Bringing psychological treatment to the psychiatric ward

Affecting patients, staff, and the milieu

Mårten Tyrberg
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Abstract
The psychiatric ward is a complex setting. This has to do partly with the severity of the patients’ suffering. Often, they present with such diagnoses as psychosis, self-harm, substance abuse, and suicidality. In fact, they often present with a combination of these. This renders the delivery of effective treatment a challenging task. Partly, the complexity of the ward has to do with aspects of the context itself. Admissions and discharges often happen fast and unexpectedly, staff members are expected to handle various challenging behaviors, they display quite high levels of burnout and work dissatisfaction, and the wards are often staffed by bank staff, leading to a lack of continuity of care. This adds to the challenge of delivering effective treatment. In the typical Swedish ward, treatment consists of medication, nursing, observation, and management of risk behaviors. Psychological treatment is seldom a routine part of inpatient care. However, there are sound arguments for adding psychological treatment in the form of cognitive behavior therapy (CBT) of various modalities. Further, there is promise in psychosocial interventions delivered by the nursing staff after appropriate training, and in providing supervision to the staff.

The aim of the present thesis was to investigate the feasibility and potential efficacy of acceptance and commitment therapy (ACT), a CBT based psychotherapy model, as a broadly applied intervention in the context of psychiatric inpatient care. In three studies, ACT was evaluated as a brief individual psychotherapy intervention, and as a psychologically informed approach to dealing with patients performed by the nursing staff group in a psychiatric ward for psychosis patients.

In study I, an average of two sessions of ACT was delivered to patients (n = 11) with a diagnosis of psychosis. Compared to a control group (n = 10), the risk for rehospitalization during a four-month follow-up period was significantly smaller for patients in the experimental group. There was also a trend toward increased values-based living scores in the experimental group, compared to controls.

Study II evaluated the effects on staff members (n = 20) and patients (n = 9) of a brief ACT training intervention tailored to the staff group, the aim of which was to introduce ACT as a day-to-day approach to dealing with patients. After a total of 12 hours of ACT training, the staff group displayed a slight increase in work-related psychological flexibility, compared to before, while a non-randomized control group (n = 18) displayed a slight decrease. Patients being treated on the ward after the staff training displayed a slight increase in psychological flexibility during ward treatment, while patients being treated before displayed a slight decrease. In both cases, however, the differences were considered quite small (non-significant in statistical terms). Further, the study investigated ACT-consistent behavior changes among staff members following ACT training, using a multiple baseline single-subject design. Results revealed both expected and unexpected patterns of behavior.

In study III, the usefulness of the ACT model was investigated using a qualitative content analysis. Staff members (n = 10) experienced ACT as useful in terms of dealing with patients’ struggles, enriching typical duties, and dealing with their own stress. Difficulties in using the model related to time restraints, complexities of the model itself, and the severity of patients’ illnesses.

In summary, the present thesis adds to the research basis for ACT as a treatment for psychosis, delivered in an inpatient setting. It shows that the introduction of ACT as an add-on to traditional ward treatment in Sweden is for the most part feasible and acceptable. However, the thesis also discusses various challenges in the implementation of psychological treatment in such a complex context as the inpatient ward, both in terms of delivery of the treatment itself and the evaluation of its effectiveness.

Keywords: Acceptance and Commitment Therapy, behavior therapy, inpatients, inservice training, psychiatry, psychotherapy, brief, qualitative research, randomized controlled trial, schizophrenia spectrum and other psychotic disorders.
BRINGING PSYCHOLOGICAL TREATMENT TO THE PSYCHIATRIC WARD

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Dedicated to patients and staff on ward 96.
Abstract

The psychiatric inpatient ward is a complex setting. This complexity has to do partly with the severity of the patients’ suffering. Often, they present with such diagnoses as psychosis, self-harm, substance abuse, and suicidality. In fact, they often present with a combination of these. This renders the delivery of effective treatment a challenging task. Partly, the complexity of the inpatient ward has to do with aspects of the context itself. Admissions and discharges often happen fast and sometimes unexpectedly, staff members are expected to handle various challenging behaviors, staff members display quite high levels of burnout and work dissatisfaction, and the wards are often staffed by bank staff, leading to a lack of continuity of care. This further adds to the challenge of delivering effective treatment. In the typical Swedish psychiatric ward, treatment consists of medication, nursing, observation, and management of various risk behaviors. Psychological treatment is seldom a routine part of inpatient treatment. However, there are sound scientific arguments, based on empirical studies, for adding psychological treatment in the form of cognitive behavior therapy (CBT) of various modalities. Further, there is promise in psychosocial interventions delivered by the nursing staff after appropriate training, and in providing supervision to the staff groups.

The overarching aim of the present thesis was to investigate the feasibility and potential efficacy of acceptance and commitment therapy (ACT), a CBT based psychotherapy model, as a broadly applied psychological treatment intervention in the context of psychiatric inpatient care. In three studies, ACT was evaluated as a brief individual psychotherapy intervention, and as a psychologically informed approach to dealing with patients performed by the nursing staff group in a psychiatric ward for psychosis patients.

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Study II evaluated the effects on staff members \((n = 20)\) and patients \((n = 9)\) of a brief ACT training intervention tailored to the staff group, the aim of which was to introduce ACT as a general approach to dealing with patients on a day-to-day basis. After having received a total of 12 hours of ACT training, the staff group displayed a slight increase in work-related psychological flexibility, compared to before ACT training, while a non-randomized control group \((n = 18)\) displayed a slight decrease. Patients being treated on the ward after the staff ACT training displayed a slight increase in psychological flexibility during ward treatment, while patients being treated before the staff ACT training displayed a slight decrease during ward treatment. In both cases, however, the differences were considered quite small (non-significant in statistical terms). Further, the study investigated ACT-consistent behavior changes among staff members following ACT training, using a multiple baseline single-subject design. Results revealed both expected and unexpected patterns of behavior.

In study III, the usefulness of the ACT model as a general approach in the day-to-day interactions with patients on the ward was investigated using a qualitative content analysis. Staff members \((n = 10)\) experienced the model as useful in terms of dealing with patients’ struggles, enriching typical ward duties, and dealing with their own stress. Experienced difficulties in using the model related to time restraints, complexities of the model itself, and the severity of patients’ illnesses.

In summary, the present thesis adds to the research basis for ACT as a treatment for psychosis, delivered in an inpatient setting. It shows that the introduction of ACT treatment, both in individual psychotherapy and in staff-training form, as an add-on to traditional ward treatment in Sweden, is for the most part feasible and acceptable. However, the thesis also discusses various challenges in the implementation of psychological treatment in such a complex context as the inpatient ward, both in terms of delivery of the treatment itself and the evaluation of its effectiveness.

**Keywords:** Acceptance and Commitment Therapy; behavior therapy; inpatients; inservice training; psychiatry; psychotherapy, brief; qualitative research; randomized controlled trial; schizophrenia spectrum and other psychotic disorders.

I studie I fick patienter (n = 11) med psykosdiagnos i genomsnitt två sessions ACT under avdelningsvistelsen. Dessa patienter jämfördes med en kontrollgrupp (n = 10) som endast fick sedvanlig avdelningsvård. Resultaten visade att gruppen som fick ACT i tillägg till den sedvanliga vården uppvisade en signifikant lägre risk att återinläggas under en fyra månaders upp-
följningsperiod, jämfört med kontrollgruppen. I resultaten noterades också en trend mot högre grad av värde-baserat leverne i ACT-gruppen, jämfört med kontrollgruppen.

I studie II utvärderades effekten av en kort ACT-utbildning på medlemmar i avdelningspersonalen \( n = 20 \) och på patienter \( n = 9 \). Utbildningen var skräddarsydd för personalgruppen och syftade till att introducera ACT som ett förhållningssätt i det vardagliga mötet med patienter. Efter totalt 12 timmar ACT-utbildning upptäckte personalgruppen en mindre ökning i arbetsrelaterad psykologisk flexibilitet, jämfört med innan ACT-utbildningen. En icke-randomiserad kontrollgrupp \( n = 18 \) upptäckte i stället en mindre minskning. De patienter som vårdades på avdelningen efter personalens utbildning uppvisade en mindre ökning i psykologisk flexibilitet under vårdtiden, medan de patienter som vårdades innan utbildningen uppvisade en mindre minskning. I både fall hade dock skillnaderna att betrakta som små (icke-signifikanta i statistisk mening). Studien undersökte vidare förändringar i ACT-konsekvent beteende hos medlemmar i personalgruppen, i en multipel baslinje single subject-design. I resultaten noterades både förväntade och icke förväntade beteendemönster.

Studie III utvärderade användbarheten i ACT-modellen som ett förhållningssätt i dagliga interaktioner med patienter, ur sjuksköterskors och sköterskares \( n = 10 \) perspektiv. Med hjälp av kvalitativ innehållsanalys konstaterades att personalen upplevde modellen som användbar för att hantera patienters lider, för att berika sedvanliga avdelningsuppgifter, och för att handskas med egen stress. Upplevda svårigheter handlade om tidsbegränsningar, det faktum att modellen uppfattades som komplex, och det faktum att patienterna var svårt psykiatriskt sjuka.

Sammanfattningsvis bidrar denna avhandling till forskningsunderlaget för ACT som behandling vid psykos i heldygnsvårdsmiljö. Den visar att det är genomförbart att implementera ACT-behandling både i individuell form och i form av personaltränning på en typisk heldygnsvårdavdelning i Sverige. Den visar dock också på utmaningar i implementeringen i en så pass komplex miljö, både vad gäller hur behandlingen bedrivs och hur den kan utvärderas.

**Nyckelord:** Acceptance and Commitment Therapy; beteendeterapi; internutbildning; kvalitativ forskning; psykiatri; psykoterapi, korttids; randomiserad klinisk prövning; schizofreni och störningar med psykotiska drag; sjukhuspatienter.
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Abbreviations

AAQ-II    Acceptance and Action Questionnaire
ACT      Acceptance and Commitment Therapy
ACTp     Acceptance and Commitment Therapy for Psychosis
ADAPT    Acceptance-based Depression and Psychosis Therapy
BA       Behavioral Activation
BEVS     Bull’s-Eye Values Survey
BPRS     Brief Psychiatric Rating Scale
CBT      Cognitive Behavior Therapy
CBTp     Cognitive Behavior Therapy for Psychosis
CFT      Compassion Focused Therapy
CI       Confidence Interval
CT       Cognitive Therapy
DUP      Duration of Untreated Psychosis
ECT      Electroconvulsive Therapy
ETAU     Enhanced Treatment as Usual
FAP      Functional Analytic Psychotherapy
HAM-D    Hamilton Depression Rating Scale
ISTDP    Intensive Short-Term Dynamic Psychotherapy
MCSS     Manchester Clinical Supervision Scale
N/a      Not applicable
NAP      Nonoverlap of All Pairs
NICE     National Institute for Clinical Excellence
NOS      Not Otherwise Specified
OQ-45    Outcome Questionnaire-45
PANSS     Positive and Negative Syndrome Scale
PRN      Pro Re Nata (as needed) Medication
PSI      Psychosocial Interventions
PSYRATS  Psychotic Symptom Rating Scales
PTSD     Posttraumatic Stress Disorder
RCT      Randomized Controlled Trial
RFT      Relational Frame Theory
SAAQ     Swedish Acceptance and Action Questionnaire
SD       Standard Deviation
SWLS     Satisfaction with Life Scale
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>TAU</td>
<td>Treatment as Usual</td>
</tr>
<tr>
<td>VAAS</td>
<td>Voices Acceptance and Action Scale</td>
</tr>
<tr>
<td>WAAQ</td>
<td>Work-Related Acceptance and Action Questionnaire</td>
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<tr>
<td>WAS</td>
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Introduction

During the customary half-time seminar, a vital question was asked by one of my reviewers, an associate professor:

What is this thesis really about?

This question may appear somewhat daunting when taken out of context. After all, should the answer not have been obvious, since the thesis was at least half way to being completed? However, rather than making me anxious, the question actually made me feel quite happy at the time, because it was asked in the context of a discussion about what both associate professor Ramnerö and I knew to be true of the nature of psychiatric inpatient care in Sweden. It related to the challenges inherent within such an environment, something that we both had personal experience of. I felt the question to be rhetorical, with it actually reflecting a very accurate and shared understanding of what the present thesis is about. I will let the question linger for now, though, and return to it a bit later.
Background

A central aim of the psychiatric clinic at the Hospital of Västmanland Västerås, Sweden, where I work as a clinical psychologist, is to increase and improve inpatient care. Perhaps one of the most challenging aspects of this endeavor is the need to tackle prejudices regarding what is and is not possible in such a context. For example, contrary to what is commonly believed, the severity of inpatients’ illnesses does not seem to hinder their participation in ward group activities or one-to-one sessions (Csipke et al., 2014). It has been established in studies conducted in both Sweden (Folke et al., 2018) and other parts of the Western world (Mullen, 2009; Sharac et al., 2010) that the provision of structured psychological treatment, or any type of psychosocial intervention, or even informal socializing, on a typical ward is generally severely lacking. Folke et al. (2018) asked 102 inpatients on a psychiatric ward in Sweden to fill out an activity diary over the course of a typical day. Of the 11 assessed hours, the patients reported spending an average of 3.74 hours doing nothing. Importantly, other rather passive activities, such as watching television, were assigned to different categories, so the actual amount of time spent doing (practically) nothing was likely much larger. Further, as little as 0.88 out of the 11 hours were spent with staff, and the majority of the patients’ time was spent in solitude. It hence seems to be a clear understatement when the authors conclude that “there is room for improvement in terms of inpatient activity and engagement” (Folke et al., 2018, p. 284). In fact, their results replicated those of several previous studies (Csipke et al., 2014; Curson, Pantelis, Ward, & Barnes, 1992; Higgins, 1999; Radcliffe & Smith, 2007; Sharac et al., 2010). As Folke et al. (2018) note, it appears that the inpatient milieu has become less and less engaging over the past few decades.

It seems, as Baker (2000) commented, that “inpatient care has become the Cinderella of psychiatric services, suffering from neglect” (p. 95). It is possible that historical changes in the perception of psychiatric care and how best to meet the needs of the mentally ill have contributed to this state of neglect. Part of the historical context of the present thesis is the so-called psychiatry-reform in Sweden, which took place some 30 years ago (Swedish Government Official Reports, 1992). Briefly put, the reform was driven by the ambition to better integrate the mentally ill into the community. Traditional mental hospitals were shut down, while the responsibility for housing
the mentally ill was assigned to local authorities. Psychiatric inpatient wards within regular hospitals took over the caring role previously played by large mental institutions. Since this reform there has been much debate as to whether or not it has improved the situation for seriously mentally ill patients. From the standpoint of a clinician working in psychiatric care today, it seems that there is too little currently on offer in terms of both community services and inpatient care. In any case, it can be stated that there were around 35,000 hospital beds available for psychiatric care during the late 1960s, while there are around 5,000 beds available today (Swedish Association of Local Authorities and Regions, 2010). Further, some authors (Bowers et al., 2005; Gilbody et al., 2006; Walton, 2000) argue that the attention paid to community services over the past few decades has contributed to the dearth of both research and theorizing with regard to psychiatric hospitalization.

Psychosis
The patients tended to by the psychiatric inpatient ward that is the focus of the present thesis mainly suffer from different kinds of psychosis. Although, in reality, this ward, as is probably the case for most inpatient wards in Sweden, houses a mix of diagnostically diverse (not necessarily psychotic) patients, the concept of psychosis will be outlined below. The reader should bear in mind, though, that the results of the studies included in the present thesis could probably be considered to also be applicable to patients with severe mental illness in a broader sense.

Psychosis is defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013) as an experience characterized by delusions, hallucinations, and/or formal thought disorder. However, in reality, the term “psychosis” is often used as an umbrella term, intended to cover not only the core symptoms listed above, but also emotional, perceptual, cognitive and behavioral disturbances of many kinds. Thus, it is hugely challenging to formulate a single definition that covers all the aspects of psychosis. When used in an everyday sense, for example, in a newspaper article or in the popular science media, psychosis often seems to be equated with schizophrenia. Schizophrenia is, in fact, the most common psychotic disorder, with a reported median incidence of 15.2/100,000 people worldwide (McGrath, Saha, Chant, & Welham, 2008). By contrast, psychotic experiences in a more general sense, including those cases who do not come into contact with the health care system, are reported to occur in as much as 15% of the general global population (Balaratnasingam & Janca, 2015). Hence, while schizophrenia is often a severely debilitating mental illness that affects a relatively small proportion of the population, psychotic experiences are actually quite common, and, in some sense at least, normal.
In the following paragraphs, the characteristics of schizophrenia will be outlined in some detail, since it is the most common among the psychotic disorders, and thereby a reasonable approximation to the umbrella term psychosis.

The defining features of schizophrenia (American Psychiatric Association, 2013; Vahia & Cohen, 2008) are delusions, hallucinations, and disorganization of thought, speech and behavior (so-called positive symptoms), as well as affective flattening, poverty of speech and avolition (so-called negative symptoms). Importantly, not all of these symptoms must be present for a diagnosis of schizophrenia.

Delusions are defined as beliefs that are objectively false, that is, based on incorrect inferences regarding external reality, which are held despite others’ beliefs and the existence of clear evidence that contradicts them. The most common forms of delusions are persecutory or referential. Hallucinations are perception-like experiences that can occur in any sensory modality (although voice is the most common clinical manifestation), despite the absence of the external stimulation of the relevant sensory organ. Disorganization of thought (inferred by means of the patient’s speech) refers to abnormalities in the form or structure of speech, as opposed to its content (Vahia & Cohen, 2008). Such disorganization might manifest, for example, in slipping off track, loose associations, or tangential speech. Examples of disorganized behavior range from disturbances in goal-directed behavior, to agitation, to dressing in an unusual manner (e.g., wearing multiple jackets on a hot day). Affective flattening refers to a diminished range of emotional expressiveness, which can manifest in, for example, facial immobility, poor eye contact, or unresponsiveness. Poverty of speech (or alogia) is defined as an “absence of ability to carry out engaging meaningful conversation” (Vahia & Cohen, 2008, p. 88). Finally, avolition manifests in a marked lack of interest in participating in social or occupational activities.

