

WITHOUT YOU THERE IS NO ME

An interpersonal framing of psychosis

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Childhood is the time of growth, it is the years between waking and straw ... What you lack during these years, you can never acquire, any more than you can lose what you won during this time ... Thus you find yourself in a place on earth which you have not chosen. Plant, soil, environment, climate, or negligence – all this is as granted. All this, so deeply embedded in our life, is there for always and our will without.

Vilhelm Moberg, 1968

To my children Svante and Vide

Abstract

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The general aim of this thesis was to explore experiences of interpersonal relationships of individuals with psychotic disorders and to explore patients' understanding of their symptoms. The four studies covered different aspects and perspectives relevant to understanding the interpersonal context and its possible associations with psychosis. The aim of *Study I* was to explore how individuals with psychosis experience their early relationships with caregivers and how they describe themselves as children. The study was based on interviews with 7 men and 5 women (aged 29 to 63 years). Caregivers were portrayed as sexually, physically, and/or emotionally abusive, often in combination with a non-abusive caregiver described as resigned and passive. The childhood strategies such as daydreaming and 'trying to become invisible' that emerged resemble recognized childhood signs of psychotic disorders. In *Study II*, the aim was to explore how individuals with psychosis make sense of the content of their psychotic symptoms. The study was based on the same interviews used in *Study I*. A consistent theme in the participants' understanding of the content of their psychotic symptoms was either an absence of interpersonal relationships or relationships described as abusive or intrusive. The aims of *Study III* were to compare the distribution of attachment styles in patients with psychosis with that in the general population and to investigate the relations between attachment and symptoms in the psychosis group. The study group consisted of 47 individuals (30 males and 17 females) with a mean age of 43.02 years. As expected, the secure attachment style was underrepresented in the study group compared with the general population group, and dismissing and fearful attachment styles were overrepresented in the clinical sample. The results also showed significant positive correlations between preoccupied attachment and severity of symptoms. In *Study IV*, the aim was to explore mental health professionals' perceptions of parents of patients with psychosis. Participant observations were conducted during team meetings at a psychiatric care unit specializing in patients with psychosis. In the analysis, a complex and multifaceted image emerged of parents as seen by mental health professionals. Some parents were described as a helpful resource, but others were thought to hinder treatment, or to cause the patient emotional pain. Other parents were described as neglectful or abusive. In sum, this thesis shows that knowledge of interpersonal relationships could be valuable for understanding the early signs and adult symptoms of psychosis. These findings may be important to consider both in individual treatment and in treatment focusing on family interventions.

*Key Words:* Attachment, Caregiving, Childhood, Mental health professionals, Parents, Psychosis, Relations, Symptoms

## SVENSK SAMMANFATTNING (SUMMARY IN SWEDISH)

Psykotiska symptom uppstår inte i ett vakuum och tidigare forskning visar att symptom kan bli mer begripliga när de förstås utifrån individens livshistoria. En viktig del av vår livshistoria är tidiga relationer. Dessa relationer utgör basen för hur vi ser på oss själva och för förmågan att hantera de känslor som vi känner. Nära relationer påverkar också vår förmåga att skilja yttre intryck från det egna inre tillståndet. Trots kunskap om hur tidiga relationer formar oss alla behövs specifikt mer kunskap om hur erfarenheterna av tidiga relationer påverkar personer med psykosjukdom. Det övergripande syftet med avhandlingsarbetet var således att studera erfarenheter av nära relationer hos patienter med psykosjukdom och att undersöka patientens egen förståelse av sina symptom.

Avhandlingen är baserad på fyra delstudier som dels bygger på den undersökta gruppens egna erfarenheter, dels på personalens uppfattningar av patientens föräldrar. I *Studie I* fokuserades deltagarnas beskrivningar av föräldrarna, uppväxtförhållandena samt hur de såg på sig själva som barn. Av dessa beskrivningar framkom en bild av barn som hade utsatts för olika former av övergrepp. Klimatet i familjen beskrevs som slutet och tyst och det framkom få beskrivningar av föräldrar som hade samtalat med sina barn eller som hade hjälpt barnet att förstå det svåra som hade hänt dem. Deltagarna beskrev sig själva som tystlåtna och ensamma barn med en benägenhet att dagdrömma och fantisera. I *Studie II* belystes deltagarnas beskrivningar av innehållet i de psykotiska symptomen samt hur de själva förstod orsakerna till innehållet. Deltagarna beskrev ofta innehållet i de psykotiska symptomen utifrån tidigare erfarenheter av övergrepp och vissa förstod innehållet i symptomen som en konsekvens av ensamhet och maktlöshet. *Studie III* baserades på deltagarnas självskattade anknytningsmönster och symptom. Deltagarnas självskattade anknytningsmönster jämfördes med självskattningar från en grupp ur normalpopulationen. De deltagare som skattade ett tryggt anknytningsmönster var underrepresenterade medan deltagare med undvikande anknytnings-

mönster var överrepresenterade bland dem med psykosjukdom. Deltagarna som skattade sitt anknytningsmönster som ångestfullt-undvikande var också överrepresenterade bland dem med psykosjukdom. Resultaten från *Studie III* visar vidare på ett samband mellan överberoende anknytning och symptom. *Studie IV* baserades på personalens beskrivningar av patientens föräldrar såsom de kom till uttryck vid teammöten på en mottagning specialiserad på behandling av personer med psykosjukdom. Analysen visar på en mångfacetterad och komplex och bild av patientens föräldrar. Vissa föräldrar beskrevs som en resurs såväl för patienten som för personalen; andra föräldrar beskrevs som allt för påträngande och som en orsak till patientens svårigheter.

Ett tema som löper genom samtliga studier är, att det ibland svårförståeliga i psykotiska symptom blir mer förståeliga i ljuset av individens erfarenheter av relationer. Eftersom forskning visar att det kan vara hjälpsamt för patienten att förstå psykosen utifrån ett livshistorieperspektiv är det nödvändigt för personal att våga fråga patienten vilka erfarenheter hon eller han har av tidigare relationer. Det är rimligt att tänka sig att personal ibland undviker frågor om tidiga erfarenheter utifrån föreställningen om patienten som sårbar. Det här avhandlingsarbetet visar dock att dessa frågor är viktiga att ställa för att patienten ska kunna få den förståelse och den behandling hon eller han behöver.

## LIST OF PAPERS

This thesis is based on four empirical studies, which will be referred to in the text by their roman numerals.

- I. Strand, J., & Tidefors, I. (2012). 'If you're not safe anywhere, you turn it inside yourself': Narratives about childhood experiences told by 12 individuals diagnosed with psychosis. *Psychosis: Psychological, Social and Integrative Approaches*, 4, 137-148.
- II. Strand, J., Olin, E., & Tidefors, I. (2013). 'I divide life into different dimensions, one mental and one physical, to be able to handle life, you know?' Subjective accounts of the content of psychotic symptoms. *Clinical Psychology & Psychotherapy*. Advance online publication. doi: 10.1002/cpp.1872
- III. Strand, J., Goulding, A., & Tidefors, I. Attachment styles and symptoms in individuals with psychosis. (Under revision in *Nordic Journal of Psychiatry*)
- IV. Strand, J., Olin, E., & Tidefors, I. Mental health professionals' views of the parents of patients with psychotic disorders: A participant observation study. (Under revision in *Health and Social Care in the Community*)

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January, 2014

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## INTRODUCTION

Psychotic symptoms do not arise in a contextual vacuum and research shows that symptoms become more comprehensible when considered from the standpoint of the individual's previous history (Beavan & Read, 2010; Jakes, Rhodes & Issa, 2004). A crucial part of our history is our early interpersonal experiences, which form the basis for our sense of self, for our emotions, and for our capacity to handle emotions. Our early experiences also shape our mental representations and contribute to our ability to separate external experiences from internal states. However, the early interpersonal relationships of people with psychotic disorders are poorly understood and many patients feel that there is little room for their personal histories. Therefore, the general aim of this thesis was to explore in patients with psychosis both their experiences of interpersonal relationships and their understanding of their symptoms. This aim evolved after I was accepted as a doctoral student in an intervention project aimed to increase patients' participation in treatment. Having worked with families of youth with psychosocial problems, I became interested in how early interpersonal experiences were perceived by patients with psychosis. After collecting interview and self-report data, I wanted to complement the patients' perspective with that of mental health professionals. My intention in writing this thesis has been to convey both the patients' and professionals' descriptions in a way that mirrors and does justice to their experiences.

## PSYCHOSIS

The revised Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; American Psychiatric Association [APA], 2000) uses the term “psychotic” in reference to the delusions, prominent hallucinations, disorganized speech, or disorganized or catatonic behaviours seen in schizophrenia, schizophreniform disorder, schizoaffective disorder, and brief psychotic disorder. It is common to classify symptoms of psychotic disorders as positive or negative. Negative symptoms reduce a range of experiences and can include losses of emotional expression, motivation or self-directedness, speech, and pleasures and interests (APA, 2000). Such negative symptoms, commonly observed in individuals with a diagnosis of schizophrenia, generally seem to express an emotional and relational shutdown. Positive symptoms, on the other hand, include perceptions of things that others do not perceive (hallucinations) and extraordinary explanations for ordinary events (delusions). It should be acknowledged that in 2013, the APA published the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and some definitions have been changed. However, in this thesis, definitions from the revised fourth edition of DSM (APA, 2000) will be used, mainly because this edition guided much of the research reported here.

Delusions are regarded as the core symptom of psychosis. The DSM-IV-TR (APA 2000) defines delusions as erroneous beliefs that usually involve the misinterpretation of perceptions or experiences. In psychiatry, it is common to distinguish among the severity and content of delusions. The DSM-IV-TR lists 11 types of delusions: persecutory (the most common), grandiose, reference, somatic, religious, guilty, jealous, erotomanic, controlled, thought-broadcasting, and bizarre. A study by Freeman (2007) found persecutory delusions to affect about 80% of those with psychosis. Grandiose delusions, the next most common type of delusion, are present in 25% to 50% of individuals with psychosis (Knowles, McCarthy-Jones

& Rowse, 2011). After delusions, the other positive symptom of psychosis most commonly experienced is hallucinations, defined as perceptions unprovoked by external stimulation of the sensory organs (APA, 2000). Any sense can be affected by hallucinations, which can occur in one, two, or several senses simultaneously. Among the different hallucinations, auditory hallucinations (voices) are the most commonly reported, with a lifetime prevalence of approximately 70% in individuals with psychotic disorders (Landmark, Merskey, Cernovsky & Helmes, 1990). The voices and what they say are often described as entities distinct from the individual's own mind and thoughts, and while the content of the speech can vary, it is often pejorative or threatening (APA, 2000).

Apart from the defining symptoms outlined in diagnostic manuals, other relevant clinical features of psychosis described by patients and researchers are the roles of the self and the emotions. Depending upon which theoretical “map” is used, the symptoms can be seen either as risk factors or as additional symptoms. As early as 1911, Bleuler noted that a common feature in individuals with psychosis was the tendency for the self to undergo alterations including a splitting of the self into distinct parts and a decreased ability to direct one's thoughts and actions. Many current researchers have proposed that a disturbed sense of self is characteristic of psychosis. Sass and Parnas (2003) suggest that individuals with a diagnosis of schizophrenia tend to have difficulties on the pre-reflective level, defined as the capacity to recognize experiences as one's own. Low self-awareness has also been found during the remission phase of symptoms, suggesting that it may not be associated with the severity of the psychotic symptoms (Parnas, Handest, Sæbye & Jansson, 2003). Lauveng (2012) describes the experience of losing the sense of self as follows:

*I started to think about myself as 'she'. 'She went to school'. 'She was sad'. And I wondered who 'she' was. Was 'she' 'me'? But, no, that could not be true, because the sentences I heard in my head told me that 'she' was sad, and wanted to kill*

*herself, but I was not sad, as far as I could tell. But, really, I couldn't know, because I didn't exist anymore. And if I was 'she', who was the 'I' wondering if 'I' was 'she'? Was that another 'I'? (p. 80)*

A concept related to self-awareness is metacognition – an individual's general capacity to think about thinking (Lysaker, 2010). One reason for the hypothesis of a link between psychotic disorders and deficits in metacognition is that people with psychosis often have difficulties drawing conclusions about the motives of others and the origins of their own internal states (Lysaker, 2010). Another reason is that many people are unaware of their illness (Amador et al., 1994). Difficulties related to metacognitive tasks have been explored in a number of studies that suggest that people diagnosed with schizophrenia have trouble understanding that others have interests, intentions, and motives that are separate from their own (Lysaker et al., 2005, 2007, 2008).

People with a psychotic disorder tend to have problems with affect. In 1906, Bleuler mentioned that suppression of emotions are central in schizophrenia and suggested that delusions and hallucinations are the result of an individual's attempt to avoid overwhelming affect. Also current researchers posit a central role of affects. For instance, Gumley (2010) proposes that psychotic disorders including schizophrenia can be conceived as disorders of affect regulation underpinned by weakened or compromised metacognition. The view of emotion as an underlying factor in psychosis has been established in studies indicating that depression is a common symptom during the first-episode prodromal phase (Upthegrove et al., 2010). Other studies indicate a high prevalence of post-psychotic depression following a psychotic episode (Birchwood, Iqbal, Chadwick & Trower, 2000). Individuals with psychosis and comorbid anxiety or affective disorder also have lower levels of daily functioning and reduced self-esteem; and they tend to feel more entrapped and less able to control relapses into psychosis than those without such comorbidities (Karatzias, Gumley, Power & O'Grady,

2007). Studies also show that there can be discrepancies between how people with psychosis experience emotion and how they communicate it to others. For example, Aghevli, Blanchard and Horan (2003) found that patients assessed by others to have low emotional expression reported their own emotional experience as high. Another study based on first-person accounts found discrepancies between emotional expressions and emotional experiences; many patients described negative emotions, but had difficulty communicating these emotions to others (Le Lievre, Schweitzer & Barnard, 2011).

## Prevalence

In Sweden, it is uncommon to be diagnosed with a psychotic disorder before the age of 13; the diagnosis is usually given to individuals between 15 and 30 years of age (National Board of Health and Welfare [NBHW], 2011). The most common psychotic disorder is schizophrenia. In the DSM-IV-TR (APA, 2000), only one of the symptoms, either bizarre delusions or hearing voices, is required for an individual to be diagnosed with schizophrenia. However, in the recent edition, DSM-5 (APA, 2013), two symptoms are now required for the diagnosis. The prevalence of schizophrenia is frequently reported as occurring in 0.5% of the population (APA, 2000). In Sweden, the life time prevalence of schizophrenia is approximately between 0.5% and 0.8%, and it is estimated that between 30 000 to 40 000 individuals require social services for their illness (NB Health W, 2011).

To date, few studies have provided reliable estimates of the prevalence of all psychotic disorders. One study conducted by Perala et al. (2007) in Finland showed that out of 8028 screened individuals aged 30 or older, 3.06% had a psychotic disorder. If the same rate were applied to the Swedish population, 290 700 individuals would have a psychotic disorder. Because psychosis also occurs in people with other diagnoses such as bipolar disorders and major depressive disorder, the number of individuals with psychosis would be even higher (Perala et al., 2007).



## Prevalence of psychotic symptoms in non-clinical populations

Some studies suggest that hearing voices occurs in non-clinical as well as clinical populations. For example, physical exhaustion from insomnia or drug abuse can provoke hallucinatory experiences. Hallucinations can also be related to the loss of someone close or to periods of isolation. In a random sample of 7076 individuals, 18% reported having experienced a positive psychotic symptom (van Os, Hanssen, Bijl & Ravelli, 2000), and in a study of hallucinatory experiences in a non-clinical sample, of the 39% who reported having heard their thoughts aloud, 5% reported having had conversations with the voices (Posey & Losch, 1983). Delusions such as paranoid thinking can also occur in non-clinical populations. In a review study, Freeman (2006) found that approximately 1% to 3% of the non-clinical population experience delusions as severe as those in people diagnosed with a psychotic disorder. The results also showed that 10% to 15% of the non-clinical population experience fairly regular delusional ideas such as feeling followed, feeling watched, or believing they have special powers. Freeman (2006) suggests that the high incidence of delusional thinking in the non-clinical population indicates that delusions occur on a continuum from 'normality' to 'abnormality'.

## The progression of psychotic disorders

It is important to detect early signs in order to identify individuals who may be at risk of developing psychosis. Early detection is essential to prevent or delay the onset and impact of (Birchwood, 2000) and some researchers claim that it is possible to detect signs of a psychotic disorder as far back as childhood (Polanczyk et al., 2010).

### *Childhood signs*

Researchers interested in identifying childhood signs of psychosis propose that disturbed behaviour in childhood and adolescence can foreshadow a disorder in adulthood (e.g.,

Polanczyk et al., 2010). Delays in motor and language development have been identified as possible predictors of a psychotic disorder in adulthood (Jones, Rodgers, Murray & Marmot, 1994), as have unusual social, behavioural, and emotional expressions in childhood (Wellham et al., 2009). Other studies find that withdrawal, anxiety, difficulties with thoughts and attention, aggressiveness, and neuromotor abnormalities are characteristics of children who develop a psychotic disorder in adulthood (Neuman, Grimes, Walker & Baum, 1995). A study of psychotic symptoms in twins showed a higher proportion of childhood signs of psychosis among monozygotic twins than among dizygotic twins (Polanczyk et al., 2010). These results also indicated that children with psychotic signs had more cognitive impairments, externalizing behaviour problems, internalizing problems, and elevated levels of antisocial behaviour in childhood than those who had no psychotic signs.

### *The prodromal phase*

Another area of research focuses upon the prodromal (early) signs of psychosis. These signs, previously understood as precursors to a psychotic episode, are now recognized in DSM-5 as Attenuated Psychosis Syndrome (APA, 2013). However, because that change is recent, the research outlined here is drawn from studies aimed to explore the so-called prodromal signs.

The prodromal phase is characterized by various mental states including both nonspecific symptoms, such as depressed mood and anxiety, and attenuated psychotic symptoms (Yung & McGorry, 1996). Other researchers have found that additional features such as poor cognitive functioning, low-grade psychotic symptoms, depression, and confusion precede a psychosis (Yung et al., 2003). In a study focused on first-person accounts of the prodromal phase, one of the most striking signs was changes in thinking and behaviour (Boydell, Gladstone & Volpe, 2006). The participants in a study by Møller and Husby (2000) also described changed interests and altered behaviours in social interactions such as increased passivity or active avoidance.

### *Remission and recovery*

It is difficult to show a clear direction in the progression of psychotic disorders. Longitudinal studies that follow individuals throughout their lives are scarce, therefore knowledge about long-term outcomes is limited, and the prevalence of psychotic symptoms in non-clinical samples has stirred debate about the definition of recovery. These limitations must be borne in mind through the following discussion of illness outcomes.

In a recently published review, rates of remission (i.e., subsided symptoms), were calculated. The reported remission rates for individuals with first-episode schizophrenia ranged from 17% to 78% (AlAqeel & Margolese, 2012). In those with multiple episodes of schizophrenia, remission rates ranged from 16% up to 62%. Variables that were most frequently associated with remission were better functioning before the psychotic onset, milder symptoms at debut of the illness, early response to treatment, and shorter duration of untreated psychosis. However, because the follow-up period in the included studies varied from six months to seven years, these numbers do not adequately represent the lifetime progression of schizophrenia. A review of studies concerning functional recovery (i.e., partial or complete return to normal functioning) that included patients with a first-episode psychosis found functional recovery in approximately 40% of the patients. Regardless of whether the follow-up period was under or over two years; approximately 25% of patients were considered to have ‘poor outcomes’ (Menezes, Arenovich & Zipursky, 2006).

Studies suggest that remission and recovery are possible for people diagnosed with schizophrenia. However, many individuals with a psychotic disorder do not have adequate access to mental or social health supports or to an optimized pharmacological treatment, all of which are crucial for patients to achieve remission of symptoms or good quality of life (Zipursky, Reilly & Murray, 2012). Moreover, the greater the cumulative load of risk factors is before the onset of illness, the more likely it is for the individual to have a poor outcome.

Some individuals may start with a considerably impaired ability to cope with stressors; others may start with less vulnerability, but are exposed to repeated social adversities that hinder their chances of recovery (Zipursky et al., 2012).

### An experience-based definition of psychosis

Because a psychotic experience is private in the sense that its symptoms are immediately accessible only to the individual who experiences them, first-person descriptions of psychosis can be vital to our understanding of the illness (McCarthy-Jones, Marriott, Knowles, Rowse & Thompson, 2013).

