (determinant framework according to Nilsen, 2015) that is widely used to study behavior change in implementation science (Nilsen, 2015). The theory describes how practitioners’ attitudes towards the use of new practices, their subjective norms (a person’s perception of the social pressures put on them to perform or not perform the behavior), and their perceived behavioral control (a person’s confidence in their ability to perform a behavior, often referred to as self-efficacy) influence one another, and together shape their intentions and behavior. Ajzen proposed that, as a general rule, the more favorable the attitudes, subjective norms, and perceived behavioral control, the stronger an individual’s intention to engage in the behavior in question. However, this will only be expressed if the person willingly decides whether or not to engage in the behavior. Even then, it may not be performed due to non-motivational factors, such as the perceived availability of the requisite opportunities and resources (Ajzen, 1985). Unlike most other implementation approaches, TPB’s strength is its ability to predict behavior change (predictive framework according to Moullin et al., 2015). It has also been widely tested. However, it can only explain a few of the processes that play a part in the implementation of a practice, and therefore has limited utility in providing access to the whole picture of the implementation process.

The framework on core implementation components (Fixsen, Blase, Metz, & Dyke, 2013; Michie, Fixsen, Grimshaw, & Eccles, 2009), which was used in study III, incorporates the individual adopters into the framework. Three drivers are singled out, which are thought to have a larger impact on the implementation processes and outcomes. These are: a) Competency drivers that involve the selection, training, and supervision of practitioners; b) Organizational drivers that involve facilitative administrators who prepare and support the use of the new practice; and c) Leadership drivers that involve adaptive leaders who are working towards progress and solutions. The drivers are considered to be integrated and to compensate one another. In addition, the framework highlights fidelity monitoring. As the most effective intervention will not produce positive effects unless it is implemented, the assessments of performance are seen as a critical component of implementation (Fixsen et al., 2013; Fixsen et al., 2005). The framework can be categorized as determinant (Nilsen, 2015) and descriptive (Moullin et al., 2015). It is informal and provides a clear overview of the
central implementation determinants. However, the framework has not been particularly validated, and the combined importance of the implementation drivers for the outcomes has not been confirmed. Moreover, the framework would benefit from an emphasis on the practitioners’ roles in the implementation process that goes beyond the competency drivers that focus on selection, training, and coaching.

Some researchers have demonstrated that the organizational social context, such as climate, culture, and work attitudes, affects both the adoption and implementation of practices and also the quality and outcomes of the services (Glisson et al., 2008). Some even claim that organizational-level issues have more impact on successful implementation relative to individual-level factors (Jacobs, Dodson, Baker, Deshpande, & Brownson, 2010 as cited in Aarons, Horowitz, et al., 2012). There are theoretical approaches that include both individual and organizational concepts, such as the EPIS (Exploration, Adoption/Preparation, Implementation, and Sustainment) multilevel conceptual framework (Aarons et al., 2011). EPIS can be categorized as a prescriptive (Moullin et al., 2015) process model (Nilsen, 2015).

The model is divided into four implementation phases. 1) The exploration phase involves awareness of an issue that requires attention or the need for an improved approach to an organizational challenge. 2) The preparation phase involves the decision to adopt a practice. This is not necessarily a once-off event, as organizations may experiment with and evaluate a practice prior to a broader implementation. 3) The active implementation phase involves putting the intervention into practice. 4) The sustainment phase involves the long-time sustainability of practices. The phases consist of inner and outer contexts, with different factors playing a part throughout the phases. The outer context often refers to the economic, political, and social context, while the inner context refers to the structural, political, and cultural contexts (Pettigrew, Woodman, & Cameron, 2001). However, the line between inner and outer setting is not always clear, as the interface is dynamic and sometimes precarious. The specific factors that are considered “in” or “out” will depend on the context of the implementation effort (Aarons et al., 2011). In EPIS, individual adopter characteristics are described as inner context, together with intra-organizational characteristics such as size, structure, culture, and climate, and leadership. The latter is highlighted as a crucial variable for taking ownership of the process of advancing a specific practice. The contexts are thought to manifest themselves differently during the phases. Once a phase is reached, the experiences and lessons learned may impact future implementation efforts (Aarons et al., 2011).
The strengths of the EPIS model include both the individual adopters and the organizational factors, in addition to the division of the implementation and the factors affecting it into phases. However, it can be criticized for not specifying or hypothesizing the relationships between the factors named. It is also possible that the model underestimates the value of individual adopters. As Michie et al. (2005) pointed at, the patients are exposed to new practices through the practitioners. Thus, they play a central role in the implementation of new practices. The EPIS model is used throughout the thesis to discuss the relevance of the results in relation to the implementation process.

This section has presented a small sample of the theoretical perspectives that provide insight into the diversities and utilities of the different approaches. It also gives an impression of the complexities of the processes that are put into action when new practices are to be implemented. Moullin et al. (2015) argues that the selection of an approach should depend on the practice to be implemented, the setting, the end-users, and the degree of inclusion and depth of analysis of the implementation concepts.

The following sections of the chapter present the key research findings of the themes relevant to the three studies in the thesis. Using the EPIS model, the practitioners’ roles in the exploration and implementation phase are presented, with particular reference to their attitudes towards using EBPs. Moreover, the practitioners’ roles in the implementation phase are also highlighted, with a focus on their participation in the implementation strategy. Finally, the practitioners’ roles in the sustainment phase are presented, with particular reference to their experiences of implementing a practice in their service setting.

1.3 Practitioners’ attitudes towards evidence-based practices

The concept of evidence-based medicine was introduced at the beginning of the 1990s in response to weaknesses in the standards of clinical practice and as an attempt to introduce greater certainty to clinical decision-making (Guyatt, 1991). The concept arranges the different types of evidence resources in a hierarchy, and prioritizes randomly controlled trials and meta-analyses above other designs. Other professions quickly followed this movement (Stevens, 2013; Webb, 2001), and in 2005 the American Psychological Association (2005) officially endorsed evidence-based practice (EBP) as the standard for psychological treatment.
EBP was defined as: “the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences” (American Psychological Association, 2005, p. 5), thereby emphasizing both the best available research, clinical expertise, and patient preferences. Others have defined EBP as: “interventions for which there is scientific evidence consistently showing that they improve client outcomes” (Drake et al., 2001, p. 179), that only focuses on the best available research. Some have introduced evidence-informed practices, arguing that the EBP concept has disadvantages (Nevo & Slonim-Nevoo, 2011). In this thesis, EBP is only used to refer to those interventions and practices with the best available research.

According to the EPIS model, practitioners’ attitudes towards EBPs can influence the implementation process during the exploration and implementation phases (Aarons et al., 2011). Aarons (2005) argues that for new interventions to be explored, attitudes and perceptions regarding the need to change practices are critical. Furthermore, readiness to implement and positive attitudes towards change are seen as central in the adoption of new practices (Aarons, 2004; Aarons et al., 2011). This is supported by studies that indicate that practitioners’ general attitudes towards new practices can hinder or facilitate their decisions concerning whether or not to try a new intervention (Damanpour, 1991; Nelson & Steele, 2007).

Although studies have indicated that many practitioners welcome EBPs (Ubbink, Guyatt, & Vermeulen, 2013; Ulvenes, Aasland, Nylenna, & Kristiansen, 2009), there is still resistance among practitioners in healthcare (Lilienfeld, Ritschel, Lynn, Cautin, & Latzman, 2013; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996; Stewart, Stirman, & Chambless, 2012). There are many reasons for this. Lilienfeld et al. (2013) describe some psychologists’ belief that the external world is exactly as we see it (naïve realism). This can result in practitioners believing that their clinical experience and intuition should be accorded a higher priority than the research evidence (Gaudiano, Brown, & Miller, 2011). However, as our reality is constrained by preconceptions, biases, and interpretations, clinical experiences and intuition may be misleading, leading them to use interventions that are ineffective or even harmful (Hall, 2011; Hartman, 2009).
There is also a widely held view among practitioners and researchers that there exist common therapist factors that are at least as effective as the practice that is being used, but that such therapist effects have been continuously ignored (Wampold & Imel, 2015). Referring to the meta-analysis of Baldwin and Imel (2013) that indicates that 3-7% of patient outcome variance was attributable to therapists, some argue that the development of new interventions for different psychological conditions is not a reliable pathway to improved patient outcomes (King & Bickman, 2017). These understandings are reinforced by studies that demonstrate that the advantages of EBPs over treatment as usual in real world clinical settings have been disappointingly small (Wampold et al., 2011). However, a lack of fidelity measuring may have undermined the effects of EBPs in earlier studies. Moreover, the findings do not suggest therapist effects as a major role in psychotherapy outcomes (King, Orr, Poulsen, Giacomantonio, & Haden, 2017). Instead, it seems that the utilization of manuals appears to reduce the variance associated with therapists (Baldwin & Imel, 2013; Hofmann & Barlow, 2014).

Aarons (2004) pointed out four dimensions that are thought to influence peoples’ attitudes towards adopting EBPs. They are the intuitive appeal of the practice, the likelihood of adopting a practice given the requirements to do so, openness to new practices, and the perceived divergence between research-based interventions and current practice. The dimensions were included in a scale that was developed to measure practitioners’ general attitudes, namely the Evidence-Based Practice Attitude Scale (EBPAS) (Aarons, 2004). In their search for better strategies for the implementation of EBPs in health services, researchers have used the EBPAS to examine factors that appear to affect practitioners’ attitudes towards EBPs. Table 1 summarizes the research findings on specific factors that have been shown to relate to attitudes towards adopting EBPs. Some of the findings differ, as do the sample and the settings of the studies that have examined the predictive factors.

In terms of professional experience, most of the findings point in the same direction; the higher the experience practitioners have, the lower they score on the EBPAS total, appeal, requirements, and openness (Aarons, Glisson, et al., 2012; Aarons et al., 2010; Melas, Zampetakis, Dimopoulou, & Moustakis, 2012). The results differ in terms of divergence, as practitioners with higher experiences scored higher in one study (Aarons, Glisson, et al., 2012) and lower in another (Aarons et al., 2010). Concerning age, some studies found
younger practitioners to score higher on the EBPAS total (Gray, Elhai, & Schmidt, 2007; Melas et al., 2012). Others found that older practitioners score higher on openness and requirements (Aarons et al., 2010; Aarons & Sawitzky, 2006), but that they also scored higher on divergence (Aarons, 2006; Aarons & Sawitzky, 2006; van Sonsbeek et al., 2015). Nakamura, Higa-McMillan, Okamura, and Shimabukuro (2011) did not find any differences in terms of experience or age. However, their sample consisted of voluntary attendees of a workshop on EBPs, who may have been generally positive towards EBPs. With regard to education, the higher the level, the lower the practitioners scored on requirements, but the higher on appeal (Aarons, 2004, 2006; Aarons et al., 2010; Aarons & Sawitzky, 2006; van Sonsbeek et al., 2015). Some also reported higher on openness and divergence (Nakamura et al., 2011; van Sonsbeek et al., 2015). In terms of gender, some did not find any associations (Aarons & Sawitzky, 2006; Melas et al., 2012). Others found females to score higher on total, appeal, and requirements (Aarons, 2006; Aarons, Glisson, et al., 2012; Aarons et al., 2010), but also on divergence (van Sonsbeek et al., 2015). However, most studies had unequal sample sizes across the two groups, which decreases the power of the statistically significant difference detected (Frazier, Tix, & Barron, 2004). This undermines the results that suggest actual differences between the genders. Attitudes have also been associated with organizational characteristics. For example, practitioners in less bureaucratic programs (Aarons, 2004), more proficient organizational cultures, and less stressful climates (Aarons, Glisson, et al., 2012) have been shown to favor EBPs.

We know little about Norwegian health practitioners’ general attitudes towards EBPs. One study among 966 physicians indicated that they had limited knowledge and experience of evidence-based medicine, but a positive attitude towards the concept (Ulvenes et al., 2009). However, no study to date has examined Norwegian mental health practitioners’ attitudes using the EBPAS. Moreover, the Norwegian healthcare system differs substantially from that of the USA, where most of the research on attitudes has been done (see 1.5.2 for details).
<table>
<thead>
<tr>
<th>Factor</th>
<th>Reference</th>
<th>Participants</th>
<th>Demographics (%): $M = \text{mean} \ (SD = \text{standard deviation})$</th>
<th>Method</th>
<th>Findings ($p$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional experience</td>
<td>Aarons et al. (2010)</td>
<td>1089 therapists from 100 children/adult mental health clinics in USA, nationwide sample</td>
<td>$M = 10.66 \ (SD = 8.51)$</td>
<td>Regression with MLR estimation</td>
<td>Higher experience relates to: higher on requirements (.05), lower on openness (.05), lower on divergence (.05)</td>
</tr>
<tr>
<td></td>
<td>Aarons, Glisson, et al. (2012)</td>
<td>1112 therapists from 100 mental health clinics in USA, nationwide sample</td>
<td>$M = 10.76 \ (SD = 8.55)$</td>
<td>Hierarchical linear model analyses</td>
<td>Lower on total (.001), lower on appeal (.001), lower on requirements (.001), lower on openness (.001), higher on divergence (.001)</td>
</tr>
<tr>
<td></td>
<td>Melas et al. (2012)</td>
<td>534 medical doctors randomly selected from 14 Greek hospitals</td>
<td>$M = 4.45 \ (SD = 5.73)$</td>
<td>Correlational analyses</td>
<td>Lower on total (.01)</td>
</tr>
<tr>
<td></td>
<td>Nakamura et al. (2011)</td>
<td>240 therapists in public sector youth mental health services, attendees of workshop on EBPs, Hawaii</td>
<td>$M = 5.6 \ (SD = 6.4)$</td>
<td>Zero-order bivariate correlations + ANOVA</td>
<td>No significant findings</td>
</tr>
<tr>
<td>Age</td>
<td>Aarons (2004)</td>
<td>(N=322) US Public sector clinical service workers from 51 child/adolescent programs</td>
<td>$M = 35.7 \ (SD = 10.49)$</td>
<td>Multilevel regression analyses</td>
<td>Higher age relates to: higher on divergence (.01)</td>
</tr>
<tr>
<td></td>
<td>Aarons (2006)</td>
<td>(N=303) US Public sector children/youth mental health service practitioners and case managers from 49 programs</td>
<td>$M = 35.63 \ (SD = 10.49)$</td>
<td>Multilevel regression analyses</td>
<td>Higher on openness (.05), higher on divergence (.05)</td>
</tr>
<tr>
<td></td>
<td>Aarons and Sawitzky (2006)</td>
<td>(N=303) US Public sector children/youth mental health service practitioners and case managers from 49 programs</td>
<td>$M = 38.22 \ (SD = 11.49)$</td>
<td>Multilevel regression analyses</td>
<td>Higher on requirements (.05)</td>
</tr>
<tr>
<td></td>
<td>Gray et al. (2007)</td>
<td>(N=461) Trauma professionals in mental health (ISTSS* members)</td>
<td>$M = 46.9 \ (SD = 11.4)$</td>
<td>Correlation matrix</td>
<td>Lower on total (.01)</td>
</tr>
<tr>
<td></td>
<td>Melas et al. (2012)</td>
<td></td>
<td>$M = 36.51 \ (SD = 7.9)$</td>
<td></td>
<td>Lower on total (.01)</td>
</tr>
<tr>
<td></td>
<td>Nakamura et al. (2011)</td>
<td></td>
<td>$M = 39 \ (SD = 11.1)$</td>
<td></td>
<td>No significant findings</td>
</tr>
<tr>
<td></td>
<td>van Sonsbeek et al. (2015)</td>
<td>(N=270) Youth care professionals in 5 institutions in the Netherlands</td>
<td>$M = 43.15 \ (SD = 11.03)$</td>
<td>Multilevel regression analyses</td>
<td>Higher on divergence (.001)</td>
</tr>
</tbody>
</table>