In addition to the core symptoms of schizophrenia listed above, it has been increasingly recognized that many patients suffer from cognitive impairments in the mild to moderate range (American Psychiatric Association, 2013; Heinrichs & Zakzanis, 1998; Vahia & Cohen, 2008). Indeed, in many cases the cognitive deficits are more impairing for the patient than the main psychotic symptoms (Vahia & Cohen, 2008).

For the individual, the cost of schizophrenia is high in terms of the level of suffering, diminished quality of life, and diminished work- and family-related opportunities. Indeed, a diagnosis of schizophrenia has been estimated to shorten life expectancy by ten years (Andlin-Sobocki & Rossler, 2005). The cost of schizophrenia is also high for society more generally (Knapp,
Etiology

Despite the fact that the causes of schizophrenia and other variants of psychosis remain incompletely understood, a number of risk factors have been identified. Roughly, these are divided into genetic and environmental risk factors. The strongest of all risk factors is having a close biological relative who has the illness (Downar & Kapur, 2008; Zwicker et al., 2018), a finding that has been established largely through twin studies. In monozygotic twins, who share 100% of their genetic material, if one sibling has schizophrenia, the risk in the other is about 40–50% (Tan don, Keshavan, & Nasrallah, 2008). In terms of heritability, it is estimated to account for 80% or more of the liability for schizophrenia (Tandon et al., 2008; Zwicker et al., 2018). However, it is not yet known which particular genes carry on this vulnerability. In fact, as Zwicker et al. (2018) point out, evidence collected so far indicates that the nature of psychotic illnesses is highly polygenic (meaning that many genes within the genome are likely involved). Further, the extent to which the environment plays a role in the development of psychosis is in turn affected by genetic sensibility, which is also polygenic. Although several meta-analyses have identified chromosomal regions containing susceptibility genes for schizophrenia, the number of genes contained in these regions amount to about one quarter of all known genes (Tandon et al., 2008). In other words, there is some significant lack of precision in the genetic linkage approach.

The contribution of environmental risk factors to the overall risk for psychosis has been debated. Based on evidence from twin studies less than 20% of the variance in liability to schizophrenia is accounted for by environment alone (Zwicker et al., 2018). Epidemiological studies, however, tend to ascribe a larger relative risk to environmental factors. Environmental risk factors are clustered based on the stage in development where exposure could influence risk. Importantly, none of them are pathognomonic. Factors such as male sex, minority status, low socio-economic status, and income inequality influence risk throughout development (Tandon et al., 2008; Zwicker et al., 2018). During the prenatal stage, risk for psychosis is influenced by inadequate nutrition, maternal anemia, maternal infections (e.g., influenza, rubella), paternal older age, and heavy metals. During the perinatal phase, factors such as vitamin D status, obstetric complications, season of birth (late winter and early spring associated with higher risk [Tandon et al., 2008]) and pre-term birth are associated with risk. Migration and urban residence constitute risk factors from the perinatal phase and all through development. Maltreatment and bullying affect risk during childhood, while cannabis and
tobacco use during adolescence are associated with higher risk. Typically, psychotic illness is diagnosed when an individual is in his/her early twenties.

Cognitive Behavior Therapy for Psychosis

While there are effective pharmacological treatments available for schizophrenia and other psychotic disorders, it has been reported that 25-50% of those receiving the best possible pharmacotherapy still experience psychotic symptoms (Gaudiano, 2006). This renders the development of alternative approaches (e.g., psychological treatment) a vitally important avenue for research.

The research base concerning psychological interventions targeted at psychosis and related serious mental illnesses has grown over the last few decades. Different versions of cognitive behavior therapy (CBT) have received the most consistent support in published trials. However, especially in recent years, the debate has been ongoing as to the actual magnitude of the treatment effect, since later trials with more stringent controls have produced smaller effect sizes when compared to early trials.

CBT for psychosis (CBTp), shares the basic features of CBT for other psychiatric conditions. Indeed, CBTp was developed based on the Beckian theory of emotional disorders (Beck, 1976). Thus, the therapy is typically active, structured and time-limited. Rector and Beck (2002) offer a template of a typical CBTp treatment intervention, including the establishment of a therapeutic alliance, the formulation of a prioritized problem list, psychoeducational and normalizing interventions, the development of a cognitive conceptualization (linking thoughts, feelings, and behaviors), cognitive and behavioral techniques intended to treat positive and negative symptoms and comorbid anxiety/depression, relapse prevention, and the establishment of a step-by-step action plan. Specific interventions used to treat the core psychotic symptoms include Socratic questioning, testing and reframing beliefs, weighing evidence, using alternative explanations, using behavioral experiments, eliciting self-beliefs, investigating the hierarchy of fears and suspicions, and the use of images and role-play (Rector & Beck, 2002). This template is an example of a classic CBTp approach, although in recent years numerous different versions of CBTp have been developed, incorporating techniques from various schools of therapy (a review of these can be found in Turkington, Wright, and Tai [2013]).

In a large meta-analysis applying stringent methodological criteria, Wykes, Steel, Everitt, and Tarrier (2007) concluded that CBTp has modest effects on the positive symptoms of psychosis, with an overall effect size of 0.40. A
later meta-analysis (Jauhar et al., 2014) concluded that the pooled effect size was 0.25 for the positive symptoms, 0.13 for the negative symptoms and 0.33 for the overall symptoms of psychosis. The latter authors question whether it is reasonable to so strongly advocate the use of CBTp for psychosis, given that the effect sizes are small. Further, a recent meta-analysis conducted by the same research group (Laws, Darlington, Kondel, McKenna, & Jauhar, 2018), which focused on the outcomes related to functioning, distress, and quality of life, concluded that the effect of CBTp was small at best.

Lynch, Laws, and McKenna (2010), in a meta-analytical review pooling data from trials of CBTp that controlled for non-specific intervention effects, reported that CBTp performed no better than the non-specific control conditions, and it did not reduce the relapse rate. Sarin, Wallin, and Widerlöv (2011), in a meta-analysis comparing CBTp with other psychological treatment alternatives, found non-significant trends in favor of CBTp following treatment, although they reported that delayed effects could be seen in favor of CBTp. In a meta-analysis specifically investigating the effect of CBTp in relation to medication-resistant psychosis, Burns, Erickson, and Brenner (2014) reported a mean weighted effect size for the positive symptoms of 0.47. Additionally, van der Gaag, Valmaggia, and Smit (2014), in a meta-analysis of individually tailored formulation-based CBTp, reported effect sizes in the small to medium range, thereby concluding that CBTp is effective in terms of treating auditory hallucinations and delusions. Thus, several recent meta-analyses appear to show that the effects of CBTp are evident, albeit often small. The reported effect sizes are summarized in Table 1. While some authors of meta-analyses claim that “there is overwhelming evidence that CBT for psychosis is effective” (Burns et al., 2014, p. 875), others state that CBTp has “failed in all of the treatment studies that used both control interventions and blind evaluations” (Lynch et al., 2010, p. 14). Despite this ongoing debate, offering CBTp to patients who have not fully recovered despite optimal medication is still recommended in several current clinical practice guidelines (Canadian Psychiatric Association, 2005; National Institute for Health and Care Excellence [NICE], 2010; Swedish National Board of Health and Welfare, 2011). Moreover, CBTp is considered to be an evidence-based treatment, with strong research support, by the American Psychological Association (Society of Clinical Psychology, n.d.-b). However, the mixed reports of the effectiveness of CBTp do seem to indicate the need to further explore the psychological treatment of schizophrenia.
Table 1

*Characteristics of meta-analyses included in review, and reported effects of CBTp*

<table>
<thead>
<tr>
<th>Study</th>
<th>Total N of studies included</th>
<th>Effect size</th>
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<th>Positive symptoms</th>
<th>Negative symptoms</th>
<th>Functioning</th>
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<td>34</td>
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<td>0.36 (g, delusions); 0.44 (g, hallucinations)</td>
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<td>Laws et al. (2018)</td>
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<td>0.25 (d)</td>
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</tr>
</tbody>
</table>

Note: Effect size refers to post-treatment measures, and letters in parentheses indicate use of Cohen’s *d* or Hedge’s *g*. Total number of studies refers to all studies included in the respective analysis and in some cases not all of these reported all types of outcomes. N/a = not applicable.

Psychosis patients with command hallucinations might represent a particularly high-risk group in terms of committing potentially violent acts in compliance with their hallucinations (Haddock & Shaw, 2011). A version of CBTp specifically tailored towards patients with command hallucinations has, therefore, been tested in two trials (Birchwood et al., 2014; Trower et al., 2004), with promising results being reported concerning the reduction in risk behavior.

It is well known that the duration of untreated psychosis (DUP) affects the prognosis in people with schizophrenia (Bottlender et al., 2003; Harrigan, McGorry, & Krstev, 2003; Harrison et al., 2001; Linszen, Dingemans, & Lenior, 2001). In fact, the DUP is the strongest predictor of both symptom severity and outcome (Drake, Haley, Akhtar, & Lewis, 2000). Bird et al. (2010), in a systematic review, concluded that including CBT as an element of standard care during the first critical period of psychotic illness offers clinically important benefits.
Acceptance and Commitment Therapy

Acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999) is a learning-theory-based approach to human suffering. As a therapy, it is essentially exposure-based, using operant and respondent conditioning principles as vehicles for changing behavior. Its goal is to minimize the avoidance of various aspects of experience, while at the same time maximizing the ability to be flexibly present among whatever unwanted emotions, thoughts, memories, or physical sensations might occur. This, in turn, aims to offer the option of doing what matters in life (living according to one’s values, in ACT terms), even when in the presence of unwanted experience. The key to this process is establishing that attempting to achieve control over thoughts and feelings is a futile endeavor, and instead promoting a willingness to let thoughts and feelings remain as they are. In this sense, ACT differs from traditional exposure therapy due to not necessarily aiming for a reduction in negative experience, but rather an increase in what is termed “psychological flexibility”, defined as the ability to “contact the present moment more fully as a conscious human being, and to change or persist in behavior when doing so serves valued ends” (Hayes, Luoma, Bond, Masuda, & Lillis, 2006, p. 7). More colloquially, ACT strives for psychological flexibility because the opposite, rigidity, is a central feature of so many psychiatric disorders. For example, in the case of psychosis, a patient typically sticks to a limited set of problem-solving strategies in order to cope with his or her situation. Often, these strategies are variants of avoidance, for example staying in the house at all times to lessen the impact of intruding thoughts and imperative voices. While this is fully understandable given the patient’s situation, it is likely not a behavior pattern that will allow the patient to live a rich and fulfilling life, and in that sense it is rigid. Psychological flexibility, on the other hand, would mean embracing symptoms in a new way, which would allow the patient to leave the house and engage in valued activities, in spite of experiencing intruding thoughts and imperative voices.

Theoretically, ACT is post-Skinnerian in the sense that it goes beyond the traditional behavioral understanding of language and cognition, instead relying on a well-established and laboratory-driven theoretical research base known as relational frame theory (RFT; Hayes, Barnes-Holmes & Roche, 2001; Hughes & Barnes-Holmes, 2016b). In short, the theory proposes that the majority of human behavior, if not all, is to some extent verbal. Verbal, in this sense, refers to how stimuli participate in relations with other stimuli based on arbitrary conventions rather than actual physical properties, how stimulus functions are transformed in accordance with those relations, and how this relational framing comes to influence human behavior. From early childhood onwards, this process evolves from relatively simple relations to increasingly complex relational networks and the relations between those networks. The result is a uniquely human and practically endless capacity for...
imagination, problem-solving, and rule following, but also potentially a breeding ground for worry, rumination, and anxiety. Much like the dark and bright sides of the Force as personified by Darth Vader and Luke Skywalker, respectively, human verbal ability is described by RFT as both a blessing and a curse.

In ACT terms, therefore, psychological problems might be described as the results of language traps. Suffering is caused not so much by psychological phenomena themselves, but by how we as humans relate to such phenomena. Relating to a thought based on what it claims to be (dangerous, never ending, doubtlessly true, causal in relation to overt behavior), rather than relating to it based on what it actually is (often the experience of a string of words linked together by arbitrary relations, transient in nature, not in itself able to cause overt behavior, not inherently either negative or positive) leads to very different likelihoods in terms of action.

A key goal for the ACT therapist is to undermine the destructive role that language can play in the lives of humans. In terms of the therapeutic technique, this is often accomplished by using metaphor and experiential exercises (e.g., Hayes et al., 1999; Törneke, 2017; Törneke, Luciano, Barnes-Holmes, & Bond, 2016). According to the approach of RFT, over-reliance on instructions during therapy is potentially problematic. It risks leading to rigid rule following, which is an example of exactly the kinds of language traps ACT aims to avoid. Metaphor, on the other hand, while technically also producing rules to guide behavior, cannot be taken literally (Törneke et al., 2016). Metaphor offers you guidance, but it does not tell you exactly what to do. Instead, when used correctly, it encourages paying flexible attention to the actual context at hand, thereby facilitating a choice of action based on direct contingencies. For example, having previously metaphorically described a patient’s struggles with anxiety as “keeping the monster in its cage,” a therapist might respond to a later statement in the following way: “So the monster is really rattling the door of its cage when you start thinking about getting out of the house?”

Experiential exercises, in the context of ACT, are essentially a means of conducting in vivo discrimination training (Törneke et al., 2016). In accordance with the goal of reducing the rigidity that often characterizes a problematic behavioral repertoire, the therapist seeks to help the patient experience two different classes of behavior. On the one hand, a problematic class that is assumed to dominate at the present time, and on the other hand an alternative class that might prove more helpful. For example, the therapist might write a particularly troubling thought on a piece of paper, and then hold it in her hand. Holding the paper up in front of the patient and moving it towards him, she might ask him to illustrate using his own hand what he would usually do when a troubling thought is closing in on him. Pushing
back against the therapist’s hand with his own, and experiencing the force that this requires, while not actually making the thought go away, could cause the patient to open up to other alternatives in terms of relating to thoughts.

Since the first treatment study concerning depression (Zettle & Hayes, 1986), the ACT research base has been steadily growing. ACT now demonstrates effectiveness in treating many psychiatric and somatic conditions (A-Tjak et al., 2015; Hayes et al., 2006; Öst, 2008; Ruiz, 2010), with reported effect sizes that are generally in the medium range.

The RFT Account of Psychosis

ACT shares many features with CBT. Both approaches are structured and time-limited, requiring the involvement of an active therapist, and they both rely on exposure as a major feature of the treatment. Indeed, rather than being distinctly different, ACT is often described as part of the “third wave” of CBT (Hayes, 2004). In regular clinical practice in particular, an ACT therapist will likely use some interventions that are identical to those used by a CBT therapist. That being said, in the following paragraphs I would like to contrast the two approaches as they are applied in the treatment of psychosis, singling out details according to which they are profoundly different. My purpose here is to provide a rationale for choosing ACT as an alternative therapeutic approach for psychosis. The theoretical basis for the following account will be RFT.

In line with its roots in traditional cognitive therapy, a typical CBTP approach might involve reality testing, the formulation of evidence for and against distressing beliefs and the generation of alternative explanations for psychotic symptoms (e.g., Kingdon & Turkington, 2002; Rector & Beck, 2002). All of these strategies exhibit a flavor of promoting rational, logical behavior, as well as of establishing a sense of reality versus non-reality against which different experiences can be measured. The aforementioned strategies all target the content of the patient’s mind, aiming to shift it from the irrational to the rational. In other words, psychotic thoughts or beliefs are targeted, with the aim of replacing them with, or changing them to, non-psychotic ones. ACT for psychosis (ACTp) does not target content, but rather context. This means that the issue is not whether a particular thought or belief is psychotic or not, but instead what its function is in the context of the broader behavioral repertoire. Importantly, ACTp treats all thoughts and beliefs in the same way, whether they are psychotic or not. The issue here is workability, meaning that the primary focus is the effectiveness of certain ways of responding with regard to the patient’s chosen values. Logic and rationality are likewise unimportant to the ACTp therapist, for the same reason. In fact, logic is often conceptualized as part of the problem, since it
often is a feature of the language traps that verbal behavior sets for us. Clinically speaking, following logic (or, stated in RFT terms, coherence) is exactly what a psychotic patient with paranoid delusions is doing when he is tapping shut the electrical outlets in his apartment in order to avoid surveillance by evil forces. Technically, he is probably following a self-generated rule (defined in the context of RFT as a verbally specified contingency making reference to antecedents, behavior, and consequence [Hughes & Barnes-Holmes, 2016a] – for example, “If I don’t make the surveillance stop I am at great risk”). Hence, while a CBTp therapist might use reality testing and help the patient to seek evidence for and against the belief that surveillance is taking place, an ACTp therapist would go straight to the workability of the behavior (taping the outlets shut and functionally similar behaviors) and, by extension, the workability of following the rule. The question of truth would not necessarily come up during this kind of work, nor would the question of what is and is not psychotic. Analyzing delusional beliefs in terms of rule-governed behavior allows for a more flexible approach from the therapist, since it is no different from a functional standpoint to analyzing a seemingly “normal” behavior. Like all functional analyses, it is focused on antecedents (i.e., the rule and other aspects of the context), behavior (i.e., tapping the outlets shut), and consequences (i.e., likely coherence as a conditioned reinforcer of following rules and, perhaps, also an emotional sense of relief from surveillance). It does not, however, dictate beforehand what psychological content should be altered. Bypassing the question of normality also lays the groundwork for a genuinely equal therapeutic relationship between therapist and patient, whereby the therapist’s thoughts are considered no more normal than the patient’s, since they are all just thoughts.

I would argue that one of the most salient features of a typical psychotic patient is the rigid over-reliance on self-generated rules (e.g., in the case of delusions) and all the problematic behavior that this entails. That is, the patient keeps engaging in rule-governed behavior even though such behavior is ineffective, because the context supporting this rule following is in itself so strong. Making sense, being rational, and being logical are all rewarded in human society. There exists some theoretical (McEnteggart, Barnes-Holmes, Dillon, Egger, & Oliver, 2017; Stewart, Stewart, & Hughes, 2016) and empirical (Monestès, Villatte, Stewart, & Loas, 2014) research backing this notion up, although the actual argument stems from clinical experience of this rigidity in therapeutic encounters with psychosis patients. Using therapeutic techniques that rely too heavily on instructions, as traditional CBTp might, risks establishing new rules that are either too rigidly adhered to, or else are discarded in favor of the old familiar ones (i.e., delusions). As an alternative, ACTp offers the possibility of directly focusing on the workability of particular instances of rule following in terms of how such rules affect the patient’s ability to live a valued life. While doing so, the patient is invited to explore alternative patterns of behavior, with the therapist always look-
ing out for rigidity. Rather than focusing on the contents of verbal processes, ACTp attempts to alter the context supporting such processes, thereby weakening the verbal relations that represent the very building blocks of psychological problems.