In a recently published review, McCarthy-Jones et al. (2013) present personal accounts from 97 qualitative studies of first-person experiences of a psychotic episode. One of the main findings across the studies concerned loss: loss of consensual reality and loss of the sense of self after the initial prodromal changes, which could involve feelings of confusion and insecurity about oneself and the world. Participants also described great fear and confusion, as well as distrust of one's own perceptions. The loss of a coherent sense of self was frequently described, but not always related to the psychotic experience; losing one's sense of self could also involve losing one's identity as a consequence of diagnostic labels and negative interactions with the mental health system (McCarthy-Jones et al., 2013).

The psychotic episode was sometimes described positively in terms of hearing helpful and comforting voices. Once the fear and confusion of fragmentation had passed, individuals across the studies described regaining the sense of a stable and understandable reality that could still involve hearing voices. In the recovery phase, some individuals tried to make sense of their experiences, some by linking them to genetics, to the loss of friends or relatives, to loneliness, or to drugs or alcohol. Others linked the psychotic experience to abuse or other traumatic experiences in childhood. In all of the studies, participants emphasized the importance of hope, which they related to support from family and friends, positive attitudes

from clinicians, and having the courage to believe in the possibility of restoring family relationships and other important interpersonal relationships.

McCarthy-Jones et al. (2013) conclude that it is important to view psychosis not only as an internal illness, but also as an illness that can have devastating consequences for the person's social life. They further conclude that the experience of a psychotic episode includes much more than hallucinations and delusions.

### Theories, models, and perspectives of psychosis

The stress–vulnerability model is widely used to explain the development of a psychotic disorder. In formulating this model, Zubin and Spring (1977) proposed that individuals have different degrees of vulnerability to the disorder; individuals with low vulnerability require high levels of stress to develop and manifest the illness, while those with high vulnerability may develop a psychotic disorder after relatively low levels of external stress. Vulnerability in this model may be caused by factors in the environment or within the individual (e.g., genetic predisposition). Environmental causes of vulnerability could include childhood adversity, dysfunctional family environment, being bullied, and being socially isolated. According to the model of stress–vulnerability, the onset of a psychotic disorder is generally related to stressful life experiences such as moving away from home, starting to study, or separation from or loss of someone close (Zubin & Spring, 1977).

Numerous more recent models aim to explain psychotic disorders and their various symptoms. Some of these models focus on factors in the individual's environment, while others focus on biological vulnerability. Genetic models require that an individual have a specific predisposition to develop an illness. This specific predisposition could be genetic, related to the amount of a specific protein in the brain, or because of a disturbed and hyperactive dopaminergic signal transduction (Gibiino et al., 2010; Zuckerman, 1999). Some cognitive models also assert that various cognitive deficits must be present for psychotic

symptoms such as hearing voices to occur. For example, the inner speech model proposes that through defective self-monitoring of inner speech, verbal thoughts are not recognized as the person's own (Frith & Done, 1988). Similarly, in the memory-based model it is proposed that cognitive deficits cause an individual to fail to recognize or identify their own mental states (Waters, Badcock, Michie & Maybery, 2006).

The cognitive integrative model builds on previous cognitive models of psychosis, but posits a central role for both the emotions and the social environment in the development of positive psychotic symptoms (Garety, Kuipers, Fowler, Freeman & Bebbington, 2001). According to this model, basic cognitive dysfunction is related to difficulties in self-monitoring intentions and actions, and this could lead to people's inability to recognize their intentions as their own (i.e., Frith, 1992). In this model, anomalous experiences associated with emotional changes may also be experienced as personally significant and may trigger the individual to search for an explanation. Here, biased conscious appraisals are crucial and contribute to the conclusion that these confusing experiences are externally caused and thereby jumping to conclusions (Garety & Freeman, 1999). These immediate processes are argued to occur against a social background. Garety et al. (2001) suggest that earlier adverse experiences such as childhood trauma and social marginalization may create a cognitive vulnerability characterized by negative schematic models of the self and the world (e.g., 'I am vulnerable, others are dangerous'). Social isolation contributes to the acceptance of the psychotic appraisal since isolation limits the individual's access to alternative and more realistic explanations. The externalizing appraisal is regarded as a defining decision and a psychotic episode occurs when the individual understands internal experiences to be externally caused and personally significant (Garety et al., 2001).

Another way of understanding psychosis is by emphasizing the similarities between psychotic symptoms and dissociation. This approach suggests that in the context of a

psychosis, the voices heard can be understood as components of the self that have been dissociated or disowned as a consequence of trauma, loss, or other interpersonal stressors. Morrison, Frame and Larkin (2003) suggest that verbal post-traumatic thought intrusions may expand, and in combination with dissociation, be experienced as voices. Dissociation is viewed as a psychological defence to trauma that allows individuals to detach from events that are too overwhelming for the psyche to process (van der Hart, Nijenhuis & Steele, 2006). Consequent manifestations may include symptoms such as a sense of detachment and alienation from the body, a sense of unreality about the external world, identity confusion, and psychogenic amnesia. In the short term, this can function as a survival strategy by reducing conscious awareness of intolerable information. In the long term, if the dissociation becomes a habitual way to respond to anxiety or threat, it can result in considerable distress impairment (Dell, 2002).

Other theorists, particularly those belonging to the psychoanalytic tradition, see the relationship between the child and the caregiver as important to the development of a psychotic disorder. For example, Sullivan (1962) focused on the interpersonal relationship between the child and the mother when aiming to understand the development of psychosis. Sullivan argued that when the child's needs produce anxiety in the caregiver, the child becomes anxious and tends to disintegrate rather than integrate negative emotions. Sullivan defined three different types of behaviour that the child uses to avoid provoking anxiety in the caregiver and how those behaviours are interpreted by the child and contribute to the development of psychosis. First, behaviours that gain the caregiver's approval and increased tenderness towards the child are internally organized as 'the good me'; second, behaviours that generate anxiety and disapproval in the caregiver are organized in the child as 'the bad me'; and third, behaviours that produce intense anxiety in the caregiver, and consequently in the child, are not allowed into the child's consciousness and are organized as a dissociative

system that is ‘not me’. An inability to defend against dissociative aspects of the self could lead to an experience in which the ‘not me’ eventually degenerates into a schizophrenic process. Sullivan (1962) argued that schizophrenia, like all other psychopathologies, is an understandable reaction to interpersonal anxiety and overwhelming affect, and he understood the psychotic episode as a sometimes protective retreat from perceived dangers.

### *Personal perspectives of causes of psychotic disorders*

Patients, caregivers, and professionals seem to consider both social and biological vulnerabilities when asked about the causes of psychosis. In one study 76% of patients diagnosed with schizophrenia thought that at least one social stressor, most frequently family conflict, was the cause of their illness; 26% reported their symptoms as the cause of their disorder, and 10% reported biological causes (Magliano, Fiorillo, De Rosa, Malagone & Maj, 2004). Another study that included a more detailed presentation of perceived causes of illness in a sample of 77 patients with a diagnosis of schizophrenia found that 48% reported psychosocial factors. Within this category, most patients reported burdens such as pressure to achieve at work or in school. The second most frequently given cause (32%) was childhood adversity. A majority of these reported an aggressive atmosphere at home and bad treatment as a child as the major factors contributing to their illness (Holzinger, Löffler, Müller, Priebe & Angermyer, 2002).

Other researchers have focused upon how caregivers and professionals view the causes of psychotic disorders. Clarke and Couchman (2012) explored how 50 caregivers of adolescents explained the causes of their children’s illness. Caregivers reported a mean number of six causes; the five most commonly reported were heredity/genetic factors, substance abuse, peer influences, school stress, and tension in social relationships. In terms of family-related factors, 22 caregivers reported conflicts within the family, and 14 caregivers reported bad upbringing/poor caregiving. Another study found that 21% of the relatives



viewed heredity as the causal factor for schizophrenia, and 27% reported conflicts within the family (Magliano et al., 2004). Professionals also tend to endorse a combination of biological and psychosocial factors when reporting the causes of schizophrenia. One study shows that 68% of professionals reported heredity, and 47% reported conflicts in the family as the main casual factors (Magliano et al., 2004).

### Delusions and life experiences

Many researchers claim that psychotic symptoms such as delusions do not arise in a contextual vacuum. For example, Rhodes and Jakes (2000) quote Jung (1914) who claimed, 'These symptoms immediately became comprehensible when considered from the standpoint of the individual's previous history' (p. 162). Similarly, Gilbert (1989) posits the possibility of considering key aspects of delusions as symbols of the individual's actual problems and goals. Much current research aiming to study delusions from a personal perspective support the early ideas of Jung (1914), who thought that delusions are more comprehensible when considered in light of an individual's emotional and biographical context. Consequently, because delusions are such personal experiences, it may be advantageous to focus upon studies based on first-person accounts.

In one of few studies that have used a first-person approach to explore how individuals in an acute psychotic phase understand the causes of their delusions, three quarters of the participants ( $n = 100$ ) reported the delusion itself as an explanation for the delusion, and presented no alternative explanation for their experiences (Freeman et al., 2004). The authors of this study conclude that a more detailed interview might elicit other explanations for experiences of such personal nature. Another study explored whether individuals' fundamental concerns such as life goals and long-term problems were manifest in the content of their delusions (Jakes et al., 2004). The six main categories found in the interviews indicated that the thematic links between the delusions and the personal contexts are so

personal and complex that a full theory that encompasses them all might not be possible (Jakes et al., 2004). The complexity of delusions was supported in another study finding as many as 34 delusional themes (Rhodes, Jakes & Robinson, 2005). Rhodes et al. (2005) suggested that in therapeutic work, it might be essential to map out each individual's specific set of delusions to understand how the delusional themes relate to individual concerns and experiences.

Rhodes and Jakes (2010) explored the onset of delusions from a first-person perspective and found three types of onsets that ranged from a sudden transformation of the self and the world to delusions that began early in childhood. The participants who described that the delusions began in childhood commonly described social difficulties in the family such as domestic violence and isolation. For example, one of the participants stated that she started to experience delusions as a reaction to loneliness:

*I looked after the young ones, and I always felt that I was protected by these angels. I knew it was safe to go through the woods, when to cross the road, I never felt alone, I always felt that there was someone around, and I believe it is the angels, because when I was twelve I actually saw them in my bedroom. I saw two of them, I wasn't happy at the time, things were bothering me. (p. 142)*

Rhodes and Jakes (2010) discuss their findings in terms of the many features, pathways, and potential stages that may lead towards delusions and conclude that the relevance of interpersonal issues needs to be further explored.

### *Persecutory delusions*

One of the most common types of delusion is the persecutory delusion. Freeman and Garety (2000) define persecutory delusion as an individual's belief that harm is occurring, or is going to occur, and that a persecutor exists who intends to cause that harm. By definition,

persecutory delusions are problems of interpersonal reference (Boyd & Gumley, 2007), and much research has focused upon the relationship of persecutory delusions to the social and emotional aspects of an individual's life. One study that compared experiences of abuse found that those with persecutory delusions reported higher levels of emotional abuse than those without persecutory delusions (Rankin, Bentall, Hill & Kinderman, 2005). A later study comparing a group of people with persecutory delusions with a non-clinical group found that those with persecutory delusions reported higher levels of neglect and overprotection during childhood than the non-clinical group (Ashcroft, Kingdon & Chadwick, 2012). The findings from these two studies could be interpreted in different ways. For example, paranoid thinking could lead to more negative evaluations of caregiving, or patients' accounts of their family relations could be at least partly accurate and therefore could contribute to their delusions. If the last option is considered, Rankin et al. (2005) suggest that family influences create a base for how individuals view themselves and others. A negative view of the self and others could lead to an individual who also misinterprets or misperceives relationships in the wider social context.

To highlight the personal experience of paranoia, one study using interviews to gain understanding of the personal meaning of the word paranoia will be discussed (Boyd & Gumley, 2007). In the narratives, fear and vulnerability appeared to be the most important theme. The participants frequently described paranoia as a response to genuinely frightening experiences, and most reported that they had also been depressed. For some participants, paranoia led them to rely on strategies to keep themselves safe that eventually led to isolation and alienation. Several participants spoke of being violently assaulted both in childhood and as adults, and their paranoia was interpreted as an adaptive response to such violent experiences. One of the participants stated:

*I wouldn't say only s\*\*\*\*bags get paranoid, I would just say frightened people. I think people get paranoid dead easily, or get paranoid because of the way they were brought up. They might be brought up viciously. Maybe their mum and dad treat them like s\*\*\*e or something like that, and they get frightened quite easily. They get paranoid dead easily because it ricochets (clicking fingers) in their mind.*

(p. 16)

The findings were interpreted according to Sullivan (1956), who viewed paranoia as a defensive operation used in a difficult interpersonal environment. Boyd and Gumley (2007) also refer to attachment theory (Bowlby, 1977, 1980, 1988), mentioning the possible contribution of insufficient caregiving to an increased vulnerability to paranoia.

### *Grandiose delusions*

Another common type of delusion is grandiose delusion, which is defined as a false and inflated belief in one's worth, power, knowledge, or special identity (APA, 2000). Research using first-person accounts to explore grandiose delusions seem to be lacking, therefore two major explanatory models for grandiose delusions will be presented and linked to empirical findings.

The delusion-as-defence model suggests that grandiose delusions could represent an individual's attempted self-defence against negative affective states (Freeman et al., 1998). In line with this model, Beck and Rector (2005) suggest that grandiose delusions develop to compensate for underlying feelings of loneliness, unworthiness, or powerlessness. However, empirical support for this model is insufficient. One study that aimed specifically to test this model (Smith, Freeman & Kuipers, 2005) by comparing implicit (unconscious) and explicit (conscious) self-esteem found no support for any association between low implicit or explicit self-esteem and grandiose delusions. Another study found no support for the function of grandiose delusions as a defence strategy, but showed instead that grandiose delusions were

negatively associated with loss and humiliating events (Raune, Bebbington, Dunn & Kuipers, 2006). However, some evidence for the delusion-as-defence model was presented in a recently published review (Knowles et al., 2011). One of the included studies pointed towards a link between traumatic life events and grandiose delusions (Read, Agar, Argyle & Aderhold, 2003), while others found only a weak association (Mason, Brett, Collinge, Curr & Rhodes, 2009). Knowles et al. (2011) discuss the problems inherent in using self-report instruments to study the delusion-as-defence model when such defence mechanisms occur outside cognitive awareness and are therefore difficult or impossible for participants to report accurately.

Another model, the emotion-consistent model, hypothesizes that grandiose delusions are an extension of existing self-esteem, and that high self-esteem may be exaggerated in combination with positive affect (Smith et al., 2005). Although few researchers have explored how grandiose beliefs relate to self-esteem, there seems to be more support for the emotion-consistent model than for the delusion-as-defence model (Knowles et al., 2011). For example, two unrelated studies reported that grandiose delusions were related to higher explicit self-esteem and lower scores of depression (Moritz et al., 2010; Smith et al., 2006). Another study found that when individuals with grandiose delusions were compared with individuals with persecutory delusions, those with grandiose delusions evaluated themselves less negatively and had less anxiety and depression (Garety et al., 2013).

### Hallucinations and life experiences

Contrary to what is proposed in DSM-IV (APA, 2000), research show that voices often reflects people's thoughts, feelings and experiences. Individuals who hear voices can identify at least some of those voices as sounding like or reminding them of someone they know. Leudar and Thomas (2000) found that most participants reported hearing the voices of people who were significant to them and that many of the voices were experienced as those of people

at least known to them. Findings reported by Birchwood and Chadwick (1997) show that 16% of voice hearers found it easy to identify their voices, whereas 70% identified a voice by its content, rather than its identity.

Beavan and Read (2010) explored hearing voices from the first-person perspective. All participants filled in self-report instruments about their experiences of hearing voices, and approximately one third participated in a semi-structured interview. About half of the participants reported voices that were mostly friendly or helpful and a third reported voices that were negative or unhelpful. The content of the voices was the only predictor of emotional distress and the strongest predictor of contact with mental health services. More detailed descriptions of the voices were collected in the qualitative part of the study; participants described voices that gave advice, guidance, encouragement, criticism, and comments. Regardless of the specific content, most participants reported that the voices had personal relevance to them. For instance, one of the participants described hearing the voice of his mother:

*When I make a little mistake over something, like I've misread the bus timetable and I find I've missed the bus or something, something quite trivial, and I will hear this voice saying, 'You're rubbish, you're no good, you're incompetent, you've got no common sense, I always knew you couldn't manage without me'. (p. 203)*

Research regularly focuses upon the negative impact of voices, although many individuals with psychosis feel supported by them. When asked about positive voices, as many as 26% of participants reported hearing voices as a pleasurable experience, and the experience of pleasurable voices was negatively associated with distress (Sanjuan, Gonzalez, Aguilar, Leal & van Os, 2004). Voices described as positive and useful have also been described as giving advice, assisting in daily activities, and helping the individuals to make decisions (Jenner, Rutten, Beuckens, Boonstra & Sytema, 2008).

Among patients with a history of either physical or sexual abuse during childhood, Read and Argyle (1999) found that half of the group reported that symptom content was related to the abuse. Hallucinations were more common among those who had experienced sexual abuse, and the relationship between hallucinations and abuse was particularly strong for those who had experienced incest. Sexual abuse was also related to voices with more distressing content, such as commands and paranoid ideations. Some of these results were replicated in a later study based on journal data from patients attending community mental health centres (Read et al., 2003). A significant relationship between voices and abuse was established, and here also it was noted that those who had been abused were more likely to experience voices that were commanding. Another study show that in those patients who had experienced trauma, 12.5% experienced voices with themes and content similar to their traumas. Moreover, 45% heard voices in which the themes, but not the content, were the same as those of their traumatic experiences (Hardy et al., 2005).

In recent years, interest has grown in understanding how individuals position themselves in relation to their voices, and what consequences this might have for their experience of emotional distress. Cognitive models of hearing voices propose that individuals' behavioural and emotional reactions to hearing voices depend upon their appraisal of the voices (e.g., Chadwick & Birchwood, 1994). To explore whether the power of the voice mediated distress, Birchwood et al. (2004) used social rank theory (e.g., Gilbert & Allen, 1998) and demonstrated that individuals who saw themselves as powerless and low in social rank, but perceived the voice as powerful and high in social rank, were likely to be more distressed by the voice. These authors suggested that negative life experiences could lead to feelings of subordination, less ability to control the voice, and more feelings of distress associated with the voice.

In a recently published review, the relevance of interpersonal relationships was explored through both qualitative and quantitative studies (Hayward, Berry & Ashton, 2011). Strong support was found for the view that voices can be understood within interpersonal frameworks, and that the relationships that voice hearers develop with their hallucinations share many features with their relationships in the social world. Few studies have focused particularly upon how early experiences with caregivers are related to individuals' appraisals of their voices. One study, however, showed that those who had experienced childhood abuse perceived their voice as more powerful and critical than those who had not experienced childhood abuse. Lack of emotional support from caregivers was also linked to hearing voices that were less supporting (Connor & Birchwood, 2012).



## THEORIES LINKING THE PAST WITH THE PRESENT

It is unclear how developmental pathways that lead to a psychotic disorder differ from those that lead to other psychopathological disorders. However, because psychosis seem to include problems with sense of self, with metacognition, and with affect regulation, these aspects will be highlighted according to Sterns' theory (1985) of the development of a sense of self and Bowlby's attachment theory (1977, 1980, 1988).

### A developmental perspective of sense of self

*Anyone concerned with human nature is drawn by curiosity to wonder about the subjective life of young infants. How do infants experience themselves and others? Is there a self to begin with, or another, or some amalgam of both? How do they bring together separate sounds, movements, touches, sights, and feelings to form a whole person? Or is the whole grasped immediately? How do infants experience the social events of "being with" another? How is "being with" someone remembered, or forgotten, or represented mentally? What might the experience of relatedness be like as development proceeds? (Stern, 1985, p. 3)*

Stern (1985) posited that an infant, from birth, possesses active skills used to create a sense of self in company with its caregivers. He suggested that every domain of self-experience begins at a particular age, but that each stage influences experiences throughout the lifespan.

During the period of 0–2 months, the infant uses its sensory abilities to understand the surrounding world. The infant's experiences are related to mobilization, activity, and emotions, and emotions are considered to constitute the child's map when it tries to organize and create coherence and meaning in the world. According to Stern, much of the caregiver's primary function is to help the infant to regulate and organize the emotions, and to create pathways between different emotional conditions. The period of 2–6 months is characterized by the infant's integrating the experience of a sense of self physically separate from others.

