



Advances in Mental Health

Promotion, Prevention and Early Intervention

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/ramh20>

Parents with a mental illness and their sense of parenting competence

Kjersti Bergum Kristensen, Camilla Lauritzen, Bjørn Helge Handegård & Charlotte Reedtz

To cite this article: Kjersti Bergum Kristensen, Camilla Lauritzen, Bjørn Helge Handegård & Charlotte Reedtz (2023): Parents with a mental illness and their sense of parenting competence, *Advances in Mental Health*, DOI: [10.1080/18387357.2023.2220437](https://doi.org/10.1080/18387357.2023.2220437)

To link to this article: <https://doi.org/10.1080/18387357.2023.2220437>



© 2023 UiT The Arctic University of Norway.
Published by Informa UK Limited, trading as
Taylor & Francis Group



Published online: 14 Jun 2023.



Submit your article to this journal [↗](#)



Article views: 188



View related articles [↗](#)



View Crossmark data [↗](#)

Parents with a mental illness and their sense of parenting competence

Kjersti Bergum Kristensen, Camilla Lauritzen, Bjørn Helge Handegård and Charlotte Reedt

Regional Centre for Child and Adolescent Mental Health and Child Welfare, UiT The Arctic University of Norway, Tromsø, Norway

ABSTRACT

Objective: Research provides evidence that parental mental illness affects child development through parenting behaviour. This study investigates how parents with a mental illness report on their parenting sense of competence.

Method: A sample of 141 parents receiving treatment at a clinic for mental health and substance use disorders participated. The Parenting Sense of Competence scale (PSOC) was used to assess participants' parenting sense of competence. Information about diagnoses, child age and participation in a preventive family intervention called Child Talks was also collected. PSOC scores from our sample was compared to normative samples.

Results: Parents with a mental illness reported having equal or higher PSOC scores compared to the normative samples. Neither children's age, comorbidity nor parents' diagnosis affected PSOC scores. PSOC satisfaction score was a significant predictor for participation in Child Talks, where lower scores were related to a small increase in participation rate.

Discussion: The results indicate that parents with a mental illness do not view or report feeling less competent in the parenting role than the general population. We discuss the validity of the results and if there are factors that may influence parents' reports such as stigma, fear of losing custody and impaired self-awareness.

ARTICLE HISTORY

Received 2 December 2022
Accepted 29 May 2023

KEYWORDS

Parenting; PSOC; prevention; parental mental illness; parenting sense of competence; parenting self-efficacy

Introduction

The annual prevalence of mental illnesses among parents with minor children is estimated to be 28.9% for Norwegian mothers and 14.1% for Norwegian fathers (Torvik & Rognmo, 2011), 25% for American mothers and 14.4% for American fathers (Luciano et al., 2014). The prevalence of more severe mental illnesses among parents is 7% for mothers and 2.6% for fathers (Luciano et al., 2014). For adults in mental health treatment, it is estimated that about one third are parents of minor children (Maybery & Reupert, 2018; Reedt et al., 2015; Ruud et al., 2019). When shifting the

CONTACT Kjersti Bergum Kristensen  Kjersti.b.kristensen@uit.no

© 2023 UiT The Arctic University of Norway. Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

perspective to the children, the estimates of children exposed to parental mental illness vary across timeframe and severity of illnesses included. In Sweden, 11% of children have a parent in treatment (Pierce et al., 2020) and in Norway 10.4% of children have a parent with a mental illness of a severity that requires treatment (Torvik & Rognmo, 2011). When including more moderate parental mental illnesses it is estimated that 23.3% of Australian children (Maybery et al., 2009), 23.1% of Norwegian children (Torvik & Rognmo, 2011), 12.1% of Canadian children (Bassani et al., 2009) and 23.2% of children in the UK (Abel et al., 2019) have a parent with a mental illness. By the age of 16 the cumulative risk raises to 53.1% (Abel et al., 2019).

Children of parents with a mental illness are at an increased risk of social, emotional, cognitive, physical, and behavioural problems and illnesses, due to both hereditary and environmental factors (Hosman et al., 2009; Reupert et al., 2013; van Santvoort et al., 2015). A meta-analysis found that offspring of parents with schizophrenia, bipolar disorder and major depressive disorder had a 1-in-3 risk of developing schizophrenia, bipolar disorder or major depressive disorder, and a 1-in-2 risk of developing any mental illness by adulthood (Rasic et al., 2014). Children of parents with an anxiety disorder are at a specific risk of developing an anxiety disorder themselves, whereas children of parents with other mental illnesses are at a risk of developing any mental illness (Leijdesdorff et al., 2017). Parents with a mental illness are more often unemployed, have financial problems and low socioeconomic status, which are life circumstances adding to the burden for these families (Kristensen et al., 2022; Luciano et al., 2014). Protective factors for families, such as social support, coping-skills and positive parenting can prevent emotional and health problems in children (Hosman et al., 2009).

Parental mental illness is a risk factor for harsh, hostile, and inconsistent parenting, and parenting with less involvement, attendance to the child's needs, encouragement and supportive interaction (Brockington et al., 2011; Oyserman et al., 2005, 2000). Meta-studies have found that parental depression decreases positive parenting behaviour (Lovejoy et al., 2000; Wilson & Durbin, 2010). Associations between mental health problems among mothers and permissive parenting, described as a lack of parenting confidence and follow through, has also been found (Oyserman et al., 2005). The more severe the illness is, the more often the symptoms parents experience influence their functioning and their ability to parent. Some parents with a severe mental illness will manage to parent well, but in general, symptoms from having a mental illness will make it more difficult to practice positive parenting behaviour such as being patient, reasonable, empathic, warm and loving, involved, engaged, and consistent (Brockington et al., 2011). Positive parenting behaviour is fundamental for a well-functioning parent-child interaction and is associated with healthy child development (Coren et al., 2003; Miller-Heyl et al., 1998; Stack et al., 2010), while behavioural and emotional problems in children are associated with adverse parenting behaviour (Sanders et al., 2014).

Parenting competence is related to how effective parents are at managing child behaviour and helping children learn social and practical skills, which promotes healthy child development (Ellis et al., 2018; Jones & Prinz, 2005). Parenting competence, parenting skills, parenting strategies, parenting behaviours and parenting practice are all terms related to a practical dimension of parenting. Parenting competence is related to parenting behaviour and the ability to complete a task successfully as judged by others. In comparison, parenting sense of competence is the parent's own belief and judgement of their

parenting abilities, which requires insight and self-awareness. Parenting sense of competence, parenting confidence, parenting self-efficacy and parenting self-esteem are terms used to describe a parent's beliefs in their ability to parent successfully (Hess et al., 2004). However, the concepts of parenting confidence and parenting self-esteem refer more to the sense of worth as a parent, rather than the capability to fulfil the parenting role (Bandura, 1997). The terms parenting sense of competence and parenting self-efficacy often refer to the same construct and are defined similarly. In this paper we chose to use the term parental sense of competence as aligned with the measurement by Johnston and Mash (1989) used in the present study. The measurement tool, Parenting Sense of Competence (PSOC) was operationalised by Johnston and Mash (1989) into two subscales: Parenting self-efficacy and parenting satisfaction, but is often referred to as a measure of parental self-efficacy (Jones & Prinz, 2005; Wittkowski et al., 2017). Parenting satisfaction is defined as parents' enjoyment in the parenting role (Johnston & Mash, 1989), and is a construct closely related to parenting self-efficacy. Parenting satisfaction is positively associated with parenting competence and parenting self-efficacy (Jones & Prinz, 2005).

It is possible for parents to feel confident about their parenting competence despite low levels of knowledge of parenting and child development and low parenting competence (Conrad et al., 1992; Hess et al., 2004). Overall, as described in a review of the literature, there are positive associations between parents' self-perceived capability in the parenting role and parenting competence (Coleman & Karraker, 1998; Gelkopf & Jabotaro, 2013; Jones & Prinz, 2005; Rogers & Matthews, 2004; Sanders & Woolley, 2005). There is, however, some inconsistency in the research regarding how parents' expectation about their ability to parent successfully is related to parental competence, possibly caused by inaccurate self-reports (Jones & Prinz, 2005). The level of self-efficacy may also reflect the effort that is put into parenting tasks and parents' persistence when facing obstacles and challenging life situations (Bandura, 1997).