As discussed above, focusing clinical interventions on changing the content of a particular psychotic experience, such as delusions, is seen as risky from an RFT perspective, to the extent that it depends on the same kinds of rule rigidity that is seen as the basis of the problem. A similar argument can be made when it comes to another of the main symptoms of psychosis, namely auditory hallucinations, or voice hearing. In the above section on etiology, the cause of psychosis is described as partly genetic, partly environmental. From an RFT perspective (McEnteggart et al., 2017) one possible alternative way of explaining the environmental etiology of voice hearing is by referring to a disturbed development of the ability to relate to others, what is technically termed *deictic framing* in RFT language. In terms of risk factors listed in the etiology section above, this phenomenon would be a variant of the maltreatment risk factor.

A typically developing child learns how to relate stimuli in a vast number of ways, with increasing complexity (Hughes & Barnes-Holmes, 2016a). Usually beginning with responding to objects and events on the basis of frames of coordination (e.g., relating the written word CAT to an actual cat), relational framing develops with frames of opposition (e.g., cat is different from dog), frames of comparison (e.g., Chihuahuas are smaller than German shepherds), frames of hierarchy (e.g., German shepherds belong to the race dogs), frames of temporality (e.g., spring comes after winter), frames of causality (e.g., smoking causes cancer), frames of conditionality (e.g., showing up at work is a condition for getting paid), and deictic frames (e.g., I am here and you are there). This last way of framing events has been suggested to play a part in the development of voice hearing.

Referring to the fact that childhood trauma (e.g., emotional abuse or neglect) is a risk factor for developing psychosis, and the fact that a traumatic history is particularly common among psychosis patients who also hear voices, McEnteggart et al. (2017) propose that part of the putative trauma might involve significant others who are intrusive, over-controlling, or highly unpredictable. This, in turn, might lead to an overwhelming experience of others exerting control over one’s own psychological content. Facing this situation, the child might derive a different pattern of relational frames compared to a typically developing child. While the latter normally derives I-here-now versus others-there-then relations (i.e., makes a distinction between self and others from a here-now perspective), the child subjected to traumatizing abuse might derive others-here-now relations, as others dictate many aspects of experience. In other words, a relation of coordination is
derived between self and others, causing the child to develop a more loosely built sense of self. The resulting experience might be that one’s own perspective is difficult to differentiate from that of others. Thus, internal experiences (e.g., thoughts) might be responded to as if they were external. As McEntegart et al. (2017) point out, it is likely that the more one’s experience is coordinated with that of others, the more threatening others can become.

From a clinical standpoint, the above reasoning regarding the etiology of voice hearing gives some guidance as to which interventions are suitable and which might not be. McEntegart et al. (2017) argue that interventions should focus on relations with oneself and with others, aiming to train a coherent and distinct sense of self. This might be accomplished, for example, by using perspective taking exercises and by clarifying values (e.g., Törnke et al., 2016). Returning to the issue of targeting content versus targeting context, McEntegart et al. (2017) advise against using interventions designed to control voice content, as this might be similar to the originally problematic behavior of others exerting control over one’s psychological content.

From an RFT perspective, rigid rule following is conceptualized as one of the main features of the experience of psychosis. When used to underpin psychotherapy interventions, RFT also proposes, however, a way of establishing rule-governed behavior that is inherently flexible, and that can function to promote values-based living. Thus, while human verbal behavior might in some cases be a curse, as discussed above, RFT also attempts to capitalize on its capacity for being a blessing.

According to RFT, one specific form of rule-governed behavior, termed augmenting, has a particular potential for guiding behavior that is values-based, and also has a potential for competing with well-established and rigid rules that typically characterize a problematic behavior repertoire (Plumb, Stewart, Dahl, & Lundgren, 2009). Augmenting is defined as rule-governed behavior that change the impact of certain consequences (Barnes-Holmes et al., 2001). An example of an augmental might be: “It is important to me to take care of my physical health.” If such a statement actually promotes action in some form that improves or maintains physical health, it is thought to be rule-governed behavior in the form of augmenting. This is because the statement establishes taking care of one’s health as an important consequence. “Taking care of one’s health” is probably in a hierarchical relation with many different behaviors (i.e., there are many ways of taking care of one’s health), while “important” likely is in an equivalence relation with many other appetitive verbal stimuli (e.g., good, vital, etc.). So, as exemplified here, rules as stated in this way ideally paves the way for behavior that is flexible, as it offers many choices, and that leads to appetitive consequences. In order to actually promote action, they generally also have to be
supplemented with further, more concrete augmentals, where specific actions are connected to a sense of meaning (Villatte, Villatte, & Hayes, 2016), such as: “I will go for a run tonight, because it is important to me to take care of my health”.

Importantly, establishing flexible rule-governed behavior to promote values-based living is different from merely formulating goals. There is nothing inherently wrong with helping a patient formulate goals. In fact, it might be quite effective. However, rule-governed behavior as defined above moves goal formulation beyond its inherent rigidity. That is, to put it bluntly, a goal can be reached through a certain action and then action stops. A flexible rule, on the other hand, establishes a certain quality of action as inherently appetitive, and thereby 1) opens up an endless array of possible actions and 2) promotes continued action in that same direction.

In summary, the argument for ACT as an alternative approach for the treatment of psychosis rests on its ability to flexibly address any and all aspects within that spectrum by means of functional analysis, including verbal behavior analysis based on RFT, and a therapeutic standpoint not separated from the patient’s perspective in terms of what is or is not normal. This approach offers therapeutic tools (such as metaphor, experiential exercises and values work) that have a clear connection to the basic theory and do not establish the language traps that underlie behavioral rigidity in the first place.

ACT for Psychosis

Much like the case of CBT in relation to CBTp, ACTp shares basic features with ACT for other psychiatric conditions. That being said, a few adjustments for the psychotic population are usually recommended (e.g., Bach, 2004; Bloy, Oliver, & Morris, 2011; Morris, Johns, & Oliver, 2013; Pankey & Hayes, 2003). Generally speaking, interventions are more collaborative and psychoeducational when compared to the sometimes intensely experiential nature of traditional ACT (Pankey & Hayes, 2003). Due to the risk of exercises triggering quite dramatic psychotic symptoms, closed-eye exercises are in some cases avoided. Importantly, this is not to say that psychotic symptoms are inherently dangerous, since it is rather a question of maintaining trust as well as an effective therapeutic relationship. The exercises tend to be more focused on the external context than the internal, as the latter is often difficult for psychotic patients. There is also generally greater concern with regard to maintaining a proper pace, since many patients with psychosis experience quite severe cognitive deficits. Related to this are the need for frequent summaries, repetitions, simplification of exercises, and perhaps a shortened session length. Being more concrete and the use of physical props is also a way of adapting ACT to the psychotic population. Generally, more attention should be paid to establishing a therapeutic relationship, since is-
sues of trust may be particularly problematic for this patient group. As attentive readers might note, none of these adjustments really change the basic nature of ACT. Importantly, in individual cases, they might also be more or less relevant.

ACTp is considered to be an evidence-based treatment, with modest research support, by the American Psychological Association (Society of Clinical Psychology, n.d.-a). Further, a recent systematic review (Wakefield, Roebuck, & Boyden, 2018) concluded that ACTp has the potential to be an effective treatment modality, even when of a very brief duration (the included studies ranged from 2-24 sessions). However, the authors also note that many of the considered studies lack the methodological rigor, large sample sizes, proper blinding procedures, and long-term follow-ups required to build a more robust research base.

Bach and Hayes (2002) published the first trial of ACTp, in which they investigated its effect on a group of inpatients \( (n = 80) \), when compared to treatment as usual (TAU). The patients received four sessions of ACTp while being treated on a psychiatric ward. The results showed a significantly lower rehospitalization rate over four months among those patients who received ACTp when compared to those who received TAU. Interestingly, the ACTp group reported psychotic symptoms to a higher degree after therapy, although they noted the symptoms to be less believable, when compared to the control group. This is, however, to be expected given the emphasis within the ACT model on acceptance and openness to experience, no matter what that experience is. In a follow-up study of the long-term effects (Bach, Hayes, & Gallop, 2012), the lower rehospitalization rate remained significant at the one-year follow-up point. Gaudiano and Herbert (2006) replicated the study by Bach and Hayes (2002) with a smaller sample \( (n = 40) \), and an active control condition, and reported similar results, although the difference in the rehospitalization rate between the groups was not significant. However, they found significant differences between the groups in terms of the measures of distress related to hallucinations. A mediation study (Gaudiano, Herbert, & Hayes, 2010) showed that the believability of hallucinations was a statistically significant mediator of the effect of hallucination-related distress. Currently, Gaudiano et al. (2017) are preparing for a larger-scale clinical trial of ACT for inpatients, which will combine individual and group sessions and use enhanced TAU as a comparison. Additionally, the authors plan to use ward staff as study therapists.

Moving on to outpatient groups, in a randomized trial focusing on emotional dysfunction following psychosis in an outpatient sample (White et al., 2011), ACTp was shown to reduce depressive symptoms significantly when compared to the control group. In a patient sample with psychosis and childhood trauma, Spidel, Lecomte, Kealy, and Daigneault (2018) found decreased
overall symptoms and lessened anxiety in patients randomized to ACT treatment (group modality) when compared to the control group participants who received TAU. Interestingly, there was no significant difference between the groups in terms of the trauma-related symptoms. In a follow-up study (Spidel, Daigneault, Kealy, & Lecomte, 2019), the authors found that the level of trauma severity pre-treatment did not moderate the effects of the treatment, which suggests that ACT might be well suited for those with a greater severity of childhood maltreatment. However, they further noted that about a third of patients did not respond to the treatment at all. Also evaluating ACT as an intervention for co-morbid psychosis and trauma, Jansen and Morris (2017), in a case series, reported a clinically significant improvement in the measures of post-traumatic stress disorder (PTSD) following 12 sessions of individual treatment.

In an open feasibility trial of a combination of ACT and behavioral activation (BA) together with pharmacotherapy, Gaudiano, Nowlan, Brown, Epstein-Lubow, and Miller (2013) demonstrated an improvement among patients with depression coupled with psychotic symptoms. The patients improved with regard to their depressive and psychotic symptoms, and the changes were clinically significant. Further, the treatment was seen as both credible and acceptable.

In a well-designed randomized controlled trial (RCT) comparing acceptance-based CBT to befriending and a waitlist condition for people with command hallucinations, Shawyer et al. (2012) reported no significant differences between the two active conditions in terms of primary outcome measures (confidence to resist obeying commands and confidence to cope with commands). Both groups improved following treatment. When combined, and compared to the waitlist condition, however, a significant difference was found. The authors discuss how befriending, rather than merely being seen as a control for therapist contact, might be seen as a viable intervention on its own. Further, they discuss how CBTp shows more modest effects in more recent, high-quality trials when compared to earlier research.

Shawyer et al. (2017) and Thomas et al. (2014 [study protocol]) investigated the effects of ACT when compared to befriending in a group of chronically ill patients with medication-resistant psychosis. Their results showed no significant differences between the groups in terms of the primary outcome measure (Positive and Negative Syndrome Scale, PANSS), while process-based changes could not be detected, as was the case in previous studies. However, the participants in the ACT group reported a higher degree of satisfaction with therapy, as well as greater subjective benefit.

The overall aim of ACT is to promote psychological flexibility (Hayes et al., 1999; Hayes et al., 2006). In some studies of ACT for psychosis, changes in
the outcome measures were indeed mediated by changes in psychological flexibility (Bach et al., 2013; Gaudiano et al., 2010; White et al., 2011). Morris, Garety, and Peters (2014) further showed that the process of psychological flexibility was related to the levels of depressive and anxiety symptoms observed in a group of voice hearers.

In an uncontrolled feasibility study, Johns et al. (2016) piloted an ACT for psychosis group protocol in a community setting. Their results showed an improvement in functioning and mood, and, as predicted by the ACT model, concurrent changes in psychological flexibility. The authors stress the need for future controlled studies. ACTp has also been researched from the perspective of patients who have undergone therapy. In a qualitative study using a thematic analysis, Bacon, Farhall, and Fossey (2014) found that while some patients experienced aspects of therapy as difficult to use or understand, all of those interviewed described some positive outcomes. Mindfulness, acceptance, defusion, and values work were described as being the most useful therapy components.

There have also been attempts to combine ACT with other third-wave approaches. In a case study, Baruch, Kanter, Busch, and Juskiewicz (2009) showed how ACTp might be combined with techniques from a related third-wave therapy known as functional analytic psychotherapy (FAP, Kohlenberg & Tsai, 1991). FAP focuses specifically on the therapeutic relationship, and it uses in-session client and therapist behavior to differentially reinforce clinically relevant behaviors (Baruch et al., 2009). In the case of psychosis, the authors suggest that using FAP in addition to ACTp might represent a useful means of handling, for example, paranoia during a session.

In addition to controlled research, a number of case studies concerning ACTp have been published. Razzaque (2013) described the benefits of ACTp for severely mentally ill patients who engage in acute self-harm and violence in an inpatient setting, while Bloy, Oliver, and Morris (2011) and Veiga-Martínez, Pérez-Alvarex, and García-Montes (2008) reported on ACTp treatment in outpatient contexts for patients with paranoia, delusions, and auditory hallucinations.

In summary, ACTp research has previously been implemented in several contexts, targeting both inpatients and outpatients, using various methodologies, and looking into mediating processes, outcomes, client experiences, and more. The reviewed studies are summarized in Table 2. All in all, the research base for ACTp seems promising, although there remains a need for further and larger-scale trials.
<table>
<thead>
<tr>
<th>Study design</th>
<th>Design summary</th>
<th>Result summary</th>
<th>Effect size</th>
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<tr>
<td><strong>Bach &amp; Hayes (2002)</strong></td>
<td>RCT</td>
<td>80 psychotic inpatients randomized to 4 sessions of ACT or TAU.</td>
<td>ACT participants rehospitalized significantly less during four-month follow-up.</td>
</tr>
<tr>
<td><strong>Gaudiano &amp; Herbert (2006)</strong></td>
<td>RCT</td>
<td>40 psychotic inpatients randomized to average of 3 sessions of ACT or ETAU.</td>
<td>Non-significant effects on rehospitalization; significant effect for ACT group on distress related to hallucinations.</td>
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<tr>
<td><strong>Veiga-Martínez et al. (2008)</strong></td>
<td>Case study</td>
<td>ACT applied to 30-year-old male outpatient with schizophrenia.</td>
<td>Patient improved as measured by the BPRS, more socially active as shown by social network map, though improvements could not be reliably attributed to ACT.</td>
</tr>
<tr>
<td><strong>Baruch et al. (2009)</strong></td>
<td>Case study</td>
<td>ACT and FAP combined applied to 21-year-old male outpatient with depression, delusions and hallucinations.</td>
<td>Decreased score on the BDI-II, still within clinical range on the OQ-45, improved social relationships. Improvements could not be reliably attributed to ACT+FAP.</td>
</tr>
<tr>
<td><strong>Gaudiano et al. (2010)</strong></td>
<td>Mediation study</td>
<td>Data from Gaudiano &amp; Herbert (2006) used.</td>
<td>Effect on hallucination-related distress statistically mediated by believability of hallucinations at post-treatment.</td>
</tr>
<tr>
<td><strong>Bloy et al. (2011)</strong></td>
<td>Case study</td>
<td>ACT applied to 32-year-old male outpatient with paranoid delusions, delusions of reference, thought broadcasting and thought insertion.</td>
<td>Positive response overall, decrease in general distress, depression and psychotic symptomatology, though this could not be reliably attributed to ACT.</td>
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<tr>
<td>Study design</td>
<td>Design summary</td>
<td>Result summary</td>
<td>Effect size</td>
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<tr>
<td>White et al.</td>
<td>RCT</td>
<td>27 psychotic outpatients randomized to ten sessions of ACT or TAU. Significant more ACT participants changed from depressed to non-depressed; significantly greater reduction in negative symptoms among ACT participants.</td>
<td><em>d</em> = 0.43; <em>d</em> = 0.47</td>
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<tr>
<td>(2011)</td>
<td></td>
<td></td>
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<tr>
<td>Bach et al.</td>
<td>Long-term follow-up</td>
<td>One-year follow-up of data from Bach &amp; Hayes (2002). Results from previous study remain significant at one-year follow-up (ACT participants rehospitalized significantly less).</td>
<td><em>d</em> = 1.04</td>
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<tr>
<td>(2012)</td>
<td></td>
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<tr>
<td>Shawyer et al.</td>
<td>RCT</td>
<td>43 outpatients with command hallucinations randomized to either 15 sessions of CBT augmented with ACT or befriending. No significant group differences on primary or secondary outcome measures (eg. PANSS).</td>
<td><em>d</em> = 0.60</td>
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<tr>
<td>(2012)</td>
<td></td>
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<td>(PANSS total at endpoint)</td>
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<tr>
<td>Bach et al.</td>
<td>Mediation study</td>
<td>Used combined data from Bach &amp; Hayes (2002) and Gaudiano &amp; Herbert (2006). Difference in days to rehospitalization shown to be significantly mediated by believability of psychotic symptoms.</td>
<td>n/a</td>
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<tr>
<td>(2013)</td>
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<tr>
<td>Gaudiano et al.</td>
<td>Feasibility trial</td>
<td>14 outpatients with depression and psychotic features provided with up to 6 months of ADAPT. Treatment reported to be credible and acceptable; clinically significant improvements in depressive and psychotic symptoms, and psychosocial functioning.</td>
<td><em>d</em> = 3.33</td>
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<td>(2013)</td>
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<td></td>
<td>(total BPRS score)</td>
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<tr>
<td>Razzaque</td>
<td>Case study</td>
<td>ACT protocol focused on violence towards self or others applied to three inpatients (one with schizoaffective and two with bipolar disorder). Reduction in violent behavior in all three patients, though this could not be reliably attributed to ACT.</td>
<td>n/a</td>
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<tr>
<td>(2013)</td>
<td></td>
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<tr>
<td>Bacon et al.</td>
<td>Qualitative, thematic analysis</td>
<td>Semi-structured interviews with nine outpatients with schizophrenia or schizoaffective disorder regarding hypothesized active therapeutic processes of ACT. Mindfulness, defusion, acceptance and values work described as most useful therapy components.</td>
<td>n/a</td>
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<tr>
<td>(2014)</td>
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<td>Study design</td>
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<tr>
<td>Morris et al. (2014)</td>
<td>Cross sectional</td>
<td>50 outpatients with auditory hallucinations administered measures of acceptance, mindfulness skills, voice believability, thought control, depression and anxiety.</td>
<td>Psychological flexibility accounted significantly for variance in depression and anxiety; nonjudgemental acceptance contributed to prediction of emotional and behavioral resistance to voices.</td>
</tr>
<tr>
<td>Johns et al. (2016)</td>
<td>Feasibility study</td>
<td>65 (completers) psychosis outpatients assigned to 4 weeks of group ACT.</td>
<td>Improvements in functioning and mood, participants scored highly on measures of acceptability and satisfaction with intervention; conclusions limited by un-controlled pre-post design.</td>
</tr>
<tr>
<td>Jansen &amp; Morris (2017)</td>
<td>Case series</td>
<td>Three outpatients with first-episode psychosis and comorbid PTSD administered 12 sessions of ACT.</td>
<td>General acceptability and satisfaction with intervention. Reliable improvements in all patients on measures of PTSD, anxiety, depression and psychological flexibility.</td>
</tr>
<tr>
<td>Shawyer et al. (2017)</td>
<td>RCT</td>
<td>96 outpatients randomized to ACT or befriending, measured for overall mental state post-treatment (PANSS).</td>
<td>No significant differences between groups on measures of overall mental state.</td>
</tr>
<tr>
<td>Spidel et al. (2018)</td>
<td>RCT</td>
<td>50 outpatients with psychosis and childhood trauma randomized to 10 sessions of group ACT or TAU.</td>
<td>Significantly greater change on measures of acceptance, psychiatric symptoms, anxiety and help seeking in ACT group.</td>
</tr>
<tr>
<td>Wakefield et al. (2018)</td>
<td>Systematic review</td>
<td>13 ACTp studies reviewed with regard to quality of the methodology and potential benefits.</td>
<td>Review indicates the intervention has potential for different sub-groups and in various lengths and formats, but many studies are limited by bias and poor methodological quality.</td>
</tr>
<tr>
<td>Spidel et al. (2019)</td>
<td>Follow-up study</td>
<td>Using data from Spidel et al. (2018), potential moderation by trauma severity, and different change profiles among ACT participants were investigated.</td>
<td>Trauma severity did not moderate treatment effect; three different outcome clusters emerged, one of which (36.7%) did not benefit from treatment at all.</td>
</tr>
</tbody>
</table>
Note: ACT = Acceptance & Commitment Therapy; ACTp = ACT for psychosis; ADAPT = Acceptance-based Depression and Psychosis Therapy; BDI-II = Beck Depression Inventory; BPRS = Brief Psychiatric Rating Scale; ETAU = Enhanced Treatment as Usual; FAP = Functional Analytic Psychotherapy; N/a = not applicable; OQ-45 = Outcome Questionnaire-45; PANSS = Positive and Negative Syndrome Scale; PTSD = Post-traumatic Stress Disorder; RCT = Randomized Controlled Trial; TAU = Treatment as Usual.
Other Third-Wave Therapies for Psychosis