According to Stern, the child must first have an understanding of itself in order to experience itself as separated from others. He suggests that the infant's sense of agency, the centre of its will, is a central feature of this phase. The centre of will is developed through the ability to control – to some extent – one's emotional experiences, but the child at this stage is also aware that it is highly dependent on its caregiver for emotional regulation. At this stage, the infant starts to internalize interactions with others, and internal representations built on these experiences become the structural basis of developing memories.

When the child is 7–15 months old, it develops a genuine sense of self and an experience of having a self that is both separate from and intertwined with others. Signs of this developmental progress include a conscious sharing of attention with another person. The child learns that not only intentional focus, but also its own intentions, can be shared with others. With the emergence of a preverbal language, a narrative self can come forth. In this phase, the sharing of affective conditions is defined as the most essential feature and takes place with the caregiver as an indispensable interpreter. Stern (1985) also stressed the importance of a corresponding and affectively intoned imitation that 'matches' the infant's emotion and behaviour. If the infant's emotional expressions are ignored, or continually misinterpreted, this will lead to a child without a coherent internal world as well as to a child isolated from relational contexts.

According to Stern (1985) the child's verbal self develops at 15–18 months through dialogue and interaction with others, and an understanding of the world is established. The verbal self is also referred to as the symbolic self, since it provides the child with abilities to start the process that leads to the ability of self-reflection. At this stage, it is possible for the child to create a private, inner world. However, in dysfunctional conditions, language can become the foundation of disintegration and alienation and a tool for the manipulation and distortion of experiences. With the emergence of a more mature language, a narrative self can

emerge when the child is 3–3.5 years old. The primary function of a narrative at this age is to allow the child to organize otherwise chaotic and incoherent experiences. Through language, the child becomes able to reflect upon experiences, to create meaning, and to shape an autobiography. The child's autobiography and self-perception is based on the caregiver's perception of the child (Stern, 1985).

### Attachment theory

To survive, children need physical proximity to a protective adult. According to attachment theory a biological bond between the infant and its caregiver evolved to maintain this proximity and to prevent separation. Regardless of whether the caregiver responds adequately to the infant's need of protection, the infant will attach to the support available. The main goal of the infant is to seek closeness and protection, and to build a base of security from which it can explore the environment. Love, security, and predictability promote the child's development and give the child prerequisites to handle and cope with separation without losing its sense of self (Bowlby, 1977, 1980, 1988).

'A secure base' encompasses the two most fundamental aspects of the caregiver's role: to function both as a base from which the child may venture forth to explore and as a haven of safety to which the child can return when feeling threatened (Ainsworth, Blehar, Waters & Wall, 1978). If the child can return to a haven of safety when in danger, that child is enabled to observe and explore its surroundings with curiosity and a sense of adventure. A secure attachment does not require perfect parenting, but a child does need a 'good-enough-caregiver' who reacts at least adequately to the infant's signals. If the caregiver frequently and continuously ignores or inadequately responds to the child's needs, its development will be inhibited (Broberg, Granqvist, Ivarsson, Risholm & Mothander, 2006).

The infant's interactions with its caregivers create so-called internal working models of the self and of others. These models consist of mental representations of early experiences

with the caregiver, especially experiences during situations of perceived danger and threat, since the attachment system is highly activated in such situations (Bowlby, 1977, 1980, 1988). According to attachment theory, these internal working models will form the basis of the personality and create a template for how the child will predict and plan its actions (Bernier & Meins, 2008). These internal working models will function as a compass to help the child understand and interpret the world and its place in it. If the child experiences a positive relation with its caregivers, the working models will be consistent with reality. If the caregivers do not adequately meet the child's needs, the child will develop working models that are inconsistent with reality since it is forced to ignore its negative experiences with its caregivers to retain the protective closeness that is its primary need. This enables a positive internal working model of the caregiver, while also leading to dysfunctional patterns and difficulty orientating in the social world (Bernier & Meins, 2008; Broberg et al., 2006).

An overview of the different terms for internal working models or attachment styles used by different researchers is presented in Table 1.

**Table 1.** *Definitions of attachment styles*

<i>Authors</i>	<i>Attachment styles</i>			
Ainsworth et al., (1978)	secure	insecure-avoidant	insecure-resistant	
Bartholomew & Horowitz, (1991)	secure	dismissing	preoccupied	fearful*
Hazan & Shaver, (1987)	secure	avoidant	ambivalent	
Main, Goldwyn & Hesse, (2002)	secure/ autonomous	insecure- dismissing	insecure- preoccupied	unresolved/ disorganized

\*Correspond Main's unresolved category and to Hazan and Shaver's avoidant category.

Through the structured laboratory procedure ‘The Strange Situation’, Mary Ainsworth studied infants’ responses to separation from and reunion with their caregivers and categorized these responses into three different attachment styles: secure, insecure-avoidant, and insecure-resistant (Ainsworth et al., 1978). Infants classified as securely attached use the caregiver as a secure base and welcome the caregiver at reunion. Insecure-avoidant children show an indifferent attitude towards the caregiver and do not welcome the caregiver at the reunion. Insecure-resistant children are distressed during separation but unable to be comforted at reunion (Bernier & Meins, 2008). Subsequently, a fourth pattern of attachment was described, the disorganized attachment. The child with disorganized attachment, when separated and then reunited with the caregiver, shows a diverse array of contradictory behaviours. The disorganized child seems to have no coherent strategy for dealing with either separation or reunion. The relationship between the child and the caregiver in this case is based on fear; the caregiver who is the solution to the child’s anxiety is at the same time the source of the child’s fear (Bernier & Meins, 2008).

Main et al. (2002) developed the Adult Attachment Interview (AAI), which became a measure of the internal representations of early caregiving in adolescents and adults. The coding procedure in the AAI uses scales for experiences of parental figures and for states of mind. The classification of an AAI transcript is mainly built on different styles of narrative organization (i.e., state of mind). A transcript is classified as secure/autonomous if the individual indicates that the attachment-related experience is important and consistent independent of the type of relationship. The transcript is also scored according to the coherence of the narration and the participant’s metacognitive monitoring (i.e., capacity to think and reflect upon the narration during the interview). A transcript is classified as insecure-dismissing if the individual devalues or cuts short attachment-related experiences and if the narrative contains idealizations. A transcript coded as insecure-dismissing also

commonly includes a consistent lack of recall and dismissive attitudes (i.e., important relations are discussed as if they do not matter). A transcript is classified as insecure-preoccupied if the individual is aggressively preoccupied with attachment figures but the narrative is characterized by passivity or vagueness. To be classified as unresolved/disorganized, the transcript has to contain narratives about unresolved, and not mourned, memories of loss or abuse. These narratives can also include confusing statements and disoriented speech (Main et al., 2002).

Today, numerous of self-report instruments have been developed to measure attachment in adulthood. Hazan and Shaver (1987) were the first to conceptualize romantic love as an attachment process. Their instrument builds upon the three categories of Ainsworth et al. (1978). Bartholomew and Horowitz (1991) created another self-report instrument to measure adult attachment in close relationships, the Relationship Questionnaire. The Relationship Questionnaire measures the individual's perception of his or her emotional style in close relationships. As adults, individuals with a secure attachment style tend to have a positive model of self and a positive model of others (Bartholomew & Horowitz, 1991). An adult with a dismissing attachment style tends to have a positive view of self and low anxiety in relation to others, and a negative view of others and therefore a high degree of avoidance of relationships (Bartholomew & Horowitz, 1991). An individual with a dismissing attachment style is commonly perceived as emotionally distanced and as having a limited capacity to communicate emotional issues. An adult with a preoccupied attachment style is characterized by a negative view of self and high anxiety in relation to others, and a positive image of others and therefore a low degree of avoidance of relationships (Bartholomew & Horowitz, 1991). In close relationships, individuals with a preoccupied attachment style can be demanding, with an excessive fear of separation and difficulty maintaining boundaries between their own and others' feelings of distress. An adult with a fearful attachment style has a negative view of self

that commonly involves feelings of being unlovable and unworthy of care and support. This individual commonly also has a negative view of others that is characterized by fears of rejection, betrayal, and abandonment (Bartholomew & Horowitz, 1991).

Attachment research has emphasized the extent to which infant attachment organization creates continuity in the child's developmental pathway to adolescence and adulthood (Main, Kaplan & Cassidy, 1985). The continuity of attachment styles was the focus of a meta-analysis by Fraley (2002) that indicated that attachment patterns in 12-month-old infants could predict their adult attachment style with approximately 70% to 75% accuracy. A secure attachment in childhood can, however, alter into an insecure attachment style in adulthood. This discontinuity in attachment style is commonly related to one or more difficulties such as the loss of a caregiver, abuse perpetrated by a caregiver, or the severe illness of a caregiver. In the same way, an insecure attachment style in childhood, through positive experiences, can transition to a secure attachment style in adulthood (Broberg, Risholm-Mothander, Granqvist & Ivarsson, 2008).

#### *Attachment styles and psychosis*

To date, few studies have compared the distribution of attachment styles in groups of patients with psychosis with that in non-clinical groups. One of the few studies applying a three-way categorization (i.e., excluding the fearful attachment style) showed that both the dismissing and the preoccupied attachment styles were over-represented in people with schizophrenia, and that the secure attachment style was under-represented, compared with those in a non-clinical group (Ponizovsky, Nechamkin & Rosca, 2007).

There are some discrepancies in the distribution of attachment styles within groups of individuals with psychosis (see Table 2). In one of the earliest studies to use the AAI to classify attachment in a group of whom the majority were diagnosed with schizophrenia, 89% were classified as insecure-dismissing, but 44% were classified as unresolved/disorganized

when that category was included (Tyrrell, Dozier, Teague & Fallot, 1999). In a recent study of people with first-episode psychosis, 50% of participants were classified as insecure-dismissing and 29% were classified as unresolved/disorganized (MacBeth, Gumley & Schwannauer, 2011). Of the insecure attachment styles, the dismissing attachment style was also over-represented in a study of self-reported attachment style in persons with psychosis (Berry, Barrowclough & Wearden, 2008; Ponizovsky et al., 2007).

From a stress-vulnerability perspective, knowledge of a person's attachment style is important because of its relation to the capacity to regulate affect. According to Ponizovsky et al. (2011), among others, individuals with insecure attachment styles have difficulties appropriately regulating their affective responses to stressful interpersonal situations. From a psychotherapeutic perspective, knowledge of a patient's attachment style is important because it can inform the professional's choice of strategy in working with patients who have an insecure attachment style (Harder & Folke, 2012).

**Table 2.** *Distribution of attachment styles in samples of individuals with psychosis*

<i>Study</i>	<i>Sample</i>	<i>Measure</i>	<i>N</i>	<i>Secure</i>	<i>Avoidant</i>	<i>Ambivalent</i>	<i>Disorganized</i>
Gumley & Schwannauer, (2006)	SZ	AAI	29	3.4%	55.2%	0%	41.4%
MacBeth et al., (2011)	F-E-P	AAI	34	11.8%	50%	8.8%	29.4%
Ponizovsky, et al. (2011)	SZ	RQ	100	53%	10%	16%	21%
Ponizovsky et al., (2007)	SZ	H & S	30	16.7%	56.7%	26.6%	
Tyrell et al.,* (1997)	SMI	AAI	54		89%		44%

SZ: schizophrenia; F-E-P: first-episode-psychosis; SMI: severe mental illness; AAI: Adult Attachment Interview (Main et al., 2002); RQ: Relationship Questionnaire (Bartholomew & Horowitz, 1991); H & S: Hazan and Shaver's trichotomous measure (Hazan & Shaver, 1987).

\*89% were classified as avoidant when the disorganized attachment style was not considered; 44% were classified as disorganized when this category was included.



### *Attachment, affect regulation, and therapeutic relationships*

According to attachment theory, there are two key strategies available for the child to regulate affect and distress. One is deactivation of affect, which is associated with insecure-avoidant strategies, and the other is hyperactivation of affect, which is associated with insecure-resistant strategies. Insecure-avoidant children tend to deactivate their attachment signals, and instead of seeking comfort from an unavailable caregiver, the child tends to withdraw and inhibit its natural reaction of seeking comfort (Ainsworth et al., 1978). Deactivating strategies is related with a caregiver who dismisses the child's need of emotional and physical closeness (Bernier & Meins, 2008). Insecure-resistant children tend to hyperactivate their attachment needs in order to ensure closeness from the caregiver (Ainsworth et al., 1978). Hyperactivating strategies in the child tend to be associated with a caregiver who is inattentive and self-occupied, and who communicates feelings of anxiety and distress in a way that makes the child more worried (Bernier & Meins, 2008).

Because individuals using hyperactivating strategies tend to have an excessive need to express their fears, needs, and doubts (Mikulincer, Shaver & Pereg, 2003), researchers have hypothesized that patients with a psychotic disorder who rely upon hyperactivating strategies have a habit of help-seeking behaviour and a tendency to over-report their symptoms and need of care. This hypothesis was confirmed in an early study that found that patients who were classified as having an insecure-preoccupied attachment style were reported by clinicians to be more demanding of their care providers than patients classified as securely attached (Dozier, 1990). Another study, based on self-report instruments, showed that patients with a preoccupied attachment style reported more emotional distress and engaged in greater self-disclosure than patients with a dismissing attachment style (Dozier & Lee, 1995).

Individuals using deactivating strategies have a tendency to suppress or deny their worries, needs, and vulnerabilities (Fraley, Davis & Shaver, 1998). Based on these findings, it

has been expected that patients with a dismissing attachment style would have difficulties establishing a therapeutic bond. This assumption was confirmed in study showing that clinicians reported that patients classified as having an insecure-avoidant attachment style were less likely to commit themselves to the therapeutic process. Patients classified as insecure-avoidant were also seen as less comfortable with psychotherapeutic treatment than individuals classified as secure/autonomous (Dozier, 1990). Later studies have also found that avoidant attachment is associated with difficulties committing to the therapeutic relationship (Berry et al., 2008). However, it is important to note other studies that do not confirm the associations between the different attachment styles and the capacity to establish a therapeutic bond (Catty et al., 2012; Kvrjic, Cavelti, Beck, Rüschi & Vauth, 2012).

#### *Attachment styles and symptoms*

Few studies have found specific associations between an avoidant attachment style and negative affect such as depression and anxiety. This could be related to the general tendencies of individuals with an avoidant attachment style to suppress or deny worries or to their lower capacity to reflect and report upon their own mental states (MacBeth et al., 2011). Emotional distress such as depression and anxiety among individuals with a preoccupied attachment style has been confirmed in several studies of individuals with psychosis (Berry et al., 2008; Blackburn, Berry & Cohen, 2010; Ponizovsky, et al, 2011).

Because individuals with an avoidant attachment style tend to have a negative model of others, Berry et al. (2008) expected a relationship between an avoidant attachment style and paranoia. This expectation was confirmed and has also been replicated in a non-clinical sample (MacBeth, Schwannauer & Gumley, 2008). In addition, MacBeth et al. (2008) found that interpersonal distancing contributed significantly to the predicted association between an avoidant attachment style and paranoid ideations. This suggests that both lack of security and distancing attitudes towards others predispose individuals to a more paranoid mindset. The

association between a dismissing attachment style and paranoia, however, failed to be replicated in one of the larger studies (N = 100) of patients with a diagnosis of schizophrenia (Ponizovsky et al., 2011). This study instead reported a positive association between a preoccupied attachment style and suspiciousness/persecution. The authors discuss this relationship as a possible outcome of the tendency in people with preoccupied attachment to see threats in social interactions and to feel a need to foresee negative consequences.

Various findings have been reported concerning relations between attachment styles and hallucinations and delusions. One study, applying a two-way dimensional construct of attachment (ambivalent and avoidant) found a positive association between avoidant attachment and both positive and negative symptoms of psychosis (Berry et al., 2008). Ponizovsky et al. (2011) found that a preoccupied attachment style was positively related to delusions, and that a fearful attachment style was associated with hallucinations. Another study found no significant relationships between any of the attachment classifications and hallucinations, delusions, or paranoia (McBeth et al., 2011). The fearful attachment style has rarely been included in studies of patients with a psychotic disorder, but when it has, it has been associated with symptoms of anxiety, depression, and hallucination (Ponizovsky et al., 2011).

#### *Attachment, mentalization, and psychosis*

Attachment theory defines mentalization as the mental activity that enables an individual to perceive and interpret their own and others' behaviours and mental states (Fonagy & Luyten, 2009). Mentalization is also regarded as the capacity to distinguish between inner and outer reality. The ability to mentalize is facilitated by secure attachment and is mainly developed through the ability of caregivers to reflect upon and communicate their own mental states and to mirror the infant's intentional and emotional expressions appropriately (Fonagy, Target, Gergely, Allen & Bateman, 2003). If the caregiver's responses are consistent, the child's

emotions will become predictable, contained, and regulated. If not, children may fail to recognize their own affect and intentions as their own, and may eventually lack the ability to separate external experiences from internal states.

In one of only a few studies to explore the direct link between attachment style and mentalization in individuals with psychosis, MacBeth et al. (2011) found that those classified as secure/autonomous or insecure-preoccupied had higher reflective function (the capacity to 'read others' minds) than those classified as insecure-avoidant. Similar results were reported by Bourne, Berry and Jones (2013), who found that psychological mindedness (a concept similar to reflective function), was negatively related to an avoidant attachment style in a non-clinical sample. Braehler and Schwannauer (2012) explored how young individuals adapt to the consequences of a psychotic episode and how their capacity for reflective function influenced this adaptation. Their results suggest that moderate reflective function was linked to a positive adjustment to the consequences of a psychotic episode, whereas impaired reflective function was associated with a lower capacity to adapt.

## RISK FACTORS IN THE INTERPERSONAL ENVIRONMENT

The model of stress–vulnerability (Zubin & Spring, 1977), the cognitive integrative model (Garety et al., 2001), the suggested similarities between dissociation and hallucinations (Morrison et al., 2003), and psychoanalytical theories (e.g. Sullivan, 1962), all stress the importance considering the individuals’ interpersonal relationships when aiming to understand the development of a psychotic disorder. However, it is important to emphasize that there is scarce evidence to suggest that a single risk factor, whether hereditary, biological, psychological, or social, causes a psychotic disorder. Research points rather towards cumulative risk factors, that is, the chance that one risk factor increases the risk of exposure to another risk factor (Varese et al., 2012). In the following section, risk factors in various aspects of relationship will be discussed.

### Caregivers’ bonding styles

Many studies that aim to measure the parent-child relationship use the Parental Bonding Instrument, consisting of two dimensions: the caring scale and the overprotection scale (Parker, 1979). High protection and low care is defined as “affectionless control” and has been found to characterize the way many patients with a psychotic disorder retrospectively perceive the early relationship with their parents (for review, see Read & Gumley, 2010). Parker (1982) found that both fathers and mothers were perceived as less caring and fathers as more overprotective in patients with psychosis than in those in a comparison group. Similar findings were reported in another study suggesting that those with psychosis perceived both of their parents as lower in care and higher in overprotection than those in a comparison group (Rankin, Bentall, Hill & Kinderman, 2005). Another study found that individuals diagnosed with schizophrenia viewed both caregivers as less caring, but only fathers as more overprotective, than those in a non-clinical group (Parker, 1989).

A study comparing perceptions of caregiving in twin pairs, one of whom had been diagnosed with schizophrenia, found that the twin with schizophrenia reported the caregivers as less caring and more overprotective than the non-diagnosed twin did (Onstad, Skriv & Torgensen, 1994). The authors outlined three possible explanations for their results: the findings may be due to retrospective bias; the caregivers may have treated the twins differently and contributed to the development of schizophrenia in the one twin, or a difficult premorbid personality in the diagnosed twin may have caused the caregivers to raise him or her differently. Studies have been conducted to clarify whether the child's personality influences the parents' bonding style. One study reported no associations between childhood personality as rated by mothers and patients' ratings of their caregiving (McCreadie, Williamson, Athawes, Connolly & Tilak-Singh, 1994). Another study found that the ill sibling was more likely than the well sibling to perceive the mother as more socially reserved, less socially competent, and more depressed and anxious. Furthermore, patients described their mothers as less caring and more overprotective than their siblings did. There were strong associations between maternal bonding behaviour and premorbid personality traits; however, high maternal overprotection still remained after correcting for the influence of premorbid personality traits (Willinger, Heiden, Meszaros, Formann & Aschauer, 2002).