The link between parenting sense of competence and parental mental illness was reviewed by Jones and Prinz (2005). The authors concluded that there is a negative association between parenting sense of competence and both parental depression and parental stress. They, and others, also found that, parenting sense of competence may be a predictor for child outcomes and is negatively associated with emotional and behavioural problems in children (Jones & Prinz, 2005; Preyde et al., 2015; Rogers & Matthews, 2004). Jones and Prinz (2005) suggested that parenting sense of competence may impact child development indirectly through parenting competence, but depending on the situation, parenting sense of competence can be a consequence, mediator, transactional or an antecedent variable. A direct link between parenting sense of competence and child outcomes can be explained by social learning principles – by children observing their parent express doubt or frustrations, – secondly influencing the children's own belief of self-worth and capability (Jones & Prinz, 2005).

Parental mental illness is stigmatised (Hinshaw, 2005). Among parents who were users of psychiatric services in the UK, 28.3% had experienced discrimination related to their parenting role (Jeffery et al., 2013). Being a parent with a mental illness is perceived as a violation of social and cultural norms, and the stigma of being a parent with a mental illness can prevent children and parents from seeking support (Reupert et al., 2021). The fear of stigma and loss of custody has been shown to affect the willingness of

parents with a mental illness to seek treatment and disclose parenting difficulties (Ackerson, 2003; Diaz-Caneja & Johnson, 2004), and self-presentation bias may affect the validity of self-reported parenting data (Morsbach & Prinz, 2006). Having and caring for children is the main motivation to get well for many parents, while having their children removed is their biggest fear (Evenson et al., 2008; Nicholson et al., 1998).

Parental mental illness can impair patients' self-awareness (Maybery et al., 2015), make them more suspicious of other peoples' intentions (Bennett & Corcoran, 2010) or make them evaluate themselves in a more negative manner (Parent et al., 2014). Thus, interventions for parents with mental illness often focus on improving parenting skills and educating parents of the impact mental illness has on their children (Schrank et al., 2015). Evidence from systematic reviews suggested that parenting interventions, aiming to support parents with a mental illness in their parenting role, have a positive effect on both parenting and child outcomes (Havinga et al., 2021; Lannes et al., 2021; Schrank et al., 2015; Thanhäuser et al., 2017). In the present study, all participants were offered a short preventive intervention called Child Talks, consisting of three meetings (Doesum & Koster, 2008; Reedtz et al., 2010). Child Talks focuses on psychoeducation, informing and supporting the children and providing further support for the families (Reedtz et al., 2010, 2012).

The high number of parents with a mental illness, and the potential risk this poses to their children, underpins the importance of investigating how mental illness impacts parents' experience of parenting. Few studies have investigated parents who are in treatment for a mental illness and their sense of competence in the parenting role. Parents who feel less competent in the parenting role might benefit from participating in preventive interventions. However, little is known about associations between parents' sense of competence scores and their willingness to participate in preventive interventions.

The aims of the present study are to investigate:

- (1) If and to what extent parents with mental illness differ from parents in the general population in terms of their sense of competence in the parenting role;
- (2) How diagnosis, comorbidity, and children's age influence parenting sense of competence; and
- (3) If scores on parents' sense of competence are associated with parents' participation in the preventive intervention Child Talks

Materials and methods

This is a retrospective cross-sectional study of 141 patients with minor children at the Division for Mental Health and Substance Use Disorders (DMHSD) at the University Hospital of Northern Norway (UNN). The parents were receiving treatment or were admitted to the division in 2010–2015. Patients with minor children were supposed to respond to an assessment form as a part of the new routines in the clinic. The assessment form included the PSOC questionnaire. Next, they were all invited to participate in the Child Talks intervention. The study is approved by the data protection officer at UNN, which allowed us to extract data from filled-out questionnaires in patient journals in 2015. The study is part of

a larger quality assurance project between UNN and the Regional Center for Child and Adolescent Mental Health and Child Welfare at UiT The Arctic University of Norway.

Parenting sense of competence scale (PSOC)

The Parenting Sense of Competence Scale (PSOC) was developed by Gibaud-Wallston and Wandersman (1978). The 16-item Likert-scale questionnaire measures self-reported parenting sense of competence by two subscales: Parenting satisfaction and parenting self-efficacy (Johnston & Mash, 1989). Parenting self-efficacy aims to measure parents’ belief in their ability to be a successful parent, problem solving skills, familiarity with parenting and belief in their ability to perform tasks related to parenting (Johnston & Mash, 1989). Parenting satisfaction aims to measure parents’ degree of fulfilment, motivation, and absence of frustration in the parenting role, and is an affective dimension of parenting (Johnston & Mash, 1989). PSOC is a commonly used instrument for measuring the construct of parenting self-efficacy (Jones & Prinz, 2005). In this study, the Norwegian translated version of the measurement was used.

Several studies have investigated the factor structure of PSOC (Gilmore & Cuskelly, 2009; Johnston & Mash, 1989; Ohan et al., 2000; Rogers & Matthews, 2004). Gilmore and Cuskelly (2009) used a normative sample to perform a factor analysis of the measure. The authors found that the measurement contained three useful factors that reflect satisfaction with the parenting role, parenting efficacy and interest in parenting. Both the original factor structure by Johnston and Mash (1989) and the factor structure by Gilmore and Cuskelly (2009) are applied in the analysis of our data. For an overview of items included in the subscales, see Table 1.

Cronbach’s alphas were calculated to evaluate the internal consistency of the PSOC subscales for the current sample. Values over 0.70 are considered adequate, values

Table 1. Factor structure from two studies with normative comparison groups.

| Item | Satisfaction | | Efficacy | | Interest | | Total | |
|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | J&M ¹ | G&C ² | J&M ¹ | G&C ² | J&M ¹ | G&C ² | J&M ¹ | G&C ² |
| 1 | | | ✓ | | | | ✓ | |
| 2 | ✓ | ✓ | | | | | ✓ | ✓ |
| 3 | ✓ | ✓ | | | | | ✓ | ✓ |
| 4 | ✓ | ✓ | | | | | ✓ | ✓ |
| 5 | ✓ | | | | | | ✓ | ✓ |
| 6 | | | ✓ | ✓ | | | ✓ | ✓ |
| 7 | | | ✓ | | | | ✓ | |
| 8 | ✓ | ✓ | | | | | ✓ | ✓ |
| 9 | ✓ | ✓ | | | | | ✓ | ✓ |
| 10 | | | ✓ | ✓ | | | ✓ | ✓ |
| 11 | | | ✓ | ✓ | | | ✓ | ✓ |
| 12 | ✓ | | | | | ✓ | ✓ | ✓ |
| 13 | | | ✓ | ✓ | | | ✓ | ✓ |
| 14 | ✓ | | | | | ✓ | ✓ | ✓ |
| 15 | | | ✓ | ✓ | | | ✓ | ✓ |
| 16 | ✓ | ✓ | | | | | ✓ | ✓ |
| 17 | - | - | - | - | - | - | - | - |
| Number of items included | 9 | 6 | 7 | 5 | - | 3 (2 *) | 16 | 14(13 *) |

* Item 17 was not included in our questionnaire. Hence for our sample the Interest score by G&C’s factor structure is divided by 2 items, instead of 3, and total PSOC scores by G&C’s factor structure is divided by 13 items, instead of 14.
¹J&M is an abbreviation for Johnston & Mash’s factor structure, ²G&C is an abbreviation for Gilmore & Cuskelly’s factor structure.

over 0.80 are considered good, and values over 0.90 are considered excellent (The European Federation of Psychologists' Associations, 2013). The pooled Cronbach's alpha was adequate for Johnston and Mash's Satisfaction scale ($\alpha = 0.79$), adequate for Gilmore and Cuskelly's Satisfaction scale ($\alpha = 0.77$), good for Johnston and Mash's Efficacy scale ($\alpha = 0.80$), good for Gilmore and Cuskelly's Efficacy scale ($\alpha = 0.80$), but low for Gilmore and Cuskelly's Interest scale ($\alpha = 0.60$).

In a systematic review of self-reported measurements of parental self-efficacy, the psychometric and administrative properties of the measurement PSOC had an overall mean score of 14, on a scale ranging from 0 – to a perfect score of 36 (Wittkowski et al., 2017). The overall quality of the PSOC measurement had a higher score than the average overall score of the parental self-efficacy measurements included (Wittkowski et al., 2017). However, some concerns about PSOC were addressed because of a lack of information of some psychometric properties of the measurement (Wittkowski et al., 2017).