Mindfulness, which is often defined as “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” (Kabat-Zinn, 1994, p. 4), is a treatment component often included in both ACT and other psychological treatments for psychosis. Three meta-analyses of mindfulness-based interventions for psychosis have been published to date. In the first one (Khoury, Lecomte, Gaudiano, & Paquin, 2013), the authors conclude that mindfulness interventions have a moderate effect on negative symptoms ($n = 12; \text{Hedge's } g = .52$), but a lesser effect on positive symptoms. The effects are comparable to those of traditional CBTp (Wykes et al., 2007). Further, Khoury et al. (2013) note that the average rate of attrition in the included studies (12.14%) was relatively small when compared to other studies concerning cognitive and behavioral therapies.

In a second meta-analysis (Cramer, Lauche, Haller, Langhorst, & Dobos, 2016), the results provide evidence of moderate improvements in psychotic symptoms and the rate of hospitalization following mindfulness-based interventions when compared to TAU ($n = 8; \text{SMD} = .57$). These findings can be seen as partly in line with those of Khoury et al. (2013). The identified differences are attributed to the fact that more RCTs were available for the second analysis, while the studies used somewhat different inclusion criteria and methods of analysis.

The most recent meta-analysis (Louise, Fitzpatrick, Strauss, Rossell, & Thomas, 2018), which included ten studies, concluded that third-wave interventions are efficacious in the case of psychosis ($g = 0.29$). The authors, similar to Khoury et al. (2013), note that the effects are comparable to those reported in prior meta-analyses of CBTp (Jauhar et al., 2014; Wykes et al., 2007). The effects are modest, and they seem to stem from mindfulness-based interventions to a larger extent than from ACT interventions. The authors discuss how ACT might prove too challenging for a patient group with such severe cognitive difficulties. They also discuss, however, how choosing symptom measures as the primary outcome might miss the target for many third-wave interventions, since they generally focus on functioning more generally, or on one’s relationship to symptoms. Indeed, many prior studies (including Bach and Hayes [2002]) were excluded. Martins et al. (2017) discuss third-wave interventions for psychosis in a similar way. While concluding that such interventions do offer some benefits, the authors note that even though the conceptual perspective on treatment has changed, the outcomes are still symptom-focused.
Group-based mindfulness interventions for severely mentally ill patients have shown some promise in several trials. For instance, Chadwick et al. (2016) investigated whether a group mindfulness-based intervention improved the general level of psychological distress (primary outcome), voice-related distress, perceived controllability of voices, and recovery in patients with distressing voices. The authors did not find any significant effects in terms of the primary outcome, although there were significant between-group post-intervention effects with regard to the secondary outcomes. A mindfulness-based psychoeducation program for schizophrenia has been proven effective in terms of improving patients’ insight into their illness, reducing the severity of symptoms, improving functioning, and reducing the number and length of rehospitalizations when compared to the control group (Chien & Lee, 2013), with the improvements remaining stable at the two-year follow-up (Chien & Thompson, 2014).

Abba, Chadwick, and Stevenson (2008), in a qualitative study using grounded theory methodology, offered a theory to describe how patients relate differently to psychosis following mindfulness practice. The process was proposed to involve three stages. During the first stage, the patients shifted from being lost in psychosis to being centered in the moment, thereby experiencing voices and thoughts in the here-and-now. During the second stage, the patients learned to allow their symptoms to come and go without a struggle, rather than engaging in habitual circles of struggle. Then, during the third stage, the patients achieved acceptance of their psychotic experience, and hence acceptance of themselves, which enabled them to reclaim their power.

Braehler et al. (2013) conducted a feasibility trial of compassion-focused therapy (CFT) in psychosis, and they concluded that CFT can be considered a safe and acceptable intervention based on the low attrition rates and high attendance rates (18% and 82%, respectively). The identified improvement was significantly greater among the CFT participants when compared to TAU participants.

After reviewing the evidence found to date concerning psychological therapies for voices, and concluding that the inclusion of psychological therapy in addition to routine care is beneficial, Thomas et al. (2014) offered some recommendations for future research. The authors suggest that future studies should focus on specific therapeutic processes, thus moving beyond (mere) overall efficacy. They further suggest looking into specific processes associated with voices and developing relevant interventions. This would contrast with translating existing protocols (e.g., for anxiety and depression) for the treatment of voices. Thomas et al. (2014) also suggest developing better outcome measures, for example, capturing the impact of voices on emotional wellbeing and functioning. Additionally, the authors underline the need to understand individual differences among voice hearers, as well as to focus...
more on voice hearing in populations beyond schizophrenia. Indeed, the prevalence of auditory hallucinations in those with Parkinson’s disease (10%), obsessive-compulsive disorder (14%), and PTSD (40%–50%), to name just a few diagnoses, requires consideration. Finally, Thomas et al. (2014) stress the importance of issues concerning implementation. This latter aspect is also discussed by Pfammatter (2006), who stresses the interdependence that exists between any therapeutic approach and the general mental health care system. No matter how effective a treatment might prove to be during trials, implementation in real-world contexts remains key.

Models of Therapy in Inpatient Care

Integrating psychological perspectives into the ward milieu represents a significant challenge, on many levels (Folke, Kanter, & Ekselius, 2016). Folke et al. (2016) propose clinical, cultural, organizational and competence barriers. Clinical barriers refer to the fact that inpatients often suffer from acute crises and multiple diagnoses, while evidence-based treatment protocols are generally developed for less acute, and diagnosis specific, problems. Cultural barriers refer, for example, to the ward traditionally promoting an observational rather than an interactional stance. Organizational barriers have to do, for example, with lack of time allocated for therapeutic work, and unstable staffing conditions. Competence barriers refer to the scarcity of staff members formally educated to conduct psychotherapy. As noted by Jacobsen, Hodkinson, Peters, and Chadwick (2018) in a recent review of psychological therapies for psychosis within acute psychiatric inpatient settings, a further challenge concerns the actual evaluation of the various available interventions. The authors conclude that, based on the studies included in the review, there exists a clear need for improvement in methodological rigor.

The aim of therapy is often to cultivate both acceptance and tolerance of difficult experiences, while traditional ward interventions often follow a medical model, essentially aiming to achieve experiential control and symptom reduction (Jacobsen, Morris, Johns, & Hodkinson, 2011). This might be especially true during times of high stress, when patients are in acute crises. As a means of coping with this, the staff on the wards tend to become highly task-driven and focused on symptom management (Cowdrill & Dannahy, 2009). Adding psychological treatment to the inpatient milieu requires a flexible model due to the often unpredictable and somewhat chaotic context of a psychiatric ward, as well as the fact that the patient group is heterogeneous in terms of both diagnosis and severity of illness. Further, if the aim is to use the untapped potential within staff groups not traditionally used as therapists, it is hugely advantageous if the chosen model is relatively easy to learn.
Therapeutic work in the inpatient context can occur on three levels, namely direct work with the individual, indirect work with the team surrounding the individual, and strategic work with the organization or care system (McGowan, 2009; Sambrook, 2009). Direct work, that is, psychotherapy in various forms, has to adapt to the challenges of the inpatient context, as discussed above. Indirect work often occurs through collaborations with other ward staff. The ward rounds might represent one central arena in which such work could occur. Supervising or training ward staff is another form of indirect work. This also touches upon strategic work, since improving the competence of the workforce through training and supervision is intended to positively affect the wider organizational culture.

Although different forms of CBT have shown promise for those seriously mentally ill patient groups most often treated on psychiatric wards, adapting the treatment protocols to the inpatient setting is highly challenging. While one could optimistically describe an inpatient ward as an “ideal environment for the functional analysis and formulation of behavior, with its endless opportunities for assessment and observation” (Kennedy, 2009, p. 61), there are also obvious challenges in terms of providing psychological treatment in such a ward in a systematic way. McGowan (2009) offers a summary of these challenges. The brevity of ward stays is the first hurdle to be overcome. Often, we have only a few days in which to offer a therapeutic intervention. The second challenge concerns the uncertainty of the time frame. We seldom know the length of a patient’s stay in advance, and even if such information is available, it can often change quite rapidly. The third challenge is the differing levels of medication. As McGowan (2009) notes, not only are patients often prescribed a higher dosage of medication while they are hospitalized, but additional, as needed (pro re nata, PRN) medication is often prescribed as well. PRN medication is often essential for a patient’s health and recovery from an acute state of illness, although just as often it is at odds with the psychological interventions we aim to deliver (e.g., exposure). The fourth point brought up by McGowan (2009) concerns the appropriateness (or otherwise) of the hospital as an environment for improvement. If, as is often the case, the containment of risk is the primary motivation for hospitalization, this removal of the patient’s responsibility is at odds with the fundamental tenets of many CBT treatment models.

In order for psychological treatment to work in the inpatient setting, whether it is in the direct form, the indirect form, or delivered through organizational work, radical adaptations are necessary (McGowan, 2009). The flexibility of the therapist in charge is of the utmost importance here. The timing of the intervention is a delicate matter, meaning that while a patient might reject the notion of therapy at the point of first contact, the therapist should be open to approaching him/her again at a future time (Freemantle & Clarke, 2009). Sambrook (2009) also underlines the necessity of a therapist being able to
handle setbacks with both humor and acceptance. This might sound like a minor point, but in my experience it is essential. To illustrate this, I would like to use the brilliant metaphor formulated by Clarke and Wilson (2009), that is, the sandcastle model of working as a therapist in an acute hospital:

“You do some training, set up reflective practice systems, collaborate with one or two brilliant staff, have the odd success – you build your sandcastle. Then everything changes. There are one or two untoward incidents; a few difficult admissions; the regular staff leaves or go off sick, so the ward is staffed by ‘agency’; even your allies get new jobs; the psychiatrist gets risk averse – the tide comes in and sweeps it away – so, you start building another sandcastle! The important thing is to avoid getting discouraged and to keep building. The service users do not have the luxury of leaving this particular beach” (p. 198).

Despite the challenges described above, inpatient CBT has shown promise among various patient groups and in various modalities. Cuijpers et al. (2011), in a meta-analysis, stated that while the effect sizes may be small ($g = 0.29$), psychological treatments have a robust effect on depression in depressed inpatients. BA (Jacobson, Martell, & Dimidjian, 2006), a CBT model developed for the treatment of depression, has shown promise when delivered in an inpatient context (Folke et al., 2015; Hopko et al., 2003). Folke, Hursti, Tungström, Söderberg and Ekselius (2015) have suggested that BA, which shares many features with ACT, is a particularly suitable model for integration into inpatient care due to its relative simplicity. Indeed, preliminary results suggest that the model is feasible as an intervention during inpatient care, as well as offering a suitable bridge between inpatient and outpatient care.

Although the prior research concerning inpatient psychotherapy has mainly dealt with different varieties of CBT (e.g., the meta-analysis by Cuijpers et al. [2011]), there are also examples of the use of psychodynamic therapy for depression in the inpatient context. For instance, de Roten et al. (2017), in a randomized controlled trial of brief psychodynamic therapy for inpatients, as compared to TAU, found the post-treatment effect sizes in terms of the severity of depression to be in the small to medium range. As the authors point out, these results are comparable to those reported by Cuijpers et al. (2011). Additionally, in an observational study conducted in a naturalistic context evaluating the effects of staffing an inpatient ward (mixed diagnoses) with a psychologist who is trained in intensive short-term dynamic psychotherapy (ISTDP), Abbass, Town, and Bernier (2013) showed promising results. One aim of the clinic where their study was carried out was to reduce the amount of electroconvulsive therapy (ECT) administered to patients. As a result of the initiative, a mean of nine ISTDP sessions were provided to 33 inpatients during the first 1.5 years. When comparing the ISTDP ward with a compara-
ble neighboring ward, the percentage of patients receiving ECT was reduced by 51.5% in the ISTDP ward, while it increased by 30.5% in the control ward, one year after the introduction of ISTDP. Further, the average length of stay on the ISTDP ward decreased by 23%, while it increased by a mean of 15.8% on the control ward.

Drury, Birchwood, Cochrane, and MacMillan (1996a, 1996b) published the first trial of CBTp for the acute phase of psychosis in inpatients. Using a protocol that focused on psychotic beliefs, the distress they cause, and the evidence for such beliefs, the authors found that patients treated with CBTp showed a decline in their positive symptoms when compared to the control group. Although the positive symptoms actually declined significantly in both groups, the decline was significantly greater in the CBTp group. The treatment was delivered in a combined group and individual format. The treatment was also shown to positively affect symptoms not actively targeted by the protocol, such as dysphoria and insight (Drury et al., 1996b). In a five-year follow-up study, Drury, Birchwood, and Cochrane (2000) reported that the effects of the therapy were enduring in patients who had experienced a maximum of one relapse.

As described more extensively above, ACTp has also proven efficient in an inpatient context, with two randomized trials (Bach & Hayes, 2002; Gaudiano & Herbert, 2006) showing a reduced risk of rehospitalization and reduced distress related to hallucinations following a brief course of ACTp.

Kösters, Burlingame, Nachtigall, and Strauss (2006), in a meta-analytic review of the effectiveness of inpatient group psychotherapy, reported beneficial effects in both controlled (mean Cohen’s $d = 0.31$) and pre-post-data studies (mean Cohen’s $d = 0.59$). Generally speaking, the mood disorder patients fared better when compared to the patients with schizophrenia, PTSD, and mixed diagnoses. Owen, Speight, Sarsam, and Sellwood (2015) conducted a literature review concerning group CBTp in acute care. The number of studies included was small ($n = 14$), and they varied in terms of their overall quality and methodology. This was seen as reflecting the harsh reality of conducting therapy and research in a real-world inpatient context, since the inclusion criteria for the review were broad. Thus, the included studies might have small samples, lack control groups, use CBT manuals tailored to a specific context and thus make it difficult to ensure that the same treatment was delivered across the studies, etc. Despite this, the authors were able to draw a number of overall conclusions based on the evidence: CBTp seems to be acceptable to patients, as shown in the favorable responses to the satisfaction measures; CBTp has the potential to reduce symptom-related distress by providing new knowledge of, and a sense of control over, symptoms; CBTp has the potential to improve patients’ overall quality of life, as shown in the improved psychosocial functioning. In a con-
trolled quasi-experimental study combining quantitative and qualitative analyses, Owen, Sellwood, Kan, Murray, and Sarsam (2015) compared a group of inpatients who were receiving group CBTp to a control group who were receiving TAU. The results indicated a trend towards a greater reduction in distress in the experimental group, as well as significantly improved confidence over time in the experimental group. Yet, the results were inconclusive in terms of the changes seen in the positive symptoms of psychosis. Overall, service users and staff alike perceived the intervention as feasible, acceptable, and valued.

Much of the prior research on inpatient psychotherapy has been small scale, or else taken the form of feasibility studies. Jacobsen et al. (2011), in a small pilot study, demonstrated the feasibility and acceptance among patients with chronic and treatment-resistant psychosis of introducing a group-based mindfulness intervention on a specialist tertiary inpatient ward. In an RCT concerning feasibility, Wood, Byrne, Enache, and Morrison (2018) described a CBT-based intervention for psychotic inpatients experiencing stigma. The provided CBT was compared to an active control condition (psychoeducation). Both interventions appeared to benefit the patients, and conducting an RCT in order to evaluate psychological interventions in an inpatient milieu was considered generally feasible. In an exploratory study investigating the effect of a group CBT program for chronically psychotic forensic inpatients, Hornsveld and Nijman (2005) found only marginally significant improvements among the experimental participants in terms of their social skills and negative coping behavior. The authors also reported practical difficulties in administering the program, with the patients attending only irregularly and showing little motivation.