*ISTSS = International Society for Traumatic Stress Studies
<table>
<thead>
<tr>
<th>Factor</th>
<th>Reference</th>
<th>Demographics (%)</th>
<th>Findings (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education level</td>
<td>Aarons (2004)</td>
<td>Doctoral-level (9.6), Master-level (56.5), Lower (33.2)</td>
<td>Higher education level relates to:</td>
</tr>
<tr>
<td></td>
<td>Aarons (2006)</td>
<td>Doctoral-level (9), Master-level (58), Bachelor-level (19)</td>
<td>Higher on appeal (.05)</td>
</tr>
<tr>
<td></td>
<td>Aarons and Sawitzky (2006)</td>
<td>Doctoral-level (9.3), Master-level (58.1), Bachelor (18.6)</td>
<td>Higher appeal (.01)</td>
</tr>
<tr>
<td></td>
<td>Aarons et al. (2010)</td>
<td>Doctoral-level (7), Master-level (67.6), Bachelor-level (16)</td>
<td>Lower requirements (.05)</td>
</tr>
<tr>
<td></td>
<td>Nakamura et al. (2011)</td>
<td>Doctoral-level (10.4), Master-level (70.4), Bachelor (15.8)</td>
<td>Doctoral more open compared to masters (.02)</td>
</tr>
<tr>
<td></td>
<td>van Sonsbeek et al. (2015)</td>
<td>Higher vocational education (55.3), University education (41.6)</td>
<td>No associations on other dimensions</td>
</tr>
<tr>
<td>Gender</td>
<td>Aarons (2006)</td>
<td>Female (77)</td>
<td>Being female relates to:</td>
</tr>
<tr>
<td></td>
<td>Aarons and Sawitzky (2006)</td>
<td>Female (76.7)</td>
<td>Higher on appeal (.05)</td>
</tr>
<tr>
<td></td>
<td>Aarons et al. (2010)</td>
<td>Female (76)</td>
<td>No associations</td>
</tr>
<tr>
<td></td>
<td>Aarons, Glisson, et al. (2012)</td>
<td>Female (76.4)</td>
<td>Higher total (.05)</td>
</tr>
<tr>
<td></td>
<td>Melas et al. (2012)</td>
<td>Female (35)</td>
<td>Higher requirements (.05)</td>
</tr>
<tr>
<td></td>
<td>van Sonsbeek et al. (2015)</td>
<td>Female (71.3)</td>
<td>Higher on divergence (.05)</td>
</tr>
</tbody>
</table>
1.4 Practitioners’ participation in the implementation strategy

According to the EPIS model, individual adopters may affect the implementation process during all the phases, and especially during the exploration and implementation phases (Aarons et al., 2011). In the exploration phase, the individual adopters’ values, goals, social networks, and perceived need for change are highlighted, while in the active implementation phase, the demographics, adaptability, and attitudes towards EBP are emphasized as determinants in the implementation of new practices (Aarons et al., 2011). However, little is said concerning the practitioners’ engagement in the implementation strategy during the implementation process.

Implementation strategies are methods and techniques, both single or multifaceted, that are used to enhance the implementation of a practice (Proctor, Powell, & McMillen, 2013). Similarly to other areas within implementation science, research on implementation strategies has been hampered by the varied quality of the reporting (Pinnock et al., 2015). Strategies are not described in detail or are not justified, and therefore it remains challenging to learn from the strategies used.

Some researchers have reversed this trend, and are providing increased evidence for particular strategies. The Expert Recommendations for Implementation Change (ERIC) study consists of an expert panel that focuses on identifying, developing, and testing 73 implementation strategies (Powell et al., 2015). The Cochrane Effective Practice and Organisation of Care (EPOC, 2015) group is continually working to publish systematic reviews that are updated every three years for each of the 47 implementation strategies included in their taxonomy. These groups are providing conceptual clarity on what constitutes different implementation strategies. However, there is a growing understanding among researchers that the effectiveness of implementation strategies depends on contextual factors, and on the manner in which the strategies are delivered and managed (Øvretveit et al., 2011). As the main effect of a strategy is often dominated by a large number of contextual and delivery factors, it can tend to be weak. Therefore, instead of examining whether strategies are effective, implementation efforts should be tailored to the specific setting (Powell et al., 2017), and research should pursue questions such as how, when, where, and why a strategy is effective (Mittman, 2012). Proctor et al. (2013) claimed that to specify the implementation strategies
properly is a prerequisite to studying them empirically. They recommend that strategies should be 1) named, 2) defined, and 3) operationalized. The specification should include: a) identifying who enacts the strategy, b) the actions/steps within it, c) the targets they attempt to impact, d) when the strategy is used, e) the dosage, f) the implementation outcomes affected, and g) the empirical, pragmatic, or theoretical justification for the choice of implementation strategy.

Fidelity to the implementation strategy is the degree to which implementation strategies are utilized as specified, contrary to fidelity to the intervention, which is the degree to which an implementer follows the intervention as specified (Cross & West, 2011). Both are important when implementing new practices. Many definitions of fidelity are based on Dane and Schneider’s (1998) description of program integrity (Cross & West, 2011; Schoenwald et al., 2011). Slaughter, Hill, and Snelgrove-Clarke (2015) define fidelity to the implementation strategy as including three elements, which are adherence (clarity concerning what actually occurred during implementation), dose (the extent to which the participants actually received the implementation strategy), and participant response (whether the participants were actively involved with the strategy). In their review of 72 implementation studies, they claimed that there has been a decline in the quality of implementation fidelity documentation over time, referring to adherence, dose, and participant response (Slaughter et al., 2015). However, because of the complexity of searching for fidelity articles, the search strategy was based on the references of the Cochrane EPOC Taxonomy (EPOC, 2015), which only included articles from three high-impact leading medical journals, with randomized controlled trials or cluster randomized trials study designs. Documentations in articles with other designs or other journals may have been overlooked.

In terms of dosage, Proctor et al. (2013) call for details concerning the intensity of the implementation strategies provided, as the field needs to know the minimal dose required to gain the strongest effect. Two studies within mental health settings were found. In a pre-post study in the USA, Neff, Amodei, Martinez, and Ingmundson (1999) evaluated three training models for health care practitioners providing HIV/AIDS mental health training. Follow-up data was collected one month post-intervention. Fifteen workshops were completed over a two-year period, which included full-day (N=514), half-day (N=209), and brief (N=114) workshop approaches. The results indicated a dose effect in that the longer trainings produced
change, specifically in the area of knowledge enhancement. The study did not use a randomized design, and examined only short-term effects. In a randomized controlled trial in the USA, Kauth et al. (2010) examined facilitation (in which an implementation expert operates as a facilitator to help teams identify and solve problems around change efforts) as an effective strategy for implementing cognitive behavioral therapy (CBT). It counted the time spent by each of 23 practitioners in the various activities with the facilitator. Although the study indicated that the practitioners who received facilitation significantly increased their CBT use compared to those who did not receive facilitation, there were no significant associations between change in CBT usage and total time in facilitation or number of facilitator contacts with practitioners. The study was limited by a small sample and by self-reported CBT use.

There is a lack of reporting on the implementation strategies being delivered. More evidence on the practitioners’ participation in the strategies can shed new light on the strategies being used in the implementation efforts, including an increased understanding of the role of practitioners in the implementation process.

1.5 Practitioners’ experiences and sustained use

The goal in implementing new practices in health services is that they should be sustainable over time. Sustainability refers to: “the extent that interventions can continue to be delivered over time, institutionalized within settings, and have necessary capacity built to support their delivery” (Chambers, Glasgow, & Stange, 2013, p. 3). In the EPIS model and elsewhere, continued fidelity monitoring and support has been highlighted as critical for continued EBP effectiveness (Aarons et al., 2011; Fixsen et al., 2005; Schoenwald et al., 2011). Monitoring can support the practitioners’ understanding that they have a new set of skills that they are expected to practice. Moreover, this can provide greater role clarity when practitioners know what is expected of them and how their job performance will be evaluated, which is associated with better job performance and role efficacy (Bray & Brawley, 2002). In addition, staffing has also been mentioned as a determinant in the sustainability of practices, although little research has been conducted on it (Aarons et al., 2011; Fixsen et al., 2005). To find the right person for the job may be decisive for sustaining the practice, whether this concerns the practitioner adopting a new practice or the leader facilitating its use.
This PhD project examined practitioners’ experiences in using the Illness Management and Recovery (IMR) program in Norwegian service settings. The following sections present IMR and the Norwegian mental health services.

1.5.1 Illness Management and Recovery

Illness Management and Recovery (IMR) is a standardized psychosocial intervention with a strong empirical foundation in illness self-management and recovery. It is based on the stress-vulnerability model (Mueser et al., 2006) and was developed during the National Implementing Evidence-Based Practices (NIEBP) project in the USA (Bond, Drake, McHugo, Rapp, & Whitley, 2009), which implemented five EBPs in 53 sites in the USA during a 2-year implementation phase. These were supported employment, Family Psychoeducation, Integrated Dual Disorder Treatment, Assertive Community Treatment, and IMR. Illness Management and Recovery is designed to help people with schizophrenia, bipolar disorders and major depression manage their illness and achieve their personal goals (McGuire, Kukla, et al., 2014). Five strategies form the basis of the IMR program, namely, psychoeducation to improve knowledge of mental illness, relapse prevention to reduce relapses and rehospitalization, behavioral training to improve medication adherence, coping skills training to reduce the severity and distress of persistent symptoms, and social training to strengthen social support. The practitioners teach these strategies by means of a combination of educational, motivational, and cognitive-behavioral techniques (Mueser et al., 2002; Mueser et al., 2006). The program is organized into 11 modules, which include recovery strategies, practical facts about mental illness, the stress-vulnerability model, building social support, using medication effectively, drug and alcohol use, reducing relapses, a healthy lifestyle, coping with stress, coping with problems and symptoms, and getting one’s needs met in the mental health system. A workbook with educational handouts has been developed, which is taught weekly to service users for 10-12 months, individually or in groups. A toolkit has been published together with fidelity checklists to guide the implementation of the practices in the NIEBP project that includes IMR (SAHMSA, 2009a, 2009b). This toolkit has not been evaluated.

A review (McGuire, Kukla, et al., 2014) demonstrated that IMR is advantageous to treatment as usual, according to observer ratings of psychiatric symptoms, as well as patient and
practitioner ratings. However, two randomized studies with active control groups found no significant differences between the groups, although there were significant improvements in the intervention group from pre to post treatment (Dalum et al., 2016; Salyers et al., 2014). The studies had weaknesses that included low participation rates, non-blinded staff, and high dropout rates. Furthermore, details were lacking concerning the fidelity to the implementation strategies and the dosage of IMR received by the patients. This makes it difficult to draw conclusions about whether the implementation outcomes were a result of the intervention or of the implementation strategies.

Certain implementation outcomes have been reported in IMR studies. In terms of feasibility (i.e., the extent to which a practice can be used or carried out within a setting, often based on patient retention and participation), IMR appears feasible but is challenging to implement (McGuire, Kukla, et al., 2014). The curriculum is comprehensive and the completion rates vary substantially between studies. The dropout rates ($Mdn = 24\%$) and the completion rates ($Mdn = 63\%$) could be improved (McGuire, Kukla, et al., 2014).

In terms of fidelity to the intervention (i.e., to which a practice was implemented as intended), higher fidelity to IMR has been associated with better patient outcomes (Bartholomew & Kensler, 2010; Hasson-Ohayon, Roe, & Kravetz, 2007). One study also found higher overall IMR practitioner competence to be associated with increased patient illness self-management (McGuire, White, et al., 2015). Researchers have reported high levels in some studies (Fujita et al., 2010; Levitt et al., 2009; Salyers et al., 2010), although the results have varied widely in other multisite studies (Hasson-Ohayon et al., 2007; McGuire et al., 2016). In their study on improving fidelity in the NIEBP project, Bond, Drake, McHugo, et al. (2009) emphasized a “monitoring philosophy”, and hypothesized that introducing fidelity monitoring to services would provide them with a focus for implementation efforts and a framework for understanding the practice, providing the leaders with political documentation, and offering validation to teams achieving high fidelity. However, few services embraced the fidelity monitoring philosophy, although those that did appeared to have sustained the practice. Several researchers have stated that the practitioners’ understanding needs to be worked on for them to experience assessments as a resource for long-term sustainability (Bond et al., 2014; Rychener, Salyers, Labriola, & Little, 2009). To my knowledge, little has been reported in terms of fidelity to the implementation strategies used in IMR studies, which
include adherence, dosage, and participant responsiveness. There has also been little examination of a select group of high IMR fidelity-scoring practitioners, since this is the exception rather than the rule.