### Emotional climate in the family

The emotional climate in the patient's family has been labelled as 'expressed emotion', and the Expressed Emotion scale was developed and published by Brown et al. in 1972. One of the earliest studies found a high degree of relapse in patients who returned home to relatives who often made critical comments. In its current form, the Expressed Emotion scale measures criticism, hostility, and over-involvement towards the patient. Relatives are rated to have a high or low level of expressed emotion. Initially, high expressed emotion was regarded as a characteristic trait of relatives of people diagnosed with schizophrenia; a more systemic

approach to expressed emotion is currently in use, and some researchers suggest that expressed emotion is more correctly viewed as a coping- and response style that interact with the patient's symptoms and behaviours (Burbach, 2013).

The predictive value of living with caregivers with high expressed emotion has been established for more than 40 years. Butzlaff and Hooley (1998) concluded, in a meta-analysis of 26 studies, that high expressed emotion in relatives is such a robust predictor of relapse that no further studies are needed to validate this finding. Despite the established relationship, Barrowclough and Hooley (2003) highlighted the need for more precise explanatory models of the underlying mechanism of expressed emotion. In a review, they explored whether differences in illness-attribution differed between relatives with high and with low expressed emotion. Their findings suggest that critical relatives tend to hold the patient responsible for their difficulties controlling symptoms and have a tendency to view the patient's difficulties as a consequence of specific habits or traits. Barrowclough and Hooley (2003) also found that relatives who display controlling behaviour towards patients increase the patients' stress and decrease their sense of self-worth.

### Family communication

Communication deviance is defined as a lack of clarity in communication and the idea of its relevance for psychotic disorders builds on the assumption that persistently vague, fragmented, or contradictory communication from caregivers can increase the probability that the child will develop a scattered perception of the self and the world (Singer & Wynne, 1965). Examples of deviant communication include the use of odd words, incomplete ideas, contradictions of previous statements, and vague and incomprehensible comments. Deviant communication also restricts the ability of family members to communicate about problems. These communication deficits can contribute to an even more stressful family environment,

and consequently, to higher rates of psychotic relapse (Kymalainen & Weisman de Mamani, 2008).

Some researchers have found that deviant communication can distinguish caregivers of patients diagnosed with schizophrenia from caregivers of individuals without any known mental illness (Docherty, 1995), as well as from caregivers of patients with major depression (Asarnow, Goldstein & Ben-Meir, 1988). However, other researchers have found that it is not possible to distinguish communication patterns in caregivers of patients with schizophrenia from caregivers of patients with bipolar disorders (Miklowitz et al., 1991). There is some support for the idea that other family members of people with psychosis, such as siblings, also have more deviant communication patterns than family members in non-clinical groups (Docherty, Gordinier, Hall & Dombrowski, 2004). Miklowitz (1994) aimed in a review of studies to determine whether communication deviance is: (1) a psychosocial risk factor that triggers the onset of psychosis, (2) a caregiver's reaction to having a child with psychosis, or (3) a genetic indicator associated with the heritability of a psychotic disorder. They concluded that there was support for the role of communication deviance as both a social risk factor and a genetic risk factor. The same conclusions were drawn from the Finnish Adoptive Study, which showed that the interaction of communication deviance and genetic vulnerability in an adopted child best predicted psychiatric illness over the course of a 21-year follow-up period. Because this study measured communication deviance before the onset of any disorder, its results indicate that deviant communication patterns precede illness rather than arise as a reaction to having an ill child (Tienari et al., 2004). In a recently published systematic review and meta-analysis, the authors concluded that high parental communication deviance could indicate an increased risk of a child developing a psychotic disorder, at least among those exposed to other risk factors (Roisko, Wahlberg, Miettunen & Tienari, 2013).



## Adverse childhood experiences

The negative effects of abuse on attention, stress regulation, and mentalization are well known. Trauma may bring about a complete collapse of the self-structure, especially in those in whom the capacity to mentalize is already weak. A collapsed self-structure and weakened mentalization could also involve the loss of awareness of the relationship between internal and external reality (Fonagy & Target, 2000).

A number of population-based studies provide support for the association between childhood adversity and psychosis. For example, data drawn from the Netherlands Mental Health Survey and Incidence Study (Janssen et al., 2004) showed that those who had experienced emotional, physical, or sexual abuse before the age of 16 were more likely to report psychotic symptoms during a 3-year follow-up period. Whitfield, Dube, Felitti, and Anda (2005) also found that individuals who reported a history of hallucinations were more likely to have been both physically and sexually abused during their childhood. In a recently published meta-analysis of 36 studies including cohort studies, large-scale cross-sectional studies, and case-control studies (Varese et al., 2012), support was found for the proposition that adverse experiences in childhood increase the chance of developing a psychotic disorder. Until recently, there has been an absence of meta-analyses addressing the prevalence of childhood sexual, physical, and emotional abuse in individuals with psychosis. To address this concern, Bonoldi et al. (2013) conducted a meta-analysis of 23 studies of self-reported experiences of childhood abuse and found that the prevalence of self-reported sexual, physical, and emotional abuse during childhood were 26%, 39%, and 34% respectively in those with psychosis.

Despite studies showing that childhood adversity is over-represented among individuals with psychosis, few studies have been able to show how experiences of trauma differentiate one clinical population from another (Morgan & Fisher, 2007). Researchers have suggested

that it is important to study trauma-specific aspects such as type of abuse, relation to the abuser, when the abuse occurred, severity of abuse, and duration of abuse (Faust & Stewart, 2007; Gil et al., 2009; Morgan & Fisher, 2007). The cumulative effects of childhood adversity also seem to be important. Studies show that traumatic childhood experiences increase the risk of exposure to another trauma in a dose–response effect. This effect was reported in 9 out of 10 studies in a meta-analysis by Varese et al. (2012).

Being exposed to more than one adverse childhood experience seems to increase the risk of developing a psychotic disorder (Bentall, Wickham, Shevlin & Varese, 2012). Data from the British National Survey of Psychiatric Morbidity (Bebbington et al., 2004) showed that those who met the criteria for a psychotic disorder were almost 15 times more likely to have been sexually abused than those who not met the criteria. Compared with individuals who met the criteria for neurotic disorders, alcohol dependence, and drug abuse, individuals who met the criteria for a psychotic disorder had the highest odds ratios for all types of victimization. Other researchers have also found that experiences of multiple traumas are related to the severity of symptoms. For example, Lysaker and LaRocco (2008) reported that individuals who reported multiple experiences of trauma had more severe delusions, hallucinations, and depression than those who had experienced a single trauma. There is also some support for a relationship between being closely related to the abuser and having an increased risk of developing the more severe psychotic symptoms. In a small sample, those who had experienced incestuous abuse reported more severe hallucinations and delusions than those who had not been abused by a family member (Read & Argyle, 1999).

To further understand how experiences of abuse contribute to the development of psychosis, it may be necessary to expand the focus of childhood adversity and more specifically study the broader emotional consequences as well as the context in which the trauma occurs. Boevink (2006) highlights this concern:

*I don't think that the abuse itself is a strong cause for psychosis. It hurts, but it is rather simple. I think that the threat and the betrayal that come with it feed psychosis. The betrayal of the family that says, 'you must have asked for it', instead of standing up for you. That excuses the offender and accuses the victim. And forces the child to accept the reality of the adults ... You are forced to betray yourself. This is what causes the twilight zone. What makes you vulnerable for psychosis. (p. 18)*

## Having been bullied

Approximately 11% of school children are bullied on a regular basis (Elgar, Craig, Boyce, Morgan, Vella-Zarb, 2009). It is well known that being bullied has negative long-term effects on mental health, and being bullied has been found to be predictive of mental disorders later in life (Sourander et al., 2007). Bebbington et al. (2004) attempted to discover whether experiences of having been bullied varied between individuals with different psychiatric disorders. They found that almost 50% of those meeting the criteria for a psychotic disorder had been bullied. The odds ratios for having been bullied were significantly higher in the group that met the criteria for a psychotic disorder than in those who met the criteria for neurotic disorder, alcohol abuse, drug abuse, or who lacked a diagnosis. In another large study, Lataster et al. (2006) found that being bullied was associated with delusional ideation and hallucinatory experiences in a general population sample of 14-year-old adolescents. In a recent review, the expected association between being bullied as a child and the severity of hallucinations and delusions in non-clinical and clinical samples was confirmed (van Dam et al. 2012). Particularly strong support was found for the link between being bullied and developing psychotic symptoms in non-clinical groups. Moreover, strong associations were found between the frequency, severity, and duration of being bullied and higher levels of psychotic signs in the non-clinical group. The association between being bullied and

psychotic signs is likely to be mediated by feelings of depression, loneliness, and lower self-esteem (for a review, see Hawker & Boulton, 2000).

## Loneliness

Individuals with psychosis have significantly smaller networks than individuals without any known illness (Meeks & Murrell, 1994). Studies also show that the qualities of relationships also distinguish those with psychosis from non-clinical groups, with patients with psychosis having fewer intimate relationships (Semple et al., 1997). A limited social network could be viewed as a consequence of the long-term effects of a mental illness, but from an attachment theory perspective, it could also reflect the individuals' incapacity to establish close relations (Bernier & Meins, 2002). One study compared the social network and perceived social support of individuals in an early phase of their psychotic disorder with an aged-matched comparison group. The clinical group identified significantly smaller networks with fewer friends and fewer people to turn to in a crisis. The lack of intimate relationships outside the family was also found in an Australian cross-sectional survey of individuals with psychotic disorder. Results showed that 80% reported feelings of loneliness, and about half reported a need for more friends (Stain et al., 2012). A total of 37% of the participants identified loneliness and social isolation as some of their biggest challenges or difficulties for the future. There is a lack of longitudinal studies exploring subjective understandings of the causes and effects of loneliness. It is likely that other factors such as having been bullied and the consequences of abuse contribute to a fear of intimacy. In non-clinical samples experiences of childhood trauma are the strongest predictor of perceived loneliness in the second half of life (Palgi, Shrira, Ben-Ezra, Shiovitz-Ezra & Ayalon, 2012).

## METHODOLOGICAL CONSIDERATIONS

A number of issues need to be considered when choosing study methods and analytic tools. Self-report questionnaires enable between-group comparisons and the possibility of finding relations between variables. Interviews and observations are used to better understand individuals and their experiences. It could be argued that no method is inherently superior to another. Guba (1981) posits that the research question should guide the chosen methods of data collection and analysis. Both quantitative and qualitative methods have strengths and weaknesses, and they should be valued according to their different scopes (Guba, 1981; Shenton, 2004).

Self-report instruments play an important role in psychological assessments, but their validity depends upon the participants' willingness and ability to report their experiences accurately. Psychosis affect perceptions of reality and may be associated with participants' lack of insight into their own difficulties (Amador & David, 1998). To address issues of poor insight, one study compared self-reported symptoms with clinicians' ratings; the results showed that many patients diagnosed with schizophrenia were able to report their symptoms accurately. However, one group of patients seemed to cope through a defensive denial of distress and thus under-reported their symptoms (Bell, Fiszdon, Richardson, Lysaker & Bryson, 2007). The tendency of some patients to under-report distress is important to consider in studies that rely on self-report instruments. However, under-reporting distress can also be a concern in studies using self-reported mental health in non-clinical samples (Shedler, Mayman & Manis, 1993).

Two different approaches, narrative and self-report, are used to conceptualize and assess adult attachment. The theoretical assumptions of these approaches are similar: early attachment experiences are believed to lead to the formation of internal working models, which in turn influence later interpersonal functioning (Korver et al., 2013). There is ongoing

debate about whether attachment should be conceptualized as a categorical or dimensional construct. Although attachment theorists assume that one predominant attachment style emerges during development (Fonagy, Gergely & Target, 2008), studies indicate that individuals tend to choose more than one option when they are asked to evaluate their internal model of self and others (e.g. Stein et al., 2002). The dimensional approach to conceptualizing attachment has psychometric advantages, whereas the use of categories adds interpretational power by capturing characteristics associated with combinations of dimensions (Griffin & Bartholomew, 1994). Numerous self-report measures of adult attachment are currently available, but there is little agreement on how well the different instruments correspond to each other (Stein et al., 2002). Crowell, Fraley and Shaver (2008) found that self-reported attachment style was not related to attachment styles assessed on the AAI, although Mikulincer and Shaver (2007) found both assessment techniques valuable. Earlier research using the AAI stressed that attachment classifications in people with schizophrenia should be interpreted with caution: people with such thought disorders may appear unresolved in reference to loss or abuse *because of* their thought disorders (Dozier, Stovall-McClough & Albus, 2008). Although a later study using the AAI in a group of patients with a first-episode psychosis found that their narrative coherence was independent of psychotic symptoms (MacBeth et al., 2011), there may be reasons to reconsider the value of both self-report questionnaires and the AAI in persons with psychosis.

The use of self-report questionnaires restricts the informant to limited response options, while interviews and observations enhance the possibility of finding new information. A qualitative approach is more suited to give people's individual experiences a more prominent role. Qualitative research includes various theoretical and methodological approaches and can be roughly divided into two camps. In the first camp research methods are tied to a particular theoretical or epistemological position (such as interpretive phenomenological analysis

[IPA]). In the second, methods are essentially independent of theory and epistemology, and can be applied across a range of theoretical and epistemological approaches (such as thematic analysis). Thematic analysis is considered a useful method to describe patterns or themes in the transcribed data (Braun & Clarke, 2006). IPA has an explicit theoretical foundation based on phenomenological thoughts and hermeneutic ideas (e.g. Heidegger, 1962; Husserl, 1977). Phenomenological philosophy provides us with ideas about how to examine and comprehend lived experiences, and IPA seeks to make sense of how human beings make sense of their world (Smith, Flowers & Larkin, 2009). An important theoretical aspect of IPA is its commitment to the particular, which is seen in its focus on details and the individual perspective of a particular person in a particular context. Despite its aim to understand the world from the perspective of the informant, however, IPA acknowledges that this understanding is formed in dialogue with the understanding of the researcher (Smith et al., 2009).

## GENERAL AIM

The general aim of this thesis was to explore experiences of interpersonal relationships of individuals with psychosis and to explore patients' understanding of their symptoms. These intertwined aims were guided by theories and research indicating that interpersonal relations are important for a child's development and by theoretical perspectives that highlight the importance of interpersonal relationships in the development of psychosis. The four studies covered different aspects and perspectives deemed relevant to understanding the interpersonal context and its possible associations with symptoms of psychosis.



## SUMMARY OF STUDIES

The first two studies in this thesis were based on interviews with individuals with psychosis, the third study was based on self-report instruments, and the fourth was based on participant observations of team-meetings at a psychiatric care unit specialized in working with patients with psychosis. This section summarizes the aims, methods, and results of the four studies.

### Specific aims

The aim of *Study I* was to explore how individuals with psychosis experience their early relationships with caregivers and how they describe themselves as children. This aim was formulated in accordance with studies indicating that knowledge of their childhood experiences could be important in better understanding people with psychosis (Berry et al., 2008; Magliano et al., 2004; Read et al., 2003; 2005).

In *Study II*, the aim was to provide a deeper understanding of how individuals with psychosis make sense of the content of their psychotic symptoms. This aim was formulated in line with previous research indicating that the content of psychotic symptoms is important to those who experience them (Beavan & Read, 2010; Boyd & Gumley, 2007; Rhodes et al., 2005).

Studies comparing the distribution of attachment styles between individuals with psychosis and general population groups rarely include all four attachment styles. Therefore, one aim of *Study III* was to compare the distribution of the four attachment styles between a group of individuals with psychosis and a general population group. The other aim was to explore relations between the attachment styles and symptomatology.

The aim of *Study IV* was to explore how mental health professionals view the parents of patients with psychosis using data collected during team meetings. Because parents of patients with psychosis are an important part of the care system, additional knowledge about

professionals' views of parents could improve our understanding of findings showing that professionals sometimes negative attitudes towards parents (Kim & Salyers, 2008; Riebschleger, 2001). Further knowledge about parents could also be important when planning family treatment.

## Methods

Data for this thesis was drawn from baseline data from an intervention study conducted during the years 2009–2011. The research group that carried out the intervention consisted of a professor of medicine at the University of Lund, an associate professor of social work at the University of Gothenburg, an associate professor in psychology at the University of Gothenburg, and a PhD student (myself) at the Department of Psychology, University of Gothenburg. The Regional Ethical Review Board, University of Gothenburg, approved of the study design.

Data collection was carried out at a psychiatric care unit specialized in working with patients with psychosis. In this unit, both outpatient and in-patient care was provided, and at the time of the data collection 550 patients were enrolled. Each patient had two key-care providers who, together with a psychiatrist, were responsible for assessing treatment needs and coordinating treatment interventions.

### *Participants*

The participants in *Studies I* and *II* were seven men and five women aged from 29 to 63 years. Eight participants were born in Sweden, two in another European country, one in the Middle East, and one in South America. Four participants were diagnosed with paranoid schizophrenia. Further diagnoses were schizophrenia unspecified, residual schizophrenia, schizoaffective disorder, undifferentiated schizophrenia, unspecified non-organic psychosis, delusional disorder, posttraumatic stress disorder, and other acute predominantly delusional

psychotic disorder, commonly in combinations of two or more. The participants had been in contact with psychiatric services for from 3 to 35 years. At the time of data collection, three participants were being treated with psychotherapy will nine participants had not received any psychotherapeutic treatment. At the time of the interviews, nine participants were experiencing active psychotic symptoms, and three had experienced psychotic symptoms within the last 12 months.

The participants in *Study III* were 47 patients who had been diagnosed with psychotic spectrum disorders. The mean age of the participants was 43.02 years ( $SD = 12.54$ ); 63.8% were male; and 44.7% of the participants were born in Sweden, 21.3% were born in another European country, and 34.0% were born in a non-European country. Most were single (85.1%), most had no children (72.3%), and most (74.5%) had no employment. Their mean age for first contact with psychiatric care was 28.80 years ( $sd = 11.14$ ). According to medical registers, the most common diagnosis among the participants was schizophrenia (34.0%). Other diagnoses were schizoaffective syndrome (12.8%), bipolar disorder (10.6%), and other psychoses (42.6%). Diagnoses were classified according to the ICD-10 (WHO, 1997).

A random sample of individuals ( $n = 1124$ ; 55% women; age range 30–50 years) living in the west of Sweden were used in *Study III* to compare the distribution of attachment styles in patients with psychosis with that in the general population. The group had not been screened for any mental illness. The common factor for the control group was that they were all parents of children aged 15 years or under (Broberg & Broberg, 2012).

In *Study IV*, team-meetings at the psychiatric unit were observed in order to elicit staff views of the parents of patients with psychosis. All teams included a mental health worker, a nurse, an occupational therapist, a physiotherapist, a psychologist, a psychiatrist, a secretary, and a social worker. According to the *Swedish Guidelines for Psychosocial Interventions for Schizophrenia or Schizophrenia Conditions* (National Board of Health and Welfare, 2011),

staff should inform the parents about psychotic disorders and provide them with practical and emotional support, including training in problem-solving and communication. Half of the staff was educated in systemic family therapy as described by Boscolo (1980) and Lundsbye *et al.* (2010), and three out of 35 professionals had received training in psycho-educational family intervention. The coordination of the team meetings alternated between all team members except for the secretary. The teams met for two hours each week to review the list of hospitalized patients, to discuss patients and coordinate treatments, and to decide whether patients enrolled by other health services should be registered at the unit.

### *Instruments*

For *Studies I* and *II*, a semi-structured interview schedule was developed. The interview questions were formulated from a combination of theoretical and empirical knowledge. Topics included were memories of parental figures, memories of childhood, onset of the psychosis, content of the psychotic symptoms, experiences of psychiatric care, participants' understanding of the causes of their psychosis, and finally, participants' feelings about the interview questions and whether similar questions had been asked by mental health care staff. The same main topics were explored in each interview.

For the aim of *Study I*, the following questions were included in the interview agenda:

- Could you describe your mother/father with three words?
- Could you give some examples to explain why you chose these three words?
- How would you describe your parents as caregivers?
- How would you describe yourself as a child?
- Do you have any experiences of abuse?
- Did anything specific happen to you that is important for understanding who you were as a child?

For the aim of *Study II*, the following questions were used:

- Could you tell me about your symptoms?
- Could you describe the content of your symptoms?
- How do you understand the content of your symptoms?