York (2007), in a qualitative study of the experiences of participants in an inpatient mindfulness group, found mindfulness to be a useful therapeutic addition to the standard acute inpatient care. Learning to accept problematic thoughts and feelings, as well as exposing oneself to them, might prove quite different from the psychiatric norm of controlling and avoiding negative thought content. In fact, the intervention was seen as being a markedly different approach to, and sometimes even in conflict with, standard care, although it was considered potentially complementary. As York (2007) notes, such friction can lead to useful debate.

In a pilot evaluation study, Durrant, Clarke, Tolland, and Wilson (2007) reported the preliminary effectiveness of a CBT intervention tailored specifically to an acute ward context. Using elements taken from interactive cognitive subsystems theory, dialectical behavior therapy, and other mindfulness-based psychotherapy approaches, the authors showed that the admitted individuals (who had various diagnoses) could make sense of their situation and take responsibility for their mental health difficulties. The results were re-
ported despite the study facing the typical methodological challenges found in the inpatient context, such as data collection difficulties.

In the literature, there are also descriptions of attempts to use therapists who lack extensive formal psychotherapy training in inpatient initiatives. For instance, Salberg, Folke, Ekselius, and Öster (2018) showed that nurse-led BA groups were perceived as positive by the majority of both patients and staff members. Rieu et al. (2011) reported the preliminary efficacy of an ultra-brief inpatient version of a CBT model for depression delivered by psychiatry residents. Stein and Jacobo (2013) described how they train psychiatry residents in basic, brief psychotherapy techniques, which are tailored especially to the inpatient context. They use four principles to summarize the essence of their model, which is primarily CBT-based: support (focusing on therapeutic alliance and validation), affective experience and expression (e.g., differentiating between emotions), chain analysis (understanding factors influencing one’s behavior), and relational styles/maladaptive relational patterns (assessing interpersonal functioning).

Turning now to studies conducted from a user’s perspective, the picture being painted is unfortunately quite grim. Walsh and Boyle (2009), making the case for user-led research, report the results obtained from focus groups conducted with inpatients on psychiatric wards across the United Kingdom. The primary role of the staff of such wards, as experienced by these patients, was to administer medication and ensure the ward rules were followed. When approached by patients asking for personal time, staff members often answered they had no time available. The patients further felt uninvolved in the formulation of their care plans, and their access to specialist services, such as psychologists and psychotherapists, was severely lacking.

A summary of the inpatient psychotherapy studies included in the review is found in Table 3.
<table>
<thead>
<tr>
<th>Study design</th>
<th>Study design summary</th>
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<th>Effect size</th>
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<tr>
<td>Drury et al. (1996a) RCT</td>
<td>40 psychotic inpatients randomized to either combined group-individual CT, or a control condition with matched hours of informal support.</td>
<td>Significant decline in positive symptoms for both groups, though significantly greater for CT group.</td>
<td>$d = 1.49$ (observer-rated positive symptoms for CT group between admission and week 12)</td>
</tr>
<tr>
<td>Drury et al. (1996b) RCT</td>
<td>Used the same sample as Drury et al. (1996a), but used extended definition of recovery, including dysphoria, insight and psychotic thinking.</td>
<td>Survival analysis showed CT led to more rapid recovery (25-50% reduction) during 6-month follow-up, irrespective of definition.</td>
<td>n/a</td>
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<tr>
<td>Drury et al. (2000) Follow-up study</td>
<td>Five-year follow-up of data ($n = 34$) from Drury et al. (1996a).</td>
<td>Significantly less residual positive symptoms in CT group, but only for those with a maximum of one relapse.</td>
<td>$g = 3.03$ (positive symptoms for CT group between week 2 and five-year follow-up)</td>
</tr>
<tr>
<td>Bach &amp; Hayes (2002) RCT</td>
<td>80 psychotic inpatients randomized to 4 sessions of ACT or TAU.</td>
<td>ACT participants rehospitalized significantly less during four-month follow-up.</td>
<td>$d = 0.79$</td>
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<tr>
<td>Hopko et al. (2003) RCT</td>
<td>25 inpatients with major depression randomized to two weeks of BA or supportive therapy.</td>
<td>Significantly greater reduction in depressive symptoms in BA group.</td>
<td>$d = 0.73$</td>
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<tr>
<td>Hornsveld &amp; Nijman (2005) Quasi-experimental pre-post study</td>
<td>16 inpatients with psychosis participated in group CBT program in forensic setting over course of one year, and were compared to 16 non-randomized controls.</td>
<td>Significant improvement in CBT group on measures of social skills and negative coping behavior.</td>
<td>$d = 1.07; d = 0.96$</td>
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<tr>
<td>Gaudiano &amp; Herbert (2006)</td>
<td>RCT</td>
<td>40 psychotic inpatients randomized to average of 3 sessions of ACT or ETAU.</td>
<td>Non-significant effects on rehospitalization; significant effect for ACT group on distress related to hallucinations.</td>
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<tr>
<td>Kösters et al. (2006)</td>
<td>Meta-analysis</td>
<td>Included 24 controlled and 46 pre-post studies of inpatient group therapy for various diagnoses.</td>
<td>Treatment deemed beneficial overall, greater improvement among mood disordered compared to other patients.</td>
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<tr>
<td>Durrant et al. (2007)</td>
<td>Pilot study</td>
<td>14 inpatients with depression, personality disorder and psychoses received between 1 and 8 sessions of CBT. No control group.</td>
<td>Significant improvement on measures of self-efficacy and internal locus of control.</td>
</tr>
<tr>
<td>York (2007)</td>
<td>Qualitative interview study</td>
<td>8 inpatients with bipolar disorder, depression, personality disorder, schizophrenia and substance abuse interviewed semi-structurally regarding experiences of participating in mindfulness group.</td>
<td>Thematic analysis revealed themes related to cognitive changes, concentration, sense of peace, acceptance, exposure to problem thoughts, awareness, self-management, post-discharge use of techniques, negative experiences and medication.</td>
</tr>
<tr>
<td>Walsh &amp; Boyle (2009)</td>
<td>Focus group study</td>
<td>Ten focus groups with service users, exploring ways of coping with illness and how inpatient care facilitates.</td>
<td>Content analysis revealed main areas of concern being information, communication, relationships, activities, self-help, care plan involvement, and physical environment.</td>
</tr>
<tr>
<td>Cuijpers et al. (2011)</td>
<td>Meta-analysis</td>
<td>12 studies of psychological treatment for inpatients with depression included in analysis.</td>
<td>Psychological treatment showed a significant additional effect on depression compared to TAU alone.</td>
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<tr>
<td>Jacobsen et al. (2011)</td>
<td>Feasibility study 8 inpatients with psychosis attended between 1 and 6 group mindfulness sessions.</td>
<td>Intervention found to be acceptable and tolerated by participants.</td>
<td>n/a</td>
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<tr>
<td>Rieu et al. (2011)</td>
<td>RCT 22 inpatients with major depression randomized to 6 sessions of CBT or TAU with matched contact time.</td>
<td>Improvement in both groups, though significantly greater such in CBT group on one outcome measure (HAM-D).</td>
<td>$d = 1.31$ (pre-post treatment total HAM-D score for CBT group)</td>
</tr>
<tr>
<td>Abbass et al. (2013)</td>
<td>Observational study, non-randomized pre-post ISTDP-trained therapist was employed at mixed diagnoses ward, and offered therapy routinely to patients.</td>
<td>Significant improvement on both main outcome measures; patients on experimental ward required less ECT treatment compared to control ward.</td>
<td>$d = 0.74; d = 0.39$ (mean change on measure of symptoms and interpersonal problems, respectively)</td>
</tr>
<tr>
<td>Folke et al. (2015)</td>
<td>Pilot feasibility study Depressed inpatients ($n = 13$) assigned to 12-session BA treatment, to bridge gap between inpatient and outpatient care.</td>
<td>Significant improvement on self-rated outcome measures of depressive symptoms and functioning.</td>
<td>$d = 2.60; d = 2.11$</td>
</tr>
<tr>
<td>Folke et al. (2015)</td>
<td>Single-case experimental design Six depressed inpatients treated with 10-session BA protocol, randomization to different lengths of baseline.</td>
<td>Marked improvement on measure of depressive symptoms in at least four cases (strong effect sizes, as indicated by NAP).</td>
<td>$NAP = 1.0$</td>
</tr>
<tr>
<td>Owen et al. (2015)</td>
<td>Literature review 14 articles relating to 10 studies of group CBTp for inpatients included in review.</td>
<td>Trends towards reduction of distress and affective symptoms, increased knowledge of symptoms, and reduced readmissions. Not enough evidence for strong conclusions.</td>
<td>n/a</td>
</tr>
<tr>
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<td>Owen et al. (2015)</td>
<td>Mixed methods, quasi-experimental&lt;br&gt;22 inpatients with psychoses received 4 sessions of group CBTp, and were compared to a non-randomized control group (n = 11).</td>
<td>Significant reduced distress and increased confidence in CBTp group compared to controls.</td>
<td>$d = 0.33$</td>
</tr>
<tr>
<td>de Roten et al. (2017)</td>
<td>RCT&lt;br&gt;Psychodynamic psychotherapy added to TAU for depressed inpatients (n = 76)</td>
<td>Significantly higher reduction in depressive symptoms in experimental group.</td>
<td>$d = 0.39$ (post-treatment difference)</td>
</tr>
<tr>
<td>Jacobsen et al. (2018)</td>
<td>Systematic review&lt;br&gt;65 studies of psychotherapy for psychotic inpatients included.</td>
<td>Variable methodological quality, wide range of outcome measures; difficult to interpret evidence.</td>
<td>n/a</td>
</tr>
<tr>
<td>Salberg et al. (2018)</td>
<td>Survey&lt;br&gt;Nurse-led BA groups for inpatients evaluated using questionnaires.</td>
<td>Patients (n = 84) and staff (n = 34) reported overall positive experiences of group sessions.</td>
<td>n/a</td>
</tr>
<tr>
<td>Wood et al. (2018)</td>
<td>Feasibility RCT&lt;br&gt;30 psychotic inpatients randomized to CBT for stigma, or psychoeducation.</td>
<td>No identified benefit of either intervention compared to the other. Research process and interventions deemed feasible and acceptable.</td>
<td>$d = 0.23$ (post-therapy group difference on main outcome, internalized stigma)</td>
</tr>
</tbody>
</table>

**Note:** ACT = Acceptance & Commitment Therapy; BA = Behavioral Activation; BPRS = Brief Psychiatric Rating Scale; CBT = Cognitive Behavior Therapy; CBTp = Cognitive Behavior Therapy for Psychosis; CT = Cognitive Therapy; ECT = Electroconvulsive Therapy; ETAU = Enhanced Treatment as Usual; HAM-D = Hamilton Depression Rating Scale; ISTDP = Intensive Short-Term Dynamic Psychotherapy; N/a = not applicable; NAP = Nonoverlap of All Pairs; RCT = Randomized Controlled Trial; TAU = Treatment as Usual.
Training Ward Nurses

A central concept running throughout the work involved in the present thesis has been that of therapeutic potential. This is especially so in the parts of the thesis concerning indirect work with patients, that is, working through staff members. How do we unlock the therapeutic potential residing within each staff member working on a psychiatric ward? Indeed, the nurses working on the ward typically do not see themselves as therapists per se, although as Rosebert and Hall (2009) state it would be a “waste of valuable resource not to develop this part of the workforce” (p. 147).

To some degree, the work described in the present thesis deals with switching from a traditional medical perspective on psychiatric inpatient care, to considering the psychiatric ward as a therapeutic milieu. A therapeutic milieu could be defined as “a supportive and nurturing interpersonal environment that teaches, models and reinforces constructive interaction” (Cowdrill & Dannahy, 2009, p. 116). As Cowdrill and Dannahy (2009) note, switching from a traditional ward context to a therapeutic milieu requires that attention be paid to the quality of relationships, both those between staff and patients and those between staff from different professions. This, in turn, requires appropriate channels of communication (Sambrook, 2009). The ward round represents one obvious arena for communication and relationship building between professions, although it is likely that the establishment of a therapeutic milieu requires much more. Various strategies have been tested in attempts to improve the ward milieu. For example, adding a nurse who acts as the milieu manager has proven to be an effective means of handling increased acuity, while not increasing costs in the long term (Triplett et al., 2017).

Recently, there has also been some discussion regarding the psychotherapy-related role of the psychiatric nurse. There is general agreement that nurses, especially those who specialized in psychiatry during their degree study, have the proper degree of competency to provide not only standard nursing care, but also psychotherapy, assuming that they are given the proper context, training, and supervision (Mullen, 2009). The provision of psychotherapy could be embedded within broader packages of psychosocial interventions, as will be discussed more extensively below, or in a standard form (an example of this is discussed by Reasor and Farrell [2005]). However, the pressures of medication management and surveillance, as well as the increasingly burdensome administrative load, seem to hinder psychotherapeutic conversations (Cameron, Kapur, & Campbell, 2005; Deacon, 2003; Delaney & Handrup, 2011; Goulter, Kavanagh, & Gardner, 2015; Mullen, 2009).
Mental health nurses to a large extent experience contradictions between ideals about in depth dialogues with patients and the harsh reality of a psychiatric ward, and this experience contributes to feelings of insufficiency and resignation (Graneheim, Slotte, Markström, & Lindgren, 2014; Molin, Graneheim, Ringnér, & Lindgren, 2016). Additionally, when more sustained interactions with patients do occur, they seem to seldom be theoretically informed or purposefully therapeutic (Whittington & McLaughlin, 2000). A situation has evolved, most likely due to the policies formulated by the health care organization, whereby the surveillance of risk status and observing and checking patients is reinforced, while genuinely interacting or engaging with patients appears to face extinction. From the perspective of the individual nurse, this might very well also represent an attempt to protect oneself from work-related stress, or indeed be a result of that stress itself (Mullen, 2009). However, there are also studies wherein the picture painted is not so grim. In an interview study conducted by Bowers et al. (2005), who aimed to define the function of acute psychiatric wards in the United Kingdom, the interviewed nurses spoke warmly about the need for, and use of, so-called presence+. This word was considered to refer to something more than merely being with patients or speaking to them. In fact, presence+ was described using words such as “caring,” “like family,” “constant contact,” “friendly,” “welcoming,” “respect,” “therapeutic relationship,” and “rappro.” Hence, while the psychiatric inpatient ward is clearly a stressful environment, where many staff members struggle with work-related stress that hinders them from truly engaging with their patients, many nurses exhibit a high level of ambition when it comes to interacting with patients. The issue of time, though, has been described as a major obstacle for nurses aiming to achieve presence+, whether it be in the form of formal psychosocial interventions or informal engagement with patients (e.g., Deacon, 2003; Mullen, 2009; Sin & Scully, 2008). A concept somewhat similar to presence+, termed Time Together, was evaluated by Molin, Lindgren, Granheime, and Ringnér (2018). Time Together is an intervention aimed at ensuring there is time for patients and the ward staff to engage in joint activities of different kinds. The authors conclude that the intervention is feasible in a Swedish context, although it needs further evaluation, especially in terms of its effects on patients.

Nurses represent the single largest professional group providing care to psychiatric inpatients, which means that if they are not given the training, opportunity, and mandate necessary to provide some form of psychotherapy, it appears unlikely that most inpatients will get access to such therapy. What would it take to actually provide nurses with the necessary training, opportunity, and mandate? Cameron et al. (2005) call for a therapeutic infrastructure, or in other words, clear organizational support. This would include not only training, but also ongoing supervision as needed. This is likely crucial in terms of achieving real cultural change, switching from inpatient care that
is custodial and solely based on a medical model, to a therapeutic ward that provides a broader palette of care to patients.

In the literature, the practice of training psychiatric nurses in psychotherapy techniques is often described within the rubric of psychosocial interventions (PSI). PSI are established as a post-qualification training alternative for nurses in the United Kingdom (Bradshaw, Butterworth, & Mairs, 2007), and they are recommended in the National Institute for Clinical Excellence (NICE) guidelines (2003). However, they are not routinely offered in all Western countries. In Sweden, for example, a need for skills development in this area has been identified (e.g., Jacobsson, 2013; Swedish Association of Local Authorities and Regions, 2010; Swedish National Board of Health and Welfare, 2009), as part of the drive towards improved content in psychiatric inpatient care.

PSI lack, to the best of my knowledge, a universal definition, although they are described by Sin and Scully (2008) as referring to collaborative work with service users that integrates medical, social, and psychological interventions. Collaborative assessment, CBT interventions, structured family interventions, medication management, and the management of symptoms and relapses are all core elements of PSI (Sin & Scully, 2008). PSI are tailored to patient groups suffering from schizophrenia and related serious mental illness. In a literature review, Gilbody et al. (2006) concluded that while PSI represent a promising initiative for inpatient care, there has been a lack of long-term evaluations, as well as evaluations concerning cost effectiveness. The need to evaluate PSI from a service user’s perspective has also been underlined (Sin & Scully, 2008).