In terms of sustainability (i.e., to which an EBP is maintained within a service setting), this has been shown to be challenging (Bond et al., 2014; Bond, Drake, McHugo, et al., 2009). Of the five practices implemented in the NIEBP project, IMR has had the lowest sustainability rates. Only 3 of 12 (25%) sites had experienced sustained practice, while 7 (58%) had restarted, and 2 (17%) had been discontinued (Bond et al., 2014). One may therefore question the implementation strategy used to achieve sustainability in the project, although the strategy was embraced in order to achieve high fidelity rates (Bond, Drake, McHugo, et al., 2009).

Of the studies examining the practitioners’ experiences with adopting IMR, most of them examined the facilitators and barriers involved in implementing the program. Salyers, Rollins, McGuire, and Gearhart (2009) surveyed 89 practitioners who had attended IMR training offered by one center in Indiana, USA. One-fourth reported no use of IMR in retrospect of the training. Half of these reported having no intentions of using it before attending training. On open-ended questions, the three most common facilitators included training, the IMR materials, and support from co-workers or supervisors. Many also reported the agency as helpful. The barriers mentioned included patient-related barriers (e.g. motivation, nonattendance), agency-related barriers (administrative or other staff), barriers within themselves (competing demands or getting started), and IMR itself. Whitley, Gingerich, Lutz, and Mueser (2009) interviewed key informants from 12 community mental health centers in the USA that implement IMR. Four themes emerged that determined its success or failure, namely, leadership, organizational culture, training, and staff and consultation. McGuire, White, White, and Salyers (2013) surveyed IMR experts representing 107 Veterans Affairs Medical Centers in the USA on the penetration of IMR into their centers and the determinants of implementation. The facilitators included knowledgeable staff and peer support, while the barriers included limited staff availability and intimidating workbook materials. In addition, and as many others have also found in implementation efforts (Aarons et al., 2011; Fixsen et al., 2005), active leaders who are committed to the implementation process were found to be crucial when implementing practices (Bond, Drake, McHugo, et al., 2009; McGuire, Salyers, et al., 2015; Torrey, Finnerty, Evans, & Wyzik, 2003). Although these studies had many
implications for further implementation efforts, they would have been even more beneficial if their findings had been placed into a theoretical approach.

1.5.2 Norwegian mental health services

Norway consists of about five million inhabitants, who are spread over almost 400,000 km², making it one of the most sparsely populated countries in Europe. It is also one of the world’s richest countries per capita due to its large oil production (Ringard, Sagan, Sperre Saunes, & Lindahl, 2013). Health status in Norway is generally good, with a higher life expectancy and a lower morbidity and mortality rate than that of other OECD (Organisation for Economic Cooperation and Development) countries (Saunes, Helgeland, & Lindahl, 2014). The government is responsible for the provision of treatment and the promotion of public welfare and health to everyone, on equal terms and irrespective of income. Coverage is universal and automatic for all residents, and is financed through national and municipal taxes (The Commonwealth Fund, 2017).

Norway is a parliamentary democracy, and is currently divided into three administrative levels, namely, the state, 19 counties, and 429 municipalities. The health care system is semi-decentralized, and distinguishes between specialized and community care (Ringard et al., 2013). The state is responsible for specialized care, which is administered by four Regional Health Authorities, each responsible for several health trusts that include mental health divisions consisting of both inpatient and outpatient services. To a great extent, specialized mental health care consists of specialists in psychiatric nursing, psychiatry, and psychology. One of their main tasks is to diagnose and provide specialized psychosocial and medical treatment to service users with severe mental illnesses. Specialized care is subject to guidelines that are developed by the Norwegian Directorate of Health (Directorate of Health, 2011, 2013).

The municipalities are responsible for primary care. Their political mandate is to deliver services to service users (referred to as patients in this thesis) with all types of mental illnesses, and in close proximity to their homes. The practitioners generally have a primary background in a mental health discipline, or primary training in areas such as nursing, social education, or social work, with supplemental training in a mental health discipline. They offer individual outpatient psychotherapy, psychotropic medication management, and home visits. In most
municipalities, there are few or no psychologists or psychiatrists, but the Ministry of Health and Care Services (2016) is working towards increasing the number of psychologists. Considerable differences in size and organization among the municipalities mean that primary care practitioners enjoy a great deal of freedom in organizing their services (Ringard et al., 2013). This makes them more flexible and subject to fewer governmental restrictions than specialized care practitioners.

Scandinavian work organizations have been found to emphasize greater autonomy for employees than is generally the case in other countries (Dobbin & Boychuk, 1999; Gustavsen, 2007). Gustavsen (2007) described the Scandinavian learning-oriented model that is based on trust. The managers trust their employees to handle all the challenges that emerge, while the employees involve themselves deeply in their work, continuously acquiring new knowledge and facing difficult decisions and the associated risks. It is recognized that all the actors need to learn, which, in turn, demands a certain degree of freedom in their work roles.

In implementation science, autonomy (the degree of perceived control that practitioners have over how they perform tasks and operate independently) has been demonstrated to affect the implementation of new practices. The insertion of new interventions can lead to healthcare practitioners’ experiences of loss of job autonomy and increased turnover (Aarons, Fettes, Sommerfeld, & Palinkas, 2012; Rossen, Buus, Stenager, & Stenager, 2016). However, the implementation of new practices has also been shown to lead to increased job autonomy as it provides practitioners with more structure and competence in their work (Aarons, Fettes, et al., 2012). Thus, high autonomy is emphasized. On the basis of four meta-analyses, Greenhalgh et al. (2004) conclude that organizations will assimilate practices more readily if they are divided into semi-autonomous departments and units. According to their experiences of implementing IMR, McGuire, Salyers, et al. (2015) promoted autonomy-supportive leaders who delegate decisions and executions to program-level leaders, as this has been associated with increased innovation use.

Moreover, a difference has been pointed out between practitioners’ feelings of being autonomous (i.e., self-regulating, oriented toward the interest value of the environment, and the contextual supports for self-initiation) and autonomy support (i.e., leaders understanding and acknowledging the perspectives of practitioners, and offering them opportunities to make
choices and encourage self-initiation). In their study that tested the self-determination theory, Baard, Deci, and Ryan (2004) found support for a model in which the employees’ perceptions of their leaders’ autonomy support predicted the employees’ satisfaction with their autonomy, competence, and relatedness, which in turn predicted their job performance.

1.6 Summary of the background

Implementation involves a process of activities that places an intervention of known dimensions into practice. It is influenced by many factors both inside and outside the service environment. Successful implementation depends on desired outcomes, which are the effects of deliberate and purposive actions to implement new practices. Theory is needed to guide the implementation research. However, the number of theoretical approaches makes it difficult to choose the most appropriate one, and some theories focus more on individual adopters than others.

The practitioners’ attitudes towards the use of new interventions, their active participation in implementation, and their experiences of implementing a specific program can provide valuable knowledge concerning their role in the implementation of new interventions. In terms of attitudes, positive attitudes are seen as central for the adoption of new interventions. However, there is resistance among healthcare practitioners to using new interventions. We know little about the Norwegian health practitioners’ general attitudes towards EBPs.

Implementation strategies are methods or techniques used to enhance the implementation of a practice. More evidence on the practitioners’ participation in these strategies can shed new light on the strategies being used in the implementation efforts, including an increased understanding of the practitioners’ roles in the implementation process.

Illness Management and Recovery is a standardized psychosocial program that is designed to help people with severe mental illness manage their illnesses and achieve their personal goals. Research has indicated that the program appears feasible, although it has some challenges. Sustainability has been shown to be particularly challenging, and continued fidelity monitoring and support has been highlighted as critical for continued EBP effectiveness.
2. Aims and research questions

The aim of the thesis was to contribute to the understanding of the practitioners’ roles in the implementation of EBPs. The specific questions addressed were:

1) What predicts mental health practitioners’ attitudes towards adopting EBPs?
2) Of what importance was the practitioners’ participation in the implementation strategy when implementing IMR in their service settings?
3) How did the practitioners experience their work with the IMR program in their services, and what challenged its further use?

The first study addressed the practitioners’ attitudes as a precursor to their decisions regarding whether or not to try a new intervention. As the findings on the factors affecting the practitioners’ attitudes towards EBPs differ substantially, more research is needed in order to gain better understanding of what are the most consistent of all known factors. The thesis contributes to knowledge in this area by exploring individual predictors for attitudes towards new interventions, and the differences in attitudes between services in the Norwegian context.

The second study addressed practitioner participation in the implementation strategy used when implementing IMR. Research has been hampered by the varied quality of reports on the process of implementation (Pinnock et al., 2015). This thesis contributes to the literature by thoroughly reporting and evaluating the strategy used. It also adds knowledge concerning the importance of facilitating practitioner participation in the strategy when implementing new practices, which had previously received little attention. In addition, it contributes to knowledge by examining whether IMR is feasible in the Norwegian mental health services. This may provide grounds for further implementation in the healthcare system.

The third study addressed the practitioners’ experiences of using IMR in their services. To my knowledge, no one has examined a group of high-fidelity, voluntary practitioners with good training and consultation conditions who use IMR. The qualitative focus group study contributes to the literature by highlighting the practitioners’ need for active support and guidance by leadership in order to be able to sustain the practice in the services. Leaders have a central role in facilitating implementation in the services.
3. Materials and methods

3.1 Project setting

A national guideline from 2011 indicated the need for improvements in the clarification, treatment, and follow up of people with severe mental illnesses, often in combination with drug abuse (Directorate of Health, 2011). In 2011, several units at the Akershus University Hospital (Ahus), together with seven communities and three non-governmental organizations (run by patients and relatives) in the area of Romerike, received a large grant for a collaboration project. The project was called the Community Collaborative Treatment project (CCT project) and its aim was to improve collaboration between services for patients in need of multiple and prolonged health services (Heskestad, Schjervheim, & Ruud, 2012).

My interest in implementation research made me curious about the project, and in late 2011 the Research and Development Department of the Division of Mental Health Services at Ahus provided me with the opportunity to write my thesis on it. At that time, some of the practitioners in the health services participating in the CCT project were calling for acquired competence in the treatment of this group of patients. I was therefore allowed to plan the implementation of one of the evidence-based practices described in the CCT handbook (Heskestad et al., 2012), that is Illness Management and Recovery (IMR).

A great deal of work was done in preparing the PhD project, and in making it possible to implement IMR in the services. With financial support from the Regional Research Network in Psychotic Disorders of the South-Eastern Norway Regional Health Authority, the manual (approximately 1300 pages) was translated into Norwegian during 2013. Hazelden Publishing owned the rights to the third edition of the IMR manual, and Ahus negotiated the rights to translate it and distribute it to the participating services. In May 2013 an introductory seminar with Susan Gingerich, one of the editors of the manual, was arranged in order to inform the services and motivate them to join the project. Ahus engaged Rickard Färdig (PhD), a Swedish psychologist with extensive experience in IMR, to train and consult the practitioners. The service enrolment occurred during Autumn 2013. Because some of the services in the CCT project abstained from participating in the IMR training, this paved the way for other
services in the Health Authority to join it. Consequently, the PhD project worked side by side with the CCT project.

While the implementation process moved forward, we chose to carry out a cross-sectional study in order to examine Norwegian mental health practitioners’ attitudes towards the use of EBPs. This gripped my curiosity as they had been greatly debated in the national and international media and in professional journals for a long period.

3.2 Philosophical underpinnings

Many researchers in the field of implementation have highlighted the importance of using the most appropriate methods to answer the research questions, emphasizing both quantitative and qualitative methods (Palinkas et al., 2011; Southam-Gerow & Dorsey, 2014). This is in accordance with a pragmatic paradigm, in which paradigm is defined as “shared beliefs among members of a specialty area” (Morgan, 2007, p. 53). Pragmatism stands on the shoulders of philosophers such as Dewey, James, and Mead from late 1800s, but it has recently received increased attention due to the shortcomings of other approaches. The metaphysical paradigm has been prevalent for a long time, emphasizing philosophical discussions on the nature of reality and truth (Morgan, 2007). Guba and Lincoln (1994) have contributed heavily to this approach by distinguishing between several paradigms and arguing that it is impossible to translate or reinterpret research between them. Pragmatism seeks to reorient research from abstract concerns about reality, and to rather turn it towards more practical issues with regard to which questions are most important to study and which methods are most appropriate for conducting those studies. This opens up the possibility of unifying different and even conflicting theories, perspectives, and methods (Morgan, 2007). Pragmatism seeks to guide concrete action. However, our actions are the outcomes of our experiences. The questions we decide to ask are therefore influenced by our personal history, social background, and cultural assumptions. Being conscious and reflective about what we choose to study and how we choose to do so is therefore essential (Morgan, 2007, 2014).

The philosophical underpinnings of the thesis are founded in a pragmatic position. Implementation is a practical field of study, and the research questions are mostly formed to guide concrete action. This corresponds to the purpose of the thesis, which aims at answering
questions concerned with a variety of methodological approaches on the practitioners’ roles in the implementation of EBPs, and to build on the knowledge of what leads to successful implementation.

The PhD project was largely built on quantitative data collection (Studies I and II), while the qualitative data collection of Study III was planned during the implementation process. There are several qualitative methodologies that can be used in different ways to make sense of how people experience particular conditions. Some methodologies are open-ended, inductive, and concerned with theory generation and the exploration of meanings, and are often referred to as the “big Q” (Willig, 2013). In this PhD thesis, a non-numerical data collection technique was incorporated into a research design that was mainly built on quantitative methodology, which is often categorized as the “little q” (Willig, 2013). However, we did not have predetermined categories for coding and scoring the qualitative material, but sought to engage with the data in order to gain new insights into the ways in which the practitioners experienced the implementation of IMR in their services. The data was approached using thematic analysis, which can be used across different qualitative theories (Braun & Clarke, 2006). The method of analysis used in Study III qualifies as part of the big Q. With regard to interpretation, we leaned towards a realist reading of the data, taking the practitioners’ statements at face value, and elaborating and amplifying the meanings that were contained within the data. We were concerned with getting closer to the quality and meaning of the practitioners’ experiences as they presented them, without seeking to identify the underlying structures.