Normative samples

To investigate if and to what extent parents with a mental illness differ from parents in the general population in terms of their sense of competence in the parenting role, we compare scores from our sample to two normative samples. The normative samples found relevant for comparison had large sample sizes and were performed in countries comparable to the Norwegian context with similar education level, birth rates, life expectancy and human development index (United Nations Development Programme, 2022).

Gilmore and Cuskelly (2009) provides normative PSOC scores for a non-clinical sample of 1201 parents, found to be representative of the general population in Australia. Only one parent per family participated. All participants were parents of children under the age of 18. The internal consistency was calculated separately for mothers and fathers (Gilmore & Cuskelly, 2009). Cronbach's alpha for Satisfaction was reported at 0.72 for mothers and 0.76 for fathers, for Efficacy, 0.68 for mothers and 0.74 for fathers, and for Interest, 0.62 for mothers and 0.57 for fathers. The study includes a 17th item, loading on the third factor Interest. In our study, item 17 is not included. Items 12 and 14 load on the factor Interest in the factor structure used in the study by Gilmore and Cuskelly (2009). Originally, items 12 and 14 aimed to measure Satisfaction (Johnston & Mash, 1989). The subscale Interest, without item 17, is found to have an internal consistency of alpha coefficient 0.58 for mothers and 0.62 for fathers (Rogers & Matthews, 2004). The internal consistency for the Interest subscale is low, and has been suggested removed, since it does not measure interest in the parenting role in terms of self-esteem (Rogers & Matthews, 2004).

Johnston and Mash (1989) studied, 512 parents of children aged four to nine years, from a large Canadian city. The data were collected in a door-to-door survey, across neighbourhoods with varying socioeconomic status. The internal consistency of the factors provided by Johnston and Mash (1989) had a Cronbach's alpha of 0.75 for Satisfaction and 0.76 for Efficacy. For comparison reasons, all scale scores are divided by the number of items within the scale.

Compared to the sample of Johnston and Mash (1989), the study of Gilmore and Cuskelly (2009) is from a more recent time period, and their sample is over twice as large. Gilmore and Cuskelly (2009) included parents of children aged 0–18, which is

comparable to our sample. Johnston and Mash (1989) only included parents of children aged 4–9. However, in our sample we did not include item 17, which is used by Gilmore and Cuskelly (2009). Both normative samples and factor structures had limitations. We therefore choose to compare the PSOC for parents with a mental illness to both normative samples, to get a more comprehensive understanding of potential differences.

Statistical analysis

SPSS version 28 was used for the statistical analysis. We excluded cases with more than 50% missing items on one of the subscales. We also removed duplicate cases where parents had answered the form several times. PSOC is a scale measuring parent's sense of competence, where 12 of the 16 questions reflect general responses to parenting. After removal of cases with more than 50% missing items, there were 71 parents who had filled out more than one form, providing answers for each of their children. We calculated the intra-class correlation between PSOC total scores for siblings, and the results showed that there was very low within-family variance ($ICC = 0.93$). We therefore removed duplicate cases using a random number generator, so that only one PSOC answer was used for each parent in the further analysis, resulting in 141 unique parent PSOC scores.

The PSOC scale is a 6-point scale originally (Johnston & Mash, 1989), but the present study used a 5-point scale. We transformed the values from a scale of 0–4 to a scale of 1–6 to enable comparison to the normative samples. In the present study, answering '0', labelled 'strongly disagree', was transformed to a score of 1. Answering '1' was transformed to a value of 2.25, '2' was transformed to 3.5, '3' was transformed to 4.75, and lastly '4 – strongly agree' was transformed to a value of 6.

Multiple imputation was done, on item level, to simulate values for missing data based on the observed data. The method is proven to give more accurate results than running the analysis with case deletion or single imputation methods (Schafer & Graham, 2002). To estimate missing values in the PSOC responses and the gender of parents (11 missing values), we used the following variables with data available in our imputation model as possible predictors: gender of the parent (only used to predict PSOC responses), birth year of the child, gender of the child, total number of children, marital status, the child living with the patient, concerns regarding the child's behaviour, concerns regarding self-help, concerns regarding social-emotional factors, concerns regarding school and the PSOC items. The PSOC items had to be registered as scale variables to have a low enough number of parameters to run the model. We used the PPM method to select at random among the 5 closest predictions to impute variables within the range of the scale. We made 50 imputation datasets. For all further analysis, we used pooled estimates from the 50 imputed datasets.

An independent samples t-test was used to calculate if the mean scores for parents with a mental illness and parents in a normative sample were significantly different. Levene's test is commonly used to check if we can assume that the groups have equal variance, but since we did not have the raw data from the normative samples, we used Bartlett's test. Bartlett's test gave non-significant differences, and we therefore assume equal variance for the two groups. The PSOC scales were scored using two different scoring systems (Gilmore & Cuskelly, 2009; Johnston & Mash, 1989) (see Table 1), to compare parents with a mental illness to two normative samples.

A Norwegian study provides a Norwegian control sample for PSOC scores (Reedtz et al., 2011). Initially, we chose not to use this sample for comparison, as our normative sample, because of the small sample size ($n = 97$) and the high education level of the sample. However, after the initial results indicated high PSOC scores for our sample, we wanted to test if the high scores were partially explained by the nationality of the sample and/or the translation of the Norwegian version of the questionnaire. We therefore conducted a t-test, comparing our sample mean scores to the Norwegian control sample.

To assess how children's age, comorbidity, and diagnosis influence PSOC scores, a multiple regression was performed. Since some patients had several diagnoses, all diagnostic categories were recoded as dichotomous variables, to enable inclusion of all data in the analysis. If a patient had two diagnoses within the same diagnostic category it would only be registered as one event. The number of diagnoses in each diagnostic category in the multiple regression therefore differ from the number of diagnoses in each category presented in Table 2. We tested two multiple regression models, one for the outcome variable PSOC Satisfaction score and one for the outcome PSOC Efficacy score. The predictors in the models were the age of the child, whether or not the patients had more than one diagnosis (comorbidity), and the eight diagnostic categories, listed in Table 2. We calculated for each of the predictors the increase in the proportion of total variance explained for the models when adding the independent variables to the model by squaring the semipartial correlation coefficient. For the multiple regression analysis, we checked for multicollinearity. The assumption of multicollinearity was not violated, with no tolerance values less than 0.10 for either the models for Satisfaction or Efficacy. The normal p-p plots of the regression standardised residual suggested no major deviations from normality. The scatterplots for residuals and predicted values showed a balanced distribution along the value 0 in both models. However, the Mahalanobis distance indicated that we had some outliers in both models. The critical value for Mahalanobis distance for 10 independent variables at $p = 0.001$ is 29.59 (Tabachnick et al., 2007). For the Satisfaction model, nine cases had Mahalanobis distance values exceeding the critical value. For the Efficacy model, fourteen cases exceeded the critical value. The values of these cases were checked manually and were found adequate. Cook's distance did not exceed 1 for any of the cases.

Logistic regression was performed to assess if PSOC scores were associated with parents' participation in *Child Talks*. Due to the small sample, separate analyses for mothers and fathers were not conducted. For the logistic regression we used the scores based on the factor structure of Johnston and Mash (1989), since we do not have item 17, and tested regression models for both subscales. We used a significance level of 0.05 for all tests.

Results

Descriptive statistics for our sample

Based on the original data of 141 participants, there were 90 mothers and 40 fathers in our sample. The pooled estimates from imputed datasets categorised 5 of the 11 participants who lacked gender data as mothers and 6 as fathers (in total 95 mothers and 46 fathers). The parents had between 1 and 5 minor children, and on average 1.8

children. Most patients normally had the daily responsibility for their minor children, and 134 of 141 of the children included in the analysis lived with the parent in treatment for a mental illness. The children were aged between 0 and 18, except for one patient's child, who was aged 28. This parent had other minor children. There were 52.5% girls in the sample.

The patients' records provide diagnosis based on the ICS-10 version 2010, and diagnostic categories used in the multiple regression analysis are based on the categories in this version. For readability reasons, we gave the categories simpler names: mental and behavioural disorders due to psychoactive substance use (F10–F19) is named substance use disorders; schizophrenia, schizotypal and delusional disorders (F20–F29) is named schizophrenia; mood (affective) disorders (F30–F39) is named depression; neurotic, stress-related and somatoform disorders (F40–F48) is named anxiety disorders; behavioural syndromes associated with physiological disturbances and physical factor (F50–F59) is named eating disorders; disorders of adult personality and behaviour (F60–F69) is named disorders of adult personality; behavioural and emotional disorders with onset usually occurring in childhood and adolescence (F90–F98) is named behavioural and emotional disorders with early onset; factors influencing health status and contact with health services (z-diagnoses) (Z00–Z99) is named z-diagnoses. We were missing diagnostic information for 2 of 141 patients. The total number of diagnoses is 170, since 24 patients also had a second diagnosis and 7 also had a third diagnosis.