Follow-up questions such as ‘Do you remember anything else?’, ‘How did you feel then?’, ‘Is there anything else you would like to tell me’, and ‘Could you give me an example’ were used to ensure better comprehension of the participant’s experiences. The number of follow-up questions varied between the interviews. When the participants provided many details, fewer follow-up questions were asked. When the participants were less talkative, more follow-up questions were asked. When some participants occasionally ‘lost the thread’, follow-up questions were used to bring their attention back to the question.

In *Study III*, a background questionnaire was formulated to collect self-reported sociodemographic information. Information about the diagnosis was gathered from medical records at the time of the data collection.

*The Relationship Questionnaire (RQ)* (Bartholomew & Horowitz, 1991) was used to evaluate adult attachment styles. This instrument characterizes adult attachment through four brief statements, asking participants to indicate how much each description corresponds to their model of self and of others. Responses are rated on a 7-point Likert-type scale ranging from 1 = ‘not at all like me’ to 7 = ‘very much like me’. The dimensional approach was used for assessing associations with the outcome measure. It is also possible to use a categorical approach with the RQ by asking respondents to choose the statement that best captures their model of self and others. This was used to describe and compare the distribution of attachment styles in the study sample with that in a group drawn from the general Swedish population. The RQ has been validated against interview measures of attachment and is closely linked to a theoretical model of adult attachment (Crowell, Treboux & Waters, 1999).

The English version has been translated into Swedish and back translated for confirmation of accuracy (Broberg, 1996).

*The Symptom Checklist (SCL-90R)* (Derogatis, 1977) was used to evaluate manifestations of psychological distress. The checklist is a 90-item, multidimensional self-report inventory designed to measure a broad range of current symptoms. Respondents are asked to rate how much they have been bothered by each of a variety of symptoms over the last seven days using a 5-point Likert-type scale ranging from 0 = ‘not at all’ to 4 = ‘very much’. The sum of scores for each sub-scale (somatisation, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism) can be calculated, along with a global severity index (GSI). Low scores on the questionnaire are considered an indication of good mental health. The instrument has been standardized to Swedish conditions and has good reliability (Cronbach’s  $\alpha = 75\text{--}91$  for the sub-scales) (Fridell, Cesarec, Johansson & Malling-Thorsen, 2002).

In *Study IV*, participant observations were carried out and documented with field notes. We took open and continuous notes during the team-meetings and tried to document as literally as possible all verbal interactions concerning patients’ parents in an effort to create ‘thick descriptions’ (Bogdan & Taylor 1998). The empirical material consisted of handwritten notes that were taken during observation of approximately 40 hours of team meetings and transcribed shortly after each meeting.

### *Procedures*

All key-care providers asked their patients if they were willing to participate in a research project. The professionals were instructed to exclude patients with organic psychoses, patients with an active substance abuse, and patient’s in inpatient care. The aim was to recruit approximately 90 patients for the intervention study; however, a total of 49 with psychosis were recruited. Patients who agreed to participate received oral and written information about

the research project, emphasising that participation was voluntary and that they could drop out at any time with no need to explain. It was also stressed that no one outside the research group would have access to any personal information. An informed consent form was administrated and signed and each participant was booked for an appointment with one of the researchers (myself). Patients who did not speak Swedish were provided with an interpreter. All patients answered the self-report instruments, 47 at the psychiatric clinic and two in their homes. Participants received compensation of 100 SEK.

After completing the self-report instruments, participants were asked if they would like to participate in an interview. They were informed that the interview would include questions about their childhood, their family of origin, their present life situation, and their experiences of psychosis. Seventeen participants accepted our invitation and appointments were scheduled over a two-month period. One participant dropped out after receiving further information about the questions and four did not attend the scheduled interview. The remaining 12 participants completed the interviews, which ranged in length from one and a half to three hours. I conducted nine interviews and another person in the research group conducted three interviews. Ten interviews were conducted at the psychiatric unit, one at the Department of Psychology, and one in the participant's home. All interviews were tape-recorded and transcribed verbatim.

In the observational study of mental health teams' meetings, the professionals agreed to our presence, but to avoid affecting their discussions, they were not informed about the particular research focus. One researcher followed two teams, and two researchers followed one team each. Meetings were observed in continuous sequences and the researchers' role was to observe team members during the meetings, but not to interact with them.

## *Analyses*

In *Study I*, thematic analysis (Braun & Clark, 2006) was used to identify, analyse, and report general themes in the participants' narratives. Initially, both researchers read and reread all interview transcripts and took descriptive notes of those parts related to the aim of the study. Subsequently, all data extracts concerning the participants' experiences of their caregivers, their families, and themselves as children were coded with the intention of finding the most suitable code of each extract. This process was deductive in the sense that we coded the transcripts in line with the initial aim, however, because the coding was conducted without trying to fit codes into a specific theoretic framework, it was also in that sense inductive. The codes were discussed until we reached consensus about which was most suitable. Those codes were then listed, ideas were continually discussed, and the codes were structured and restructured in order to find main themes in the narratives. Three main themes emerged in the narratives: caregivers, family, and the participants as children. The coded data extracts were then reviewed, first to see whether the three themes captured and fit the coded data set, and finally, to ensure that the themes and sub-themes covered the research question.

In *Study II*, the narratives were analysed using IPA. According to methodological recommendations (Smith et al., 2009), the transcripts were systematically analysed case by case. Initially, the whole dataset was read and reread. During the reading, we separately took descriptive notes about those parts that included narratives about the content of psychotic symptoms. Based on these notes, possible themes were discussed and noted at different occasions, each summarized in a diary. A table was created showing the symptom content for each patient. When we were not in agreement, the whole context was considered and discussed to ensure the most suitable interpretation. Eventually, we agreed upon four themes in narratives of symptom content: feelings of grandiosity, harassing voices, commanding voices, and supportive voices. In the second phase of the analysis, the purpose was to



understand how the participants made sense of the content of the symptoms, and to detect differences as well as similarities within the themes. The transcripts were reread case by case, and descriptive and conceptual comments related to the subjective explanations were noted. In cases with more than one explanation given for the symptom content, all explanations were used; our intention was to interfere as little as possible with the personal narratives. When differences of interpretation arose, these were discussed until consensus was reached about the most suitable interpretation. Finally, the extracted data that alluded to symptom content and the participants' explanations were reread to ensure that they covered all data. The data extracts were reviewed to find the examples that best captured the way each participant described and made sense of the symptom content.

In *Study III*, data were analysed using PASW, version 19. Because of the small sample size and the data not being normally distributed, we used non-parametric analytic methods. Spearman's correlations were used to examine relationships between variables. For group comparisons between our sample and the Swedish group from the general population ( $N = 1124$ ) (Broberg & Broberg, 2012), a chi-square test was used. Results from planned analyses were regarded as statistically significant when  $p < 0.05$ . Because of a large number of explorative correlations, a Bonferroni correction was used such that the results from explorative correlations were considered statistically significant when  $p < 0.001$ .

Recognizing that participant observation has been criticized for its subjectivity (Banister, 2011), we found that inductive thematic analysis was a useful method for *Study IV* because of its ability to identify explicit themes and its low required degree of interpretation. The procedures suggested by Braun and Clarke were followed (2006). After the initial reading of the transcripts, we decided to focus upon the material from two relational perspectives: the professionals' descriptions of caregivers in relation to the patients, and the professionals' descriptions of caregivers in relation to psychiatric care. The researchers

carried out the coding process separately and codes were subsequently compared and discussed until consensus was reached. During the second stage of the analytic procedure, the purpose was to find a possible structure for the codes that had been identified across the data set. This resulted in a set of sub-themes that were structured under the five final main themes: caregivers as needed, caregivers as burdened, caregivers as absent, caregivers as a hindrance, and caregivers as a source of pain.

## Results

In the overview of the results from *Studies I, II, and IV*, the main themes are presented in the along with one quote each to highlight their essence. For *Study III* the main findings are presented in the text and in Table 4 and 5.

### *Study I*

In *Study I* a picture emerged of a caregiving system that had collapsed. The participants described experiences of abuse, and the family atmosphere was characterized as concealed, silent, and separate from other social contexts. Childhood strategies such as withdrawing, daydreaming, and fantasizing emerged.

*Memories of my parents.* In the first theme participants described their caregivers as unable to provide a secure base for them when they were children. The caregivers were portrayed as opposites: one was described as unpredictable, intrusive, and abusive, while the other was described as resigned and passive. The participants also described experiences of sexual, physical, and/or emotional abuse.

*The worst abuse was that he compared me with others, saying that I was worthless.*

*Why didn't I do this and ... Some kind of psychological abuse, which was worse than...*

*Memories of my family.* The second theme concerned the family atmosphere. The family atmosphere was described as silent and lacking in open communication. None of the participants described having been encouraged to speak about their experiences of abuse. Moreover, some participants described a shattered social life.

*Things didn't belong. It was as if everything was separate – me, my family, school, everything. Have always had a split ... or I have felt fragmented from where I belong, and that's something I still can feel.*

*Memories of myself as a child.* The third theme concerned participants' memories of themselves as children. The participants described themselves as lonely children who had handled adversities such as being bullying without the support of caring adults. There were also narratives about feeling confused about ones' identity and some described themselves as children who had partly been living in a fantasy world.

*I escaped into music and dreamed myself away. I have always had a great imagination. I dreamt away that I perhaps met the person in the song. There was this song 'Puff'; it was about a dragon who became friends with a boy. But the boy forgot about the dragon, and I recognized myself in that dragon.*

## *Study II*

In *Study II*, a consistent theme was the participants' understandings of the content of their psychotic symptoms in terms of previous interpersonal experiences such as absence of relationships or relationships described as abusive or intrusive (see Table 3 for background information and subjective accounts of voice content). Some participants connected their symptoms to the voices of real persons, but they more commonly related them to the emotional consequences of intrusive relationships.

**Table 3.** *Background information and subjective accounts of voice content.*

Assumed name	Age	Gender	Phase of illness	Grandiose content	Harassing content	Commanding Content	Reassuring content
Arthur	59	M	12 months*	X	X		
Ben	29	M	AS**	X			
Cesar	63	M	AS**	X			
David	28	M	AS**	X			
Eve	37	F	12 months*		X		X
Fiona	47	F	AS**		X		
Gustav	37	M	AS**		X		X
Harriet	54	F	AS**		X	X	X
Ian	47	M	AS**		X		X
Joanne	48	F	AS**			X	X
Karen	29	F	12 months*			X	
Levi	33	M	AS**			X	

\*Active symptoms within the last 12 months

\*\*Active symptoms at time of interview

*Grandiose content.* Grandiose delusions included beliefs in having a special identity, superhuman powers, a special mission, or clairvoyant abilities. None of the participants described stress or anxiety in relation to these symptoms; rather, grandiose feelings seemed to provide them with abilities and self-confidence that were lacking in real life. These symptoms were commonly understood as responses to loneliness and the longing for a different life.

*Loneliness is the most troublesome thing throughout my whole life. Perhaps one wants life to be different, yes. I have noticed that loneliness is the reason for my thoughts. Don't know. If that's a cause, then, yes.*

*Harassing content.* Some participants described symptoms with a harassing and sometimes sexual content. In contrast to the grandiose feelings described in the previous theme, this symptom content was frightening and provoked feelings of anxiety and distress. Participants reflecting upon this symptom content commonly related it to the sexual, physical, and/or emotional abuse they had suffered.

*Well, it's these thoughts I had when I was a child that come up, my experiences. But I avoid men now; they humiliated me, called me a tramp. It wasn't fun for me,*

*to lie there with violence against my vagina, just because he was horny. That's incestuous, isn't it?*

*Commanding content.* Participants' attitudes to content characterized by commanding voices varied. For some, these voices were understood as instructive, for others, they seemed intrusive. As in the other themes, interpersonal experiences were evoked when the participants reflected upon the symptom content. These interpersonal experiences could involve dominating caregivers who had had a large impact on the participants' lives. Instructive voices also seemed to come in response to distressing life situations.

*I wanted to leave my husband, so I chose to imagine that I was being watched, because I didn't want to feel alone. I wanted to have support for leaving him. So I imagined that TV, radio, television, and everyone were telling me to leave him.*

*Supportive content.* This theme encompasses narratives about symptoms with positive content. None of the participants described these voices as disturbing. Rather, the voices were understood as comfort for loneliness and longing.

*Joanne: No, it's more like [pause] angels in my room. There are angels that show themselves. So then, at first, it was one way to get help.*

*I: Why do you think it is angels?*

*Joanne: When you live in supported housing, you're very much on your own. The staff aren't so open, so you need someone to talk to, someone who is at home.*

*I: Would you like it to disappear?*

*Joanne: I don't know, I'm used to it. Or at least, not until I get myself a boyfriend to live with.*

### *Study III*

*Secure attachment.* As predicted, in the secure category, the proportion of individuals in the clinical sample (27.7%) was significantly lower than in the general population group (63.7%),  $X^2(df = 1) = 24.94$ ,  $p = 0.000001$ , two-tailed (see Table 4). There was no significant association between the secure attachment style and symptoms.

*Dismissing attachment.* As predicted, in the dismissing category, the proportion of individuals in the clinical sample (36.2%) was significantly higher than in the general population group (19.2%),  $X^2(df = 1) = 8.13$ ,  $p = 0.004$ , two-tailed (see Table 4). There was no significant association between the dismissing attachment style and symptoms.

*Preoccupied attachment.* The hypothesis that the proportion of individuals with a preoccupied attachment style should be overrepresented in the clinical sample compared with a general population group was not confirmed. There was a significant positive association between preoccupied attachment and global severity index ( $p = 0.001$ , two-tailed). There were also significant positive correlations between preoccupied attachment and the following symptom subscales: depression ( $p = 0.001$ , two-tailed), anxiety ( $p = 0.001$ , two-tailed), interpersonal sensitivity ( $p < 0.0005$ , two-tailed), paranoia ( $p = 0.001$ , two-tailed), and psychoticism ( $p < 0.0005$ , two-tailed, see Table 5).

*Fearful attachment.* As predicted, in the fearful attachment category, the proportion of individuals in the clinical sample (19.1 %) was significantly higher than in the general population group (6.6 %),  $X^2(df = 1) = 10.82$ ,  $p = 0.001$ , two-tailed (see Table 4). There were significant positive correlations between fearful attachment and interpersonal sensitivity ( $p < 0.0005$ , two-tailed) and between fearful attachment and psychoticism ( $p = 0.001$ , two-tailed, see Table 5).

**Table 4.** *Distribution of attachment categories in the study sample compared with the general population group*

Attachment categories	Current sample	General population group	$\chi^2$
	n = 47	n = 1124	
Secure	13 (27.7%)	716 (63.7%)	24.94
Dismissing	17 (36.2%)	216 (19.2%)	8.13
Preoccupied	8 (17.0%)	118 (10.5%)	2.00
Fearful	9 (19.1%)	74 (6.6%)	10.82

**Table 5.** *Correlations between attachment, global severity index, and the symptom subscales*

Scales	Secure	Dismissing	Preoccupied	Fearful
Global severity index	-0.296	0.007	0.498*	0.389
Somatization	-0.213	0.140	0.409	0.337
Obsessive-Compulsive	-0.293	0.008	0.378	0.395
Interpersonal sensitivity	-0.321	-0.115	0.575**	0.538**
Depression	-0.211	-0.066	0.463**	0.254
Anxiety	-0.231	-0.038	0.489**	0.288
Hostility	-0.144	0.044	0.281	0.183
Phobic anxiety	-0.309	-0.038	0.436	0.346
Paranoid ideation	-0.141	-0.020	0.463*	0.349
Psychoticism	-0.263	0.069	0.501**	0.464**

\* $p < 0.001$  \*\* $p < 0.0005$

#### *Study IV*

In *Study IV*, the professionals talked about parents as resources for both patients and themselves as care-providers. However, some parents were seen as a hindrance to the patient's treatment and wellbeing.

*Parents as needed.* During the team conferences the professionals talked about parents as beneficial to the patient's treatment because they could provide valuable information. Those parents were also described as important to the professionals, particularly when a treatment alliance was difficult to accomplish with the patient. The team also discussed parents who were important to patients in situations of distress or fear and they talked about patients who escaped from the ward in order to be with their parents. Some parents were understood as wishing to help, but unable to because of the patient's psychotic symptoms.

*She has escaped two times from the psychiatric ward, and then she runs to her mother, but the mother can't take care of her when she is like this, even though she wants to. (Nurse)*

*Parents as burdened.* The professionals talked about parents who were burdened or worried because of their child's deteriorating symptoms or general life situation. The professionals also discussed patients who had refused to continue their medication or had terminated their ongoing contact with psychiatric care. Such decisions were described as having negative consequences for the parents. Moreover, the professionals described parents who were in a challenging situation, who seemed to struggle between the patient's needs on the one hand and the wellbeing of other family members on the other. Other discussions concerned parents whose own lives had become restricted by their child's needs.

*She phoned me last week and was devastated since she can't leave the house when her daughter is at home. I mean, she has her own life and can't stay at home with her daughter during the days. But how can we help them? (Psychiatrist)*

*Parents as absent.* In some of the professionals' discussions, parents were described as absent from the patient's life because of a dysfunctional family situation. During such discussions, resistance towards involving parents were often attributed to the patient's decision, although sometimes it was the parents who did not want to take part in the patient's treatment.

*The mother has many faces. When we were going to have the meeting she phoned and said that she had forgotten the time. Isn't that strange considering that she meanwhile says that the only thing she can think about is how important it is that things work out for her daughter—then you can't just forget about an appointment? (Psychiatrist)*



*Parents as a hindrance.* The professionals discussed parents who had interfered with the patient's treatment in a way that had negative consequences for the patient. Some of these parents were referred to as 'gatekeepers'. The professionals also talked about parents who interfered with the patient's medical treatment, and this seemed to be an arena for conflicts between the professionals and the parent.

*His mother wants him to have medication, not just therapy.* (Occupational therapist)

*I don't think it's as bad as the mother says.* (Nurse)

*But the problem is that she confuses him.* (Occupational therapist)

*Parents as a source of pain.* Some parents had abused the patient or other members of the family. The professionals used experiences of abuse as a way to understand the patient's disorder or the content of the patient's psychotic symptoms. Sometimes the professionals linked the patient's symptoms to experiences of abuse directed to other family members.

*He doesn't have any insight. It's not possible to talk to him, and he thinks that he has been shot in the head.* (Social worker).

*That's not strange, considering that his father shot his brother in the head.* (Nurse).

## GENERAL DISCUSSION

In the following section, the findings from the four studies will be discussed in relation to Stern's (1985) understanding of the child's development of a sense of self, in relation to attachment theory (Bowlby, 1977, 1980, 1988), and in relation to previous empirical studies. Limitations will be discussed, and clinical implications of the studies will be suggested.

### Interpersonal experiences

The ability to function as a secure base for the child's explorations and as a haven of safety to which the child can return when in danger or feeling threatened is the most fundamental aspect of a parent's skill as a caregiver (Ainsworth et al., 1978). In our interviews about their childhood memories, patients with psychosis rarely described caregivers who had provided them with safety and security. Instead, they described experiences of sexual, physical, or emotional abuse, and some described multiple types of abuse (*Study I*). Also in *Study IV*, a complex image of the patients' parents emerged through the mental health professionals' discussions, some of which concerned parents who had neglected or abused the patient as a child. Earlier research has shown that many individuals with psychosis have experienced abuse (Bonoldi et al., 2013; Janssen et al., 2004; Varese et al., 2012; Whitfield et al., 2005). Questions about adverse childhood experiences are therefore not only relevant, but important; if they are not asked, mental health professionals risk missing information that could provide important knowledge about patients' capacity to relate (Read, Hammersly & Rudegeair, 2007). Furthermore, in much research focusing on childhood abuse in people with psychosis, the relationship between the abused and the abuser is undefined. Such knowledge could be important, because a child who is abused by a caregiver will have not only greater difficulty establishing emotional bonds, but also more severe mental health problems (Alexander et al., 1998; Read & Argyle, 1999).

In *Study I*, some participants felt betrayed by non-abusive caregivers who had not had the capacity to react appropriately to their accounts of abuse in childhood. Boevink (2006) suggests that such betrayals and denials of their experiences can lead children to deceive themselves into accepting an alternate and illusory reality. As adults, some of our participants wished to understand why the non-abusive caregiver had not acted to protect them. *Study IV* further showed the complex emotions associated with family abuse as mental health professionals discussed some parents' absence as related to shame. Previous studies have found shame to be a barrier to parents' willingness to take part in the patient's treatment (Wong, Davidson & Anglin, 2009). Since family involvement has many benefits (e.g. Seikkula et al., 2006), professionals can play an important role in identifying parents who withdraw because of shame.