With regard to my personal history, I became familiar with the science of implementation while working as a research coordinator of a randomized controlled trial study of Trauma-Focused Cognitive-Behavioral Therapy (TF-CBT) at the National Center for Violence and Traumatic Stress Studies (NKVTS). The challenges we experienced with services’ systematic trauma assessments, practitioner turnover, and leaders’ facilitation of trauma treatment aroused my curiosity in the field of implementation. The individual patient stories and the results of the study (Jensen et al., 2014) have also given me an overall belief in EBPs, as long as the intentions for using them are to improve the outcomes of patients with mental disorders. My background as a patient relative and my master’s degree in social- and community psychology has influenced my knowledge and desire to improve mental health services for people who need help. There are stories that have triggered my desire to ask critical questions
regarding the way mental health services are organized. As a non-practitioner, I have deep respect for the work practitioners do, and I would like to understand the challenges they face in their clinical workday, especially in relation to the implementation of EBPs.

3.3 Design and procedures

**Study I.** In anticipation of the start of the implementation project, a cross-sectional survey study was conducted, using paper questionnaires. Data were collected from October 2013 to May 2014. Prior to the implementation of IMR, seven primary care units within the CCT project accepted an invitation to participate. Moreover, 30 of 36 eligible specialized care units within our hospital trust were asked to participate. When 22 of the units had responded positively, this was considered a sufficient sample as those units represented all the types of clinics in all the departments in adult psychiatric care within the hospital trust. The population was chosen due to the accessibility of the services, and because it represents the largest catchment area of the Norwegian health authorities.

To secure a high response rate, an appointment was made with the entire team of practitioners in 20 of the units. The pen and paper survey was distributed and collected at these meetings (87.5% response rate). In 9 of the units the survey was distributed to an employee who administered the survey to the other practitioners in the unit. The employee collected the survey in an envelope, which was sent to the PhD candidate (78.4% response rate). In total, 315 (84%) of the 375 invited employees agreed to participate. Because of missing data on the EBPAS total scale, 21 surveys were excluded, leaving 294 respondents.

**Study II.** The IMR implementation study took place from November 2013 to June 2015. Because the practitioners in the CCT project were seeking increased treatment competence, we decided that it was not possible to randomize the services or the practitioners in different groups, without offering the same good training conditions for all the participants. We considered matching the patients with a control group, which would enable a comparison of the outcomes among treated and non-treated units in order to estimate the effect and reduce bias. However, we chose not to do this due to the risk of imposing too much work on the services, which may have resulted in withdrawals. This left us with an observational prospective design.
An e-mail was sent out to seven primary and six specialized mental health services. Of these, seven primary care and two specialized care units agreed to participate in the implementation project. All but one specialized care unit participated in the CCT project. The service leaders were asked to recruit three to five voluntary practitioners in each unit.

The PhD candidate and the principal supervisor (Kristin Heiervang) were responsible for the implementation process, and served as an advisory group for the service settings. Although some have warned that researcher-led implementation teams are highly artificial (Mittman, 2012), this was considered most appropriate for the time being. A psychologist with extensive experience in IMR (Rickard Färdig) was responsible for training and consulting the practitioners. We developed a strategy for the implementation of IMR based on the recommendations of the IMR toolkit (SAHMSA, 2009a, 2009b) (see Study II for substantial descriptions). A one-day introductory seminar on IMR was held six months prior to implementation and enrolment in the project occurred after this. The advisory group held individual meetings with the clinical leaders prior to the training, where the implementation process and the research project were discussed. The leaders were asked to identify a staff member to advocate for the program and the IMR manual and information brochures were distributed. Training occurred in two 2-day seminars during one month, plus two booster sessions the following year. The practitioners began recruiting patients during the training. All but one were recruited within five months, and the last one was recruited after eight months. The practitioners began weekly telephonic group consultations with the IMR trainer, which continued for approximately nine months and then became biweekly for another five months until June 2015. The practitioners were asked to audiotape the first session in every IMR module, and the trainer rated them and gave feedback on the sessions. No local adaptations to the manual were allowed. The advisory group assessed the fidelity after 6 and 12 months of implementation, and the services received feedback with recommendations for improvements. In addition, the practitioners were encouraged to evaluate patient outcomes after each IMR module.

Study III. During the implementation process, our curiosity was drawn towards the practitioners’ understanding of their experiences with implementing IMR in their services. In order to better understand the challenges and facilitators experienced by the practitioners, we decided to collect qualitative data. This was considered as complementary to the
quantitative material in Study II, as it provided a more in-depth understanding of the phenomena (Palinkas & Soydan, 2012). The qualitative study (Study III) was conducted independently of the quantitative study (Study II) with regard to the research questions, data collection, and separate data analysis (Creswell & Clark, 2011). In the thesis, conclusions have been drawn in the light of both data materials.

Semi-structured focus group interviews were chosen to access the interaction between the IMR practitioners and their common understanding of the challenges and facilitators of the implementation in the services in which they work. Focus groups were also considered to be advantageous because they save time and resources in comparison to individual interviews. A prolonged engagement between the researcher and the participants is seen as advantageous for the credibility of the study. It enables the establishment of trust between the parties and an adequate understanding of the services (Shenton, 2004). We therefore considered it beneficial to serve as an advisory group for the practitioners prior to the interviews, as this gave us a wider knowledge and experience of the services. However, we were also aware of the risk of restricting the respondents’ feedback due to our dual roles. We clarified our independence from the program makers, and the fact that we did not stand to gain from the process, financially or otherwise. We also highlighted the value of honest feedback. We assured the practitioners that information from the qualitative focus group interviews would not be reported to the leaders in a way that would disclose their identity.

We found that it was convenient to conduct the interviews in connection with the fidelity monitoring visits at the practitioners’ services, after they had used IMR for 12 months. However, there was a slightly risk of exhausting the practitioners with an hour long interview after the fidelity monitoring interview. To avoid this, we had a break between the two interviews. Furthermore, some of the themes were repeated in the two interviews (e.g. training facilities and outcome monitoring). However, while the fidelity monitoring interviews examined how IMR took place in the services, the focus group interviews examined the practitioners’ experiences with and thoughts about the implementation of IMR. It is possible that the practitioners’ experiences with these themes may have been mixed up due to the discussions in the fidelity monitoring interviews prior to the focus group interviews. In order to prevent central thoughts and discussions that had been present in the fidelity monitoring
interviews from becoming lost, we sometimes asked the practitioners to repeat them in the focus group interviews.

Nine focus group interviews were conducted by the candidate, who was joined by the principal supervisor for five of them. Eight interviews were audio taped and transcribed verbatim. One was analyzed on the basis of written notes due to challenges with the recorder that resulted in no recording. The focus group interview consisted of few practitioners \((N = 2-5)\). This gave us empirical data consisting of in-depth reflections and thorough discussions between the practitioners. We therefore avoided empirical data from many participants, with the risk of being left with data from superficial discussions. In addition, the practitioners were colleagues and knew each other well, which made it easier for them to get into immediate, spontaneous, and dynamic discussions about the themes.

3.4 Ethical considerations

The project as a whole was approved by the Regional Committee for Medical and Health Research Ethics (REK 2013/2035) and the Personal Ombudsman at Ahus University Hospital (PVO 14-031). The practitioners who participated in the cross-sectional survey study gave their consent by responding to the survey. The practitioners and service users who participated in the implementation of IMR were given verbal and written information about the study. They all gave their written consent to participate in the study by signing an informational letter approved by the Regional Committee for Medical and Health Research Ethics (REK). The letter informed the participants about the study procedures, confidentiality, and the opportunity to withdraw at any time. The study was registered at Clinical Trials (NCT02077829) 2.25.2014.

3.5 Samples

Study I. The sample in Study I consisted of 294 practitioners. 71.4% \((n = 210)\) were from inpatient and outpatient units in specialized mental health care, and the remaining 28.6% \((n = 84)\) were from primary care units. The practitioners in primary and specialized care differed significantly in their level of education \(\chi^2\)-test, \(p < .001\) and discipline \(\chi^2\)-test, \(p < .001\) (Table 2). This makes sense as primary care participants mostly have bachelor’s degrees in
nursing/social education or social work, while specialized care participants mostly have master’s degrees in psychology, nursing/social education, or medicine.

<table>
<thead>
<tr>
<th>Table 2 Participant demographic information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary care</td>
</tr>
<tr>
<td>(n = 84)</td>
</tr>
<tr>
<td>Characteristic</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Years of experience</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Educational level*</td>
</tr>
<tr>
<td>Lower</td>
</tr>
<tr>
<td>Bachelor</td>
</tr>
<tr>
<td>Master</td>
</tr>
<tr>
<td>Ph.D.</td>
</tr>
<tr>
<td>Discipline*</td>
</tr>
<tr>
<td>Psychology</td>
</tr>
<tr>
<td>Nursing/social educator</td>
</tr>
<tr>
<td>Medicine</td>
</tr>
<tr>
<td>Social worker</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Auxiliary nurse</td>
</tr>
<tr>
<td>Physiotherapy</td>
</tr>
</tbody>
</table>

Note. The significant differences between primary and specialized care: *χ^2^-test, p < .001

Sample sizes vary slightly because of missing data.

Study II. The sample in Study II consisted of nine mental health services. All nine clinical service leaders participated in the implementation process. They included six women and three men. Of the 138 employees in the nine participating service settings (Md = 12 per service, range = 9-31), 36 practitioners participated in IMR implementation. Five withdrew during the implementation period (four changed position), leaving 31 practitioners in the study (Md = 4 per service, range = 2-5). The practitioners were mostly female (n = 21), and the mean age was 44 years (SD = 9.1). The mean years of clinical experience were 11.8 (SD = 8.3). Practitioner disciplines included nursing/social education (n = 15), social work (n = 8), physiotherapy/pedagogy (n = 7), and psychology (n = 1). Most had a bachelor’s degrees (n = 27) and the remainder had a master’s degree (n = 4).
The patients were recruited by the practitioners using the IMR program’s intake criteria (i.e., symptoms of or diagnosed with severe mental illness). The services considered that a large portion (10-100%) of their patients were eligible for receiving IMR. The practitioners were asked at the beginning to recruit at least three patients each. However, many practitioners had difficulties finding patients who would sign the informed consent to participate in the research. This was due to several reasons, including the long program duration, motivation, and symptoms such as paranoia that made it difficult to accept the tape recorder. The necessary number of patients was therefore reduced to at least one patient per practitioner. Forty-four patients signed the informed consent. Twenty-eight were males, and the mean age was 40.7 years ($SD = 10.4$). Their main diagnoses were schizophrenia ($n = 17$), bipolar disorder ($n = 9$), depression ($n = 4$), other ($n = 5$), missing ($n = 3$), and non-diagnosed ($n = 6$). Their occupations were unemployed ($n = 27$), in vocational rehabilitation ($n = 11$), employed ($n = 3$), and homemaker/sick leave ($n = 3$). Based on patient choice or service decisions, 27 were included in the IMR groups and the remaining 17 had IMR on an individual basis.

**Study III.** The sample in Study III consisted of the practitioners participating in the implementation of IMR. Of the 31 practitioners who participated, 5 were unable to attend the interviews (illness or other work responsibilities), leaving 26 practitioners in the focus group interviews ($Mdn = 3$ per service, range = 2-5) (Table 3).

### Table 3: Service settings and fidelity scores

<table>
<thead>
<tr>
<th>Service</th>
<th>Number of practitioners</th>
<th>Practitioners</th>
<th>Service setting</th>
<th>Fidelity scores*</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>Asta¹, Arve¹, Ann¹</td>
<td>Primary</td>
<td>4.69</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>Bob², Brit²</td>
<td>Primary</td>
<td>4.77</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>Chris³, Christine¹, Carl¹, Cate³, Celine²</td>
<td>Primary</td>
<td>4.69</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>Dagny¹, Dina¹, David²</td>
<td>Primary</td>
<td>4.77</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>Eline¹, Erik¹</td>
<td>Specialized</td>
<td>-</td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td>Freya³, Faye², Frida³</td>
<td>Primary</td>
<td>4.62</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>Grete¹, Gina⁴</td>
<td>Specialized</td>
<td>4.62</td>
</tr>
<tr>
<td>H</td>
<td>3</td>
<td>Hanna¹, Henrik¹, Hilda³</td>
<td>Primary</td>
<td>4.46</td>
</tr>
<tr>
<td>I</td>
<td>3</td>
<td>Iben³, Iris³, Iver²</td>
<td>Primary</td>
<td>4.23</td>
</tr>
</tbody>
</table>

¹ = nurse / social education, ² = physiotherapy / occupational therapy / pedagogy, ³ = social work, ⁴ = medical doctor / psychology

* IMR fidelity scale 1-5. The higher the score, the better the fidelity.
The practitioners were mostly female ($n = 18$), and the mean age was 45 years ($SD = 9.0$). The mean years of clinical experience were 12.3 ($SD = 8.4$). Practitioner disciplines included nursing/social education ($n = 14$), social work ($n = 5$), physiotherapy/occupational therapy/pedagogy ($n = 6$), and medical doctor/psychology ($n = 1$). Most had a bachelor’s degree ($n = 22$) and the remainder had a master’s degree ($n = 4$). The sample has several similarities to the population of Norwegian public health practitioners, which consists mainly of women (70%) (Statistics Norway, 2017b) with bachelor’s degrees rather than master’s degrees (Statistics Norway, 2017a). Typical primary care education, in descending order, are nursing, social education, physiotherapy, and occupational therapy (Norwegian Directorate of Health, 2017).

3.6 Measures

3.6.1 Implementation measures

Several measures were used to assess the factors that are believed to contribute to the implementation of EBPs, including attitudes towards EBPs, fidelity to intervention, fidelity to the implementation strategy, and feasibility. In addition, the practitioners’ plans for continued use and demographics were assessed.