Empirical studies indicate that it is beneficial to provide nurses with training in various forms of PSI. O’Neill, Moore and Ryan (2008) found, in a qualitative interview study, that following PSI training, psychiatric nurses working on an acute ward reported a positive attitude change towards their patients. Further, this attitudinal change seemed to translate into the patients being better equipped to manage the symptoms of their illness. Bradshaw et al. (2007) showed that the addition of clinical supervision to PSI training led to significantly higher knowledge outcomes among students when compared to students who did not receive supervision. Further, the clinical improvement seen in patients treated by students from the group who received supervision was significantly higher. PSI also seem to offer benefits in terms of building resilience to burnout among nurses working in acute psychiatric inpatient care. Ewers, Bradshaw, McGovern, and Ewers (2002), in a randomized trial, showed that providing nurses with PSI training led to both significant improvements in their knowledge and attitude regarding mental illness, and a significant decrease in the burnout rate.
Richards et al. (2005) evaluated the effects of a nurse education program delivered to staff working on three psychiatric wards in the United Kingdom. The program aimed to help the nurses address acute concerns in the ward context. The results revealed that a higher amount of psychological, social and physical information was contained within their initial assessments, their care plans were individualized to a greater extent, and the nurses identified and provided relevant therapeutic activities to a greater extent. At the same time, there seemed to be less service user involvement in the formulation of the care plans following the education program when compared to the situation before the program was implemented. Nesset, Rossberg, Almvik, and Friis (2009) found an improved treatment environment, as perceived by both patients and staff and measured using the Ward Atmosphere Scale (WAS; Moos, 1996), following a training program built on milieu therapeutic principles that was implemented in a forensic psychiatric inpatient setting in Norway. Eliassen, Sørlie, Sexton, and Høifødt (2016) also reported positive changes in the WAS, following the administration of two eight-week interventions, which focused on affect-consciousness and mindfulness, to the staff working on two psychiatric wards for psychotic patients. Wykes et al. (2018), in a larger-scale trial encompassing a total of 16 psychiatric wards and 1,108 inpatients in the United Kingdom, investigated the perceptions of care among the patients following a staff training program based largely on CBT principles. The results showed that, interestingly, the perceptions of, and satisfaction with, care improved among those patients who were admitted involuntarily. However, there was no detectable benefit to those who were admitted voluntarily. The authors discuss how this might partly be explained by the voluntarily admitted patients holding a relatively positive view of inpatient care even before being hospitalized. The additional cost to standard care of an intervention (an average of 51.6 staff training sessions per ward) such as that described by Wykes et al. (2018) is low, adding up to only an estimated £10 per patient per week. Thus, a relatively low-cost intervention seems to offer the potential to improve the perceptions of care among a very vulnerable patient group, with little influence over their practical care.

In the literature concerning the training of ward staff, the challenges associated with continuity in the workforce and support from management are common issues. McCann and Bowers (2005) reported on a project in which training in CBT interventions was delivered to nurses working on seven psychiatric wards in the United Kingdom. The training was delivered at three staged levels. The applicator level included basic knowledge of psychosocial interventions, such as the vulnerability/stress model, coping strategies, and addressing compliance. This level of training was delivered to all staff on the ward, whether qualified or unqualified. The technician training was aimed only at qualified staff, since it involved more specific therapeutic strategies, including working with voices and intrusive thoughts. The spe-
cialist training, that is, the most advanced level, was offered to a select number of staff that showed particular interest, and it included in vivo supervision and practice. McCann and Bowers (2005) conclude that a sufficient and stable workforce on the ward, as well as effective leadership and management, are the two key factors that influence the successful implementation of psychosocial interventions on psychiatric wards. The authors describe how, out of the seven wards included in their project, the use of the trained interventions continued in only two wards. The two key factors mentioned above are discussed as being critical for success or failure.

**ACT Training**

It has been established that staff working in the field of health care represent a group suffering from relatively high levels of burnout and work-related stress, as well as a high turnover rate and low levels of work satisfaction (Clegg, 2001; Dreison et al., 2018; Hastings, 2002; O’Connor, Muller Neff & Pitman, 2018; Swedish Work Environment Authority, 2016). Reviewing the reasons for this situation is beyond the scope of the present thesis, but speculatively, one can imagine that working with highly distressed individuals, such as those being treated in a psychiatric inpatient setting, sometimes takes its toll on one’s own health as well. Thus, if PSI training of some kind is offered to psychiatric inpatient staff, it would seem to be a good idea if such training also includes self-care strategies.

Based on the existing evidence, and facing the complex and challenging reality of psychiatric inpatient care, with the aim of improving it via psychological means, it appears reasonable to look for a treatment model that is as flexible and as transdiagnostic as possible, ideally incorporating the components of several evidence-based treatments. The rationale behind choosing ACT as a model for use in the training of psychiatric ward staff is its flexibility and transdiagnostic character, combined with its proven efficiency in treating a variety of psychiatric disorders (A-Tjak et al., 2015; Hayes et al., 2006; Ruiz, 2010; Öst, 2008). There have also been a number of empirical studies concerning the effects of ACT training for health care staff, although not for psychiatric staff per se, as far as I am aware. The interventions being studied have had roughly two different foci, specifically aiming to either reduce stress among health care workers, or teach health care workers to use ACT techniques themselves.

Stewart et al. (2016) describe one of the most recent of these studies, an evaluation of the ACT training (three-day workshop) of a mixed group of professionals in Sierra Leone. The authors report a significant increase in psychological flexibility among the participants some three months after the workshop when compared to the baseline, as measured using the Acceptance
and Action Questionnaire (AAQ-II; Bond et al., 2011), as well as a significantly positive change in their overall life satisfaction, as measured using the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985). The participants generally rated the workshops positively, and they reported using the techniques they learned in their clinical practice. The positive results with regard to the AAQ-II are interesting in their own right, since psychological flexibility is vital if an ACT therapist is to successfully use ACT techniques (e.g., through modeling), but also because of the measure’s known correlation with several quality of life indices, including job satisfaction (Bond et al., 2011; Hayes et al., 2006). Richards et al. (2011) showed, similar to the findings of Stewart et al. (2016), that participation in ACT training was seen as acceptable and useful by a group of health care workers. The knowledge acquired during the training seemed to transfer to their clinical practice in many cases.

In a controlled study conducted by Frögéli, Djordjevic, Rudman, Livheim, and Gustavsson (2016), ACT was evaluated as an intervention aiming to prevent stress-related ill health among nursing students. Following a total of 12 hours of ACT training, the participants reported significantly lower levels of experiential avoidance, higher levels of mindful awareness, and lower levels of stress and burnout, when compared to the control group. Using a somewhat similar approach, Brinkborg, Michanek, Hesser, and Berglund (2011) investigated the effect of an ACT intervention aimed at reducing stress among Swedish social workers. The authors found support for their hypotheses that ACT reduced both stress levels and levels of burnout, and increased general mental health, when compared to the control condition. However, these results only applied to those participants who reported high levels of stress at baseline. Similar results were reported by Waters, Frude, Flaxman, and Boyd (2018), who investigated the effects of a routinely offered ACT training intervention for distressed health care workers. The levels of psychological distress reported in the experimental group decreased over the three-month evaluation period.

Combining data obtained from two studies, Noone and Hastings (2009, 2010) found that support staff caring for people with intellectual disabilities showed reduced psychological distress after 1.5 days of ACT training, with an effect size in the medium range. Further, similar to the findings of Brinkborg et al. (2011), the authors stated that the intervention led to a greater positive change for those staff members who reported more stress prior to the intervention. The same pattern was described by Bethay, Wilson, Schnetzer, Nassar, and Bordieri (2013), who delivered ACT training to a group of intellectual disability support staff. When compared to the control group, the group that received the intervention showed higher levels of general health after the intervention. However, this difference was only evident among those who had consistently applied the learned techniques, and the
participants who reported higher distress before the intervention showed greater post-intervention changes.

In at least in those kinds of ACT training programs aiming to teach health care workers to use ACT techniques themselves, it is reasonable to assume that offering supervision or consultation in some form after the training should have an additional effect. Indeed, Luoma and Plumb Vilardaga (2013) found, in a randomized study, that the participants in a two-day ACT workshop only showed improved psychological flexibility if the workshop was followed by a series of telephone consultations. Thus, offering supervision or consultation in addition to ACT training might be necessary in order to truly consolidate new knowledge or ensure that the learned techniques are actually used.

Supervision

Providing the nursing staff that work on psychiatric wards with clinical supervision represents an alternative or supplement to PSI training. Although the term “supervision” lacks an agreed upon definition, one reasonable suggestion has been offered by Cleary, Horsfall and Happell (2010): “a semi-structured process where a mental health nurse (the supervisee) meets regularly and confidentially with a more experienced practitioner (the supervisor) to discuss issues of relevance to the supervisee’s practice” (p. 525). Clinical supervision might serve restorative, normative, and/or formative functions (Brunero, 2007). The restorative function refers to receiving feedback or validation, or support in handling work-related stress. The normative function aims to achieve consistency in terms of how nurses approach patient care, while the formative function refers to supervision representing an educational opportunity. In a literature review, Brunero (2007) concluded that the restorative function was somewhat more dominant than the other two functions in most studies of supervision.

Empirical studies concerning the effects of clinical supervision for nurses working in psychiatric inpatient care have suggested that supervision can lead to a broadened and changed knowledge base, as well as to the increased use of goal-oriented active strategies (Hallberg, 1994). Hallberg (1994) further showed that nurses who received clinical supervision felt both better understood and more understanding towards others, which lead to improved cooperation on the ward. Berg and Hallberg (2000), in a qualitative interview study concerning the perceived meaning and significance of clinical supervision on a psychiatric ward, described the intervention as multifaceted and complex. The meaning of clinical supervision was interpreted as confronting the complexity inherent within ongoing daily life in nursing care. The nurses reported that supervision allowed them to speak out, share,
and examine each other’s feelings, thoughts and experiences in relation to working with patients. They also reported, however, that supervision revealed mistrust and a lack of openness towards other members of the nursing group. White and Winstanley (2010), in a randomized study, found that supervision contributed to the wellbeing of supervisees, but only in cases where the received supervision was demonstrably efficacious (as measured using the Manchester Clinical Supervision Scale, MCSS; Winstanley, 2000). In a qualitative interview study using phenomenographic methodology, Arvidsson, Löfgren, and Fridlund (2001) investigated the influence that clinical supervision had on nurses’ professional competence four years after the completion of a two-year supervision program. The results could be divided into six categories: a feeling of job satisfaction, gaining knowledge and competence, gaining a sense of security in nursing situations, a feeling of personal development, realizing the value of supervision, and developing a sense of professional solidarity. The authors hence conclude that clinical supervision appears to have a lasting influence.

In reviewing the rather varied literature concerning clinical supervision, Cleary et al. (2010) conclude that too much is being asked of supervision as an individual process. Listing the benefits commonly attributed to supervision in the literature (e.g., enhanced patient care, greater job satisfaction, reduced feelings of burnout, ensuring quality of practice, and improved recruitment and retention), the authors rightly question whether it is reasonable to expect even half of the suggested outcomes. While there are obvious benefits associated with supervision, as reported in a number of empirical studies (Arvidsson et al., 2001; Berg, 1999; Berg & Hallberg, 2000; Bradshaw et al., 2007; Hallberg, 1994; White & Winstanley, 2010), the varying aims of supervision, differences in its content and scope, and the complexities of most inpatient contexts render the issue of supervision highly complicated, not least when it comes to determining exactly in what way it is effective. A possible remedy suggested by Cleary et al. (2010) involves allowing supervisees themselves to define what clinical supervision is. That is, the authors suggest it ought to be defined through a bottom-up process, rather than a top-down one. The latter pattern has probably contributed to nursing staff generally being reluctant to participate in supervision sessions, which they sometimes perceive to be an extension of managerial control (Gilbert, 2001; Malin, 2000; Walsh et al., 2003). It has further been found (Cleary & Freeman, 2005) that nurses might obtain the benefits usually ascribed to clinical supervision through informal means of professional support, a fact that contributes to the passive resistance often seen to the implementation of formal supervision. This finding would also seem to suggest the need for a more bottom-up process for implementing supervision.
Summary
So, what is this thesis really about? As became crystal clear during the halftime seminar, if not even sooner, it is about encouraging psychiatric staff, as well as the psychiatric organization as a whole, to try a different approach to the one they are used to. In this rather broad sense, the thesis is not so much about ACT specifically, as it is about how psychological treatment from any school can interact with the context of psychiatric inpatient care, including patients, staff, the physical milieu, management, and the organization at large. That being said, the approach we have chosen in the present thesis is ACT.

Based on the existing literature, there seem to be a few things that we would benefit from doing in Sweden, that we do not generally do:

I. Provide psychiatric inpatients with psychotherapy, preferably different versions of CBT, with both standard CBT and the third-wave options (mindfulness-based interventions, ACT, etc.) appearing feasible, acceptable, and reasonably effective in terms of symptom management and quality of life.

II. Provide nurses working on the wards with training and supervision concerning psychosocial interventions. Although the field is currently understudied, the different types of CBT interventions appear to represent a feasible and acceptable option, with the potential to positively affect staff members and patients alike.
Aim of the Present Thesis

The overarching aim of the present thesis was to investigate the feasibility and potential efficacy of ACT as a broadly applied psychological treatment intervention in the context of psychiatric inpatient care. Feasibility is defined here as the presence or absence of obstacles or opportunities in the natural environment, and the general prospects for success of the intervention. Broad application, in this case, refers to intervening on both the individual level, through psychotherapy in a traditional sense, and the ward level, through training and supervising ward staff in the use of different ACT techniques. A further aim of the present thesis was to address the various issues of implementation on a more general level by discussing what facilitates and what hinders the implementation of psychological treatment in the psychiatric ward milieu and the wider hospital organization.

The above aims were accomplished through three studies, which each had separate individual aims.

Study I

The aim of study I was to investigate whether adding individual ACT treatment to the existing treatment package available on a psychiatric inpatient ward for those with psychosis was both feasible and beneficial for patients. A further aim of study I was to determine which measures might prove most suitable in terms of assessing the individual therapy treatment outcome in the ward milieu.

Study II

The aim of study II was to investigate the feasibility, acceptance, and potential effectiveness of implementing an ACT training and supervision intervention tailored to the group of nursing staff working on the same psychiatric inpatient ward as that addressed in study I. A further aim of study II was to establish an evaluation culture on the ward by applying scientific methods of evaluation in a naturalistic context.
Study III
The aim of study III was to investigate the experienced usefulness, as well as the perceived difficulties, of the ACT model, as applied in everyday ward work, from the perspective of a subset of the nursing staff included in study II.
Methods

When producing the present thesis, the aim was always to use a broad spectrum of research methods in order to accomplish the overarching research aim, as well as to answer the research questions that inform the included studies. The inherent complexity of the context in which the research was conducted represented one reason why this was considered important. Capturing all possible effects in the hectic milieu of a typical psychiatric inpatient ward was recognized to be hugely challenging from the very beginning. A second reason why the use of multiple methods was seen as important concerned the aim of investigating psychological treatment from both a traditional individual psychotherapy perspective, where there are relatively well-established gold standards for outcome research (i.e., the RCT), and the perspective of working therapeutically through the nursing staff group, where the most suitable research method is not so obvious. A third reason was my interest as a doctoral student in familiarizing myself with a multitude of methods in order to become as broadly knowledgeable a researcher as possible.

Thus, in the studies included in the present thesis, various research designs including a randomized controlled trial, a quasi-experimental pre-post design, a multiple baseline single-subject design, and a qualitative content analysis, have been applied.

Study I

Study I was a randomized controlled trial involving repeated measures, which compared a group of inpatients who received ACT + TAU ($n = 11$) to a group who received only TAU ($n = 10$). The research setting was an inpatient ward for psychotic patients, within the psychiatric clinic of a medium-sized hospital in central Sweden (Västmanland County).

Patients who were admitted between January and August 2013 were approached and asked to participate in the study, so long as they had any diagnosis described in the DSM-IV chapter “Schizophrenia and other psychotic disorders” (DSM-IV; American Psychiatric Association, 2000) and were clinically assessed as being able to understand the purpose and method of the
study. In total, 63 patients (33 women) were approached, and 21 were randomized and included in the analysis. Demographic information concerning these patients is provided in Table 4.

Table 4
Participants’ characteristics at baseline

<table>
<thead>
<tr>
<th></th>
<th>ACT + TAU (n=11)</th>
<th>TAU (n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age (SD)</td>
<td>42.54 (13.41)</td>
<td>39.00 (11.02)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Schizoaffective disorder</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Delusional disorder</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Brief psychotic disorder</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Psychosis NOS</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Substance-induced psychosis</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Personality disorder NOS</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>with auditory hallucinations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean duration of illness (SD)</td>
<td>10.36 (10.34)</td>
<td>14.50 (13.56)</td>
</tr>
<tr>
<td>Source of income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Sickness pension</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Sickness benefit</td>
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<tr>
<td>Social allowance</td>
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<td>0</td>
</tr>
<tr>
<td>Jobseeker’s allowance</td>
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<td>1</td>
</tr>
<tr>
<td>Study allowance</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Study loan</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: ACT = acceptance and commitment therapy; NOS = not otherwise specified; SD = Standard Deviation; TAU = treatment as usual.

The TAU consisted of medication, contact with outpatient care staff if available, meetings with the attending psychiatrist (when admitted, at discharge, and on an as-needed basis), and regular meetings (ideally daily) with a designated contact on the ward (a member of the nursing staff). Aside from joint meals, there were no structured group activities on the ward, and there were no structured therapeutic interventions.

The ACT intervention consisted of one to four individual sessions provided during the patient’s stay on the ward. On average, the patients in the experimental group received two sessions (SD = 1). The sessions were 45 minutes in length, and they were conducted in either the patient’s room or a separate meeting room on the ward. Typically, session one took place within two days of the patient being admitted to the ward, while the following sessions took place every other day. The number of sessions depended on each patient’s length of stay on the ward. The first author of study I conducted all the sessions. The third author (an experienced ACT therapist) acted as the clinical supervisor, and a sample of sessions (three in total) were videotaped
and assessed in terms of adherence to treatment protocol and therapist competence by the third author.

The ACT treatment protocol was based on that of Gaudiano and Herbert (2006) in terms of modifying the original ACT manual (Hayes et al., 1999) for patients with psychosis and the context of an inpatient ward. In particular, the use of a pre-set number of core components in each session was copied from the work of Gaudiano and Herbert (2006). The rationale for this was the uncertainty beforehand as to each patient’s length of stay, and hence the need to ensure that every session offered as complete an ACT treatment as possible in terms of session content. Thus, each session included, to some extent at least, psychoeducation concerning psychosis, the presentation of the ACT model, defusion or acceptance exercises, values clarification, a session review, and homework practice. A typical session dealt with the normalizing of psychotic symptoms through psychoeducation (e.g., prevalence). The “passengers on the bus metaphor” (Hayes et al., 1999, p. 157) was commonly used to present the ACT model, since it encompasses all the aspects of the model. An example defusion or acceptance exercise would be some version of the “soldiers in the parade/leaves on a stream exercise” (Hayes et al., 1999, p. 158). In terms of mindfulness, most often a simple exercise focusing on breathing or on noticing external or private experiences was used. A common means of addressing values was the “what do you want your life to stand for exercise” (Hayes et al., 1999, p. 215). At the end of each session, the content was summarized and a between-session assignment, such as spending more time with fellow patients (if that was in line with the patient’s values), was formulated.