Another, less direct, way to gain understanding of patients' early interpersonal experiences is by measuring their attachment styles. *Study III* was the first study to show that a fearful attachment style was overrepresented in a group of people with psychosis compared with a general population group. However, because a fearful attachment style is associated with discomfort with intimacy, difficulty trusting, and experiences of abuse (Alexander, 1993; Bartholomew & Horowitz; 1991, Liotti, 2006), this result could have been expected. Still, those reporting a fearful attachment style constituted a rather small subgroup of participants. This may suggest that attachment styles as measured by the RQ (Bartholomew & Horowitz, 1991) do not adequately reflect early attachment experiences in this group of patients. Another possibility is that patients with a fearful attachment style avoid taking part in studies because of their difficulty in trusting others.

Although few examples of positive early interpersonal experiences were reported in *Study I*, themes in *Study IV* showed that the professionals perceived some caregivers as supportive and important to the patients as adults as well as to the mental health professionals

themselves. For instance, some caregivers were seen as resources that could help motivate an unwilling patient to treatment and as important informants when patients had difficulty formulating their own needs. It should also be acknowledged that the negative image that emerged of the patients' caregivers in *Study IV* should be evaluated in light of the possibility that the professionals had a particular need to discuss problematic caregivers during those meetings. The relatively large proportion of patients who reported a secure attachment style also indicates positive interpersonal experiences (*Study III*). This finding could be clinically important, since a secure attachment style implies the capacities to express, mentally represent, and resolve negative emotions within relationships (Levy, Ellison, Scott & Bernecker, 2011). Such capacities may be important to take into account when planning treatment interventions.

#### Emotions and self

Stern (1985) portrays the child's emotions as a map used to help it organize and create coherence and meaning in the world. In relation specifically to psychosis, Gumley (2010) proposes that psychotic disorders can be understood as disorders of affect regulation underpinned by weakened or compromised metacognition. In *Study III*, a significantly higher proportion of the participants (a majority) than the general population group were found to have a dismissing attachment style. The fact that there was no significant association between a dismissing attachment style and symptoms may indicate that patients who score themselves high on the dismissing attachment style have a reduced capacity to formulate their inner mental state and thus also their treatment needs. It may therefore be important for clinicians to be aware of possible discrepancies between symptoms as they occur within the individual and as they are expressed in the therapeutic context. Furthermore, because attachment theory acknowledges that both affect regulation strategies and mentalization affect the individual's tendencies and capacities to express internal mental states, future studies are needed to

complement self-rating scales with clinical judgement. Another alternative could be to include measures of reflective function as a way to control for the capacity to report symptoms. Contrary to people with dismissing attachment, people with a preoccupied attachment style are thought to hyperactivate distress and focus on negative emotions rather than to employ deactivation strategies (Bartholomew & Horowitz, 1991; Mikulinicer et al., 2003). Some support for this notion was found because the results in *Study III* indicated a positive association between the preoccupied attachment style and severity of psychological distress (GSI). From a clinical perspective, this finding is important in the sense that patients who rely on hyperactivating strategies may benefit from treatment interventions that aim to reduce their tendency to become overwhelmed by negative affects (Harder & Folke, 2012).

Several participants in *Studies I* and *II* described loneliness and withdrawal in both childhood and adulthood. The background information in *Study III* showed that 75% of the participants were unemployed, 85% were not in a partner relationship, and 72% had no children. This suggests that many of the participants did not have the capacity to form close interpersonal relationships and to establish themselves in society. From a pathological perspective, withdrawal and antisocial behaviours are suggested to be part of an on-going psychopathological process that predisposes the child to socially deviant behaviours (Polanczyk et al., 2010). From an attachment perspective, difficulties in establishing emotional bonds are particularly associated with a dismissing attachment style (Bernier & Meins, 2008). In the narratives, withdrawal seemed mainly related to ‘tiptoeing’ out of fear for an abusive parent. Other narratives indicated that some participants had used strategies such as withdrawal to escape being bullied. Although it is not possible to determine if the withdrawal is best understood as part of a pathological process, as a consequence of internal working models, or as a way to handle with fear, awareness of different ways of understanding social withdrawal can be important.

Eliciting the narratives of children who have had adverse childhood experiences is especially important, since these narratives can help them to understand, manage, and integrate their experiences. The narrative also promotes the child's capacity to understand and cope with other people's feelings, thoughts, and actions (Singer & Wayne, 1965). Without a narrative identity to relate to, one's own actions, as well as others', can seem foreign or unreal (e.g. Pasupathi & Hoyt, 2009). Also Stern (1985) stresses the importance of using a narrative to organize experiences that could otherwise be chaotic and incoherent. Some participants described feeling confused in their early lives about who they were and how they could fit in (*Study I*). These feelings may be understood in light of the participants' descriptions of their families as having difficulties to communicate. A child with few opportunities to handle and integrate both daily and adverse life experiences with their caregivers may have difficulty developing a stable identity and sense of self. Considering that communication within the family can vary over time and across different cultures, the results indicating a lack of communication can, however, be important to study in a more homogeneous group.

Because a psychotic experience can be characterized by the loss of boundaries between external and internal realities, the theme 'Daydreaming' in *Study I* may be particularly important to consider. Some participants described having had childhood tendencies to daydream, to fantasize, and in some cases to have imaginary friends. Some participants who described having had difficulty separating their fantasy world from real life reported that such difficulties were also a part of their lives as adults. In some research, exaggerated tendencies to fantasize are seen as symptoms of dissociation. Although dissociation is considered a normal childhood ability, it may also develop as a defence mechanism in the face of trauma. Signs of dissociation include depersonalisation (the feeling of being outside of one's own body) and derealisation (the feeling that familiar things have become unfamiliar or unreal) (van der Hart, Nijenhuis & Steele, 2006). Examples of such experiences were

present in the participants' narratives about themselves as children and may be related to the abuse they described. The participants themselves referred to daydreaming and loss of contact with reality as a consequence of their absence of interpersonal relationships. This indicates that daydreaming and fantasizing may compensate for deficiencies in real relationships. Because it has been suggested that individuals who are prone to fantasizing are at greater risk of developing psychotic disorders (Waldo & Merritt, 2000), it may be advantageous to further explore the causality of exaggerated fantasizing.

### Psychotic symptoms

Researchers claim that psychotic symptoms do not arise in a contextual vacuum (Rhodes & Jakes, 2000). Gilbert (1989) posits the benefits of considering key aspects of delusions as symbols of the individual's actual problems and goals. Other researchers posit that hallucinations such as voices tend to mirror the individual's life experiences (e.g. Beavan & Read, 2010). Much of what emerged in *Study II* tends to support this way of understanding delusions and hallucinations. A consistent theme in the participants' understanding of the content of their psychotic symptoms was their association of the symptoms with their interpersonal experiences, including the absence of relationships and relationships described as abusive or intrusive.

Symptoms with a harassing and sometimes sexual content were described as frightening and as provoking feelings of anxiety and distress. These emotions, accompanying psychotic symptoms characterized as malevolent and with a sexual content, are congruent with symptoms of trauma as defined in a study by Reiff et al. (2012) (*Study II*). Also the professionals seemed to explain the patients' symptoms in terms of their experiences of abuse. Abusive caregivers, or abuse directed against other family members, were discussed by the professionals in their attempts to understand both the source of the patient's psychosis and the content of the psychotic symptoms (*Study IV*).

In *Study III*, a relation also emerged between fearful attachment and psychotic symptoms. This relation could be understood in several ways, one of which concerns an overlap between definitions. The disorganized attachment style is associated with fragmented self-experiences and disorganized thinking (Liotti, 2006), and psychoticism is defined in the SCL-90-R as shattered or confused thinking. It could also be that the fearful attachment style increases the risk of more severe psychotic symptoms. Previous studies have found that strategies for suppressing negative affects are positively associated with increased severity of the positive symptoms of psychosis (Badcock, Paulik & Maybery, 2011). A diminished capacity to recognize and cope with negative affects could explain the lack of association between the fearful attachment style and depression and anxiety, as well as the association between the fearful attachment style and psychoticism.

Analyses in *Study III* also showed a significant positive relation between preoccupied attachment and paranoid ideation. It has been suggested that interpersonal distancing and negative attitudes towards others predispose an individual to develop a paranoid mindset (Berry et al., 2008, MacBeth et al., 2008). Our results support those of the study by Ponizovsky et al. (2011), and suggest that a positive association between preoccupied attachment and paranoia relates rather to the sense of unworthiness characteristic of a negative self-image. This interpretation is supported by a large review showing consistent low self-esteem and negative self-schemas in individuals with persecutory delusions (Kesting & Lincoln, 2013). A reflection and a possible limitation concern the absence of paranoia in *Study II*. In hindsight, passages in the transcripts indicate that some participants described paranoia. However, these descriptions were not followed up during the interviews as the frightening experiences described appeared to be normal reactions to real experiences rather than symptoms. This is an important limitation of *Study II*, but it is also an example of how preconceptions, or lack of preconceptions, may influence the way symptoms are perceived.



Participants who described harassing symptom content also described symptoms they interpreted as supportive, protective, and comforting, possibly compensating for needs unmet in their real-life relationships. Symptoms with a commanding content were also described and generally linked to the emotional consequences of intrusive relationships, distressing life events, or situations requiring a difficult or important decision (*Study II*). Simultaneous supportive and commanding symptoms could be understood to indicate that psychotic symptoms of psychosis might sometimes function as a substitute for real people or for self-agency. Such an understanding has implications for treatment, in that not all symptoms in these cases should become targets of treatment intervention.

Descriptions of grandiose delusions included having a special identity, superhuman powers, a special mission, or the power of clairvoyance (*Study II*). None of the participants described stress or anxiety related to these symptoms; rather, the grandiose feelings seemed to provide participants with abilities and self-confidence that they did not have in real life. These symptoms were understood in relation their loneliness and longing for a different life. This finding accords with the delusion-as-defence model, which posits that grandiose delusions arise from an individual's attempt to self-defense against negative affective states (Beck & Rector, 2005; Freeman, et al., 1998). Similarly, it has been proposed that people without the social power to protect themselves might activate internal defensive emotions and strategies, of which grandiose delusions could be an example (Birchwood et al., 2007). This finding contradicts findings in other studies that show no support for the use of grandiose delusions as a defence strategy (i.e. Garety et al., 2013; Raune, et al., 2006; Smith et al., 2005) and it therefore needs to be replicated.

Few participants in *Study II* explained the content of their psychotic symptoms in terms of their mental illness. This finding differs from another study that found mental illness to be the most commonly reported explanation of psychotic symptoms (Freeman et al., 2004).

However, there were both methodological differences between *Study II* and the study by Freeman et al. and differences in the sample characteristics. Whereas the present study recruited participants from an outpatient unit, Freeman et al. recruited participants who were in an acute stage of illness. Patients in a less acute phase of their psychotic disorder might be better able to reflect upon their symptoms and therefore more capable of providing alternative explanations for the content of their hallucinations or delusions. This difference needs to be further explored and could usefully be approached by comparing participants in different phases of illness. Another approach could be to compare the effects of different possible treatment interventions on patients' capacity to contextualize and reflect upon the content of their symptoms.

### Methodological reflections

In qualitative studies, it may be particularly relevant to reflect on the researchers' dual role as the instrument of both data collection and analysis (Shenton, 2004). In *Studies I and II*, interview questions were formulated according to a combination of theoretical and empirical knowledge. During the interviews, my lack of clinical experience with patients with psychosis could be considered a limitation (*Studies I and II*). I may not have addressed some topics as fully as someone with more experience, however, I pursued the interviews with a curiosity and wish for understanding that might have been blunted in someone with more experience and preconceptions. Perhaps the openness of interviewees who are not too familiar with the topic may make it easier for respondents to describe their experiences. However, a recurring question during the interviews was whether the participants realized the degree of their self-revelation. It should be noted that when participants showed any signs of concern or distress, their wellbeing was always considered more important than the research question.

It should also be stressed that some of the narratives were found to have multiple meanings, and in that sense, the results are the product of the researchers (*Studies I, II, and*

IV). Ricoeur (1993) sees the narratives interpreted by the researcher as both a fiction and a representation of reality. Consequently, the participants' and the professionals' descriptions were not presented as mere transcriptions of the narratives, but were structured creatively to enable their interpretation. This means that there are other ways to understand the data and that other researchers might have found other meanings in the material. However, our intention was to do justice to the narratives and in that sense also to the participants' experiences. Shenton (2004) draws particular attention to how researchers may become so immersed in the culture under scrutiny that their professional judgement is influenced. This may have been of particular concern during the collection and analysis of data in *Study IV*, but it is difficult to evaluate how successful I was in not allowing my familiarity with the unit and the professionals to influence the results. Hopefully, my intention to document the professionals' conversations as literally as possible limited how much my preconceptions affected what was noted during the observations.

There is also reason to reflect on the effect of the researcher's presence when the participants filled in the self-report instruments (*Study III*). Many participants asked whether I was a psychiatrist or a psychologist, some asked whether I had children, some asked about their diagnosis, and some about their medications. As I replied to these questions, my relationships with the participants may have become less independent and objective. Some participants also wanted to discuss how to respond to the items. In these discussions I sought a balance between my role as researcher and as a person intending to be helpful.

Shenton (2004) considers the honesty and credibility of the informants important to assessing and analysing the data. It may have been useful to verify the participants' narratives of abuse with journal records (*Studies I and II*). However, since many patients said that several of the questions in the interview were being asked of them for the first time, it is uncertain whether credibility checks would have contributed with further information. In

reflection, the participants seemed to struggle to describe their experiences in a truthful and correct way. Some participants brought journal records, some referred to their care providers, and some told me to contact relatives or friends to assure the validity of their experiences.

There is also reason to reflect on how reliable self-report instruments are for measuring symptoms (*Study III*). It is not possible to know whether the self-report instrument aiming to measure symptoms was consistent with how patients' reported levels of symptoms would be perceived by another person. Because some people with psychosis tend to have difficulties with mentalization, researchers conducting future studies might consider complementing self-report instruments with clinical judgements or interviews.

Another concern is the overlap between the subscales in the SCL-90R (*Study III*). Depending on sample characteristics, different studies have found the scale to consist of different number of sub-scales, from only a few factors in general population samples (e.g. Olsen, Mortensen & Bech, 2004) to seven factors in a sample of people with severe mental illness (e.g. Paap et al., 2011). The overlap between the subscales might reflect comorbidity, but it might also indicate that the SCL-90-R is poorly constructed. Therefore, the associations between attachment styles and subscales should be interpreted with caution.

Because of the numerous ways to measure attachment and the confusion about how the different attachment measures are related to each other, the results of this study should preferably be seen as representative of the way attachment is operationalized in RQ. Critique has also been directed towards the reliability of an instrument that measures attachment styles by one single statement (Crowell & Treboux, 1995). However, as reported by Ponizovsky et al. (2011), my experience of the RQ was that the participants found the instrument easy to fill in. It should also be noted that the RQ measures attachment styles by asking participants to evaluate themselves and others in close relationships (Bartholomew & Horowitz, 1991). Because 84% of the participants were single and many described loneliness as a major

ongoing concern in their lives, it may have been difficult for some to respond in a realistic way. It could also be acknowledged that because *Study III* used a cross-sectional design, it could not distinguish the direction of the relationship between attachment and symptoms. Because the experience of psychosis may cause changes in interpersonal relating (Korver-Nieberg et al., 2013), longitudinal studies are needed to assess the direction of causation between attachment styles and symptoms.

There is also reason to reflect on how consistent our participants' experiences are with the experiences of other people with psychosis. Many of the participants had different diagnoses, but analyses of what impact this might have on the participants' experiences were not performed. However, since the aim was not to draw conclusions about people with specific diagnoses, this was deemed an acceptable question to set aside. It may also be important to note that diagnostic homogeneity is difficult to accomplish because diagnoses tend to change over time (Castagnini, Bertelsen & Berrios, 2008) and there is little evidence suggesting that diagnosis is an optimal way to recruit homogenous groups. However, because of the diagnostic heterogeneity it is not possible to generalize the findings from *Study III* to a specific diagnosis.

Another concern that needs to be addressed is how the recruitment process influenced which patients participated in the study. It is possible that the staff recruited patients with more stable mental health, and since the participants were recruited from outpatient mental health care, they may not be representative of those with the most severely illnesses. Furthermore, we have no information about the patients who declined to participate; therefore, it is not possible to evaluate whether the participants who participated in the study are representative of the larger group of patients cared for at the unit. Moreover, because the unit was situated in a socioeconomically disadvantaged area with high levels of unemployment, reliance on the social welfare benefits, and many immigrants, our sample may

not be consistent with other groups of people with psychosis (*Studies I-IV*). However, previous studies have found that social marginalization is a risk factor for developing a psychotic disorder (van Os, Kenis & Rutten, 2010), which may suggest that our participants were indeed representative of certain groups of people with psychosis.

### Conclusions and clinical implications

The four studies of this thesis demonstrate that interpersonal experiences are important and clinically relevant in order to better understand people with psychosis. *Study I* show that knowledge about childhood abuse can enhance the understanding of behaviours associated with psychosis. Because adverse childhood experiences might affect patients' general behaviour and their symptoms, mental health professionals should ask patients questions that intend to target experiences of childhood abuse. It may be relevant to specifically ask about experiences of emotional abuse, neglect, and betrayals, however, such experiences can be more difficult to identify, and may require different questions than those aiming to target sexual or physical abuse. In *Study II*, many participants' explained the content of their psychotic symptoms by referring to an absence of interpersonal relationships or relationships described as abusive or intrusive. This indicates that therapeutic interventions could usefully help patients to make sense of their psychotic symptoms by linking the symptoms to experiences of real social relationships. Furthermore, because some participants described symptoms that seemed to function as defences that helped the patient to cope with his or her daily life, it is important to consider the possible consequences of targeting symptoms that may perform an important self-defensive function. An important finding from *Study III* was the heterogeneity of attachment styles. Information about attachment can help professionals to understand the complex emotions some patients express in the therapeutic relationship. Professionals are recommended to be aware of patients attachment styles because it can also provide important information about patients' capacities to handle distress. Additionally, a

high proportion of the patients reported an insecure attachment style. Patients with an insecure attachment may need a secure and continuous therapeutic relationship to understand and integrate interpersonal experiences. *Study IV* showed a multifaceted and complex image of parents of patients with psychosis. To provide interventions to effectively address each family's specific situation, mental health professionals need to identify families' different needs and capacities. Professionals should also identify and help families with adverse experiences in order to support the parents to fulfil their potential to become a resource for their child with psychosis.

## REFERENCES

- Aghevli, M. A., Blanchard, J. J., & Horan, W. P. (2003). The expression and experience of emotion in schizophrenia: A study of social interactions. *Psychiatry Research, 119*, 261-270.
- Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment: a psychological study of the strange situation*. Hillsdale NJ: Erlbaum.
- AlAqeel, B., & Margolese, H. C. (2012). Remission in schizophrenia: Critical and systematic review. *Harvard Review of Psychiatry, 20*, 281-297.
- Alexander, P. C., Anderson, C. L., Brand, B., Schaeffer, C. M., Grelling, B. Z., & Kretz, L. (1998). Adult attachment and longterm effects in survivors of incest. *Child Abuse & Neglect, 22*, 45-61.
- Amador, X. F., & David, A. S. (1998). *Insight in psychosis*. New York: Oxford University Press.
- American Psychiatric Association. (2000). *DSM-IV-TR. Diagnostic and statistical manual of mental disorders* (4th ed.), text revision. Washington DC: Author.
- American Psychiatric Association. (2013). *DSM-5. Diagnostic and statistical manual of mental disorders* (5th ed.). Washington DC: Author.
- Asarnow, J. R., Goldstein, M. J., & Ben-Meir, S. (1988). Parental communication deviance in childhood onset schizophrenia spectrum and depressive disorders. *Child Psychology & Psychiatry & Allied Disciplines, 29*, 825-838.
- Ashcroft, K., Kingdon, D. G., & Chadwick, P. (2012). Persecutory delusions and childhood emotional abuse in people with a diagnosis of schizophrenia. *Psychosis: Psychological, Social and Integrative Approaches, 4*, 168-171.
- Badcock, J. C., Paulik, G., & Maybery, M. T. (2011). The role of emotion regulation in auditory hallucinations. *Psychiatry Research, 185*, 303-308.