*The Evidence-based practice Attitude Scale* (EBPAS) (Aarons, 2004) (Study I) measures practitioners’ attitudes towards the implementation of EBPs. EBPAS is a well-established 15-item measure that generates the following four scales. 1) Intuitive appeal (four items) refers to whether practitioners will use an innovation if it is attractive, gives meaning, can be used correctly, and whether it is being used by colleagues who are pleased with it. 2) Requirements (three items) refers to whether practitioners will use the innovation if it is requested by the service, supervisor, or by agency mandates. 3) Openness to change (four items) is the degree to which practitioners are willing to try new interventions. 4) Divergence (four items) refers to whether practitioners experience research-based interventions as not clinically useful and less important than clinical experience (reverse scored on the EBPAS total score). A five-point Likert scale is used to assess the degree of agreement with a given statement ($0 = not at all to 4 = to a very great extent$), and higher mean scores indicate more favorable attitudes. Cronbach’s alpha has been shown to range from .90 to .59, with an overall scale alpha of .77.
In the sample of Study I, Cronbach’s alpha ranged from .88 to .64, with an overall scale alpha of .81. The content validity of the scale has been supported (Aarons et al., 2010). The criterion validity has shown mixed findings; some have found it to predict the adoption or use of EBP (Beidas et al., 2014; Henggeler et al., 2008), while others have not found a relation between EBPAS scores and EBP behavior (Gray et al., 2007; Higa-McMillan, Nakamura, Morris, Jackson, & Slavin, 2014). EBPAS scores have been shown to be stable to change over time (Gioia, 2007; Lopez, Osterberg, Jensen-Doss, & Rae, 2011).

Permission from the author was obtained to use the EBPAS questionnaire and the scale was translated into Norwegian by the candidate. Conceptual equivalence was emphasized, and the principal supervisor back-translated the scale and compared this with the original version, together with the candidate. It was concluded that no significant differences appeared during the translation process.

Three measures were used to assess intervention fidelity:

*The Illness Management and Recovery Fidelity Scale* (IMR fidelity) (McHugo et al., 2007) (Studies II and III) is a 13-item scale that assesses the implementation of specific strategies within the IMR program (e.g., motivational and cognitive-behavioral techniques), together with structural and curriculum-based elements (e.g., the number of sessions held or content modules covered). A summed and averaged fidelity score of 4 or more has been defined as successful implementation, with 3-4 as moderate fidelity, and less than 3 as low fidelity (Bond, Drake, McHugo, et al., 2009; McHugo et al., 2007). The scale has demonstrated high inter-rater reliability (ICC = .97), and its sensitivity is indicated by increased scores after training and consultation (McHugo et al., 2007; Salyers, Godfrey, et al., 2009).

*The General Organizational Index* (GOI) (Study II) is a 12-item scale that measures the general quality of the clinical care (Bond, Drake, Rapp, McHugo, & Xie, 2009). It consists of two subscales that measures quality improvement at the organizational level (i.e., existence of training and supervision facilities, process and outcome monitoring, and quality assurance) and at the individual level (i.e., provision of individualized eligibility determination, assessment, treatment plan, treatment, and choice regarding service provision). In addition, penetration (the extent to which the practice is offered) and understanding of and commitment to the program philosophy are measured. In terms of psychometric validation, one study
found support for high inter-rater reliability on both subscales (ICC on quality improvement = .95, ICC on individual level = .94). The internal consistency as measured by Cronbach’s alpha was satisfactory (.79 on quality improvement, .77 on individual level) \( (N = 244) \) (Bond, Drake, Rapp, et al., 2009).

The IMR fidelity and GOI were translated by the PhD candidate and the principal supervisor. We completed the IMR fidelity and GOI ratings during a full day site visit during which we interviewed leaders and practitioners, and also patients after 6 and 12 months of implementation. The IMR sessions were observed, chart reviews were examined, and the IMR educational handouts were reviewed. We assessed the program independently and then compared our ratings to reach consensus. Discrepancies were resolved through discussions with each other and with staff.

The Illness Management and Recovery Treatment Integrity Scale (IT-IS) (McGuire et al., 2012) (Study II) measures the practitioners’ individual competence in providing the program, that is, the quality of the program delivery (Proctor et al., 2011). The 16-item scale was rated by a trained rater, using audiotapes of the practitioners’ IMR sessions. One study found support for a one-factor model with excellent inter-rater reliability (ICC = .92) and good internal consistency \( (\alpha = .90) \). The construct validity has been supported by significantly higher total scores for the IMR sessions than for control group sessions (McGuire et al., 2012). Content validity has also been supported (McGuire, Luther, et al., 2014), as have associations between IT-IS and patient outcomes (McGuire, White, et al., 2015).

Practitioners’ fidelity to the implementation strategy (Study II) was measured by registering the practitioners’ participation in the implementation process by means of attendance rates for training and supervision. The number of IMR patients that were recruited and the practitioners’ ability to deliver audiotapes were also registered.

IMR feasibility (Study II) was measured by gathering data on patient retention and participation in the IMR process.
Practitioners’ plans for continued use of IMR (Study II) were measured after 12 months of implementation. The practitioners were asked to rate on a 5-point scale (0 = not at all, 4 = to a very great extent) whether they would continue using IMR.

Practitioners’ demographics (Studies I, II, and III) were measured by means of self-reported age, gender, years of experience in their current profession, educational level, and profession.

3.6.2 Patient measures

In Study II, several measures were used to assess the patients’ functioning, which was rated by both the practitioners and the patients. The practitioners and patients filled out a paper questionnaire when the patients were recruited and at the end of the implementation period.

The Illness Management and Recovery scale (IMRS) (Salyers, Godfrey, Mueser, & Labriola, 2007) is a 15-item scale that assesses illness self-management. It measures patient behavior towards core components in the IMR program, and a higher score indicates better functioning. The scale includes parallel patient and practitioner versions. It has shown satisfactory internal consistency (Cronbach’s α = .55-.83 on patient version; Cronbach’s α = .70-.80 on practitioner version), good test-retest reliability at 2-weeks (r =.81), and convergent validity (Fardig, Lewander, Fredriksson, & Melin, 2011; Hasson-Ohayon, Roe, & Kravetz, 2008; Salyers et al., 2007). IMRS was translated into Norwegian by the candidate and the principal supervisor.

Health of the Nation Outcome Scale (HoNOS) (Wing et al., 1998) assesses patient problem severity based on behavior, impairment, symptoms, and social functioning. The practitioners rate patients on a 12-item scale (0 = no severity, 4 = high severity), which is designed to assess change in response to an intervention. Inter-rater reliability has been shown to be fair (ICC = .59) (Amin et al., 1999). Internal consistency has been moderately high (Cronbach’s α = 0.59-0.76) and test-retest reliability has been fair to moderate (Delaffon, Anwar, Noushad, Ahmed, & Brugha, 2012).

The split version of the Global Assessment of Functioning (S-GAF) (Goldman, Skodol, & Lave, 1992; Karterud, Pedersen, Loevdahl, & Friis, 1998) was used by the practitioners to rate the patients on two 1-point scales, with one score for symptoms (GAF-S) and one for
functioning (GAF-F). The scale ranges from 0 to 100, with a higher score indicating less symptoms and better functioning. The two scores, measured in a Norwegian context, have been found to be highly generalizable, (Pedersen, Hagtvet, & Karterud, 2007; Pedersen & Karterud, 2012).

The Adult State Hope scale (ASHS) (Snyder et al., 1996) is a six-item measure of hope that patients score on a 7-point scale (1 = definitely false, 7 = definitely true). It has shown excellent internal consistency (Cronbach’s α = .93), high levels of convergent and discriminant validity, and good sensitivity. In the sample of Study II, the internal consistency was good at time 1 (α = .89) (N = 43) and acceptable at time 2 (α = .76) (N = 37).

Quality of Life (QoL5) (Lindholt, Ventegodt, & Henneberg, 2002) is a 5-item measure of patients’ subjective, objective, and existential quality of life, and is scored by patients on a 5-point scale (1 = very high, 5 = very low). It has shown acceptable test-retest correlations above 0.8 and acceptable construct validity (Lindholt et al., 2002). Studies in a Norwegian setting have shown QoL5 to be sensitive to changes and to capture differences in quality of life (Vederhus, Pripp, & Clausen, 2016), in addition to being therapeutically beneficial (Pasareanu, Opsal, Vederhus, Kristensen, & Clausen, 2015).

The Client Satisfaction Questionnaire (CSQ-8) (Larsen, Attkisson, Hargreaves, & Nguyen, 1979) measures patients’ satisfaction with services on an 8-item scale (1 = low satisfaction, 4 = high satisfaction). In this study, the questions assessed satisfaction with IMR, specifically after the implementation period. The scale has shown excellent internal consistency (Cronbach’s α = .93) (Attkisson & Zwick, 1982), which is similar to the sample of Study II (α = .90) (N = 36).

3.6.3 Interview guide

We developed an interview guide in order to better understand the challenges and facilitators experienced by the practitioners when implementing the IMR in their services. Instead of asking random questions about the challenges and facilitators, and risk excluding central components, we sought to make use of a theory that described what are believed to be the core implementation components. After careful considerations, we decided to use the framework of Fixsen et al. (2013). This particular framework was chosen due to its informal,
simple, and clear overview of a limited number of determinants. This provided the possibility of following up the practitioners’ responses with further probing questions, when appropriate.

The questions were formulated on the components described in the framework. These included the practitioners’ experiences with: a) the selection of practitioners to join the IMR training, b) the training, c) the supervision, d) the facilitation in the services, e) the decision support data system for establishing the program in the services, f) the support from other levels in their systems, g) the leadership during the implementation process, and h) the fidelity assessments that were conducted during the implementation process. In addition, three other questions were included. One question was formulated out of curiosity in order to gain an idea of the practitioners’ experiences with using the IMR. Moreover, because a limited amount of research has been conducted on the framework that we used, two questions were added concerning whether there were determinants other than those mentioned that hindered or facilitated their IMR use (see Table 2 in Study III). The questions were formulated so that they appeared exhaustive and supplementary to the components. However, given the complexity of an implementation process, which is influenced by many components, there was a risk of not covering all the central themes in an hour-long interview. To compensate for this, further questions were asked concerning themes that were noted and that appeared to determin the implementation in the services.

3.7 Analyses

Study I. In order to examine the psychometric properties of the EBPAS, the Cronbach’s alpha and the within-clinic ICC were calculated. An exploratory factor analysis was done using maximum likelihood and oblimin rotation, similar to the analysis of the original EBPAS, by using the psych R-package (Revelle, 2015). Four factors were extracted to see whether the factors corresponded to the four subscales. Factor loadings below 0.32 were not shown (Tabachnick & Fidell, 2007). A confirmatory factor analysis (CFA) was conducted using the psych R-package (Revelle, 2015) to examine whether the four proposed factors and the higher-order factor in the EBPAS structure remained valid in this sample. A grouped CFA, or measurement invariance analysis, was also conducted to investigate whether the factor structure differed between specialized and community mental health services.
In order to examine the differences in attitudes among practitioners, the analyses were run using SPSS (Version 21). A one-sample t-test was used to compare the mean of the EBPAS total and the four factors in the Norwegian sample with an earlier study of American mental health practitioners (Aarons et al., 2010). Correlational matrix and multivariate regression models were used to evaluate the association between practitioner demographic characteristics and the EBPAS. In order to deal with three missing values in the practitioners’ experience variable, we used the pairwise deletion option in SPSS. T-tests were used to test the differences in EBPAS scores between community and specialized care. Levene’s tests were used to decide whether the t-tests should be performed under the assumption of equal variances.

Study 2. There were a few missing items on the participants’ questionnaires (18 items = 0.46% in total). When no more than two items were missing, the values were replaced with the mean value of the scale or subscale. In order to compare the services during and after implementation, and to compare practitioner- and patient-rated outcomes pre- and post-implementation, paired samples t-tests with bootstrapping were performed in SPSS (Version 21). In order to examine the associations between practitioner participation and their intention to make further use of IMR, path analysis was performed using the lavaan R package (Rosseel, 2012). Multiple regression analyses were performed in SPSS (Version 21) to examine whether higher intervention fidelity was associated with better patient outcomes.

Study 3. We chose to draw upon thematic analysis, which was perceived as appropriate as it is flexible and can be done in several ways. It can be applied across a range of theoretical and epistemological approaches (Braun & Clarke, 2006). We used it as described by Braun and Clarke (2006, 2013), who provided a step-by-step guide with the following phases: 1) Becoming familiar with the data, 2) generating initial codes, 3) searching for themes, 4) reviewing themes, 5) defining and naming themes, and 6) producing the report. These phases are not a linear process, but are applied flexibly, with movement back and forth as needed to fit the research questions and the empirical material.

The goal of qualitative analysis is to provide for new meaning in the content. As the interview guide was based on Fixsen et al.’s (2013) framework, we chose to step away from this in the analysis and to approach the data more inductively. We presumed this would increase the possibility of exploring themes that had not previously been described in the framework.
Before analyzing the data, an overall question was asked, namely: How did the practitioners experience the implementation of IMR in their services?

In the initial examination of the data, the first author repeatedly read the transcripts and coded them. Coding was done to identify important themes that reflected the content of the entire data set. Codes that were perceived as central were: “IMR as valuable”, “agency”, “waiting and reservations “, and “time as decisive”. Patterns were identified and sorted into themes. A primary theme was identified as central in the interviews, namely: The practitioners’ further use of IMR depends on how leaders and patients experience, support, and implement it. In order to validate the analytical process, a senior researcher (MIH) independently reviewed transcripts from four interviews and identified preliminary themes based on them. The two authors had repeated discussions on the themes in order to arrive at consensus.

After this, the transcripts were thematically analyzed by the first author (KE) and further discussed with two other researchers separately (MIH and KH, the latter participated in five of the interviews) to ensure that the themes analyzed were the most central themes in the empirical material. We explored and conceptualized within each interview and also across interviews. Four themes were emphasized that seemed to influence the practitioners’ further use of IMR: These were: Prioritization dilemmas despite high autonomy, the practitioners’ experiences of leader engagement, their uncertainty about long-term priorities, and that practitioners were guided by the patients’ reception of IMR. A visual map and subthemes were developed, and data-extracts were selected. Revisions were made to ensure that the themes fit well with the data, and the four chosen themes were connected to relevant theory and literature.
4. Summary of findings

In the following section, an overview of the research questions, findings, and conclusions of each of the three studies will be presented.

