

# King's College London

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PG Cert/PG Dip/MSc Examination

7PADMPAR Research Skills: From Methods & Procedures to Analysis & Reporting; Coursework 1 Paper

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**Coursework Assessment I**  
**Research Skills: From Methods & Procedures to Analysis and Reporting**  
**(7PADMPAR)**

**TOPIC : Exposure to childhood trauma and development of psychosis**

**PART A (1000 words)**

**Research question:**

Adverse childhood event is estimated to affect a third of the general population worldwide (Kessler, 2010).

There is a growing convergent body of evidence suggesting the link between exposure to childhood trauma and development of psychosis (Stanton, 2020). However, some gaps remain in the understanding of this association.

Research found that gender might play a role in the relationship between childhood adversity and psychosis. Nevertheless, studies that have addressed this topic provided mixed results (Misiak, 2017).

On one hand, some studies found that early history of trauma increased the likelihood of psychosis in females but not in males (MacMillan, 2001).

It has been hypothesised that history of childhood adversity could be associated with lowering age of onset of first episode psychosis, increased symptoms in women (Fisher, 2009). A following study found a specific association between sexual abuse and auditory verbal hallucinations (Misiak, 2016).

On the other hand, some studies reported that males can be more susceptible to consequence of childhood trauma (Sweeney, 2015; Shevlin, 2007).

Fisher et al. (2009) suggested that the gender difference might be explained by psychological processes, but little is known about these underlying mechanisms.

Moreover, it has been suggested that men and women might employ different psychological mechanisms and coping strategies but there is more empirical research to be done on this point (Misiak, 2017).

In this regard, this study aims to answer the following question: What are the roles of gender difference and the related psychological and coping mechanisms in the relationship between childhood trauma and the development of psychosis?

### **Study design**

This study design chosen is an observational case control study.

We are interested in comparing a group of people with psychosis symptoms to controls to examine the psychological pathway from childhood trauma to psychosis considering the gender difference.

Although childhood adversity has been associated with higher risk of psychosis, it will not necessarily trigger the onset of psychosis. We want to experiment the assumption that the difference in psychological mechanisms between men and women could play a role in response to trauma and leading to psychosis.

Participants will be assessed on the exposure to childhood trauma as well as other variables that could mediate this relationship. Exposure to trauma will be retrospectively assessed with reliable and evidence-based tool to avoid confounding results.

This design will present the advantage of testing the current hypothesis that there is a gender difference in the association between childhood abuse and psychosis and the potential mediators or moderators.

### **Study sample:**

The cases group will involve a population of adults from 18 to 64 years old diagnosed with psychosis and the controls group will include individuals from 18 to 64 years old who will not present any current or past symptom of psychotic disorder.

To avoid confounding results, individuals of the cases group whom psychosis were elicited by substance abuse and individuals with intellectual disabilities will be excluded. Also, as the research study will involve filling in questionnaires, a sufficient understanding of English will be needed.

The controls group will be recruited from the same area of interest as the cases group. Following what previous studies have done, we will aim for a minimum sample size of 100 participants for each group.

### **Variables**

For this research project, the dependent variable will be psychosis.

In regards of the research question, the independent variables are exposure to different types of trauma, gender, psychological and coping mechanisms.

We will investigate potential mediators or moderators variables such as attachment styles, and coping strategies (Misiak, 2017; Fisher, 2009).

Confounding variables will include history of schizophrenia in the family and other family risk factors.

### **Methods**

#### **Material**

History of trauma will be assessed with the Early Trauma Inventory - Self Report (ETI-SR) to assess a large range of childhood trauma including physical, emotional and sexual abuse as well as general trauma (death of a parent) that might occurred before the age of 18 (Bremner, 2007). Internal consistency for this tool has been assessed ( $\alpha = 0.78-0.90$ ) and items were found to be correlated a (Thabrew, 2012).

In the cases group, the diagnosis will be assessed with the operational criteria for psychotic illness (OPCRIT) (McGuffin, 1991) and the Schedules for Clinical Assessment in Neuropsychiatry - SCAN (World Health Organization, 1994). These are measures that are widely used to measure psychosis in clinical and research settings (Rucker, 2011).