Table 2 provides descriptive data about the distribution of scores for the variables we include in the statistical analysis. The data presented in Table 2 is based on the pooled data. The PSOC Satisfaction and PSOC Efficacy scale ranged from 1 to 6.

Table 2. Descriptive data for variables included in the statistical analysis.

| | n | Descriptive data for continuous variables | | | | | | Descriptive data for categorical variables | |
|---|-----|---|------|------|--------|-----------------|-----------------|--|---------------------|
| | | Range | SD | Mean | Median | 25th percentile | 75th percentile | Frequency of event | Percentage of event |
| PSOC Satisfaction ^{a, b} | 141 | 1.93-6.00 | 0.87 | 4.41 | 4.48 | 3.78 | 5.04 | - | - |
| PSOC Efficacy ^{a, b} | 141 | 1.54-6.00 | 0.89 | 4.61 | 4.75 | 4.04 | 5.29 | - | - |
| Child age ^c | 141 | 1-28 | 5.30 | 9.52 | 10.00 | 5.00 | 13.50 | - | - |
| Comorbidity ^c | 141 | 0-1 | - | - | - | - | - | 25 | 17.73 |
| Substance use disorders ^c | 139 | 0-1 | - | - | - | - | - | 22 | 15.83 |
| Schizophrenia ^c | 139 | 0-1 | - | - | - | - | - | 11 | 7.91 |
| Depression ^c | 139 | 0-1 | - | - | - | - | - | 76 | 54.68 |
| Anxiety disorders ^c | 139 | 0-1 | - | - | - | - | - | 40 | 28.78 |
| Eating disorders ^c | 139 | 0-1 | - | - | - | - | - | 3 | 2.16 |
| Disorders of adult personality ^c | 139 | 0-1 | - | - | - | - | - | 10 | 7.19 |
| Behavioural and emotional disorders with early onset ^c | 139 | 0-1 | - | - | - | - | - | 5 | 3.60 |
| z-diagnoses ^c | 139 | 0-1 | - | - | - | - | - | 3 | 2.16 |
| Child Talks participation ^d | 141 | 0-1 | - | - | - | - | - | 32 | 22.70 |

^aPredictor variable for logistic regression and outcome variable in multiple regression analysis, ^b Predictor variable in logistic regression analysis, ^c Predictor variable in multiple regression analysis, ^d Outcome variable in logistic regression analysis.

Parents with a mental illness compared to parents from normative samples in terms of parenting sense of competence

When comparing our sample to the original normative sample in Johnston and Mash (1989) both mothers and fathers with a mental illness scored significantly higher on total PSOC scores, with a large effect size for mothers and a medium effect size for fathers. When compared to the normative sample of Gilmore and Cuskelly (2009) significant differences were not found, and the effect size was small for mothers and near zero for fathers. See Table 3 for detailed information.

Table 3. Means (standard deviations) for PSOC total scores for mothers and fathers. Results from comparing the means and the effect size.

| | PSOC total Johnston & Mash | | PSOC total Gilmore & Cuskelly | |
|--|---|---|---------------------------------------|---------------------------------------|
| | Mothers | Fathers | Mothers | Fathers |
| Parents with a mental illness ¹ | 4.55 (0.78), <i>n</i> = 95 | 4.38 (0.79), <i>n</i> = 46 | 4.46 (0.83), <i>n</i> = 95 | 4.33 (0.82), <i>n</i> = 46 |
| Normative data ¹ | 3.96 (0.62), <i>n</i> = 297 | 4.07 (0.56), <i>n</i> = 215 | 4.35 (0.64), <i>n</i> = 586 | 4.33 (0.66), <i>n</i> = 615 |
| <i>t</i> -test | <i>t</i> (390) = 7.56, <i>p</i> < .005* | <i>t</i> (259) = 3.15, <i>p</i> < .005* | <i>t</i> (390) = 1.35, <i>p</i> = .18 | <i>t</i> (259) = .00, <i>p</i> = 1.00 |
| Cohen's <i>d</i> | -0.84 | -0.45 | -0.15 | .00 |

¹Scores are divided by the number of items in the scale for comparability reasons. Significant results are marked with a *.

For mothers, the differences in Satisfaction scores of our sample in comparison with both normative samples were significant, with a small to medium effect size (see Table 4). Mothers with a mental illness scored significantly higher on the Efficacy subscale when compared to the sample of Johnston and Mash (1989), with a large effect size. The difference was small and not significant when compared to the sample of Gilmore and Cuskelly (2009). For the Interest subscale, a small non-significant difference was found.

For fathers, the differences in Satisfaction scores in our sample compared to the two normative groups were not significant and had small effect sizes. For Efficacy scores for fathers, our sample scored significantly higher compared to the sample of Johnston and Mash (1989) with a large effect size. When compared with the sample of Gilmore and Cuskelly (2009), the difference was small and non-significant. The difference in Interest scores for fathers in our sample compared to Interest scores in the normative sample of Gilmore and Cuskelly (2009) was small and non-significant.

The difference in Satisfaction mean scores for our sample (*n* = 141, *M* = 4.41, *SD* = 0.87) compared to the mean scores of the Norwegian control sample (*n* = 97, *M* = 4.46, *SD* = 0.67) was very small and not significant *t* (236) = 0.48, *p* = 0.63. The difference in Efficacy mean scores for our sample (*n* = 141, *M* = 4.60, *SD* = 0.90) compared to the Norwegian control sample (*n* = 97, *M* = 4.54, *SD* = 0.54) was not significant either, *t* (236) = 0.59, *p* = 0.56.

Table 4. Means and standard deviations for PSOC subscales scores for mothers and fathers, and results from comparing the means and the effect sizes.

| | Satisfaction J&M | | Efficacy J&M | | Satisfaction G&C | | Efficacy G&C | | Interest G&C | |
|--|---|--|---|---|--|--|---|---|---|--|
| | Mothers | Fathers | Mothers | Fathers | Mothers | Fathers | Mothers | Fathers | Mothers | Fathers |
| Parents with a mental illness ¹ | 4.49 (0.84) <i>n</i> = 95 | 4.23 (0.93) <i>n</i> = 46 | 4.62 (0.96) <i>n</i> = 95 | 4.57 (0.77) <i>n</i> = 46 | 4.06 (1.04) <i>n</i> = 95 | 3.98 (0.99) <i>n</i> = 46 | 4.52 (1.11) <i>n</i> = 95 | 4.44 (0.91) <i>n</i> = 46 | 5.50 (0.70) <i>n</i> = 95 | 5.11 (1.03) <i>n</i> = 46 |
| Normative data ¹ | 4.23 (0.69) <i>n</i> = 297 | 4.41 (0.64) <i>n</i> = 215 | 3.60 (0.84) <i>n</i> = 297 | 3.63 (0.78) <i>n</i> = 215 | 3.78 (0.97) <i>n</i> = 586 | 4.00 (0.97) <i>n</i> = 615 | 4.41 (0.81) <i>n</i> = 586 | 4.19 (0.86) <i>n</i> = 615 | 5.39 (0.73) <i>n</i> = 586 | 5.26 (0.73) <i>n</i> = 615 |
| <i>t</i> -test | <i>t</i> (390) = 3.03 <i>p</i> < .005* | <i>t</i> (259) = -1.58 <i>p</i> = .11 | <i>t</i> (390) = 9.94 <i>p</i> < .005* | <i>t</i> (259) = 7.43 <i>p</i> < .005* | <i>t</i> (390) = 2.41 <i>p</i> = .02* | <i>t</i> (259) = -0.13 <i>p</i> = .90 | <i>t</i> (390) = 1.05 <i>p</i> = .30 | <i>t</i> (259) = 1.77 <i>p</i> = .08 | <i>t</i> (390) = 1.29 <i>p</i> = .20 | <i>t</i> (259) = -1.17 <i>p</i> = .24 |
| Cohen's <i>D</i> | -0.34 | 0.23 | -1.13 | -1.21 | -0.28 | 0.02 | -0.11 | -0.28 | -0.15 | 0.17 |

¹Scores are calculated by dividing the sum by number of items included in the scale. Significant results are marked with a *.