4.1 Study I

The first study was entitled: “Psychometric properties of the Norwegian version of the Evidence-Based Practice Attitude Scale (EBPAS): to measure implementation readiness”. The aim of the study was to investigate the psychometric properties of the EBPAS, and to examine the differences in attitudes towards evidence-based practices (EBPs) among mental health practitioners. More specifically, we investigated the following research questions:

1. Does the Norwegian version of the EBPAS demonstrate satisfactory reliability and supported factor structure compared to the original version?
2. Does the Norwegian sample differ from a nationwide sample in the United States on attitudes among mental health service practitioners?
3. What role does the practitioners’ experience play as a predictor of attitudes towards EBPs in the Norwegian sample?
4. Are there differences in attitudes between practitioners in primary and specialized mental health care in the Norwegian sample?

Research question 1: The results indicated that the EBPAS four factor model had good psychometric properties when Item 9 and 10 were allowed to correlate. The factor loadings ranged from 0.41 to 0.87, and all the loadings were statistically significant. The reliability coefficients for the factors ranged from 0.64 to 0.88. Contrary to earlier research, Item 14 loaded on the requirements factor \( (b = 0.43) \) instead of the appeal factor. The ICC values ranged from 0.00 to 0.05, except for Item 13, which had an ICC value of 0.155. The alpha values showed only a small improvement or no improvement respectively if Item 14 or 13 were deleted, and were therefore kept in the analyses. The measurements invariances on Item 13 were examined between the specialized and community mental health services. The item loaded higher on requirements among the practitioners in the community services than in the specialized services \( (P = 0.013) \).
Research question 2: The Norwegian sample did not differ from a nationwide sample in the United States (Aarons et al., 2010) on the EBPAS total scale ($p = 0.13$) or requirements ($p = 0.09$). There were, however, significant differences on appeal ($P = 0.001$), openness ($P = 0.01$), and divergence ($P = 0.00$). As there were no differences on the EBPAS total it may be assumed that practitioners across borders share many similar attitudes towards the implementation of EBPs. However, the differences on three of the subscales may imply cultural differences between the two nations, in addition to differences in the organization of the health services and the education of the mental health practitioners.

Research question 3: In terms of the individual factors that predict attitudes towards EBPs, greater experience and an older age were associated with more negative attitudes towards EBP on all the subscales (Table 3 in Study I). The higher the educational level, the less likely the practitioners were to adopt an EBP if it was required. In addition, being female was associated with a generally more positive attitude, with a greater willingness to adopt an intervention given the appeal of it, and with more openness towards EBPs. In this sample, the practitioners’ experience played a central role as a predictor of attitudes towards EBPs. This was confirmed in multiple regression analyses, which indicated the presence of strong associations between the practitioners’ years of experience and all of the EBPAS scales when controlling for gender and health services (Table 4 in Study I).

Research question 4: There were differences in attitudes between the practitioners in primary and specialized mental health care. The practitioners in specialized care were significantly more negative towards EBPs when this was required by the organization than the practitioners in primary care (Table 3 in Study I). This was confirmed in the multiple regression analyses that controlled for experience and gender (Table 4 in Study I). Primary care appeared to be more strongly affected by organizational requirements than their colleagues in specialized care.

The EBPAS is likely to be a useful tool in future research as well as in clinical practice. Screening for attitudes towards EBP prior to implementation may indicate which attitudes are central among the participants. This may help organizations to consider the specific steps to take to influence practitioner attitudes when necessary, thereby enabling the improved tailoring of the implementation effort.
### 4.2 Study II

The second study was entitled: “How to implement Illness Management and Recovery (IMR) in mental health service settings: Evaluation of the implementation strategy”. The aim of the study was to evaluate the strategy used to implement IMR in nine mental health services. This was done through measuring fidelity to the intervention and implementation strategy, feasibility, and patient outcomes. The research question was: Did the implementation strategy facilitate the implementation of IMR in the service settings?

**Fidelity to intervention:** Of the nine service settings implementing IMR, one dropped out of supervision after 7 months, leaving eight services in the intervention fidelity analyses. The services reached a high score on the IMR fidelity scale after 6 months of implementation ($M = 4.09, SD = 0.16$), and significantly improved their scores after 12 months of implementation ($M = 4.61, SD = 0.18; p = .001$). The scores on the general organizational index did not reach a high score after 6 months of implementation ($M = 2.70, SD = 0.22$). It improved significantly after 12 months of implementation ($M = 2.99, SD = 0.22; p = .006$), although it was not within the range of *successful* implementation. Of the 31 practitioners, 20 obtained consent to audiotape sessions with patients, and therefore had IT-IS scores. The 60 sessions corresponded to a score between *satisfactory* and *very good* ($M = 3.54, SD = 0.68$).

Based on the practitioners’ intervention fidelity to IMR, as measured by the IMR fidelity and IT-IS, the results suggest that the implementation strategy was adequate for achieving high intervention fidelity among the practitioners. By contrast, the quality of organizational care as measured by the GOI was low after 6 and 12 months, despite a significant improvement between the time points. This might indicate a lack of implementation strategies for facilitating organizational change.

**Fidelity to implementation strategy:** The practitioners’ participation in the strategy varied extensively, both in training sessions ($M = 4.7$ days, $SD = 1.57$), supervision sessions ($M = 18.37, SD = 8.82$), and the number of patients recruited to IMR ($M = 1.4, SD = 1.3$). A path analysis demonstrated an association between participation in training and supervisions, and between supervision and the practitioners’ reported intentions to further IMR use (Figure 1 in Study II). The more the practitioners participated in training and supervision, the more likely they were to report the intention to continue IMR use after the implementation period.
Participation in supervisions was also associated with the number of patients recruited, but this was not associated with intentions to continue IMR use. The model fit indices were acceptable.

A positive finding was that most practitioners reported moderate to high intentions for future IMR use after the implementation period. Furthermore, the results indicated that practitioner participation in training and supervision, as well as patient recruitment, operated as moderators for future IMR use. Given that this intention is determined by their participation in the implementation strategy, increased awareness towards fidelity to the strategy during implementation should be highlighted.

**Feasibility:** In terms of feasibility, nine of the 44 patients dropped out during implementation (20.5%), and six of them did not start IMR. During the implementation period, the patients received IMR for various lengths of time ($Mdn = 14$ months). Their participation also varied ($Mdn = 30.5$ sessions), as did their completion rates ($Mdn = 7$ modules finished). Despite some challenges with a time-consuming and demanding curriculum, IMR appeared to be feasible in the participating services. However, the IMR implementation could have benefited from addressing feasibility more in the implementation strategy.

**Patient outcomes:** On practitioner-rated questionnaires, the patients showed significant improvements in illness management skills, problem severity as measured by behavior, impairment, symptoms, and social and patient functioning (Table 2 in Study II). There was no significant decrease in mental health symptoms as measured by GAF-S. The dropouts did not differ significantly on any of the variables at baseline. On self-rated questionnaires, the patients showed significant improvements in illness management skills and hope. There was a nonsignificant increase in the QoL5. The patients were highly satisfied with the program.

A consideration of the IMRS practitioners and patients at the end of the implementation period reveals that increased intervention fidelity had a positive effect when adjusted for IMRS at the start. The estimated increases were 2.97 IMRS points (practitioner score) and 6.26 IMRS points (patient score) per point increase in intervention fidelity. However, the results were nonsignificant.
The results suggest that as long as the practitioners adhere to the defining principles of the IMR program, the patient outcomes will improve. However, weaknesses in the implementation strategy at the organizational level may hinder program sustainability at the organizational level. This may reduce the likelihood of the IMR being offered to other patients and may contribute to the disintegration of the program.

4.3 Study III

The third study was entitled: “Leaders as key for mental health practitioners’ sustained use of new practices: A qualitative focus-group study”. The qualitative study examined a group of practitioners who were implementing IMR in which the majority had reached high levels of fidelity, which is the exception rather than the rule. The aim was to gain more knowledge concerning how the practitioners experienced the implementation of IMR in their services and how this influenced their further use.

Four themes were emphasized that appeared to determine the practitioners’ further use of IMR. They were as follows:

Prioritization dilemmas despite high autonomy: The practitioners in all the participating services expressed their experience of a high degree of perceived control regarding how they work. They chose their own schedule and followed up with their patients based on their clinical competence and judgement concerning what was best for their patients. Dagny (nu/se) said: “Our working environment is such that our leader is confident that we are sensible and independent in work, and that we prioritize in a way that benefits the service. We have relatively free reins when we believe in something.” However, most of the practitioners appeared to be torn between their IMR work and their other responsibilities, and were continuously dealing with priority dilemmas throughout their workday. As a result, IMR was often given a lower priority. By contrast, the practitioners in Service C said that they made independent decisions regarding their IMR use, but they seemed to have clarified their work allocations with their leader and colleagues. They experienced few priority dilemmas between IMR and their other responsibilities.
**Leader engagement:** Most of the practitioners perceived their leaders as supportive, with positive attitudes, and as showing goodwill towards IMR. However, there was not much indication of leaders being especially engaged in the implementation process, such as giving proactive attention to barriers, taking responsibility, and following up on the practitioners. In most of the services, the practitioners took primarily responsibility for facilitating IMR use and solving implementation barriers, without questioning the leaders’ roles in this. However, in a few services, the practitioners were clearly dissatisfied and expressed their frustration: “If this should last, I believe that [strategy plan] is what is required. And then someone must want it. It is very tiring when you all the time [have] to work bottom-up. It has to be top-down” (Dagny). Once again, Service C stood out. The practitioners provided a clear vision of an engaged, dedicated leader who listened to the practitioners’ wishes and followed up with them regularly.

**Uncertainty about long-term priorities:** The practitioners in the services differed in their goals and visions for implementing IMR in their organizations. Most of the services seemed to have moved hastily into implementation, without having a long-term plan. The lack of goals and vision for IMR implementation gave the practitioners mixed signals concerning the effort they were expected to put into the program. The mixed signals concerning the amount of effort to dedicate to IMR caused many of the practitioners to be idle and to wait for further instructions. Since the practitioners had to apply their own efforts to sustaining the use of the practice, this seemed to increase the risk of the implementation to deteriorate.

**Guided by patient reception:** The practitioners’ experiences with the program were described in relation to how they perceived their patients as benefitting from the treatment. Grete said: “You get inspired when you are working with a group and experience that it works. And you see progress in the group participants. […] I have already thought of who I would like to recruit the next time.” Practitioners with positive patient experiences said that they wanted to continue to use the program in their services. Those who experienced few or no visible changes in the patients were more reserved towards the program. Evaluations of whether the patients benefited from the program were based on the practitioners’ own subjective and professional observations, rather than on systematic assessments. None of the services considered systematic outcome monitoring as tools for evaluating IMR.
The findings indicate that the practitioners’ feelings of being highly autonomous were not sufficient to secure their increased use of IMR. Autonomy support from leaders also needs to be present. Furthermore, to sustain the practice in the services, the leaders should be actively engaged and should have clear goals and a vision for the implementation of IMR in the services. In addition, the practitioners’ understanding of outcome monitoring as a resource for program improvement must be worked on to avoid random patient experiences becoming decisive for further use.

Several of the findings support the framework of Fixsen et al. (2005), including the importance of leadership and fidelity monitoring. Yet the framework says little concerning practitioner autonomy and whether it is guided by patient reception. Therefore, the framework could be enhanced by an emphasis on the practitioners’ role in the implementation process beyond the competence drivers that focus on selection, training, and supervising.
5. Discussion

The aim of this thesis was to contribute to the understanding of the role of practitioners in the implementation of new practices. This chapter discusses their role according to their attitudes towards the use of EBPs (Study I), their active participation in the implementation of IMR (Study II), and their experiences with implementing IMR in their services and their intentions of further use of the program (Study III). Moreover, the chapter discusses methodological considerations that arise from these studies. The implications are presented in light of the overall findings, and the chapter ends with recommendations for future research.

5.1 Discussion of findings

5.1.1 Practitioners’ attitudes can tailor the implementation

In terms of the first research question of the thesis (What predicts practitioners’ attitudes towards adopting EBPs?), Study I reported that experienced practitioners appear to be more negative towards the use of EBPs than their less experienced colleagues. This is congruent with most findings, in which the greater the experience, the lower the scores are on EBP total, appeal, requirements, and openness, while the divergence is higher (Aarons, Glisson, et al., 2012; Melas et al., 2012). Given that professional experience is highly correlated with age in the current study, one can note that these results point in the same direction. The higher the age, the lower the practitioners scored on EBP total, appeal, requirements, and openness, and the higher they score on divergence. This is also congruent with most findings, which indicate lower scores on EBP total and higher scores on divergence (Aarons, 2006; Gray et al., 2007; Melas et al., 2012; van Sonsbeek et al., 2015), although some have reported higher openness and requirements (Aarons et al., 2010; Aarons & Sawitzky, 2006). This is a reason to conclude that the practitioners’ experience, acquired over the years, is an important predictor of their attitudes towards EBP. As practitioners gain more confidence in their own skills as they gain experience, they become less curious towards new practices. These congruent findings indicate, one may argue, that experience is the strongest of all known predictors.

Study I also indicated that practitioners with more education scored lower on requirements, which is supported by several studies (Aarons, 2004; Aarons et al., 2010; van Sonsbeek et al., 2015). In addition, the findings showed that primary care practitioners were more willing to
use an EBP than practitioners in specialized care if this was required by the service. This may indicate a strong sense of autonomy and integrity, which means that the doctors and psychologists in specialized care rely more on their autonomous decision-making and are less accepting of requirements from others than the nurses, social educators, and practitioners in other primary care disciplines are. It is also possible that the practitioners in specialized care are subject to more formalized guidelines (Ringard et al., 2013), and that feelings of pressure and decreased flexibility can lead to a decreased sense of being able to implement new practices (Ajzen, 1991). Conversely, it was also implied that the practitioners in primary care were more strongly affected by organizational requirements than their colleagues in specialized care. Given that they have fewer formal guidelines imposed on them (Ringard et al., 2013), they are perceived as being less bureaucratic (Aarons, 2004) and under less stress (Aarons, Glisson, et al., 2012), and they therefore accept the social pressure placed on them (Ajzen, 1991). It is worth noting that, in addition to the differences in the requirement scale scores, primary and specialized care also differed significantly on educational level and discipline (Table 2). The differences in requirements may therefore be a result of differences in educational level as well as organizational factors.