The main outcome measure was the rate of rehospitalization during a four-month follow-up period following discharge from the ward. The secondary measures were the Bull’s Eye Values Inventory (BEVS; Lundgren, Luoma, Dahl, Strosahl, & Melin, 2012), a measure of values-based living, the Psychotic Symptom Rating Scales (PSYRATS; Haddock, McCarron, Tarrier, & Faragher, 1999), a semi-structured interview measuring hallucinations and delusions, and the Voices Acceptance and Action Scale (VAAS; Shawyer et al., 2007), an acceptance measure tailored to auditory hallucinations. The measures were administered prior to treatment, after treatment, and at the four-month follow-up.

Study II

Study II was designed as a quasi-experimental trial with pre-post measures, and it additionally had a multiple baseline single-subject design. The purpose here was to enable a scientific discussion of the effectiveness of ACT as a staff training and supervision intervention, in addition to mapping any
changes in actual staff behavior as a causal effect of participating in the ACT training and supervision.

The participants in study II were members of the nursing staff group (n = 20) working on the same ward as that targeted in study I, whose demographics are presented in Table 5. The 18 members of the nursing staff group working on a similar neighboring ward acted as a non-randomized control group.

Table 5
Staff demographics

<table>
<thead>
<tr>
<th>Intervention group (n = 20)</th>
<th>Control group (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age (SD)</td>
<td>48.75 (12.81)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
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<tr>
<td>Male</td>
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</tr>
<tr>
<td>Female</td>
<td>14</td>
</tr>
<tr>
<td>Profession</td>
<td></td>
</tr>
<tr>
<td>Registered nurse</td>
<td>8</td>
</tr>
<tr>
<td>Assistant nurse</td>
<td>12</td>
</tr>
</tbody>
</table>

Note: SD = Standard Deviation.

Further, in order to measure the possible effects on those patients treated on the experimental ward during the period when the ACT training was administered, such patients were routinely administered a measure of psychological flexibility (Swedish Acceptance and Action Questionnaire, SAAQ; Lundgren & Parling, 2017) at both intake and discharge.

The main outcome measure for the staff members was the Work-Related Acceptance and Action Questionnaire (WAAQ; Bond, Lloyd, & Guenole, 2013), which is a measure of psychological flexibility adapted to the workplace. The measure was administered directly before the workshop, and then again two months after. In order to measure the changes in staff behavior, a measure was constructed specifically for the purpose of this particular study. The measure consisted of a number of statements ("I have encouraged a patient to experience his/her voices, thoughts, or feelings, without resistance;" "I have helped a patient be in the present;" "I have talked to a patient about what he/she misses in life;" "I have approached and talked to a patient despite being unsure of how best to help him/her") that the staff members rated on a scale ranging from zero (not at all) to three (many times). This rating was performed three times per shift, starting 13 days before the workshop, and continuing for 43 days after the workshop for half the staff group and for 56 days after the workshop for the other half.

The intervention itself was a two-day ACT workshop, with the aim of introducing the general ACT model and teaching the staff how to use it in their everyday work context. The workshop lasted for 12 hours, divided over two consecutive days, and it was delivered twice, with half the staff group at-
tending each time. The model used to teach ACT to the staff was a condensed version of the original ACT model (Hayes et al., 1999), which is known as the open-aware-active model (Oliver, Joseph, Byrne, Johns, & Morris, 2013). Throughout the workshop, experiential exercises, role-play, video demonstrations, and discussions were used. Further, directly after the workshop, weekly supervision sessions (1 h) were introduced on the ward.

Study III

Following the first ACT workshop, which was evaluated in study II, two additional workshops were conducted during the following year (April 2015 to April 2016.) In total, 21 hours of training were provided (12 + 3 + 6). The overarching aim of the two additional workshops was still to teach the staff how to use the ACT model in their everyday work. However, the second workshop also focused specifically on the staff’s health, including the introduction of an ACT tool known as the pause, which is a Swedish adaptation of the STOP tool, developed by Russ Harris (R. Harris, personal communication, September 19, 2015). The third workshop additionally focused on how best to use ACT to improve care plans.

The participants in study III were those staff members who had attended all three workshops during the year, that is, a total of eight nurses and assistant nurses (excluding those nurses who only worked the night shift). Additionally, two nurses who had attended the first two workshops and who had been offered additional ACT training (14 hours) with the aim of becoming therapists themselves (for a not yet completed study) were included. Thus, a total of ten nurses participated. The demographics concerning those nurses are presented in Table 6.

Table 6
Staff demographics (n = 10)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age (SD)</td>
<td>45.40 (15.78)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
</tr>
<tr>
<td>Profession</td>
<td></td>
</tr>
<tr>
<td>Assistant nurse</td>
<td>6</td>
</tr>
<tr>
<td>Registered nurse</td>
<td>2</td>
</tr>
<tr>
<td>Registered nurse with specialized psychiatry training</td>
<td>2</td>
</tr>
<tr>
<td>Mean years of experience (SD)</td>
<td>16.40 (13.62)</td>
</tr>
</tbody>
</table>

Note: SD = Standard Deviation.

The data were gathered using a semi-structured interview protocol, with all the participants being asked the same basic questions, but also allowing for
follow-up questions as needed. The interviews lasted between six and 25 minutes ($M = 14.40, SD = 6.06$), and they were transcribed verbatim. The data were analyzed using a qualitative content analysis (Elo & Kyngäs, 2008; Graneheim & Lundman, 2004). The analysis process began with the ten interview texts being read through thoroughly and repeatedly in order to achieve immersion and full familiarity with the data. In the next step, the so-called meaning units were marked, that is, the words, sentences, or paragraphs related to the research aims. These were condensed (i.e., shortened) in the next step, and then transferred onto coding sheets. Next, the codes were created by labeling the condensed meaning units, while the categories were created by grouping similar material together. Finally, the themes were created, which serve as an expression of the latent content of the texts, linking together the underlying meanings within the categories. A step-by-step example of the analysis process is presented in Table 7.
<table>
<thead>
<tr>
<th>Meaning unit</th>
<th>Condensed meaning unit</th>
<th>Code</th>
<th>Sub-category</th>
<th>Category</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think about how you can make it easier for the patient through a conversation, more than I did before. ‘Cause before it might have been like I asked how they were and stuff, if anything was up, but now I have a bit more, so that I can actually help them with something, through a conversation.</td>
<td>Think about how conversations can facilitate, compared to before. I have more to give.</td>
<td>Give more in conversations</td>
<td>Deepening conversations</td>
<td>Dealing with patients’ struggles and exploring values</td>
<td>Putting one’s potential in the service of oneself and others</td>
</tr>
</tbody>
</table>
Results

Study I

In sum, five out of 21 patients were rehospitalized during the four-month follow-up period. More specifically, one out of 11 in the ACT group and four out of ten in the TAU group were rehospitalized. Hence, the TAU patients were more likely to be rehospitalized (OR 6.67, 95% CI [0.60, 74.51]), although the confidence interval is clearly large and the group difference proved non-significant (Fisher’s exact test, \( p = .13 \)). When controlling for age, gender, and the before treatment BEVS scores, a Cox regression analysis (excluding two control group participants with missing values) showed a significant effect for the treatment condition (\( \beta = -2.82, SE = 1.342, Wald = 4.43, \text{Exp}(\beta) = .059, p = .035 \)), with the patients in the control group having a 94% higher risk of rehospitalization when compared to the ACT patients.

In terms of the outcome on the BEVS (values-based living), and only including those patients who provided ratings at all three measurement points (seven ACT participants, five control group participants), the Mann-Whitney U tests showed no significant differences between the groups before treatment (\( \text{ACT group mdn} = 10, \text{control group mdn} = 4, U = 31.0, p = .31 \)), after treatment (\( \text{ACT group mdn} = 12, \text{control group mdn} = 8.5, U = 21.5, p = .76 \)), or at follow-up (\( \text{ACT group mdn} = 15, \text{control group mdn} = 13, U = 14.0, p = .44 \)). The non-parametric Friedman tests of the differences among the repeated measures, however, revealed a marginally significant positive change in the BEVS score in the ACT group (\( \chi^2(2) = 5.43, p = 0.07 \)), while the change was non-significant in the control group (\( \chi^2(2) = 3.44, p = 0.18 \)).

Due to procedural difficulties resulting in too many missing values, neither the PSYRATS nor the VAAS could be included in the analysis.

Study II

In terms of the feasibility of data collection, 18 out of 20 experimental participants and 11 out of 18 control group participants provided WAAQ ratings both before and after the workshop. Out of the 61 patients being treated on the ward during the time the study was implemented, nine provided SAAQ ratings at both intake and discharge (three of whom were treated before the
workshop, and six after). With regard to the staff’s self-rated ACT-consistent behavior, three staff members in the first group failed to provide baseline ratings, and they were thus excluded from the analysis. The provision of such ratings was encouraged by the first author of study II spending time on the experimental ward several times a week, with the aim of motivating the staff members. In sum, the establishment of a measurement culture (from a staff perspective) was largely seen as successful, with the majority of staff members providing both WAAQ ratings and self-ratings. Further, the majority of staff members working each respective day shift ($M = 3.67$) attended the weekly supervision sessions (a total of six sessions during the study). In the patient group, however, the data collection proved very difficult.

In terms of the psychological flexibility ratings, there was a slight mean increase for the staff members who attended the ACT workshop, as well as a slight mean decrease for the control group staff members. For the patients being treated on the ward prior to the workshop intervention, there was similarly a slight mean decrease in psychological flexibility during their stay on the ward, while for the patients being treated after the workshop intervention there was a slight increase. Theses differences are presented in the form of 95% confidence intervals (CIs) in Figures 1 and 2. It is important to note, however, that the CIs presented in all cases include zero, which in statistical terms corresponds to being unable to reject the null hypothesis of no difference between the means.

![Figure 1](image1.png)

*Figure 1.* The 95% CIs around the mean difference in original units between the pre- and post-workshop WAAQ ratings for the control (pre-workshop $M = 41.27$, $SD = 6.28$; post-
workshop $M = 40.27$, $SD = 4.78$; difference $M = –1.00$, $SD = 5.59$) and experimental ward (pre-workshop $M = 37.17$, $SD = 4.29$; post-workshop $M = 38.06$, $SD = 3.78$; difference $M = 0.89$, $SD = 3.69$) participants. The positive difference scores indicate increased psychological flexibility.

Figure 2. The 95% CIs around the mean difference in original units between the intake and discharge SAAQ ratings for the patients treated before (intake $M = 19.00$, $SD = 8.66$; discharge $M = 19.33$, $SD = 10.69$; difference $M = –0.33$, $SD = 2.08$) and after (intake $M = 24.33$, $SD = 9.91$; discharge $M = 18.67$, $SD = 7.03$; difference $M = 5.67$, $SD = 7.63$) the workshop intervention. The positive difference scores indicate increased psychological flexibility.

The self-rated ACT-consistent behavior scores were combined, thereby producing a single score (maximum 36) per participant and shift. The scores were plotted in line graphs, and the visual analysis followed the method described by Engel and Schutt (2016). The visual analysis (level, slope, and variability) revealed no apparent causal effect of the workshop or supervision intervention, at the group level, for either group. There were individual examples of both considerable variability throughout the baseline and intervention phases, patterns that contradicted our hypotheses (increasing slope at baseline and decreasing slope during the intervention phase), and patterns that confirmed our hypotheses, with rather low levels of ACT-consistent behavior being seen at baseline and significantly higher levels being observed during the intervention phase.
Study III

The resulting categories and sub-categories related to the questions concerning the usefulness of, and the difficulties associated with, the ACT model, as experienced by the staff nurses, are depicted in Figures 3 and 4.

Figure 3. Categories and sub-categories (bulleted) related to the question concerning the experienced usefulness of the ACT model (Hayes et al., 1999; Oliver et al., 2013).
With regard to the experienced usefulness of the ACT model, the overarching theme seen to connect the underlying meanings within the categories was termed *Putting one’s potential in the service of oneself and others*. In terms of the experienced difficulties of the ACT model, the corresponding theme was termed *Struggling with organizational, personal, and patients’ limitations*. These themes, in accordance with the chosen qualitative content analysis methodology, are representations of the latent content of the interview texts. This approach involves a higher level of interpretation when compared to the categories presented in Figures 3 and 4, which are representations of the manifest content of the interview texts.

Dealing with the patients’ struggles by using different response styles might involve a nurse specifically talking to a patient about the issue of openness. The idea of deepening conversations refers to staff members describing how the ACT model helped them to speak to patients in a more genuine way, thereby allowing the patients room to elaborate on their situation. The notion of specific tools is a reference to certain concrete tools being taught during the ACT workshop, with one example being the four focus questions (What are you seeking? What have you tried? How has it worked? What has it cost...
The enrichment of typical ward duties is a way of describing how staff members found the ACT model to be useful, for example, in terms of improving the way they handled patient intake or other routine duties. Dealing with oneself and loved ones refers to how the staff members could use the ACT model to handle their personal work-related stress, as well as to counsel friends and family.

The difficulty of time refers to the staff members not feeling there was room to work with the ACT model due to the busyness of the ward. The ACT model was further experienced as difficult to both understand and implement as a steady presence on the ward (i.e., making it stick). Finally, the severity of the patients’ illnesses was seen as a major obstacle to the use of the ACT model.
Discussion

The addition of ACTp to the standard Swedish psychiatric inpatient care package appears both feasible and acceptable. An average of two sessions of ACTp seems to have the potential to lessen the risk of hospitalization during a four-month follow-up period, and to affect the patients’ values-based living in a positive direction. Study I (Tyrberg, Carlbring, & Lundgren, 2017a), building on the studies by Bach and Hayes (2002) and Gaudiano and Herbert (2006), showed similar results to previous studies. The present thesis, however, presents pilot work that is not adequately powered to provide strong support for inpatient ACTp on its own. In sum, at least three randomized trials (Bach & Hayes, 2002; Gaudiano & Herbert, 2006; Tyrberg et al., 2017a) have proven the potential efficacy of ACTp for inpatients, although the results still need to be replicated in larger samples.

It is clear from the present work that the ACTp intervention, as offered in study I (Tyrberg et al., 2017a), is not suitable for every patient treated on the ward. As discussed elsewhere in the thesis, if the intervention is to be offered routinely, it would probably be wise to approach the patients in a more flexible manner. For instance, allowing them more time to process the offer of psychotherapy, and providing more space for explaining what the intervention entails, might increase its reach and render it more inclusive. Of course, offering more than a maximum of four sessions, as was the case in study I, will also likely prove relevant in many cases. As underlined in the section explaining the rationale behind choosing ACTp as an alternative for treating psychosis, the functional analysis of each individual case is key. Such an approach would also potentially overcome the obstacle presented by the severe cognitive deficits that many patients exhibited, which excluded them from participating in study I.

Participating in ACT training as a routine activity on the part of the nursing staff working on an inpatient ward was seen as feasible and acceptable, as evidenced in the present thesis (Tyrberg, Carlbring, & Lundgren, 2017b). In addition, the attempt to establish an evaluation culture on the ward, with staff members repeatedly filling out measures over quite a long period of time, was seen as successful from a staff perspective. Evaluating the patient-related change, however, was rather less feasible, with only a small propor-
tion of the patients who were treated during the duration of the study filling out the required measures.

The effects of the training, in terms of work-related acceptance and behavior change in the desired direction (i.e., more ACT-consistent behavior), were found to be ambiguous. The non-significant changes seen in the expected positive direction (increased psychological flexibility among both staff members and patients) were interpreted cautiously. The changes in the ACT-consistent behavior, in some cases, followed a predictable pattern, while in other cases they took quite unexpected turns.

In the literature concerning ACT training aimed at health care staff, it has previously been shown that the positive effects on staff members’ health are larger among those subgroups of staff who display heightened stress levels at baseline (Bethay et al., 2013; Brinkborg et al., 2011; Noone & Hastings, 2009, 2010). It is possible that a somewhat similar pattern could explain some of the inconsistencies revealed in the self-rated behavior change following the ACT training for psychiatric inpatient staff (Tyrberg et al., 2017b). That is, it is possible that the staff members who showed a behavior pattern consistent with our hypothesis – low levels of ACT-consistent behavior at baseline, and higher levels during the intervention phase – are those who had little knowledge of PSI generally, as well as little confidence in their ability to provide structured interventions more generally. Meanwhile, it might be the case that the staff members who showed great variability throughout the baseline and intervention phases, or who showed other inconsistent patterns, are those who are confident in their knowledge regarding how to intervene with patients, and who therefore are less likely to adapt their behavior following the ACT training. In other words, even though none of the staff participants had formal therapy training, they most likely had different levels of informal therapy-related knowledge. This variability may well have moderated the effect of the ACT training, and it offers a possible explanation for the inconsistent behavior patterns that appeared in the data.

Based on the latter seeming more effective in their meta-analysis, Louise et al. (2018) discuss how ACTp, when compared to more general mindfulness-based interventions, might prove too challenging for psychosis patients, who often present with severe cognitive deficits. While this thesis does not present data in opposition to this notion, my clinical experience suggests that ACT is well suited for adaptation to patient groups suffering from cognitive deficits. Indeed, an ACT protocol has been specifically developed for patients with co-morbid intellectual disability and psychosis (Pankey, n.d.). Although, as far as I am aware, this protocol has not been tested in formal trials, its use has been described in a case study (Pankey & Hayes, 2003). In fact, the sound theoretical base (RFT) upon which ACT stands renders it particularly amenable to adjustments being made to suit different patient
groups, including those with cognitive deficits. No specific pre-set words, exercises, time frames, or other properties relating to format have to be present or noticeable for an intervention to “be” ACT. The approach is hence truly ideographic in the sense that as long as there are traceable connections to the underlying theory, in practice it can be tailored to any context or patient. On the surface, it does not matter how the intervention “looks”, meaning that it could look like ISTDP, for instance, and still truly be ACT. Admittedly, this tailoring of ACT to suit different groups could be quite a demanding task, requiring significant therapeutic expertise and a certain fluency in functional analysis. This makes simplifying the model in order to reliably train therapy novices a challenge, as evidenced in the studies included in the present thesis (Tyrberg et al., 2017b; Tyrberg, Carlbring, & Lundgren, 2017c). However, a number of studies have shown that ACTp is beneficial for patients with various diagnoses within the psychotic spectrum, including the cognitive deficits this entails. Future studies (e.g., Gaudiano et al., 2017) will shed further light on the feasibility of implementing the model via newly trained therapists.