Associations between parent's diagnoses; comorbidity; children's age and PSOC satisfaction and efficacy

Satisfaction

The regression model with the children's age, comorbidity and the eight diagnostic categories as predictors explained 11.5% of the variance in PSOC Satisfaction scores (mean of R squared for the 50 imputed data blocks). The overall model was not significant. No variables made significant contributions. The increase in the proportion of total variance explained by adding age of children to the model was 0.50%, for comorbidity 0.55%, for substance use disorders 2.60%, for schizophrenia 0.29%, for depression 1.05%, for anxiety disorders 1.40%, for eating disorders 0.75%, for disorders of adult personality 0.19%, for behavioural and emotional disorders with early onset 0.80% and for z-diagnoses 1.11%.

Efficacy

The regression model with children's age, comorbidity and the eight diagnostic categories as predictors explained 5.5% of the variance in PSOC Efficacy scores (mean of R squared for the 50 imputed data blocks). The overall model was not significant. None of our variables made a significant contribution. The increase in the proportion of total variance explained by adding age of children to the model was 0.09%, for comorbidity 0.34%, for substance use disorders 1.02%, for schizophrenia 0.00%, for depression 0.26%, for anxiety disorders 0.33%, for eating disorders 0.27%, for disorders of adult personality 0.28%, for behavioural and emotional disorders with early onset 1.31% and for z-diagnoses 0.00%.

Logistic regression assessing if PSOC scores impact participation in Child Talks

Of the 141 parents, 109 did not participate in the Child Talks intervention. The mean of the PSOC Satisfaction scores for participating parents ($n = 32$) was $M = 37.09$, and $M = 40.44$ for non-participating parents ($n = 109$). The mean of PSOC Efficacy scores for participating parents ($n = 32$) was $M = 31.46$, and $M = 32.48$ for non-participating parents ($n = 109$).

The model with PSOC Satisfaction scores as a predictor for participation was significant at the 0.05 level ($p = .04$; $OR = 0.95$). For every 1-point increase in the PSOC Satisfaction score, the odds of participation in the Child Talks intervention decreased by 5%. The model with PSOC Efficacy scores as a predictor for participation was not significant ($p = .42$; $OR = 0.98$).

Discussion

Aims of this study were to investigate how parents with a mental illness reported on their parenting sense of competence compared to the general population of parents. Secondly, we aimed to investigate how diagnosis, comorbidity, and children's age influenced parenting sense of competence, and lastly, we aimed to investigate if PSOC scores were associated with parents' participation in Child Talks. Results showed that parents with a mental illness reported equal or higher PSOC scores compared to normative samples. Neither child age, comorbidity nor diagnosis affected PSOC scores, and lower

PSOC satisfaction scores were significantly associated with a small increase in the participation rate of Child Talks.

We were surprised to find that the sample of parents with a mental illness scored higher on PSOC than parents from normative samples, since there is broad evidence that parental mental illness influences parenting competence and child outcome negatively (Brockington et al., 2011; Coren et al., 2003; Leijdesdorff et al., 2017; Lovejoy et al., 2000; Miller-Heyl et al., 1998; Oyserman et al., 2005, 2000; Rasic et al., 2014; Sanders et al., 2014; Stack et al., 2010).

One possible explanation is that parents reported feeling more competent than they were because of fear of being judged and fear of losing custody of their children. This explanation is in line with earlier studies where the risk of disclosure to third parties, the fear of legal reprisals and the tendency to present oneself in a favourable light were found to be possible factors influencing parents' self-reporting of parenting practices (Ackerson, 2003; Jeffery et al., 2013; Morsbach & Prinz, 2006). For participants in this study, PSOC reports were saved in their electronic patient journals, which may explain their reluctance to provide accurate PSOC reports. Studies have found that the fear of losing custody makes mothers with mental illnesses reluctant to disclose difficulties or to ask for parenting help from professionals (Diaz-Caneja & Johnson, 2004; Nicholson et al., 1998), and this may explain the high self-reported scores for our participants. Mothers with a mental illness scored especially high on PSOC in our sample, and it might be that this fear is more present for mothers than fathers.

In a study of Nicholson et al. (2022), stakeholders working with parental mental illness, raised considerations regarding ways to engage with patients about parenting in a non-judgmental and respectful way. Strategies included bringing up parenting when the parent appears to be ready and willing to do so, and in a pace led by the parent (Nicholson et al., 2022). In the current study the PSOC questionnaire was included in the initial assessment of patients with dependent children. Therefore, because of the design of this study, the questionnaire about parenting could not be flexibly provided when the parent was ready to discuss parenting. The timing of the PSOC assessment in this study may have contributed to parents being suspicious and reluctant to give accurate reports.

Another explanation might be that the symptoms of the illness impaired participants' self-awareness, making them feel more competent than they actually are. This reflects earlier research which showed how diagnoses such as substance use disorders and personality disorders may affect self-reported data on parenting due to impaired self-awareness (Maybery et al., 2015). Anxiety disorders or disorders with symptoms of paranoia may make parents suspicious of why healthcare professionals are asking them about parenting (Bennett & Corcoran, 2010), and may therefore also make participants report their sense of parenting competence as high. However, depression disorders may have influenced the scores in the opposite direction, when accounting for the research that suggests that parents with depressive disorders will evaluate their sense of competence in a more negative or realistic manner (Parent et al., 2014). The multiple regression analyses in the present study did not show that the predictor depression made a significant contribution to explain the variance in PSOC scores. However, few events of each diagnosis category limit the predictive ability diagnoses has on PSOC scores in this study.

Thirdly, parents with a mental illness may not perceive their parenting sense of competence as any lower than healthy parents and may not be aware of any impairment the mental illness may have on their ability to parent. This explanation is supported by Rogers and Matthews (2004), who did not find a correlation between parenting efficacy and parental depression, anxiety, and stress. It might be that mental illness does not affect parents' sense of efficacy. Hess et al. (2004) described mothers with low parenting competence, low knowledge of child development, but high parenting sense of competence as 'naively confident mothers', and this description might be suitable for parents in our sample. Mothers with low levels of knowledge of child development and parenting were worse off in terms of parenting behaviour if they had high levels of parenting sense of competence, compared to if they had low levels of parenting sense of competence (Hess et al., 2004). However, for parents practicing positive parenting behaviour, the association with parenting sense of competence was positive (Coleman & Karraker, 1998; Gelkopf & Jabotaro, 2013; Jones & Prinz, 2005; Rogers & Matthews, 2004; Sanders & Woolley, 2005). If our sample has low parenting competence, which previous research suggests, and if the finding of Hess et al. (2004) is transferrable to our sample, it is concerning that our sample scored so high on PSOC. Participating in interventions that aim to increase knowledge about child development and parenting may thus be positive for parents with a mental illness, which is also supported by the findings of Morawska et al. (2009), who found that higher levels of knowledge of effective parenting strategies were related to less dysfunctional parenting.

The outcomes for children of parents with a mental illness tend to be worse than for children of parents who do not have mental health challenges (Hosman et al., 2009; Reupert et al., 2013; van Santvoort et al., 2015). Positive associations between low PSOC scores and poor child outcomes has been found in several studies (Jones & Prinz, 2005; Preyde et al., 2015; Rogers & Matthews, 2004). However, we found that parents in treatment for a mental illness scored high on PSOC, which contrasts with other studies which found negative outcomes for children of parents with a mental illness. An explanation might be that parents rate their sense of competence as weaker only when their child has developed behavioural problems, and not as a direct effect of their illness and their parenting behaviour. See Figure 1 for an illustration of a suggestion of how parental mental illness might be related to PSOC scores.

If parents with a mental illness are not aware of how their illness can influence their parenting competence, it demonstrates a need for parenting interventions that have a psychoeducational focus, as better insight into mental illness is associated with more sensitive parenting behaviour (Mullick et al., 2001).

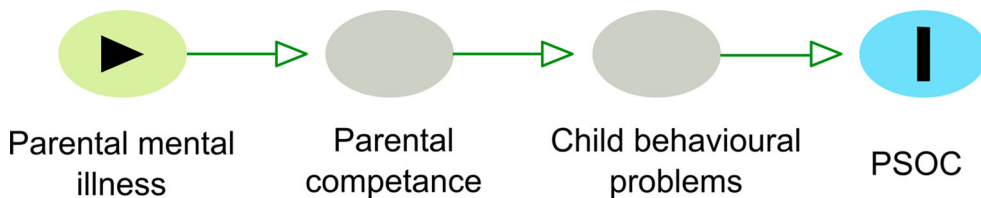


Figure 1. Illustration of the suggested causal relationships between parental mental illness and parenting sense of competence (PSOC). Note: The variables 'Parenting competence' and 'Child behavioural problems' are not measured in this study, but associations are described by previous research.