According to the theory of planned behavior (Ajzen, 1991), attitudes can shape a person’s intentions and behavior. In the EPIS model, Aarons et al. (2011) argue that attitudes towards adopting EBPs are a precursor to the practitioners’ decision regarding whether or not to try a new intervention. Knowing more about what predicts practitioners’ attitudes can provide insights into their readiness to implement EBPs in their services, and can contribute to the tailoring of better implementation strategies that strengthen EBP uptake (Aarons, Green, et al., 2012).

On the basis of Study I’s findings, it can be argued that it may be more challenging to recruit more experienced practitioners as they are less inclined to adopt new practices, less appealed by new practices, less susceptible to practices that are requested on them, and less open to change. Moreover, they perceive their own experience as more useful than EBPs. This is also the case with practitioners in specialized care, as the findings indicated that they were less willing to use a new practice than primary care practitioners were when required by the organization. By contrast, less experienced practitioners with lower educational levels and
practitioners in primary care may be easier to recruit, as they seemed to be more positive towards new practices that are put on them.

In the current IMR implementation project, we experienced more difficulties in recruiting services in specialized care than in primary care. Some reported that the programs offered by primary care practitioners were not perceived as specialized enough for the specialized care practitioners. However, this was based on our experience and has not been systematically researched, and it therefore requires further investigation. Nevertheless, it can be assumed that practitioners’ attitudes towards the use of EBPs may play an important part in their decisions regarding the use of new practices. The implementation effort should therefore take the practitioners’ attitudes into consideration in the tailoring of strategies. Practitioners with more experience and higher educational levels and/or in specialized care settings may need to be more persuaded and prepared regarding the use of new practices than practitioners with less experienced and lower educational levels and/or in primary care.

The low levels of variance explained in the regression analyses means that the effect of general attitudes towards the adoption of EBPs on the implementation of specific EBPs may be questioned. Although some research has indicated that EBPAS may predict implementation behavior (Beidas et al., 2014; Henggeler et al., 2008), the amount of evidence is still sparse. Attitudes need to be seen in connection with the large number of other factors that influence the implementation of new practices.

5.1.2 Practitioners’ active participation in the implementation strategy
In terms of the second research question of the thesis (Of what importance was the practitioners’ participation in the implementation strategy when implementing IMR in their service settings?) Study II indicated that the practitioners’ participation in the strategy during the active implementation phase was significantly related to their intentions regarding further use. The more they participated in ongoing training and supervision, the more willing they were to engage in further use. This supports the findings of Neff et al. (1999), which indicated that a higher dose was related to change, but contrasts to the findings of Kauth et al. (2010), which showed no relation between increased dose of facilitation and change in CBT use. However, both studies were based on small samples and on self-reported knowledge/use, similarly to the current study. Moreover, the current study examined intentions of further use,
rather than actual use. Further studies should examine the associations between the practitioners’ participation in the implementation strategy and their further use of the EBP in order to discover what is required to achieve behavior change.

Nevertheless, the findings in Study II underscore the importance of the dosage the practitioners receive, and not just the specific implementation strategy being used. This is a message that has been stated by several researchers (Durlak & DuPre, 2008; Proctor et al., 2013), but still appears to be lacking in the quality of the documentation (Slaughter et al., 2015). Increased awareness of the practitioners’ participation in training and supervision, together with other implementation strategies, may therefore be critical when implementing EBPs in services. From this, we can conclude that mental health practitioners’ participation is essential when it comes to their role in the implementation of new practices.

The practitioners’ active participation in implementation also resulted in adequate acceptability, adoption, and fidelity – different outcomes that have been described in the well-known study by Proctor et al. (2011). In terms of acceptability, Studies II and III indicated that IMR was accepted by most of the practitioners. In Study II, the majority reported moderate to high intentions of further IMR use after the implementation period, which probably indicates satisfaction with the program. Study III complemented these findings by describing the majority of the practitioners’ positive experiences with IMR. The practitioners emphasized the program’s clear structure, which allowed them to discuss difficult but important topics. They emphasized that the IMR helped to promote shared decision-making regarding patients’ treatment, and enhance the patients’ self-determination by enabling them to set and work towards their own goals. However, there were some challenges. Most of the practitioners described the program as comprehensive and time-consuming. While some practitioners considered this beneficial as it allowed the patients to practice what they had learned and to achieve long-term goals, a few practitioners believed this demotivated further use. In terms of adoption, Study II indicated that most of the practitioners adopted IMR during the implementation process. Five of the 36 withdrew during the implementation period, while two practitioners did not recruit any patients and therefore gained no experience with the program. In terms of intervention fidelity, Study II indicated that the practitioners achieved generally good scores. However, there were some challenges concerning evaluations as only 20 out of 31 were evaluated on the individual practitioner competence scale (IT-IS). The
results illustrate the importance of the practitioners’ roles in the implementation of a practice, with several of the implementation outcomes being dependent on their active engagement.

5.1.3 Practitioners as part of a larger whole

In terms of the third research question of the thesis (How did the practitioners experience working with the IMR program in their services, and what challenged its further use?) Study III indicated that the practitioners do not operate in a vacuum, but that they interact within organizations that also consist of leaders and patients. These groups are dependent on one another and must work together if an implementation is to succeed.

Study III showed that the practitioners’ use of IMR was related to their leaders’ involvement in the process. High autonomy among practitioners has been emphasized as important in implementing new practices (Greenhalgh et al., 2004; McGuire, Salyers, et al., 2015), while a lack of autonomy has been assumed to be related to resistance towards new interventions (Rossen et al., 2016) and increased turnover (Aarons, Fettes, et al., 2012). However, the findings of Study III indicated that even though the practitioners perceived that they were highly autonomous in their decisions towards IMR, many referred to a lack of guidance from their leaders in support of their self-initiation. This made the practitioners insecure in terms of the efforts they should put into the program. Instead of their perceived autonomy helping them to increase the use of IMR, the lack of autonomy support from their leaders caused them to hesitate and therefore acted as a barrier to the long-term sustainability of the use of IMR.

Study III differentiated between supportive and actively engaged leaders. While most of the practitioners experienced their leaders as supportive, their descriptions indicated that the majority of their leaders did not engage in the implementation process. According to the Scandinavian learning-oriented work model described by Gustavsen (2007), leaders trust their employees to handle all the challenges that emerge. Based on the findings in Study III, this can be interpreted to mean that the trust between leaders and employees makes it possible for the leaders to disengage from the implementation process, leaving all the responsibility to the practitioners. The lack of actively engaged leaders, in combination with little preparation beforehand and the services’ deficient goals and visions for the implementation of IMR, is presumed to hinder further sustainability. Accordingly, Study III indicated that leaders have a central role in the facilitation of the practitioners’ use of new practices in the services.
Some claim that organizational-level issues have more impact on successful implementation than individual-level factors (Aarons, Horowitz, et al., 2012). Study II showed that it was more challenging to generate change at the organizational level than at the practitioner level, which is in keeping with other IMR studies (McGovern et al., 2013; Salyers, Godfrey, et al., 2009). In contrast to the practitioners’ intervention fidelity to IMR, the quality of organizational fidelity as measured by the GOI was low after 6 and 12 months, despite a significant improvement between the time points. These findings were complemented in Study III, where the practitioners referred to the services’ lack of goals and visions for implementing IMR. Most of the services appear to have moved hastily into the implementation.

In addition to the influence of the leaders and organizations on the practitioners’ use of new practices, Study III also indicated that the patients can influence their use. Many practitioners allowed the patients’ experiences and feedback to control their further use of the IMR program. Those who perceived that their patients had positive experiences with the program wanted to continue using it, while those who perceived that their patients had negative experiences wanted to change the program, use parts of it, or stop using it. This may reflect the practitioners’ trust in own experiences and intuition rather than in statistics, as Lilienfeld et al. (2013) indicate. Grounding their further use of well-researched practices on their experience with just a few patients is a challenge to the sustainability of EBPs. The practitioners may want to adapt the program to fit their applied knowledge and intuitions, but they thereby risk losing the desired effect. Continued fidelity and outcome monitoring can prevent this from occurring (Fixsen et al., 2005; Schoenwald et al., 2011). However, similarly to other studies on the implementation of IMR (Bond et al., 2014; Rychener et al., 2009), Study III demonstrated that communicating the importance of a “monitoring philosophy” appears challenging. None of the services considered systematic monitoring as a tool for evaluating IMR. In this case, the patients’ reception of the program may have even more impact on the practitioners’ further use of it.

The discussion so far has pointed to at several ways in which the practitioners influence the implementation process. The practitioners’ attitudes towards using EBPs, together with their active participation in the implementation strategy, are presumed to influence whether and
how they make use of the new practice. In addition, the practitioners’ interaction with others in their work environment, such as leaders and patients, influences their use of new practices. Accordingly, the practitioners’ role is essential in the implementation of new practices in mental health services. Based on their own attitudes, engagement, and experiences, they decide whether and how they will make use of the new practice. Moreover, they form part of a larger whole, and their use of the new practice will also be influenced by other people in their work environment.

The following section discusses the methodological considerations in the three studies. The chapter ends with the clinical implications and the recommendations for future research.

5.2 Methodological considerations

5.2.1 Study I

Study I used a cross-sectional design. This is easy to conduct and is low cost, but it cannot determine cause and effect because the data are only taken from one point in time (Levin, 2006). The design was chosen in order to discover whether some factors are more prominent in the prediction of practitioners’ attitudes than others. The factors we chose to examine were based on earlier research (see Table 1), but risked ignoring confounders. The low amount of explained variance we found in our regression models (Table 4 in article II) indicates there are other factors that predict the practitioners’ attitudes in addition to the ones we examined.

The sample in Study I was not randomly selected, but represented the practitioners in seven mental health services in primary care and 22 units in adult psychiatric care within one hospital trust. Although it represents the practitioners from the largest catchment area of a health trust in Norway, the sample may be biased, and one should be cautious about generalizations. In support of the conclusions made in Study I, many of them confirm earlier findings that build on more representative samples (Aarons et al., 2010; Melas et al., 2012). Moreover, Item 13 (“It was required by the state”) had an ICC value of 0.155. The alpha value showed no improvements in the requirements factor if the item was deleted, so it was kept in the analyses. The sample also differed with regard to the number of practitioners representing specialized care ($N = 210$) and primary care ($N = 84$). Although we found differences in the attitudes of the groups, the unequal sample sizes across the groups decrease
the power (Frazier et al., 2004). To draw more certain conclusions concerning the differences between the healthcare services, research with a more representative sample is needed.

Regarding the survey collection, there was a difference in the response rate between when an employee collected the survey (78.4%) and when the PhD candidate met in person (87.5%), which may have biased the results. For example, the nonresponders in the first group may have had more negative attitudes towards EBPs than those in the second group, and therefore resisted filling out the survey. Fortunately, the total response rate was high (84%), and it is therefore assumed that the practitioners in the participating services were well represented.

5.2.2 Study II

In Study II, an observational prospective design was carried out to examine the process of implementing IMR. Practical considerations meant that there was no comparison group, which challenges the internal validity, for example, by the possibility of ruling out confounders (Kahlert, Gribsholt, Gammelager, Dekkers, & Luta, 2017; Palinkas & Soydan, 2012). Despite this, and like earlier research, there was good evidence to suggest an association between the exposure and the outcome regarding the practitioners’ exposure to the implementation strategy and the patients’ exposure to IMR. In terms of internal validity, the fact that we did not have blinded assessors should also be taken into considerations when evaluating the findings of the study. To increase the internal validity, the two assessors measured independently, before coming to consensus on the IMR fidelity and GOI scales. The trainer assessed the practitioners on the IT-IS scale, and the two assessors did not discuss the results with the trainer during the implementation process. In terms of the patient measures, both the practitioners and the patients themselves assessed the patient outcomes.

As described in Section 3.3 Design and procedures, the implementation process was guided by a researcher-led implementation team. This is by some seen as artificial and limiting of the external validity as the challenges that are viewed as important by the researchers may not be seen as such by the participating services. Moreover, practice change strategies are led by the external team rather than internal staff (Mittman, 2012). To compensate for this, the advisory group focused on informing the services continuously during the process, and providing oral and written feedback on the challenges they should work on.
As described in section 3.1 Project setting, many of the participating services had been part of the CCT project, which may have biased the sample. For example, it is possible that these services were more motivated to implement the IMR program than other services outside the CCT project. Moreover, the sample consisted of a majority of primary care services. Since Study I indicated that there were differences in attitudes between the two service settings, it can be assumed that there are other differences between these settings that may have influenced the implementation of the IMR program, and which would have resulted in different findings in the present study. However, the findings of the study such as positive patient outcomes, high fidelity rates, and organizational challenges in the implementation process were comparable with earlier studies (McGuire, Kukla, et al., 2014; Salyers, Godfrey, et al., 2009). Therefore, it is assumed that the results can be generalized to other similar mental health service settings, although with a certain caution.

In terms of drop-out rates, five of the 36 practitioners and nine of the 44 patients dropped out during the implementation. The findings on feasibility (see 4.2 Study II) indicated that the patients differed from the completers with regard to several elements. However, the low number of participating practitioners and patients meant that it was not possible to perform subgroup analyses. Larger studies should be conducted in future research to address these limitations.

Study II included a thorough description of the implementation strategies used. This transparency will facilitate the selection of optimal strategies, more accurate replication, and a more successful transfer of evidence into practice (Slaughter et al., 2015). However, not all the strategies were measured. The study could have been strengthened by measuring the effectiveness of all the implementation strategies used, and relating them to the implementation outcomes. Unfortunately, this was not considered prior to the start of implementation.