- Banister, P. (2011). *Qualitative methods in psychology. A research guide* (2nd ed.).  
Maidenhead: Open University Press.
- Barrowclough, C., & Hooley, J. M. (2003). Attributions and expressed emotion: A review.  
*Clinical Psychology Review, 23*, 849-880.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test  
of a four-category model. *Journal of Personality and Social Psychology, 61*, 226–244.
- Beavan, V., & Read, J. (2010). Hearing voices and listening to what they say: The importance  
of voice content in understanding and working with distressing voices. *Journal of  
Nervous and Mental Disease, 198*, 201-205.
- Bebbington, P. E., Bhugra, D., Brugha, T., Singleton, N., Farrell, M., Jenkins, R., . . . Meltzer,  
H. (2004). Psychosis, victimisation and childhood disadvantage: Evidence from the  
second British National Survey of Psychiatric Morbidity. *The British Journal of  
Psychiatry, 185*, 220-226.
- Beck, A. T., & Rector, N. A. (2005). Cognitive approaches to schizophrenia: Theory and  
therapy. *Annual Review of Clinical Psychology, 1*, 577-606.
- Bell, M., Fiszdon, J., Richardson, R., Lysaker, P., & Bryson, G. (2007). Are self-reports valid  
for schizophrenia patients with poor insight? Relationship of unawareness of illness to  
psychological self-report instruments. *Psychiatry Research, 151*, 37-46.
- Bentall, R. P., Wickham, S., Shevlin, M., & Varese, F. (2012). Do specific early-life  
adversities lead to specific symptoms of psychosis? A study from the 2007 the adult  
psychiatric morbidity survey. *Schizophrenia Bulletin, 38*, 734-740.
- Bernier, A., & Meins, E. (2008). A threshold approach to understanding the origins of  
attachment disorganization. *Developmental Psychology, 44*, 969–982.

- Berry, K., Barrowclough, C., & Wearden, A. (2007). A review of the role of adult attachment style in psychosis: Unexplored issues and questions for further research. *Clinical Psychology Review, 27*, 458-475.
- Berry, K., Barrowclough, C., & Wearden, A. (2008). Attachment theory: A framework for understanding symptoms and interpersonal relationships in psychosis. *Behaviour Research and Therapy, 46*, 1275–1282.
- Berry, K., Wearden, A., Barrowclough, C., Oakland, L., & Bradley, J. (2012). An investigation of adult attachment and the nature of relationships with voices. *British Journal of Clinical Psychology, 51*, 280-291.
- Birchwood, M., & Chadwick, P. (1997). The omnipotence of voices: Testing the validity of cognitive model. *Psychological Medicine, 27*, 1345-1353.
- Birchwood, M., Gilbert, P., Gilbert, J., Trower, P., Meaden, A., Hay, J., . . . Miles, J. N. V. (2004). Interpersonal and role-related schema influence the relationship with the dominant ‘voice’ in schizophrenia: A comparison of three models. *Psychological Medicine, 34*, 1571-1580.
- Birchwood, M., Iqbal, Z., Chadwick, P., & Trower, P. (2000). Cognitive approach to depression and suicidal thinking in psychosis. Ontogeny of post-psychotic depression. *The British Journal of Psychiatry, 177*, 516-521.
- Birchwood, M., Trower, P., Brunet, K., Gilbert, P., Iqbal, Z., & Jackson, C. (2007). Social anxiety and the shame of psychosis: A study in first episode psychosis. *Behaviour Research and Therapy, 45*, 1025-1037.
- Blackburn, C., Berry, K., & Cohen, K. (2010). Factors correlated with client attachment to mental health services. *Journal of Nervous and Mental Disease, 198*, 572-575.
- Bleuler, E. (1906/1912). *Affectivity, suggestibility, paranoia* (Trans. C. Ricksher), Utica NY: State Hospitals Press.

- Bleuler, E. (1911/1950). *Dementia praecox or the group of schizophrenias* (Trans. J. Zinkin), New York: International University Press.
- Boevink, W. A. (2006). From being a disorder to dealing with life: An experiential exploration of the association between trauma and psychosis. *Schizophrenia Bulletin*, 32, 17-19.
- Bogdan, T. S. & Taylor B. (1998). *Introduction to qualitative research*. New York: Wiley.
- Bonoldi, I., Simeone, E., Rocchetti, M., Codjoe, L., Rossi, G., Gambi, F., . . . Fusar-Poli, P. (2013). Prevalence of self-reported childhood abuse in psychosis: A meta-analysis of retrospective studies. *Psychiatry Research*, 210, 8-15.
- Bourne, K., Berry, K., & Jones, L. (2013). The relationship between psychological mindedness, parental bonding and adult attachment. *Psychology and Psychotherapy: Theory, Research and Practice*, doi:10.1111/papt.12007
- Bowlby, J. (1977). The making and breaking of affectional bonds: Aetiology and psychopathology in the light of attachment theory. *The British Journal of Psychiatry*, 130, 201-210.
- Bowlby, J. (1980). *Attachment and loss: Vol 3. Loss, sadness and depression*. New York: Basic Books.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Boyd, T., & Gumley, A. (2007). An experiential perspective on persecutory paranoia: A grounded theory construction. *Psychology and Psychotherapy: Theory, Research and Practice*, 80, 1-22.
- Boydell, K. M., Gladstone, B. M., & Volpe, T. (2006). Understanding help seeking delay in the prodrome to first-episode psychosis: A secondary analysis of the perspectives of young people. *Psychiatric Rehabilitation Journal*, 30, 54-60.

- Braehler, C., & Schwannauer, M. (2012). Recovering an emerging self: Exploring reflective function in recovery from adolescent-onset psychosis. *Psychology and Psychotherapy: Theory, Research and Practice*, 85, 48-67.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 33, 77–101.
- Broberg, A. (1996). The Relationship Questionnaire, Swedish version. Department of Psychology, University of Gothenburg.
- Broberg, A., & Broberg, M. (2012). Attachment styles in the Swedish population. Unpublished data. Department of Psychology, University of Gothenburg.
- Broberg, A., Granqvist, P., Ivarsson, T., & Risholm-Mothander, P. (2006). *Anknytningsteori: Betydelsen av nära känslomässiga relationer*. [Attachment theory and the importance of close emotional relations]. Stockholm: Natur & Kultur.
- Broberg, A., Risholm-Mothander, P., Granqvist, P., & Ivarsson, T. (2008). *Anknytning i praktiken – tillämpningar av anknytningsteorin*. [Attachment theory in practice: [Implication of attachment theory.]] Stockholm: Natur & Kultur.
- Brown, G.W., Birley, J. L. T., & Wing, J. K. (1972). Influence of family life on the course of schizophrenia disorders: A replication. *British Journal of Psychiatry*, 121, 241-258.
- Burbach, F. R. (2013). Towards a systemic understanding of family emotional atmosphere and outcome after psychosis. In Gumley, A., Gillham, A., Taylor, K., Schwannauer, M. (Eds.), *Psychosis and emotion: The role of understanding psychosis, therapy and recovery* (pp. 116-148). New York: Routledge/Taylor & Francis Group.
- Butzlaff, R. L., & Hooley, J. M. (1998). Expressed emotion and psychiatric relapse. *Archives of General Psychiatry*, 55, 547-552.
- Castagnini, A., Bertelsen, A., & Berrios, G. E. (2008). Incidence and diagnostic stability of ICD-10 acute and transient psychosis disorder. *Comprehensive Psychiatry*, 49, 255-261.

- Catty, J., Cowan, N., Poole, Z., Ellis, G., Geyer, C., Lissouba, P., . . . Burns, T. (2012). Attachment to the clinical team and its association with therapeutic relationships, social networks, and clinical well-being. *Psychology and Psychotherapy: Theory, Research and Practice*, 85, 17-35.
- Chadwick, P., & Birchwood, M. (1994). The omnipotence of voices: A cognitive approach to auditory hallucinations. *British Journal of Psychiatry*, 164, 190-201.
- Clarke, K., & Couchman, G. (2012). Caregiver causal attributions in youth psychosis. *Early Intervention in Psychiatry*, 6, 309-316.
- Connor, C., & Birchwood, M. (2012). Abuse and dysfunctional affiliations in childhood: An exploration of their impact on voice-hearers' appraisals of power and expressed emotion. *Psychosis: Psychological, Social and Integrative Approaches*, 4, 19-31.
- Crowell, J. A., Fraley, R. C., & Shaver P. R. (2008). Measurement of individual differences in adolescent and adult attachment. In J. Cassidy & P. R. Shaver (Eds). *Handbook of attachment: Theory, research, and clinical applications* (pp. 599-634). New York: Guilford Press.
- Crowell, J. A., Treboux, D., & Waters, E. (1999). The adult attachment interview and the relationship questionnaire: Relations to reports of mothers and partners. *Personal Relationships*, 6, 1–18.
- Dell, P. F. (2002). Dissociative phenomenology of dissociative identity disorder. *Journal of Nervous and Mental Disease*, 190, 10-15.
- Derogatis, L. R. (1977). *SCL-90: Administration, scoring and procedures manual-I for the (revised) version and other instruments of the psychopathology rating scale series*. Baltimore MD: Clinical Psychometrics Research Unit, Johns Hopkins University School of Medicine.

- Docherty, N. M. (1995). Linguistic reference performance in parents of schizophrenic patients. *Psychiatry: Interpersonal and Biological Processes*, 58, 20-27.
- Docherty, N. M., Gordinier, S. W., Hall, M. J., & Dombrowski, M. E. (2004). Referential communication disturbances in the speech of nonschizophrenic siblings of schizophrenia patients. *Journal of Abnormal Psychology*, 113, 399-405.
- Dozier, M. (1990). Attachment organization and treatment use for adults with serious psychopathological disorders. *Journal of Development and Psychopathology*, 2, 47-60.
- Dozier, M., & Lee, S. W. (1995). Discrepancies between self- and other-report of psychiatric symptomatology: Effects of dismissing attachment strategies. *Development and Psychopathology*, 7, 217-226.
- Dozier, M., Stovall-McClough, K. C., & Albus, K. E. (2008). Attachment and psychopathology in adulthood. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 718-744). New York: Guilford Press.
- Faust, J., & Stewart, L. M. (2007). Impact of child abuse timing and family environment on psychosis. *Journal of Psychological Trauma*, 6, 65-86.
- Fisher, H. L., Craig, T. K., Fearon, P., Morgan, K., Dazzan, P., Lappin, J., . . . Morgan, C. (2011). Reliability and comparability of psychosis patients' retrospective reports of childhood abuse. *Schizophrenia Bulletin*, 37, 546-553.
- Fonagy, P., Gergely, G., & Target, M. (2008). Psychoanalytic constructs and attachment theory and research. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 783-811). New York: Guilford Press.
- Fonagy, P., & Luyten, P. (2009). A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Development and Psychopathology*, 21, 1355-1381.

- Fonagy, P., & Target, M. (2000). *Mentalization and personality disorder in children: A current perspective from the Anna Freud Centre* (pp. 69-89). Philadelphia: Taylor & Francis.
- Fonagy, P., Target, M., Gergely, G., Allen, J. G., & Bateman, A. W. (2003). The developmental roots of borderline personality disorder in early attachment relationships: A theory and some evidence. *Psychoanalytic Inquiry, 23*, 412-459.
- Fraley, R. C. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modelling of developmental mechanisms. *Personality and Social Psychology Review, 6*, 123-151.
- Fraley, R. C., Davis, K. E., & Shaver, P. R. (1998). Dismissing-avoidance and the defensive organization of emotion, cognition, and behavior. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 249-279). New York: Guilford Press.
- Freeman, D. (2006). Delusions in the nonclinical population. *Current Psychiatry Reports, 28*, 191-204.
- Freeman, D. (2007). Suspicious minds: The psychology of persecutory delusions. *Clinical Psychology Review, 27*, 425-457.
- Freeman, D., & Garety, P. A. (2000). Comments on the content of persecutory delusions: Does the definition need clarification? *British Journal of Clinical Psychology, 39*, 407-414.
- Freeman, D., Garety, P. A., Fowler, D., Kuipers, E., Bebbington, P. E., & Dunn, G. (2004). Why do people with delusions fail to choose more realistic explanations for their experiences? An empirical investigation. *Journal of Consulting and Clinical Psychology, 72*, 671-680.

- Freeman, D., Garety, P., Fowler, D., Kuipers, E., Dunn, G., Bebbington, P., & Hadley, C. (1998). The London–East Anglia randomized controlled trial of cognitive-behaviour therapy for psychosis IV: Self-esteem and persecutory delusions. *British Journal of Clinical Psychology, 37*(4), 415-430.
- Fridell, M., Cesarec, Z., Johansson, M., & Malling-Thorsen, S. (2002). Swedish standardisation and validation of the symptom scale. Unpublished material. The Swedish National Board of Institutional Care.
- Frith, C. D. (1992). *The cognitive neuropsychology of schizophrenia*. Hove: Erlbaum.
- Frith, C. D., & Done, D. J. (1988). Towards a neuropsychology of schizophrenia. *The British Journal of Psychiatry, 153*, 437-443.
- Garety, P. A., & Freeman, D. (1999). Cognitive approaches to delusions: A critical review of theories and evidence. *British Journal of Clinical Psychology, 38*, 113-154.
- Garety, P. A., Gittins, M., Jolley, S., Bebbington, P., Dunn, G., Kuipers, E., . . . Freeman, D. (2013). Differences in cognitive and emotional processes between persecutory and grandiose delusions. *Schizophrenia Bulletin, 39*, 629-639.
- Garety, P. A., Kuipers, E., Fowler, D., Freeman, D., & Bebbington, P. E. (2001). A cognitive model of the positive symptoms of psychosis. *Psychological Medicine, 31*, 189-195.
- Gibiino, S., Liappas, I., Zisakis, A. K., Zisaki, A. K., Liappas, A., Kalofoutis, A., . . . Serretti, A. (2010). Myelination hypothesis in schizophrenia: Role of thyroid hormones from preclinical evidence to therapy suggestions. *Clinical Neuropsychiatry: Journal of Treatment Evaluation, 7*, 121-130.
- Gilbert, P. (1989). *Human nature and suffering*. Hove: Earlbaum.
- Gilbert, P., & Allan, S. (1998). The role of defeat and entrapment (arrested flight) in depression: An exploration of an evolutionary view. *Psychological Medicine, 28*, 585-598.



- Green, J. G., McLaughlin, K. A., Berglund, P. A., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M., & Kessler, R. C. (2010). Childhood adversities and adult psychiatric disorders in the national comorbidity survey replication I: Associations with first onset of DSM-IV disorders. *Archives of General Psychiatry, 67*, 113-123.
- Griffin, D. W., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology, 67*, 430-445.
- Guba, E. G. (1981). Criteria for assessing trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal, 29*, 75-91.
- Gumley, A. (2010). The developmental roots of compromised mentalization in complex mental health disturbances of adulthood: An attachment-based conceptualization. In G. Dimaggio & P. H. Lysaker (Eds.), *Metacognition and severe adult mental disorders: From research to treatment* (pp. 45-62). New York: Routledge/Taylor & Francis.
- Harder, S., & Folke, S. (2012). Affect regulation and metacognition in psychotherapy of psychosis: An integrative approach. *Journal of Psychotherapy Integration, 22*, 330-343.
- Hardy, A., Fowler, D., Freeman, D., Smith, B., Steel, C., Evans, J., . . . Dunn, G. (2005). Trauma and hallucinatory experience in psychosis. *Journal of Nervous and Mental Disease, 193*, 501-507.
- Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry, 41*, 441-455.
- Hayward, M., Berry, K., & Ashton, A. (2011). Applying interpersonal theories to the understanding of and therapy for auditory hallucinations: A review of the literature and directions for further research. *Clinical Psychology Review, 31*, 1313-1323.

- Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualised as attachment process. *Journal of Personality and Social Psychology, 52*, 511-524.
- Heidegger, M. (1962). *Being and time*. Oxford: Blackwell.
- Hesse, E., & Main, M. (2000). Fearful infant, child, and adult attachment: Collapse in behavioral and attentional strategies. *Journal of the American Psychoanalytic Association, 48*, 1097-1127.
- Holzinger, A., Löffler, W., Müller, P., Priebe, S., & Angermeyer, M. (2002). Subjective illness theory and antipsychotic medication compliance by patients with schizophrenia. *Journal of Nervous and Mental Disease, 190*, 597-603.
- Husserl, E. (1977). *Phenomenological psychology*. The Hague: Martinus Nijhoff.
- Jakes, S., Rhodes, J., & Issa, S. (2004). Are the themes of delusional beliefs related to the themes of life-problems and goals? *Journal of Mental Health, 13*, 611-619.
- Janssen, I., Krabbendam, L., Bak, M., Hanssen, M., Vollebergh, W., de Graaf, R., & van Os, J. (2004). Childhood abuse as a risk factor for psychotic experiences. *Acta Psychiatrica Scandinavica, 109*, 38-45.
- Jenner, J. A., Rutten, S., Beuckens, J., Boonstra, N., & Sytema, S. (2008). Positive and useful auditory vocal hallucinations: Prevalence, characteristics, attributions, and implications for treatment. *Acta Psychiatrica Scandinavica, 118*, 238-245.
- Jones, P., Rodgers, B., Murray, R., & Marmot, M. (1994). Childhood developmental risk factors for adult schizophrenia in the British 1946 birth cohort. *Lancet, 344*, 1398-1402.
- Karatzias, T., Gumley, A., Power, K., & O'Grady, M. (2007). Illness appraisals and self-esteem as correlates of anxiety and affective comorbid disorders in schizophrenia. *Comprehensive Psychiatry, 48*, 371-375.
- Kesting, M., & Lincoln, T. M. (2013). The relevance of self-esteem and self-schemas to persecutory delusions: A systematic review. *Comprehensive Psychiatry, 54*, 766-89

- Kim, H., & Salyers, M. P. (2008). Attitudes and perceived barriers to working with families of persons with severe mental illness: Mental health professionals' perspectives. *Community Mental Health Journal, 44*, 337-345.
- Knowles, R., McCarthy-Jones, S., & Rowse, G. (2011). Grandiose delusions: A review and theoretical integration of cognitive and affective perspectives. *Clinical Psychology Review, 31*, 684-696.
- Korver-Nieberg, N., Berry, K., Meijer, C. J., & de Haan, L. (2013). Adult attachment and psychotic phenomenology in clinical and non-clinical samples: A systematic review. *Psychology and Psychotherapy: Theory, Research and Practice*. Advance online publication. doi: 10.1111/papt.12010
- Kvrgic, S., Cavelti, M., Beck, E., Rüsç, N., & Vauth, R. (2012). Therapeutic alliance in schizophrenia: The role of recovery orientation, self-stigma, and insight. *Psychiatry Research, 209*, 15-20.
- Kymalainen, J. A., & Weisman de Mamani, A. G. (2008). Expressed emotion, communication deviance, and culture in families of patients with schizophrenia: A review of the literature. *Cultural Diversity and Ethnic Minority Psychology, 14*, 85-91.
- Landmark, J., Merskey, H., Cernovsky, Z. Z., & Helmes, E. (1990). The positive triad of schizophrenic symptoms: Its statistical properties and its relationship to 13 traditional diagnostic systems. *The British Journal of Psychiatry, 156*, 388-394.
- Lataster, T., van Os, J., Drukker, M., Henquet, C., Feron, F., Gunther, N., & Myin-Germeys, I. (2006). Childhood victimisation and developmental expression of non-clinical delusional ideation and hallucinatory experiences: Victimisation and non-clinical psychotic experiences. *Social Psychiatry and Psychiatric Epidemiology, 41*, 423-428.