The Australian sample (Gilmore & Cuskelly, 2009) and the Canadian sample (Johnston & Mash, 1989) that was used as normative references for comparison are likely different from our sample in more ways than in regard to the prevalence of parental mental illness. Therefore, we cannot rule out the possibility that the differences in the PSOC scores are explained by factors such as socioeconomic status, ethnicity, culture and time era. Unfortunately, we were not able to compare the samples' socioeconomic status since we did not have this information about participants in the present study. We did however also compare the PSOC scores in our sample of parents with a mental illness to a highly educated Norwegian sample. Our sample did not score significantly different than this Norwegian sample. This supports our main findings, implying that parents with a mental illness do not score themselves lower on PSOC than parents in general. However, the result from the comparison to the Norwegian sample indicate that some of the effect of the high scores in our sample may be explained by the nationality of parents and/or the Norwegian version of the questionnaire.

We were only able to explain 11.5% of the variation in Satisfaction scores and only 5.5% of the variation in PSOC Efficacy scores by the child age, comorbidity, and diagnostic variables we included in the regression models. None of the variables made significant contributions. For the diagnostic variables, some of the categories had very few events, limiting these predictors' predictive ability. Additionally, if answers were influenced by the fear of losing custody or impaired self-awareness, this could have created disturbances to true associations in the data, and hence affected the possibility of detecting true associations.

We found PSOC Satisfaction to be a significant predictor for participation in Child Talks. The effect PSOC Satisfaction scores had on participation was very small, with an odds ratio of 0.95, where increased PSOC Satisfaction was associated with a slightly lower odds for participation in Child Talks. Parents who felt they needed the intervention might have been more willing to participate, or healthcare professionals may have put more efforts into persuading the parents who shared lower parenting sense of competence to participate. Another explanation may be that the relationship and trust between patients and healthcare professionals was better in cases where the patient reported lower PSOC scores, both influencing parents reported PSOC scores to be more truthful, and hence lower, and influencing the parents' openness and willingness to participate in the intervention.

Future studies might investigate the relationship between PSOC scores and participation in parent training interventions in larger samples. Studies aiming to investigate whether the high PSOC scores among parents receiving treatment for a mental illness is caused by a fear of losing custody and/or a lack of insight in parenting are needed. This research gap was also detected by Jones and Prinz (2005), who called for studies about possible reporting bias for self-reporting parenting sense of competence. Including measurements of parenting competence assessed by an observing third party and questions about parents' fear of losing custody of their children may contribute to important knowledge. This knowledge is important, because different explanations about the mechanisms underlying parents' PSOC reporting, call for different approaches for the practice field. A fear of losing custody calls for an open and sensitive approach by healthcare professionals, while a lack of insight into parenting calls for a more psychoeducational approach.

Strengths and limitations

A strength in this study is that we compared the PSOC scores of parents with a mental illness with 2–3 normative samples, making our conclusions more reliable. Canadian and Australian populations are comparable to the Norwegian population, since all countries score very high (≥ 0.800) on the human development index, have similar life expectancy at birth and expected years of schooling (United Nations Development Programme, 2022). There may, however, be differences between the countries that are influencing the comparability between the samples. Though we did compare our sample to a Norwegian sample to test the influence of nationality and language on the scores. The construct of parenting and what is considered good parenting may have changed over the years, and the fact that the included samples have data collected during different time periods may have biased the results.

In contrast to most studies where mental health status is based on self-reported data, participants in this study were receiving treatment at a mental health clinic and their mental health status was therefore assessed and reported by healthcare professionals. Few studies have examined the link between parenting sense of competence and parental mental illness based on diagnoses set by a psychiatrist or psychologist. Hence diagnoses reported by professionals are a strength of the present study, compared to studies with self-reported diagnoses.

This study has not been designed to assess the validity of PSOC scores for this population. It is unknown if the sample in this study had high parental sense of competence or if they falsely reported elevated parental sense of competence. Measuring outcome scores for children as well, and investigating if PSOC scores differ if the questionnaire is given anonymously and by others than healthcare professionals, might provide insight into these questions in future studies.

Not all assessed patients completed the PSOC form, making a sample bias possible: Patients who were more well-functioning and who felt they were mastering parenting may have more often agreed to fill out the form.

In the present study, the PSOC form used was missing the option ‘somewhat disagree’. However, only the highest; ‘strongly agree’, and the lowest option of the scale; ‘strongly disagree’ were labelled and visible over the questions when filling out the form. The scale was transformed to a scale ranging from 1 to 6 to enable comparison, as explain in the methods section.

The Norwegian translated version of the PSOC scale has not been validated, making it possible that the sample differences are explained by the language difference. In future studies the validity of the PSOC measures for parents with mental illnesses should be investigated.

Of parents who reported on their PSOC, only 32 received the Child Talks intervention. The low participation rate makes the results less certain.

Conclusion

The results imply that parents with a mental illness do not feel or report feeling less competent as parents, compared to normative samples. However, research provides strong

evidence that parenting competence is negatively affected by parental mental illness. The PSOC measurement might not be valid as a measure for parental sense of competence for parents with a mental illness in this setting. Parents who feel they are mastering the parenting role, or who are unwilling to report feeling less competent, are less likely to seek help from other services. The results of this study do not reveal reasons for high parental sense of competence among the participants. However, if our proposed explanations for high PSOC scores among the participants are valid, awareness among healthcare professional about stigma and fear of custody loss, openness, sensitivity and building good relationships with patients may improve patients' trust. If parents in challenging life situations in need for help are not sharing difficulties because of stigma or fear of losing custody, methods and supportive practices towards these parents need to be established. Universal interventions promoting healthy child–parent interactions can be of great value.

Acknowledgements

The data used for this article is part of a larger study performed in cooperation between RKBU North, the University Hospital of Northern Norway (UNN) and the non-governmental organization Adults for Children (Voksne for Barn). We would like to thank all participants and contributors.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This study has been funded by the Regional Centre for Child and Youth Mental Health and Child Welfare (RKBU Nord) at UiT The Arctic University of Norway.

Declaration of interest statement

There are no conflicting interests for authors in this study.

Data availability statement

Data can be made available on request to the corresponding author.

Ethics statement

The study was approved by the Data Protection Officer at the University Hospital of Northern Norway (UNN). The regional ethics committee (REK) categorized the project as a quality assurance project (ref. 2011/2066/REK nord). Data used for this study is anonymous.