5.2.3 Study III
Study III was based on qualitative focus group interviews. Qualitative research provides insight into and a deeper understanding of the themes. Study III complemented the findings of Study II on the organizational challenges of implementing IMR. We perceived that the practitioners openly discussed their experiences with us in the focus group interviews. There
were good conversations and discussions within the groups, and they answered the questions without hesitation. We also perceived that the practitioners did not hide details that might have been difficult to express, or that put their services in a negative light. Practitioners who use the same models at work will often cooperate with each other and possibly influence each other in how they use and experience the model. Therefore, it was perceived as advantageous to do focus group interviews rather than individual interviews, as we captured the experiences of using IMR within the group. The quality of the empirical material was perceived as adequate. On some of the questions, we had fewer follow-up questions because they referred to processes that we, as an advisory group, were more involved in. These included their experiences with using IMR in their services, training, and supervision. However, we decided to ask these questions anyway to avoid missing out on what are believed to be important components. As there were many components that were discussed, the material could have been strengthened by going into greater detail on some of the components.

There were issues that challenged the quality of the study, such as credibility and transferability (Shenton, 2004). In terms of credibility, the researchers served as an advisory group during the implementation prior to the interviews. The development of early familiarity with the culture of the participating services increased the credibility (Shenton, 2004), although the familiarity may have restricted the respondents’ feedback regarding their thoughts on IMR. However, we believe that we managed to make the participants describe and contextualize the variations in their descriptions of the implementation of IMR in all of the services. The participants were also encouraged to be open about their experiences, and were assured that details concerning potential difficulties would not be reported back to their leaders. The PhD candidate was responsible for conducting the interviews and the data analysis. The candidate had some limited experience with qualitative methods prior to the project, which is of relevance in qualitative research (Shenton, 2004). To increase the credibility, it was attempted to be reflective concerning own background, qualifications, and experience, and how this directed the analyses. There were also frequent debriefing sessions with the two other researchers, where the PhD candidate discussed alternative approaches, and tested developing ideas and interpretations. This was helpful in order to recognize own biases and preferences, and to ensure that the analyses reflected the participants’ views.
In terms of transferability, the results of Study III have pointed out weaknesses in the framework of Fixsen et al. (2013), and have therefore contributed to the development of the theory. With regard to Study III's sample, this consisted of mental health practitioners, who were mainly from primary care services and with a Bachelor's degree. Most of them had been part of the CCT project. They volunteered for the implementation and achieved high fidelity scores. Given that the study aimed to complement the findings of Study II, randomized sampling and reaching saturation point were not relevant. The purpose of the study was to understand the challenges that the practitioners experienced, despite scoring high on fidelity and wishing to continue to use the program, which most probably ruled out the practitioners’ lack of motivation as a determinant. Five of the 31 who participated in the implementation were unable to attend the interviews, leaving 26 practitioners. We did not ask for their participation in case they were less motivated to be interviewed. Voluntary participation ensures honesty in informants (Shenton, 2004).

The sample consisted largely of practitioners in primary care, who, according to Study I, differed significantly from the practitioners in specialized care with regard to discipline and educational level. It is possible that the practitioners would have given a different understanding of the implementation challenges if the sample had represented both community and specialized health services equally. Yet transferability depends on the analytic categories that we use to understand what we have studied (Nadim, 2015). In Study III, it is considered probable that the practitioners’ autonomous roles, the leaders’ lack of engagement, and the services’ lack of preparation can be transferred to other implementation efforts in different mental health service settings. It is assumed that the practitioners’ autonomy and the leaders’ lack of engagement may challenge the sustainability of services other than those that were involved in this study.

5.2.4 Psychometric challenges

Implementation science lacks psychometrically strong instruments to support the widespread delivery of EBPs (Chaudoir, Dugan, & Barr, 2013; Lewis et al., 2015), which is also relevant to some of the measures used in this thesis. This is often due to practical challenges. For example, the IMR fidelity and the GOI measures score fidelity per unit. To validate these measures, large-scale studies with a high number of units are required, but such large and costly studies are more rare than usual.
With regard to IMR fidelity, there are few studies that have examined the reliability and validity of the measure. However, the measure has been shown to predict outcomes on the IMR scale (Hasson-Ohayon et al., 2007), which indicates that reaching high scores is important when implementing IMR. Moreover, the GOI lacks reliability and validity reporting. It has shown satisfactory internal consistency and high inter-rater reliability in one study (Bond, Drake, Rapp, et al., 2009), but it lacks confirmation. More validations are needed on both IMR fidelity and GOI.

In addition, the two measures that include IMR scale were translated into Norwegian. Although this procedure was performed thoroughly, there may have been some challenges with the translation that we were unable to detect. Moreover, the sample in Study II was too small to validate the measures in a Norwegian context. There are reasons to believe that the findings reported in Study II are valid, and the practitioners’ high scores on IMR fidelity were supported by their high ratings on IT-IS. Furthermore, the challenges within the organizations shown in the GOI scores were supported by the findings in Study III. However, because the measures do not have robust psychometrics, the findings should be interpreted with caution.

5.3 Clinical implications

The findings in this thesis point to several possible implications for the further implementation of EBPs in mental health services. The implications are described in relation to the EPIS model (Aarons et al., 2011). According to this model, implementation occurs in phases (exploration, adoption/preparation, implementation, and sustainment). It consists of an inner and outer context, in which individual adopter characteristics are mainly described as affecting the inner context of an implementation process.

According to the EPIS model, the practitioners’ attitudes towards using EBPs can influence the exploration and implementation phases (Aarons et al., 2011). It is argued that for new interventions to be explored, organizations have to perceive a need for change in practice (Aarons, 2005). This thesis has shown that it may be more challenging to persuade practitioners with more experience and higher educational levels in specialized mental healthcare to use new practices than practitioners with less experience and lower educational
levels in primary mental healthcare, especially if the practice is requested of them. If the need for change in the service is processed top-down and led by the management, then the more experienced practitioners may resist the changes that are forced on them. In entering the exploration phase, it may therefore be wise to work in a more goal-oriented way with the practitioners with more experience so that they are able to perceive an organizational challenge that needs an improved approach. Further on in the preparation and implementation phases, one should strive to make the experienced practitioners take ownership of the decisions regarding organizational change and the specific practice that is to be implemented. This must be done without compromising the fidelity of the practice. This may help the experienced practitioners to feel that they “own” the process, and lead to a sustained use of the new practice.

The findings in this thesis also imply that the practitioners with less experience and lower educational levels in primary mental healthcare have more positive attitudes towards using new practices, although the practices are required of them. In entering the exploration phase, it may be advisable to enlist these practitioners as advocates, and then to include the more experienced practitioners when the new practice has been established within the organization. As long as the practitioners’ attitudes towards the specific practice remain positive, the practice will presumably spread more easily with time.

In the active implementation phase, the EPIS model highlights the practitioners’ demographics, adaptability, and attitudes towards EBPs as determinants of the implementation (Aarons et al., 2011). However, little is said about the practitioners’ engagement in the implementation strategy. This thesis underscores the practitioners’ active role in the implementation process, as their participation in the implementation appeared to operate as a moderator of their further use. Greenhalgh et al. (2004) stated that practitioners are not passive recipients of new interventions, but interact purposefully and creatively with them. The same can be said concerning the implementation process; the practitioners interact purposefully and creatively with it. They continually decide in what way they will interact with it, and this has consequences for the implementation outcomes. Increased awareness of their active role during the implementation process is recommended.
In addition to the practitioners’ roles, leadership is also described as an important inner context determinant in the EPIS model when implementing new practices (Aarons et al., 2011). Leadership is a recurring theme in the implementation literature (Aarons, Horowitz, et al., 2012; McGuire, Salyers, et al., 2015; Torrey et al., 2003), indicating its importance in the implementation process. However, the content of the leadership that promotes implementation success is less known. McGuire, Salyers, et al. (2015) promoted autonomy-supportive leaders who delegate decisions and executions to program-level leaders. However, on the basis of the findings in Study III, it is argued that leaders should not only support practitioners’ autonomy, but also facilitate implementation by actively engaging in the process. Practitioners’ should be actively supported by their leaders. This means that leaders should clearly express goals and a vision for implementation in the service and follow up on them.

Continued fidelity monitoring and support has been highlighted as critical for sustained EBP effectiveness in the EPIS model (Aarons et al., 2011), and this is a widespread understanding among researchers (Fixsen et al., 2005; Schoenwald et al., 2011). Several studies, including Study III, have reported a challenge in introducing a “monitoring philosophy” into the services (Bond et al., 2014; Rychener et al., 2009), and this requires further attention. Without knowledge concerning whether the practitioners use the new practice according to the manual, or whether the patient outcomes are improving, the implementation of new practices loses one of its main goals, which is to document its effect. More work needs to be done to change the practitioners’ attitudes towards documenting what is being done and the outcomes. However, in a workday consisting of a large amount of documentation, it may be challenging to introduce even more of this. It is therefore essential to enable the practitioners to understand why this is important, and how they can use this information to make the services better.

The implementation of IMR that occurred during the PhD project provided basis for its further implementation in larger parts of Norway, as the translation of the manual made it possible for a selection of other mental health services to acquire it. The spread of the IMR continues to occur, with the division of the R&D mental health services at Ahus playing an important part. The findings in this thesis stress the importance of the practitioners’ participation in training and supervision in order to increase the chances of IMR to becoming sustainable in the services. This is an important message for both the practitioners and the service leaders to follow up on. Moreover, this is also an important message for the trainers of
IMR and other practices. Trainers need to ensure that training includes fidelity and outcome monitoring, and that the monitoring is sustained in the services for as long as the practitioners are using the program. For a treatment to be sustained in mental health services, we need systems that provide for this. Given the continued dissemination of IMR in Norway, an IMR network was established at the beginning of 2017. In Sweden, the IMR program was rated as one of the top recommended treatments for schizophrenia disorders (The National Board of Health and Welfare, 2017). In addition, an IMR application has been developed to make it more feasible and user-friendly (“EBP solutions. Transforming evidence based practice into digital tools.,” n.d.). The further dissemination of IMR in Norway and elsewhere is an exciting development to follow, and there will hopefully be more research on the program and its implementation.

5.4 Recommendations for future research

Despite an increasing amount of research on how to successfully implement EBPs in both general and mental health services, many questions remain unanswered. This is due to the complexity of the many factors, determinants, and concepts that play a role in the process. Research on general attitudes towards using EBPs can provide important knowledge concerning the practitioners’ relations to the EBP concept. As some practitioners are still critical of the use of EBPs, this theme is relevant in order to examine why this is, and how these critical thoughts can be challenged. In addition, research needs to be centered on attitudes towards the specific intervention that is being implemented. This can provide important knowledge concerning the practitioners’ willingness to adopt the specific practice. Future research should also examine whether attitudes towards using specific practices predict successful implementation, in order to better understand the importance of attitudes towards practices in their implementation.

With regard to reporting on the fidelity to the implementation strategies, this has been called for. Researchers should stress the importance of reporting the strategies in detail, in addition to measuring the dosage, adherence, and participant response of the strategy. This will increase the possibility of examining what strategies are preferable in particular situations.
Although there is agreement that leadership is important in the implementation process, the content of that leadership is less clear and requires further examination. In addition, more strategies on how to lead an implementation process that are grounded in theoretical perspectives should be developed and tested. This applies to implementation research in general. Placing the findings into theoretical approaches, such as the Theory of planned behavior, the EPIS model, or the framework on core implementation components, would benefit the field of implementation. The third study of the thesis contributed to the development of theory, by pointing to possible improvements in the core implementation component framework of Fixsen et al. (2005), which few previous studies have done. More studies should do the same. Moreover, the theoretical approaches can benefit from a description of the direction of the implementation process via a series of steps, or by a prediction of the directional relationships between concepts.
6. Conclusions

In general, the results of this thesis indicate that practitioners have an essential role in the implementation of new practices in mental health services. They are not passive recipients of new practices, but they interact purposefully and creatively with them. Their attitudes towards new practices (Study I), their participation in their implementation (Study II), and their experiences with them (Study III) are assumed to influence whether and how the practitioners will make use of them over time.

Earlier studies have shown inconsistencies in their findings of what factors are prominent in the prediction of practitioners’ attitudes. The first study of this thesis contributed to this knowledge gap, and was also the first study to examine Norwegian mental health practitioners’ attitudes to the use of EBPAS. This leads to the conclusion that the practitioners’ experience, which is acquired over the years, is the strongest of all known predictors of attitudes towards EBP. As the practitioners gain more confidence in their own skills, they become less curious towards new practices as they gain experience. The results also imply that the practitioners in specialized care or those with higher educational levels are less accepting of new practices that are required of them, in comparison to practitioners in primary care or with lower educational levels. Accordingly, in the implementation of new practices it appears that it will require more effort to include practitioners with more experience and higher educational levels in specialized care settings than practitioners with less experience and lower educational levels in primary care settings.

The second study of the thesis was the first study to date to examine the practitioners’ roles in the implementation of IMR in a Norwegian mental health setting. Moreover, few previous IMR studies have reported on the fidelity to the implementation strategies used. The second study provided a thorough description of the implementation strategy that was used, including its justification, by placing it into theoretical approaches. In addition, the findings indicated the importance of the practitioners’ engagement in the implementation strategy during the implementation process, as their participation appeared to operate as a moderator for their intentions of further use. This means that for a practice to be sustained the practitioners must engage actively in the process. Accordingly, mental health practitioners’ participation in the
implementation strategy is essential when it comes to their role in the implementation of new practices.

The third study examined a select group of practitioners, almost all of whom had reached high levels of fidelity to IMR, which is the exception rather than the rule. The study indicated that the practitioners do not operate in a vacuum, but rather interact within organizations that consist of both leaders and patients. The study’s findings demonstrated that leaders have a central role in the facilitation of the practitioners’ use of IMR. In terms of the practitioners’ autonomy, it is argued that the leaders should not only support the practitioners’ autonomy, but also facilitate implementation by actively engaging in the process. Moreover, the practitioners’ use of new practices may also be influenced by their patients. Many practitioners allow the patients’ experiences and feedback to control their further use of the IMR program. That is, they base their further use of well-researched practices on their experience with only a few patients. In addition, the study indicated that communicating the importance of a “monitoring philosophy” appeared challenging. These circumstances challenge the sustainability of EBPs. Accordingly, more work should be done to change the practitioners’ attitudes towards documenting what is being done and its outcomes.
References


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