- Lauveng, A. (2012). When you have lost yourself, there's really not very much left. In J. Geekie, P. Randal, D. Lampshire & J. Read (Eds.), *Experiencing Psychosis: Personal and Professional Perspectives* (pp. 79-87). New York: Routledge/Taylor & Francis.
- Le Lievre, J. A., Schweitzer, R. D., & Barnard, A. (2011). Schizophrenia and the progression of emotional expression in relation to others. *Qualitative Health Research, 21*, 1335-1346.
- Leudar, I., & Thomas, P. (2000). *Voices of reason, voices of insanity: Studies of verbal hallucinations*. London: Routledge.
- Levy, K. N., Ellison, W. D., Scott, L. N., & Bernecker, S. L. (2011). Attachment style. *Journal of Clinical Psychology, 67*, 193-201.
- Liotti, G. (2006). A model of dissociation based on attachment theory and research *Journal of Trauma & Dissociation, 7*, 55-73.
- Liotti, G., & Gumley, A. (2008). An attachment perspective on schizophrenia: The role of disorganized attachment, dissociation and mentalization. In A. Moskowitz, I. Schäfer & M. J. Dorahy (Eds.), *Psychosis, trauma and dissociation: emerging perspectives on severe psychopathology* (pp. 117-128). Hoboken, NJ: John Wiley & Sons.
- Lysaker, P. H. (2010). Metacognition in schizophrenia spectrum disorders: Methods of assessing metacognition within narrative and links with neurocognition. In Dimaggio, G., & Lysaker P. H. (Eds.), *Metacognition and severe adult mental disorders: From research to treatment* (pp. 65-82). Routledge/Taylor & Francis Group, New York, NY.
- Lysaker, P. H., Carcione, A., Dimaggio, G., Johannesen, J. K., Nicolò, G., Procacci, M., & Semerari, A. (2005). Metacognition amidst narratives of self and illness in schizophrenia: Associations with neurocognition, symptoms, insight and quality of life. *Acta Psychiatrica Scandinavica, 112*, 64-71.

- Lysaker, P. H., Dimaggio, G., Buck, K. D., Carcione, A., & Nicolò, G. (2007). Metacognition within narratives of schizophrenia: Associations with multiple domains of neurocognition. *Schizophrenia Research, 93*, 278-287.
- Lysaker, P. H., & LaRocco, V. A. (2008). The prevalence and correlates of trauma-related symptoms in schizophrenia spectrum disorder. *Comprehensive Psychiatry, 49*, 330-334.
- Lysaker, P. H., Warman, D. M., Dimaggio, G., Procacci, M., LaRocco, V. A., Clark, L. K., . . . Nicolò, G. (2008). Metacognition in schizophrenia: Associations with multiple assessments of executive function. *Journal of Nervous and Mental Disease, 196*, 384-389.
- MacBeth, A., Gumley, A., Schwannauer, M., & Fisher, R. (2011). Attachment states of mind, mentalization, and their correlates in a first-episode psychosis sample. *Psychology and Psychotherapy: Theory, Research and Practice, 84*, 42-57.
- MacBeth, A., Schwannauer, M., & Gumley, A. (2008). The association between attachment style, social mentalities, and paranoid ideation: An analogue study. *Psychology and Psychotherapy: Theory, Research and Practice, 81*, 79-93.
- Magliano, L., Fiorillo, A., De Rosa, C., Malangone, C., & Maj, M. (2004). Beliefs about schizophrenia in Italy: A comparative nationwide survey of the general public, mental health professionals, and patients' relatives. *The Canadian Journal of Psychiatry/La Revue Canadienne De Psychiatrie, 49*, 323-331.
- Main, M., Goldwyn, R., & Hesse, E. (2002). *Adult attachment scoring and classification system*. Unpublished scoring manual. Berkeley: Department of Psychology, University of California.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development, 50*, 66-104.

- Mason, O. J., Brett, E., Collinge, M., Curr, H., & Rhodes, J. (2009). Childhood abuse and the content of delusions. *Child Abuse & Neglect*, *33*, 205-208.
- McCarthy-Jones, S., Marriott, M., Knowles, R., Rowse, G., & Thompson, A. R. (2013). What is psychosis? A meta-synthesis of inductive qualitative studies exploring the experience of psychosis. *Psychosis: Psychological, Social and Integrative Approaches*, *5*, 1-16.
- McCreadie, R. G., Williamson, D. J., Athawes, R. W. B., Connolly, M. A., & Tilak-Singh, D. (1994). The Nithsdale Schizophrenia Surveys: XIII. Parental rearing patterns, current symptomatology and relatives' expressed emotion. *The British Journal of Psychiatry*, *165*, 347-352.
- Meeks, S., & Murrell, S. A. (1994). Service providers in the social networks of clients with severe mental illness. *Schizophrenia Bulletin*, *20*, 399-406.
- Menezes, N. M., Arenovich, T., & Zipursky, R. B. (2006). A systematic review of longitudinal outcome studies of first-episode psychosis. *Psychological Medicine*, *36*, 1349-1362.
- Miklowitz, D. J. (1994). Family risk indicators in schizophrenia. *Schizophrenia Bulletin*, *20*, 137-149.
- Miklowitz, D. J., Velligan, D. I., Goldstein, M. J., Nuechterlein, K. H., Gitlin, M. J., Ranlett, G., & Doane, J. A. (1991). Communication deviance in families of schizophrenic and manic patients. *Journal of Abnormal Psychology*, *100*, 163-173.
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics and change*. New York: Guilford Press.
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion*, *27*, 77-102.

- Moberg, V. (1968). *Berättelser ur min levnad*. [Stories from my life.] Stockholm: Bonnier.
- Møller, P., & Husby, R. (2000). The initial prodrome in schizophrenia: Searching for naturalistic core dimensions of experience and behavior. *Schizophrenia Bulletin*, *26*, 217-232.
- Morgan, C., & Fisher, H. (2007). Environmental factors in schizophrenia: Childhood trauma—A critical review. *Schizophrenia Bulletin*, *33*, 3-10.
- Moritz, S., Veckenstedt, R., Randjbar, S., Vitzthum, F., Karow, A., & Lincoln, T. M. (2010). Course and determinants of self-esteem in people diagnosed with schizophrenia during psychiatric treatment. *Psychosis: Psychological, Social and Integrative Approaches*, *2*, 144-153.
- Morrison, A. P., Frame, L., & Larkin, W. (2003). Relationships between trauma and psychosis: A review and integration. *British Journal of Clinical Psychology*, *42*, 331-353.
- Moskowitz, A., & Heim, G. (2013). Affect, dissociation, psychosis: Essential components of the historical concept of schizophrenia. In A. Gumley, A. Gillham, K. Taylor & M. Schwannauer (Eds.), *Psychosis and emotion: The role of emotion in understanding psychosis, therapy and recovery* (pp.9-22). New York: Routledge/Taylor & Francis.
- National Board of Health and Welfare. (2011). *Nationella riktlinjer vid psykosociala insatser vid schizofreni eller schizofreniliknande tillstånd*. [National guidelines concerning psychosocial interventions for Schizophrenia, or Schizophrenia Conditions]. Stockholm: National Board of Health and Welfare.
- Neuman, C. S., Grimes, K., Walker, E. F., & Baum, K. (1995). Developmental pathways to schizophrenia: Behavioural subtypes. *Journal of Abnormal Psychology*, *4*, 558–566.

- Olsen, L. R., Mortensen, E. L., & Bech, P. (2004). The SCL-90 and SCL-90R versions validated by item response models in a Danish community sample. *Acta Psychiatrica Scandinavica, 110*, 225-229.
- Onstad, S., Skre, I., Torgersen, S., & Kringlen, E. (1994). Family interaction: Parental representation in schizophrenic patients. *Acta Psychiatrica Scandinavica Supplementum, 90*, 67-70.
- Paap, M. C. S., Meijer, R. R., Van Bebber, J., Pedersen, G., Karterud, S., Hellem, F. M., & Haraldsen, I. R. (2011). A study of the dimensionality and measurement precision of the SCL-90-R using item response theory. *International Journal of Methods in Psychiatric Research, 20*(3), 39-55.
- Palgi, Y., Shrira, A., Ben-Ezra, M., Shiovitz-Ezra, S., & Ayalon, L. (2012). Self- and other-oriented potential lifetime traumatic events as predictors of loneliness in the second half of life. *Aging & Mental Health, 16*, 423-430.
- Parker, G., Fairley, M., Greenwood, J., Jurd, S., & Solvoe, D. (1982). Parental representation of schizophrenics and their association with onset and course of schizophrenia. *British Journal of Psychiatry, 141*, 573-581.
- Parker, G., Hayward, L., & Johnston, P. (1989). Factorial validity of EE scales. *Psychological Medicine, 19*, 435-446.
- Parker, G., Tupling, H. & Brown, L. (1979). A parental bonding instrument. *British Journal of Medical Psychology, 52*, 1-10.
- Parnas, J., & Handest, P. (2003). Phenomenology of anomalous self-experience in early schizophrenia. *Comprehensive Psychiatry, 44*, 121-134.
- Parnas, J., Handest, P., Sæbye, D., & Jansson, L. (2003). Anomalies of subjective experience in schizophrenia and psychotic bipolar illness. *Acta Psychiatrica Scandinavica, 108*, 126-133.



- Pasupathi, M., & Hoyt, T. (2009). The development of narrative identity in late adolescence and emergent adulthood: The continued importance of listeners. *Developmental Psychology, 45*, 558-574.
- Patterson, P. (2013). Attachment, loss and expressed emotion: Developmental process in psychosis. In A. Gumley, A. Gillham, K. Taylor & M. Schwannauer (Eds.), *Psychosis and emotion: The role of emotions in understanding psychosis, therapy and recovery* (pp. 136-148). London & New York: Routledge/Taylor & Francis.
- Paulik, G., Badcock, J. C., & Maybery, M. T. (2008). Dissociating the components of inhibitory control involved in predisposition to hallucinations. *Cognitive Neuropsychiatry, 13*, 33-46.
- Perala, J., Suvisaari, J., Saarni, S. I., Kuoppasalmi, K., Isometsa, E., Pirkola, S., . . . Lönnqvist, J. (2007). Lifetime prevalence of psychotic and bipolar I disorders in a general population. *Archives of General Psychiatry, 64*, 19-28.
- Polanczyk, G., Moffitt, T. E., Arseneault, L., Cannon, M., Ambler, A., Keefe, R. S. E., . . . Caspi, A. (2010). Etiological and clinical features of childhood psychotic symptoms: Results from a birth cohort. *Archives of General Psychiatry, 67*, 328-338.
- Ponizovsky, A. M., Nechamkin, Y., & Rosca, P. (2007). Attachment patterns are associated with symptomatology and course of schizophrenia in male inpatients. *American Journal of Orthopsychiatry, 77*, 324-331.
- Ponizovsky, A. M., Vitenberg, E., Baumgarten-Katz, I., & Grinshpoon, A. (2011). Attachment styles and affect regulation among outpatients with schizophrenia: Relationships to symptomatology and emotional distress. *Psychology and Psychotherapy: Theory, Research and Practice, 86*, 164-182.
- Posey, T. B., & Losch, M. E. (1983). Auditory hallucinations of hearing voices in 375 normal subjects. *Imagination, Cognition and Personality, 3*, 99-113.

- Rankin, P., Bentall, R., Hill, J., & Kinderman, P. (2005). Perceived relationships with parents and paranoid delusions: Comparisons of currently ill, remitted and normal participants. *Psychopathology, 38*, 16-25.
- Raune, D., Bebbington, P., Dunn, G., & Kuipers, E. (2006). Event attributes and the content of psychotic experiences in first-episode psychosis. *Psychological Medicine, 36*, 221-230.
- Read, J., Agar, K., Argyle, N., & Aderhold, V. (2003). Sexual and physical abuse during childhood and adulthood as predictors of hallucinations, delusions and thought disorder. *Psychology and Psychotherapy: Theory, Research and Practice, 76*, 1-22.
- Read, J., & Argyle, N. (1999). Hallucinations, delusions, and thought disorder among adult psychiatric inpatients with a history of child abuse. *Psychiatric Services, 50*, 1467-1472.
- Read, J., & Gumley, A. (2010). Can attachment theory help explain the relationship between childhood adversity and psychosis? In S. Benamer (Ed.), *Telling stories? Attachment-based approaches to the treatment of psychosis* (pp. 51-94). London: Karnac Books.
- Reiff, M., Castille, D. M., Muenzenmaier, K., & Link, B. (2012). Childhood abuse and the content of adult psychotic symptoms. *Psychological Trauma: Theory, Research, Practice, and Policy, 4*, 356-369.
- Rhodes, J. E., & Jakes, S. (2000). Correspondence between delusions and personal goals: A qualitative analysis. *British Journal of Medical Psychology, 73*, 211-225.
- Rhodes, J. E., & Jakes, S. (2010). Perspectives on the onset of delusions. *Clinical Psychology & Psychotherapy, 17*(2), 136-146.
- Rhodes, J. E., Jakes, S., & Robinson, J. (2005). A qualitative analysis of delusional content. *Journal of Mental Health, 14*, 383-398.
- Ricoeur, P. (1993) Från text till handling. [From text to action.]. Stockholm: Brutus Östlings Bokförlag Symposium.

- Riebschleger, J. (2001). What do mental health professionals really think of family members of mental health patients? *American Journal of Orthopsychiatry*, 71, 466–472.
- Roisko, R., Wahlberg, K., Miettunen, J., & Tienari, P. (2013). Association of parental communication deviance with offspring's psychiatric and thought disorders. A systematic review and meta-analysis. *European Psychiatry*, 29, 20-31.
- Sanjuan, J., Gonzalez, J. C., Aguilar, E. J., Leal, C., & van Os, J. (2004). Pleasurable auditory hallucinations. *Acta Psychiatrica Scandinavica*, 110, 273-278.
- Sass, L. A., & Parnas, J. (2003). Schizophrenia, consciousness, and the self. *Schizophrenia Bulletin*, 29, 427-444.
- Seikkula, J., Aaltonen, J., Alakare, B., Haarakangas, K., Keränen, J., & Lehtinen, K. (2006). Five-year experience of first-episode nonaffective psychosis in open-dialogue approach: Treatment principles, follow-up outcomes, and two case studies. *Psychotherapy Research*, 16, 214-228.
- Semple, S. J., Patterson, T. L., Shaw, W. S., Grant, I., Moscona, S., Koch, W., & Jeste, D. (1997). The social networks of older schizophrenia patients. *International Psychogeriatrics*, 9, 81-94.
- Shedler, J., Mayman, M., & Manis, M. (1993). The illusion of mental health. *American Psychologist*, 48, 1117-1131.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75.
- Singer, M. T., & Wayne, L. C. (1965). Thought disorder and family relations of schizophrenics: IV. Results and implications. *Archives of General Psychiatry*, 12, 201–206.
- Smith, B., Fowler, D. G., Freeman, D., Bebbington, P., Bashforth, H., Garety, P., . . . Kuipers, E. (2006). Emotion and psychosis: Links between depression, self-esteem,

- negative schematic beliefs and delusions and hallucinations. *Schizophrenia Research*, 86, 181-188.
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretive phenomenological analysis: Theory, method and research*. London: Sage.
- Smith, N., Freeman, D., & Kuipers, E. (2005). Grandiose delusions: An experimental investigation of the delusion as defense. *Journal of Nervous and Mental Disease*, 193, 480-487.
- Sourander, A., Jensen, P., Rönning, J. A., Niemelä, S., Helenius, H., Sillanmäki, L., . . . Almqvist, F. (2007). What is the early adulthood outcome of boys who bully or are bullied in childhood? The Finnish “From a Boy to a Man” study. *Pediatrics*, 120, 397-404.
- Stain, H. J., Galletly, C. A., Clark, S., Wilson, J., Killen, E. A., Anthes, L., . . . Harvey, C. (2012). Understanding the social costs of psychosis: The experience of adults affected by psychosis identified within the second Australian National Survey of Psychosis. *Australian and New Zealand Journal of Psychiatry*, 46, 879-889.
- Stein, H., Koontz, A. D., Fonagy, P., Allen, J. G., Fultz, J., Brethour, J. R., Jr., . . . Evans, R. B. (2002). Adult attachment: What are the underlying dimensions? *Psychology and Psychotherapy: Theory, Research and Practice*, 75, 77-91.
- Stern, D. (1985). *The interpersonal world of the infant. A view from psychoanalysis and developmental psychology*. New York: Basic Books.
- Sullivan, H. S. (1956). *Clinical studies in psychiatry*. Oxford: Norton.
- Sullivan, H. S. (1962). *Schizophrenia as a human process*. New York: Norton.
- Tienari, P., Wynne, L. C., Sorri, A., Lahti, I., Läksy, K., Moring, J., . . . Wahlberg, K. (2004). Genotype-environment interaction in schizophrenia-spectrum disorder: Long-term follow-up study of Finnish adoptees. *The British Journal of Psychiatry*, 184, 216-222.

- Tyrrell, C. L., Dozier, M., Teague, G. B., & FalLOT, R. D. (1999). Effective treatment relationships for persons with serious psychiatric disorders: The importance of attachment states of mind. *Journal of Consulting and Clinical Psychology, 67*, 725-733.
- Upthegrove, R., Birchwood, M., Ross, K., Brunett, K., McCollum, R., & Jones, L. (2010). The evolution of depression and suicidality in first-episode psychosis. *Acta Psychiatrica Scandinavica, 122*, 211-218.
- van Dam, D. S., Van der Ven, E., Velthorst, E., Selten, J. P., Morgan, C., & de Haan, L. (2012). Childhood bullying and the association with psychosis in non-clinical and clinical samples: A review and meta-analysis. *Psychological Medicine, 42*, 2463-2474.
- Van der Hart, H., Nijenhuis, E. R. S., & Steele, K. (2006). *The haunted self: Structural dissociation and the treatment of chronic traumatization*. New York: Norton.
- van Os, J., Hanssen, M., Bijl, R. V., & Ravelli, A. (2000). Strauss (1969) revisited: A psychosis continuum in the general population? *Schizophrenia Research, 45*, 11-20.
- van Os, J., Kenis, G., & Rutten, B. P. F. (2010). The environment of schizophrenia. *Nature, 468*, 203-212.
- Varese, F., Smeets, F., Drukker, M., Lieveerse, R., Lataster, T., Viechtbauer, W., . . . Bentall, R. P. (2012). Childhood adversities increase the risk of psychosis: A meta-analysis of patient-control, prospective- and cross-sectional cohort studies. *Schizophrenia Bulletin, 38*, 661-671.
- Vaughn C. E., & Leff, J. P. (1976). The influence of family and social factors on the course of psychiatric illness. A comparison of schizophrenic and depressed neurotic patients. *British Journal of Psychiatry, 129*, 125-137.
- Waldo, T. G., & Merritt, R. D. (2000). Fantasy proneness, dissociation, and *DSM-IV* axis II symptomatology. *Journal of Abnormal Psychology, 3*, 555-558.

- Waters, F. A. V., Badcock, J. C., Michie, P. T., & Maybery, M. T. (2006). Auditory hallucinations in schizophrenia: Intrusive thoughts and forgotten memories. *Cognitive Neuropsychiatry*, *11*, 65-83.
- Wellham, J., Scott, G., Williams, J., Najman, W., Bor, M., O Callaghan, M., & McGrath, J. (2009). Emotional and behavioral antecedents of young adults who screen positive for non-affective psychosis: A 21 year birth cohort study. *Psychological Medicine*, *39*, 625–634.
- Whitfield, C. L., Dube, S. R., Felitti, V. J., & Anda, R. F. (2005). Adverse childhood experiences and hallucinations. *Child Abuse & Neglect*, *29*(7), 797-810.
- Willinger, U., Heiden, A. M., Meszaros, K., Formann, A. K., & Aschauer, H. N. (2002). Maternal bonding behaviour in schizophrenia and schizoaffective disorder, considering premorbid personality traits. *Australian and New Zealand Journal of Psychiatry*, *36*, 663-668.
- Wong, C., Davidson, L., Anglin, D., Link, B., Gerson, R., Malaspina, D., . . . Corcoran, C. (2009). Stigma in families of individuals in early stages of psychotic illness: Family stigma and early psychosis. *Early Intervention in Psychiatry*, *3*, 108-115.
- World Health Organization (1997). *Classification of mental and behavioural disorders. Diagnostic criteria for research*. Geneva: author.
- Yung, A. R., & McGorry, P. D. (1996). The initial prodrome in psychosis: Descriptive and qualitative aspects. *Australian and New Zealand Journal of Psychiatry*, *30*, 587-599.
- Yung, A. R., Phillips, L. J., Yuen, H. P., Francey, S. M., McFarlane, C. A., Hallgren, M., & McGorry, P. D. (2003). Psychosis prediction: 12-month follow up of a high-risk (“prodromal”) group. *Schizophrenia Research*, *60*, 21-32.
- Zipursky, R. B., Reilly, T. J., & Murray, R. M. (2012). The myth of schizophrenia as a progressive brain disease. *Schizophrenia Bulletin*, *39*:1363-72.

Zubin, J., & Spring, B. (1977). Vulnerability: A new view of schizophrenia. *Journal of Abnormal Psychology*, 86, 103-126.

Zuckerman, M. (1999). *Vulnerability to psychopathology. A biosocial model*. Washington DC: American Psychological Association.