The Nottingham Onset Schedule (NOS) will determine the chronology and component of the onset. This short guided interview consists of two parts, the Preliminary Assessment and the interview itself. This standardised tool has been assessed for its reliability (Singh, 2005).

The Psychosis Screening Questionnaire (Bebbington, 1995) will be used for the controls group. It is a quick questionnaire developed to screen for psychotic symptoms in the preceding year and covers experience of hypomania, thought disorder, paranoia, strange experiences, and hallucinations.

To assess the psychological mechanisms, we will use these following questionnaires. Attachment style will be measured using Hazan and Shaver's attachment style measure (Hazan, 1987) which is a self-rating questionnaire measuring three behavioural patterns (secure, avoidant, and anxious-ambivalent) on 4-point scales (1 = not at all like me, 2 = a little like me, 3 = somewhat like me, and 4 = a lot like me).

Coping mechanisms will be measured with the Coping Responses Inventory (Moos, 1997), a scale with 48 items that measures eight different coping styles ; each item is rated from 0 (not at all) to 3 (fairly often). Participants will be asked to identify "the most important problem or stressful" event in the past 12 months and reply to questions like "Did you tell yourself things to make yourself feel better?" (positive reappraisal), "Did you try to forget the whole thing" (cognitive avoidance), "Did you take it out on other people when you felt angry or depressed" (emotional discharge).

## **Procedures**

Participants for the cases group will be recruited in mental health services where they have been in contact for psychosis symptoms. They will be assessed using the the SCAN, the OPCRIT. and the NOS. The measures will take place in the service.

Controls will be recruited for example via postal address, phone and general practitioner in the region of interest.

After giving their consent, the psychosis screening questionnaire will have to be completed by the controls group to ensure they don't show any symptoms of psychosis. The controls group will receive visits of the researchers for data collection.

All participants who would give their consent to the research study will complete the ETI-SR to assess the potential exposure and types of trauma. Participants will also have to complete the attachment style measure and the coping response inventory.

## **PART B (500 words)**

**Please discuss the advantages and disadvantages of your chosen study design and also what other study design could potentially be used to respond to the question (if any)?**

Building on the previous body of research, this study aims to contribute to the previous studies on gender difference by completing with additional variables to address the limitations. We are following the recommendation of previous studies that suggested to investigate other psychological mediators, attachment and coping styles (Misiak, 2017; Fisher 2009). This research project will contribute to broaden the understanding of the gender difference and the pathways between childhood trauma and psychosis.

One strength of this research study is that it is a case control study that would enable to compare the different groups.

The use of a semi structured interview for psychosis addresses the limitations of previous studies that didn't use DSM criteria.

A potential limitation of this research project could be the use of retrospective measures of childhood trauma. Given the wide range of age in the participants and the potential long timeframe between the events, this could lead to some alteration of the information. In the cases group, it can also be noted that psychosis might lead to memory impairments (Saykin, 1991). Nonetheless, it has been suggested that the retrospective reports of childhood trauma showed some reliability. The use of evidence-based assessment tool will also contribute to the overall level of satisfaction of the study design.

The use of the ETISR-SF will allow to assess different type of trauma, especially general trauma. This measure is interesting as it includes a large type of traumatic events. This will allow us to look at how gender might affect the pathway between childhood trauma and psychosis and fine tune the relationship.

The Coping Responses Inventory scale will also enable us to measure a large spectrum of mechanisms (e.g. emotion regulation, positive reappraisal, externalisation...).

As this research project aims to be a general population study, it is worth noting that we will overlook at specific populations such as those in prisons (Fisher, 2009).

Another possible study design would be a prospective longitudinal cohort study that will have the advantage to measure the exposure and the psychological and coping mechanisms before the outcome as well as establish causality. Nevertheless, this kind of study takes time to be completed and is susceptible to participants attrition. Some authors also warn about the potential distress that prospective studies conducted on the general population might cause, especially in children (Fisher, 2009).

Results from this study will have implications on prevention and treatment, with a potential for tailoring based on the gender and coping strategies (Misiak, 2017).

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