References

- Abel, K. M., Hope, H., Swift, E., Parisi, R., Ashcroft, D. M., Kosidou, K., Osam, C. S., Dalman, C., & Pierce, M. (2019). Prevalence of maternal mental illness among children and adolescents in the UK between 2005 and 2017: A national retrospective cohort analysis. *The Lancet Public Health*, 4(6), e291–e300. [https://doi.org/10.1016/S2468-2667\(19\)30059-3](https://doi.org/10.1016/S2468-2667(19)30059-3)
- Ackerson, B. J. (2003). Coping with the dual demands of severe mental illness and parenting: The parents' perspective. *Families in Society: The Journal of Contemporary Social Services*, 84(1), 109–118. <https://doi.org/10.1606/1044-3894.69>
- Bandura, A. (1997). *Self-efficacy. The exercise of control*. W.H. Freeman and Company. https://www.academia.edu/28274869/Albert_Bandura_Self_Efficacy_The_Exercise_of_Control_W_H_Freeman_and_Co_1997_pdf.
- Bassani, D. G., Padoin, C. V., Philipp, D., & Veldhuizen, S. (2009). Estimating the number of children exposed to parental psychiatric disorders through a national health survey. *Child and Adolescent Psychiatry and Mental Health*, 3(1), 6. <https://doi.org/10.1186/1753-2000-3-6>
- Bennett, K., & Corcoran, R. (2010). Biases in everyday reasoning: Associations with subclinical anxiety, depression and paranoia. *Psychosis*, 2(3), 227–237. <https://doi.org/10.1080/17522431003592649>
- Brockington, I., Chandra, P., Dubowitz, H., Jones, D., Moussa, S., Nakku, J., & Ferre, I. Q. (2011). WPA guidance on the protection and promotion of mental health in children of persons with severe mental disorders. *World Psychiatry*, 10(2), 93–102. <https://doi.org/10.1002/j.2051-5545.2011.tb00023.x>
- Coleman, P. K., & Karraker, K. H. (1998). Self-Efficacy and parenting quality: Findings and future applications. *Developmental Review*, 18(1), 47–85. <https://doi.org/10.1006/drev.1997.0448>
- Conrad, B., Gross, D., Fogg, L., & Ruchala, P. (1992). Maternal confidence, knowledge, and quality of mother-toddler interactions: A preliminary study. *Infant Mental Health Journal*, 13(4), 353–362. [https://doi.org/10.1002/1097-0355\(199224\)13:4<353::AID-IMHJ2280130410>3.0.CO;2-#](https://doi.org/10.1002/1097-0355(199224)13:4<353::AID-IMHJ2280130410>3.0.CO;2-#)
- Coren, E., Barlow, J., & Stewart-Brown, S. (2003). The effectiveness of individual and group-based parenting programmes in improving outcomes for teenage mothers and their children: A systematic review. *Journal of Adolescence*, 26(1), 79–103. [https://doi.org/10.1016/S0140-1971\(02\)00119-7](https://doi.org/10.1016/S0140-1971(02)00119-7)
- Diaz-Caneja, A., & Johnson, S. (2004). The views and experiences of severely mentally ill mothers. *Social Psychiatry and Psychiatric Epidemiology*, 39(6), 472–482. <https://doi.org/10.1007/s00127-004-0772-2>
- Doesum, K. T. v., & Koster, C. (2008). KOPP Praten met ouders kinderen: Handleiding preventieve huisbezoeken voor ouders met psychiatrische problemen en hun kinderen (Manual Child Talks).
- Ellis, L., Hoskin, A. W., & Ratnasingam, M. (2018). Chapter 3 - Familial Factors. In L. Ellis, A. W. Hoskin, & M. Ratnasingam (Eds.), *Handbook of social status correlates* (pp. 47–73). Academic Press. <https://doi.org/10.1016/B978-0-12-805371-3.00003-0>
- Evenson, E., Rhodes, J., Feigenbaum, J., & Solly, A. (2008). The experiences of fathers with psychosis. *Journal of Mental Health*, 17(6), 629–642. <https://doi.org/10.1080/09638230701506259>
- Gelkopf, M., & Jabotaro, S. E. (2013). Parenting style, competence, social network and attachment in mothers with mental illness. *Child & Family Social Work*, 18(4), 496–503. <https://doi.org/10.1111/j.1365-2206.2012.00874.x>
- Gibaud-Wallston, J., & Wandersmann, L. P. (1978). *Development and utility of the parenting sense of competence scale*. John F. Kennedy center for research on education and human development.
- Gilmore, L., & Cuskelly, M. (2009). Factor structure of the Parenting Sense of Competence scale using a normative sample. *Child: Care, Health and Development*, 35(1), 48–55. <https://doi.org/10.1111/j.1365-2214.2008.00867.x>
- Havinga, P. J., Maciejewski, D. F., Hartman, C. A., Hillegers, M. H. J., Schoevers, R. A., & Penninx, B. W. J. H. (2021). Prevention programmes for children of parents with a mood/anxiety disorder: Systematic review of existing programmes and meta-analysis of their efficacy. *British Journal of Clinical Psychology*, 60(2), 212–251. <https://doi.org/10.1111/bjc.12277>

- Hess, C. R., Teti, D. M., & Hussey-Gardner, B. (2004). Self-efficacy and parenting of high-risk infants: The moderating role of parent knowledge of infant development. *Journal of Applied Developmental Psychology, 25*(4), 423–437. <https://doi.org/10.1016/j.appdev.2004.06.002>
- Hinshaw, S. P. (2005). The stigmatization of mental illness in children and parents: Developmental issues, family concerns, and research needs. *Journal of Child Psychology and Psychiatry, 46*(7), 714–734. <https://doi.org/10.1111/j.1469-7610.2005.01456.x>
- Hosman, C. M. H., van Doesum, K. T. M., & van Santvoort, F. (2009). Prevention of emotional problems and psychiatric risks in children of parents with a mental illness in The Netherlands: I. The scientific basis to a comprehensive approach. *Australian e-Journal for the Advancement of Mental Health, 8*(3), 250. <https://doi.org/10.5172/jamh.8.3.250>
- Jeffery, D., Clement, S., Corker, E., Howard, L. M., Murray, J., & Thornicroft, G. (2013). Discrimination in relation to parenthood reported by community psychiatric service users in the UK: A framework analysis. *BMC Psychiatry, 13*(1), 120. <https://doi.org/10.1186/1471-244X-13-120>
- Johnston, C., & Mash, E. J. (1989). A measure of parenting satisfaction and efficacy. *Journal of Clinical Child Psychology, 18*(2), 167. https://doi.org/10.1207/s15374424jccp1802_8
- Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: A review. *Clinical Psychology Review, 25*(3), 341–363. <https://doi.org/10.1016/j.cpr.2004.12.004>
- Kristensen, K. B., Lauritzen, C., & Reedtz, C. (2022). Child-focused practice in social services for adults in Norway. *Journal of Social Work, 22*), <https://doi.org/10.1177/14680173211029725>
- Lannes, A., Bui, E., Arnaud, C., Raynaud, J.-P., & Revet, A. (2021). Preventive interventions in offspring of parents with mental illness: A systematic review and meta-analysis of randomized controlled trials. *Psychological Medicine, 51*(14), 2321–2336. <https://doi.org/10.1017/S0033291721003366>
- Leijdesdorff, S., van Doesum, K., Popma, A., Klaassen, R., & van Amelsvoort, T. (2017). Prevalence of psychopathology in children of parents with mental illness and/or addiction. *Current Opinion in Psychiatry, 30*(4), <https://doi.org/10.1097/YCO.0000000000000341>
- Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior. *Clinical Psychology Review, 20*(5), 561–592. [https://doi.org/10.1016/S0272-7358\(98\)00100-7](https://doi.org/10.1016/S0272-7358(98)00100-7)
- Luciano, A., Nicholson, J., & Meara, E. (2014). The economic status of parents with serious mental illness in the United States. *Psychiatric Rehabilitation Journal, 37*(3), 242–250. <https://doi.org/10.1037/prj0000087>
- Maybery, D., & Reupert, A. (2018). The number of parents who are patients attending adult psychiatric services. *Current Opinion in Psychiatry, 31*(4), 358–362. <https://doi.org/10.1097/YCO.0000000000000427>
- Maybery, D., Reupert, A., Patrick, K., Goodyear, M., & Crase, L. (2009). Prevalence of parental mental illness in Australian families. *Psychiatric Bulletin, 33*(1), 22–26. <https://doi.org/10.1192/pb.bp.107.018861>
- Maybery, D. J., Reupert, A., Nicholson, J., Göpfert, M., & Seeman, M. V. (2015). Are we there yet? Developing a conceptual framework for understanding families where a parent has a mental illness. In A. Reupert, D. Maybery, J. Nicholson, M. Göpfert, & M. Seeman (Eds.), *Parental psychiatric disorder: Distressed parents and their families* (pp. 365–370). Cambridge University Press. <https://doi.org/10.1017/CBO9781107707559.035>
- Miller-Heyl, J., MacPhee, D., & Fritz, J. J. (1998). Dare to be you: A family-support. *The Journal of Primary Prevention, 18*(3), 257–285. <https://doi.org/10.1023/A:1024602927381>
- Morawska, A., Winter, L., & Sanders, M. R. (2009). Parenting knowledge and its role in the prediction of dysfunctional parenting and disruptive child behaviour. *Child: Care, Health and Development, 35*(2), 217–226. <https://doi.org/10.1111/j.1365-2214.2008.00929.x>
- Morsbach, S. K., & Prinz, R. J. (2006). Understanding and improving the validity of self-report of parenting. *Clinical Child and Family Psychology Review, 9*(1), 1–21. <https://doi.org/10.1007/s10567-006-0001-5>