Butler et al. (2016) discuss the practical implications of running ACT for psychosis groups in community settings. The fact that the promotion of psychological flexibility is central, these authors note, “means that the key psychological processes targeted in therapy, and the main strategies for therapists to learn, can be clearly and succinctly specified, and yet still have wide applicability in routine care” (p. 34). The work described in the present thesis attempted to capitalize on this notion when training ward staff in the central tenets of the ACT model. Butler et al. (2016) offer a few key recommendations in this regard. Among them is the recommendation to make every effort possible to promote and maintain engagement, as well as to make the content accessible, memorable and understandable. When working with staff with no previous therapy training and certainly no previous ACT training, I have found these recommendations to be highly applicable. Simplifying the material, using repetition and booster workshops, using physical memory aids, and refraining from using traditional “therapy language” represent some of the strategies I have used. Similar experiences are reported by Bacon et al. (2014), albeit from the perspective of patients with experience of ACT treatment.

The qualitative data (Tyrberg et al., 2017c) obtained cast further light on the experience from the perspective of the staff who participated in the ACT trainings. While the knowledge acquired was in many cases put to direct use during interactions with patients, there were also significant difficulties experienced, related to both organizational and individual barriers. The model, although simplified, was perceived to be fuzzy and difficult to understand by some. This finding speaks to the limitations of short-duration training, such as that evaluated in study II (Tyrberg et al., 2017b). Attending more training
sessions was in some cases a remedy for the difficulties experienced in terms of understanding the model (Tyrberg et al., 2017c). The issue of time has been reported in the literature to be a major obstacle to the implementation of PSI in the ward context (Deacon, 2003; Mullen, 2009; Sin & Scully, 2008), and it was frequently mentioned during the work described in the present thesis (Tyrberg et al., 2017b, 2017c). Indeed, insufficient time was one of the main obstacles that the nurses faced when trying to use the ACT model, as evidenced in study III.

A theme running through the work described in this thesis has been the challenge of measuring effects in the hectic context of a psychiatric ward. Even though the gold standard for psychotherapy evaluation is the RCT, such a study design fits poorly with the clinical reality of the ward. Diagnostic uncertainty, uncertainty as to the time frame, high staff turnover and varying levels of prescribed medication are just a few of the issues inherent in the clinical setting that prove challenging for a controlled trial design (Durrant & Tolland, 2009). Choosing appropriate outcome measures proved to be one of the major challenges associated with the work described in this thesis. My clinical experience, as well as that of several other researchers, points to the validity of short, concrete measures (Durrant & Tolland, 2009; Tyrberg et al., 2017a, 2017b). Indeed, the choice of outcome measures is a difficult issue, which has to take all the aspects of the complexity of the ward context into account. From my perspective, leaning on the experiences from the present thesis, the administration of conventional self-rating measures is perhaps not the best choice. However, there are also inherent challenges in moving away from the conventional that have to be addressed. Ideally, the registration of actual relevant staff and patient behavior by independent raters present in the ward context would more closely follow the theoretical tenets of a learning theory based therapy model such as ACT, compared to conventional self-rating measures. After all, if we aim for behavior change, we ought to be able to observe such change. This presents a new set of difficulties, though, including ethical and practical ones. Further, observing the change of private behavior is indeed challenging. In any case, the discussion as to how we best might measure what we want to affect in naturalistic clinical research needs to be ongoing.

The factors outlined by McCann and Bowers (2005) as being critical to the successful implementation of PSI in the ward context were stable staffing on the ward, as well as effective leadership and management. These factors ring very true to me as well, based on experiences from the studies presented in this thesis (Tyrberg et al., 2017b, 2017c). I would also like to suggest the importance of an expert clinician actually being physically present on the ward. Such a presence has both symbolic and practical value. The clinician spending time on the ward symbolizes the therapeutic model, as well as the fact that the health care organization believes in it and is willing to use re-
sources to implement it. Practically speaking, the more the clinician is physically present on the ward, the more likely he/she is to be able to answer questions, spontaneously motivate staff members to use the model, and generally be a discriminative stimulus for clinically relevant staff behavior.

As discussed by Thomas et al. (2014) and Pfammatter (2006), if we are interested in implementing psychotherapy in inpatient contexts, we must be mindful of the interdependence that exists between the therapeutic approach and the general mental health care system. Treatments being proven effective in trials are one thing, while those treatments actually reaching and benefitting real-world patients is something else. Indeed, it is well known that clinical research findings do not readily translate into routine care (Grimshaw, Eccles, Lavis, Hill, & Squires, 2012).

In the present thesis, nurses represent a professional group of particular importance, since the studied training initiatives have been tailored to them (Tyrberg et al., 2017b, 2017c). Squires, Estabrooks, Gustavsson, and Wallin (2011) conducted a systematic review of the individual characteristics important to nurses’ use of research in their practice. The attitude towards research was found to be the single most important characteristic, being related to research utilization in general. Other key characteristics were attending conferences, having a graduate degree, current role (i.e., leadership role), clinical specialty, and job satisfaction. Forsner, Hansson, Brommels, Wistedt, and Forsell (2010), in an empirical study of psychiatric health care professionals’ attitudes towards the implementation of clinical guidelines, found that the active participation of health care staff in the implementation process may improve the adoption of the guidelines. Taking this into account when designing training or otherwise discussing how best to access the therapeutic potential of nurses via implementing evidence-based psychological interventions appears crucial. In the current study, one aim has been the establishment of an evaluation culture on the ward (Tyrberg et al., 2017b). This seems to affect nurses’ attitude towards research. During the workshops offered to the nurses (Tyrberg et al., 2017b, 2017c), an underlying aim has been to convey research findings in an accessible way. Hopefully, this has also been conducive in terms of affecting the nurses’ attitudes towards research. Of the other characteristics listed by Squires et al. (2011), job satisfaction is perhaps the one most amenable to being influenced in the present work. Even though the results presented in this thesis are ambiguous, increased job satisfaction was indeed one of the hypothesized results following the ACT training. In terms of the active participation of health care staff in the implementation of a new treatment modality, which was identified by Forsner et al. (2010) as being potentially crucial to success, I believe that ongoing discussion with staff members as to the usefulness of the ACT model in the real-world ward context, and a generally ongoing discussion, have been useful.
Limitations

In study I (Tyrberg et al., 2017a), both the experimental and control groups exhibited great variability in terms of their diagnoses. Indeed, the typical clinical presentation of a patient with delusional disorder differs quite significantly from that of a patient with schizophrenia or substance-induced psychosis. With such a small sample, moving any patient from one group to another would potentially have significant consequences. Moreover, less liberal inclusion criteria would certainly have increased the internal validity of the study. A further, related, limitation concerns the fact that the diagnoses as registered in the patient records were accepted. Renewing the assessment using structured diagnostic interviews prior to enrolling patients in the study would arguably have been a sounder methodological choice. However, with the resources available, this was not possible. Yet, the patient sample, such as it is, quite reliably represents typical ward reality in terms of how diagnostics is actually used in real-life clinical contexts. In that sense, what the study lacks in internal validity, it somewhat makes up for in external validity.

The measures administered in study I (Tyrberg et al., 2017a) were, in the cases of the BEVS and VAAS, specifically tailored to ACT. As they were administered in the same way to both the control and experimental groups, it could be argued that the control group participants were inadvertently provided with an ACT rationale. After all, the content of the measures reveals some of the rationale underlying ACT (e.g., the central role of acceptance and values). This, in turn, might have had some sort of positive effect on these patients, thereby obscuring the effect of the ACT treatment that the experimental group received. Indeed, the whole idea behind the brief format in which ACT was delivered in the present thesis rests on the potential for very limited interventions to prove efficacious. In that sense, it cannot be ruled out that learning the ACT rationale through reading the questions related to an ACT measure might be considered brief therapy.

The variability in the number of sessions provided to the participants in study I (between one and four sessions) raises a question concerning the dose-response effect, which refers to the treatment response modeled as a function of the treatment dose. The number of sessions administered depended on the length of stay of each patient, with a maximum of four sessions being provided. This limitation was based on previous successful trials using a similarly brief format (Bach & Hayes, 2002; Gaudiano & Herbert, 2006). Admittedly, the difference between one and four sessions appears large. Assuming that the patients who were admitted for very short periods (i.e., those who received the fewest sessions of ACT treatment) were released from the ward because their condition had improved, it might be rele-
vant in this context to discuss the dose-effect model versus the good-enough level model of therapy effects (Baldwin, Berkeljon, Atkins, Olsen, & Nielsen, 2009). The dose-effect model posits that psychotherapy patients improve as the number of sessions increases, although it also suggests that the magnitude of this effect decreases at higher doses (the so-called negatively accelerating curve). The dose-effect model assumes that the effect of more time spent in therapy is, on average, equal across all patients (Baldwin et al., 2009). In contrast, the good-enough level model assumes that the rate of change differs across individuals, with faster changing patients attending fewer psychotherapy sessions. The model further predicts that a given patient will end therapy, in consultation with the therapist, when she has improved to a good enough level. Patients who change rapidly will therefore attend fewer sessions, while patients who change slowly will attend more sessions (Barkham et al., 2006; Stiles, Barkham, Connell, & Mellor-Clark, 2008). Further, the good-enough level model does not require a linear change, with the main prediction being that “the effect of additional sessions is not, on average, equal across people with varying doses of treatment” (Baldwin et al., 2009, p. 204). In an empirical study examining the relationship between the rate of change and the treatment dose in 4,676 psychotherapy patients, Baldwin et al. (2009) reported results that were mostly consistent with the good-enough level model.

Broadening the scope of the discussion to include the total amount of treatment administered on the experimental ward, that is, ACT + TAU, it might be assumed that the patients were treated on the ward until they reached a good-enough level of improvement, at which point they were discharged. The rate of change, in other words, would vary as a function of the treatment dose, as predicted by the good-enough level model. Admittedly, this is a somewhat bold assumption to make. As discussed elsewhere in this thesis, the reasons for discharge vary greatly, and they are a result of the complex reality of the inpatient care system as well as the complexity of patients’ illnesses. In some cases, a patient is discharged simply because his bed is needed for someone else, no matter his degree of improvement. In other cases the patient will leave the ward of his own free choice, even if his condition has deteriorated. In other cases still, the patient will actually have improved to a good-enough level. My point, however, is that it seems reasonable for psychotherapy, as an add-on to TAU, to follow the rhythm of the ward treatment as a whole. When used in such a way, some patients will attend very few sessions, while others will attend many.

A limitation of study I (Tyrberg et al., 2017a) was the fact that the first author (i.e., I) administered all the measures, and conducted all the therapy sessions. There was a complete lack of blinding in this regard. Hence, allegiance effects cannot be ruled out. The limited availability of resources was
the reason for this oversight. Hopefully, though, the way in which study I was conducted can still serve to inspire. To some degree at least, it can serve as evidence that it is possible to conduct publishable research in naturalistic settings without extensive resources.

In study I (Tyrberg et al., 2017a), it was merely noted that all patients but two (one in each group) were prescribed at least one neuroleptic at discharge. Data as to the specific pharmacological regime for each patient was not collected. This must be regarded as a possibly confounding limitation and a threat to internal validity, as both adherence to medication and what medication one is prescribed can affect the need for hospitalization. While the randomization procedure somewhat lessens the impact of this limitation, the small sample size makes any difference between groups more likely.

As discussed in relation to study II (Tyrberg et al., 2017b), my own presence on the ward during the study was a deliberate attempt to increase the staff members’ motivation for filling out the measures, to make myself available for asking (and answering) questions, and to generally inspire the staff to use the techniques learned during the ACT training. However, the possible effects that my presence might have had could also be construed in a less flattering light, namely as a Hawthorne effect. In other words, it might have been the staff members’ experience of being observed, or of being the subjects of research, that caused them to change their behavior, regardless of any potential new knowledge acquired during the ACT training. I cannot guarantee that this was not the case; in fact, I believe it to be probable to some extent. This represents a clear limitation in a methodological sense. However, I also think it is a clinically interesting phenomenon. As discussed elsewhere in this thesis, the actual presence of a clinical expert on the ward is a prerequisite for success, in my experience at least. Of course, this does not remedy the methodological flaws identified in study II. In fact, it points to the need for creative thinking in terms of designing similar studies in the future.

As is evident from the demographics of the staff included in study II (Tyrberg et al., 2017b), the group was quite diverse in terms of both experience and age. Although none of the participants had formal psychotherapy training, it is probably safe to assume that they had picked up informal psychotherapy knowledge to varying extents. Additionally, study II failed to provide information regarding the level of specialized psychiatry training among the registered nurses (actually, \( n = 2 \)). Nurses who have attended such training, while not being formally trained in psychotherapy, will likely have more knowledge concerning psychotherapy than assistant nurses. Then again, 30 years of experience, no matter one’s profession, will almost certainly result in a significant amount of accumulated informal knowledge. In
sum, the staff group was somewhat briefly described in study II, which must be seen as a limitation.

The actual observation of staff members and the recording of changes in their behavior by independent raters would have been a methodological improvement in study II (Tyrberg et al., 2017b). Due to both practical limitations and ethical considerations, this was not possible. Instead, a measure of ACT-consistent behavior was designed specifically for the purpose of the study. Whether or not the scoring of this measure corresponds to the actual desired behavior could certainly be discussed, and questions as to the construct validity might be raised. Indeed, as mentioned in the discussion section in study II, some participants seemed to experience difficulty deciding how to score this measure (i.e., “Have I really done ACT?”). The wording of the statements (i.e., “I have encouraged a patient to have his/her voices, thoughts or feelings, without resistance;” “I have helped a patient be in the present;” “I have talked to a patient about what he/she misses in life;” “I have approached and talked to a patient despite being unsure of how to help him/her”) was decided in a discussion between myself and the co-authors of study II. Taken out of context, these statements may seem quite general, seemingly corresponding to a common sense approach to speaking to someone in need. It would hence be a valid criticism to question their degree of correspondence to ACT-consistent behavior as an isolated and well-defined construct. However, during the two-day training, all the staff members were assumed to acquire certain basic knowledge regarding ACT, and thus the wording of the statements was assumed to carry certain connotations (i.e., specific examples of ACT-consistent behavior, and conversely, non-ACT-consistent behavior). Admittedly, not all the staff members will acquire the necessary knowledge, despite all of them having attended the training. In the context of the present thesis, and bearing in mind its inherent limitations, however, the measure was seen as an acceptable alternative to the actual observation of staff behavior.

As was reported in study III (Tyrberg et al., 2017c), the features of the wider psychiatric organization were mentioned as contributing to the difficulties associated with the use of the ACT model in everyday work. In short, the organization was not always seen as having been built for such interventions. A lack of managerial support and competing ward duties were concrete examples of this. Indeed, taking the features of the organization into account is critical to implementation work. In the context of the present thesis, the resources available perhaps did not allow for a sufficiently thorough grounding on all the levels of the organization. Attempts were made to seek support for the project where possible (i.e., managers on the levels closest to the ward). However, for a project such as this to truly succeed at a deeper level, more
time and resources would probably need to be spent on seeking continuing support for the central tenets of the model on all levels of the organization.

Future Research Directions

As should be evident to the reader at this point, measuring effects in a hectic ward context has proven to be a great challenge throughout the present thesis project. The RCT, while being a well-established gold standard for psychotherapy research, does not necessarily fit with this context. Hence, in future studies of therapy in inpatient contexts, other research designs must be considered. It is my impression that qualitative research methods are currently neglected, either as a complement to traditional quantitative methodology, or indeed as stand-alone designs. The traditional approach for a psychotherapy researcher within the CBT tradition is the RCT. In other fields of research, nursing studies for instance, qualitative methodology is often the first choice. Even though I do not advocate a dramatic shift in terms of how we, as psychology researchers, should evaluate the quality of a study, I do believe that it is natural to observe a phenomenon from different angles in order to understand and describe it. Quantitative methodology represents one angle, while qualitative methodology represents another. Given both the complexity of the inpatient context and the difficulties associated with obtaining large enough and well-controlled samples for traditional RCT research, the use of single-case experimental designs (Engel & Schutt, 2016; Perone & Hursh, 2013; Purswell & Ray, 2014) is another promising alternative for future studies.

As mentioned briefly in connection with study III (Tyrberg et al., 2017c), a subset of particularly interested nurses were offered expert ACT training, with the aim being to use them as study therapists in a future treatment study. This study is yet to be conducted, although the idea of tapping into the therapeutic potential of ward staff members in this way seems to offer a promising avenue for future research. Indeed, such research is currently under way in other parts of the world (e.g., Gaudiano et al., 2017). The use of staff members as therapists seems reasonable from a cost efficiency perspective, and it is a way of increasing the reach of inpatient psychotherapy. The experiences gathered during the present thesis project also point to a certain instinctive feeling that many staff members have with regard to talking naturally to inpatients. As noted by Clarke and Wilson (2009), having a staff member who can act as an ambassador for the treatment approach is also central to the success of its implementation.
Conclusions

So, why is it important to implement an ACT model as a routine part of psychiatric inpatient care? Playing devil’s advocate here and judging from the research background, choosing instead mindfulness, classic CBTp, BA, possibly an ISTDP model, or even befriending, appears to be equally promising and effective, depending on how one reads the available studies. Well, again judging from the research background, not to mention the experiences of staff and patients within the inpatient care system, merely doing something, that is, tending to patients with purpose, direction, and ambition to create change, seems warranted, no matter the specific model followed. That being said, the choice of ACT seems warranted, given its increasing research base. My clinical experience also suggests that the ACT model, due to its inherent flexibility, offers a good fit with the psychiatric inpatient ward, with its inherent chaos and unpredictability.

The present thesis provides preliminary support for the use of ACTp as a brief individual intervention for psychotic inpatients in a Swedish context, thereby adding to the previous research base (Bach & Hayes, 2002; Gaudiano & Herbert, 2006). It further describes the potential benefits of offering the staff working on a psychiatric inpatient ward intensive training in ACT as a model for their everyday interactions with patients. The present thesis also provides useful descriptions of what makes the implementation of both individual treatment and staff-patient interaction using the ACT model challenging. On the individual side, offering the intervention in such a way as to include all patients treated on the ward is very difficult. On the staff-patient interaction side, simplifying the model in such a way as to render it accessible for all staff members is another major challenge, as is the staff members’ experience of time limitations.
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