- Mullick, M., Miller, L. J., & Jacobsen, T. (2001). Insight into mental illness and child maltreatment risk Among mothers With major psychiatric disorders. *Psychiatric Services*, 52(4), 488–492. <https://doi.org/10.1176/appi.ps.52.4.488>
- Nicholson, J., Heyman, M., English, K., & Biebel, K. (2022). The ParentingWell practice approach: Adaptation of let's talk about children for parents With mental illness in adult mental health services in the United States. *Frontiers in Psychiatry*, 13. <https://doi.org/10.3389/fpsy.2022.801065>
- Nicholson, J., Sweeney, E. M., & Geller, J. L. (1998). Focus on women: Mothers with mental illness: I. The competing demands of parenting and living With mental illness. *Psychiatric Services*, 49(5), 635–642. <https://doi.org/10.1176/ps.49.5.635>
- Ohan, J. L., Leung, D. W., & Johnston, C. (2000). The parenting sense of competence scale: Evidence of a stable factor structure and validity. *Canadian Journal of Behavioural Science / Revue Canadienne des Sciences du Comportement*, 32(4), 251. <https://doi.org/10.1037/h0087122>
- Oyserman, D., Bybee, D., Mowbray, C., & Hart-Johnson, T. (2005). When mothers have serious mental health problems: Parenting as a proximal mediator. *Journal of Adolescence*, 28(4), 443–463. <https://doi.org/10.1016/j.adolescence.2004.11.004>
- Oyserman, D., Mowbray, C. T., Meares, P. A., & Firminger, K. B. (2000). Parenting among mothers with a serious mental illness. *American Journal of Orthopsychiatry*, 70(3), 296–315. <https://doi.org/10.1037/h0087733>
- Parent, J., Forehand, R., Dunbar, J. P., Watson, K. H., Reising, M. M., Seehuus, M., & Compas, B. E. (2014). Parent and adolescent reports of parenting when a parent Has a history of depression: Associations with observations of parenting. *Journal of Abnormal Child Psychology*, 42(2), 173–183. <https://doi.org/10.1007/s10802-013-9777-1>
- Pierce, M., Abel, K. M., Muwonge Jr, J., Wicks, S., Nevriana, A., Hope, H., Dalman, C., & Kosidou, K. (2020). Prevalence of parental mental illness and association with socioeconomic adversity among children in Sweden between 2006 and 2016: A population-based cohort study. *The Lancet Public Health*, 5(11), e583–e591. [https://doi.org/10.1016/S2468-2667\(20\)30202-4](https://doi.org/10.1016/S2468-2667(20)30202-4)
- Preyde, M., VanDonge, C., Carter, J., Lazure-Valconi, K., White, S., Ashbourne, G., Penney, R., Frensch, K., & Cameron, G. (2015). Parents of youth in intensive mental health treatment: Associations between emotional and behavioral disorders and parental sense of competence. *Child and Adolescent Social Work Journal*, 32(4), 317–327. <https://doi.org/10.1007/s10560-014-0375-z>
- Rasic, D., Hajek, T., Alda, M., & Uher, R. (2014). Risk of mental illness in offspring of parents With schizophrenia, bipolar disorder, and major depressive disorder: A meta-analysis of family high-risk studies. *Schizophrenia Bulletin*, 40(1), 28–38. <https://doi.org/10.1093/schbul/sbt114>
- Reedtz, C., Handegård, B. H., & Mørch, W.-T. (2011). Promoting positive parenting practices in primary care: Outcomes and mechanisms of change in a randomized controlled risk reduction trial. *Scandinavian Journal of Psychology*, 52(2), 131–137. <https://doi.org/10.1111/j.1467-9450.2010.00854.x>
- Reedtz, C., Lauritzen, C., Mørch, L., & Steneby, J. (2010). *Håndbok - Prosjekt barn som pårørende [Manual - Project Children of parents with a mental illness]*. Regionalt kunnskapssenter for barn og unge (RKBU Nord).
- Reedtz, C., Lauritzen, C., & van Doesum, K. (2012). Evaluating workforce developments to support children of mentally ill parents: Implementing new interventions in the adult mental healthcare in Northern Norway. *Bmj Open*, 2(3), <https://doi.org/10.1136/bmjopen-2011-000709>
- Reedtz, C., Mørch, L., & Lauritzen, C. (2015). Registreres psykiatriske pasienters barn i elektronisk pasientjournal? *Nordisk Sygeplejeforskning*, 5(1), 36–45. <https://doi.org/10.18261/ISSN1892-2686-2015-01-04>
- Reupert, A., Gladstone, B., Hine, R. H., Yates, S., McGaw, V., Charles, G., Drost, L., & Foster, K. (2021). Stigma in relation to families living with parental mental illness: An integrative review. *International Journal of Mental Health Nursing*, 30(1), 6–26. <https://doi.org/10.1111/inm.12820>
- Reupert, A., Maybery, D., & Kowalenko, N. (2013). Children whose parents have a mental illness: prevalence, need and treatment. *Medical Journal of Australia*, 199, 7–9. <https://doi.org/10.5694/mja11.11200>. PMID: 25369850.

- Rogers, H., & Matthews, J. (2004). The parenting sense of competence scale: Investigation of the factor structure, reliability, and validity for an Australian sample. *Australian Psychologist*, 39, <https://doi.org/10.1080/00050060410001660380>
- Ruud, T., Maybery, D., Reupert, A., Weimand, B., Foster, K., Grant, A., Skogøy, B. E., & Ose, S. O. (2019). Adult mental health outpatients who have minor children: Prevalence of parents, referrals of their children, and patient characteristics. *Frontiers in Psychiatry*, 10, <https://doi.org/10.3389/fpsy.2019.00163>
- Sanders, M. R., Kirby, J. N., Tellegen, C. L., & Day, J. J. (2014). The triple P-positive parenting program: A systematic review and meta-analysis of a multi-level system of parenting support. *Clinical Psychology Review*, 34(4), 337–357. <https://doi.org/10.1016/j.cpr.2014.04.003>
- Sanders, M. R., & Woolley, M. L. (2005). The relationship between maternal self-efficacy and parenting practices: Implications for parent training. *Child: Care, Health and Development*, 31(1), 65–73. <https://doi.org/10.1111/j.1365-2214.2005.00487.x>
- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7(2), 147–177. <https://doi.org/10.1037/1082-989X.7.2.147>
- Schrank, B., Moran, K., Borgi, C., & Priebe, S. (2015). How to support patients with severe mental illness in their parenting role with children aged over 1 year? A systematic review of interventions. *Social Psychiatry and Psychiatric Epidemiology*, 50(12), 1765–1783. <https://doi.org/10.1007/s00127-015-1069-3>
- Stack, D. M., Serbin, L. A., Enns, L. N., Ruttle, P. L., & Barrieau, L. (2010). Parental effects on children's emotional development over time and across generations. *Infants & Young Children*, 23(1), https://journals.lww.com/iyjournal/Fulltext/2010/01000/Parental_Effects_on_Childrens_Emotional.7.aspx. <https://doi.org/10.1097/IYC.0b013e3181c97606>
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5). Pearson Boston.
- Thanhäuser, M., Lemmer, G., de Girolamo, G., & Christiansen, H. (2017). Do preventive interventions for children of mentally ill parents work? Results of a systematic review and meta-analysis. *Current Opinion in Psychiatry*, 30(4), 283–299. <https://doi.org/10.1097/YCO.0000000000000342>
- The European Federation of Psychologists' Associations. (2013). EFPA review model for the description and evaluation of psychological and educational tests, version 4.2.6.
- Torvik, F. A., & Rognmo, K. (2011). Barn av foreldre med psykiske lidelser eller alkoholmisbruk: omfang og konsekvenser [Children of parents with mental illnesses or alcohol use disorder: Prevalence and consequences]. *Folkehelseinstituttet(2011:4)*.
- United Nations Development Programme. (2022, 15.08.2022). Human Development Index (HDI). <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>.
- van Santvoort, F., Hosman, C. M. H., Janssens, J. M. A. M., van Doesum, K. T. M., Reupert, A., & van Loon, L. M. A. (2015). The impact of various parental mental disorders on children's diagnoses: A systematic review. *Clinical Child and Family Psychology Review*, 18(4), <https://doi.org/10.1007/s10567-015-0191-9>
- Wilson, S., & Durbin, C. E. (2010). Effects of paternal depression on fathers' parenting behaviors: A meta-analytic review. *Clinical Psychology Review*, 30(2), 167–180. <https://doi.org/10.1016/j.cpr.2009.10.007>
- Wittkowski, A., Garrett, C., Calam, R., & Weisberg, D. (2017). Self-Report measures of parental self-efficacy: A systematic review of the current literature. *Journal of Child and Family Studies*, 26(11), 2960–2978. <https://doi.org/10.1007/s10826-017-0830-5>