SECONDARY DATA ANALYSIS REPORT
MENTAL HEALTH PROBLEMS AND BARRIERS TO EMPLOYABILITY IN ONTARIO YOUNG ADULTS: INSIGHTS FROM THE QUINTE LONGITUDINAL STUDY

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SUBMITTED NOVEMBER 2018
PUBLISHED JANUARY 2019
Suggested Citation


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Acknowledgments

The authors would like to thank Gambling Research Exchange Ontario (GREO) for their support. Please note that the opinions expressed in this document are ours, and do not necessarily reflect those of GREO.

Report Funded by

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BACKGROUND

The transition from adolescence to adulthood is a stressful period for most individuals, and one which coincides with a major developmental transition. Important markers of the transition to adulthood include living independently, becoming financially self-sufficient, and starting a career.\(^1\) Given this importance for future quality of life, it is not surprising that the period of emerging adulthood is perceived as a taxing experience by most individuals and their families.\(^2\) While there are obviously many obstacles to the successful transition, an important barrier is posed by mental health problems, since early adulthood constitutes a peak period for the first onset of a broad range of mental disorders.\(^3\) The presence of mental disorders during early adulthood is associated with various long-term adverse outcomes, including vulnerability to additional mental health problems (particularly drug/alcohol abuse and behavioural addictions), physical health problems, and labour market marginalization.\(^4\)

Adding to the stress involved in the transition to adulthood, in recent years, is the shift that has taken place in the type of employment that now awaits many young adults.\(^5\) Unlike employment patterns that earlier generations of Canadians typically experienced, characterized by a positive sense of job security, good social benefits, and reasonably high wages, young adults in Canada are now more likely to experience jobs with much fewer of these positive features.\(^6\) According to Kalleberg,\(^5\) the beginning of this shift can be traced back to the 1970s, when we began to see major technological changes in business and industry in developed countries like Canada. An important part of this shift was also an increase in major corporations moving key business operations to countries with cheaper labour costs.

The new employment context has frequently come to be called “precarious employment”, and both unidimensional and multidimensional approaches have been proposed to measure the construct.\(^7\) Standing,\(^8\) for example, has defined precarious employment as a unidimensional concept characterized by uncertainty and insecurity of employment conditions. Using a multidimensional approach, Benach, Vives, Amable, Vanroelen, Tarafa and Muntaner\(^9\) define precarious employment as “encompassing dimensions such as employment insecurity, individualized bargaining relations between workers and employers, low wages and economic deprivation, limited workplace rights and social protection, and powerlessness to exercise workplace rights” (p, 320). Regardless of the approach taken to document the construct, the increase in precarious employment has made the availability and quality of many jobs more uncertain; it has also come to have major impacts on health and well-being, particularly for many vulnerable groups like older adolescents making the transition to adulthood.\(^6,7\)

PRECARIOUS EMPLOYMENT AND HEALTH

A detailed literature has emerged on the effects of precarious employment on both physical and mental health. The mechanisms behind this relationship are still not clear, however, the study of this relationship has typically utilized one of two theoretical perspectives: the health...
selection hypothesis or the social causation hypothesis. The health selection hypothesis suggests that health affects employment directly, while the social causation hypothesis suggests that socio-economic circumstances (including employment context) affect both physical and/or mental health. According to a recent review of the field, the social causation hypothesis has had the greatest impact on the published literature. In accordance with this hypothesis, research exploring the relationship between precarious employment and health have documented associations with various types of physical health outcomes. For example, a study that analyzed data from a large number of European countries reported an association between precarious employment and health problems such as fatigue, backaches, and muscle pain. Recent studies also report a number of negative mental health outcomes with precarious employment. More specifically, precarious employment has been found to be associated with high levels of stress, anxiety, depression, and overall poorer mental health. Quesnel-Vellee et al., using a longitudinal dataset of American participants who were followed from 1979 to 2010, found that people in precarious employment showed more severe depressive symptoms compared to people in standard employment.

**PRECAIOUS EMPLOYMENT AND MENTAL HEALTH PROBLEMS IN YOUNG ADULTS**

There is evidence that adult health is differentially affected by precarious employment; young people in Canada (and other developed countries) appear to be more vulnerable than some other groups to mental health problems when working in precarious conditions. Young unemployed adults seem to be at greater risk for smoking, excessive alcohol consumption and other unhealthy lifestyle behaviours. Not surprisingly, the combined impact of precarious employment and risky or unhealthy behaviours appears to exacerbate the risk for various negative life outcome variables. In a recent Ontario study, young men and women experiencing precarious employment were at substantial elevated risk for various mental health issues. Of particular concern are mental health problems connected to substance abuse and behavioural addictions.

**Substance use.** Independent to the problem of precarious employment, young adults as a group are vulnerable to substance use problems. It is important to note that the risk factors appear to be quite different for young men and women. For example, in terms of frequency of substance use, young men report using more alcohol, tobacco, and cannabis than young women. Palmer, Young, Hopfer, Corley, Stallings, Crowley and Hewitt, looking at the proportion of young adults diagnosed with alcohol and/or marijuana substance use disorder, found prevalence rates to be substantially higher in young men compared to young women. However, the time between the first use of substances like alcohol (or stimulants, cannabis, and opiates) and the onset of substance related problems is much shorter for young women. In addition to these gender differences, the co-occurrence of substance use and other disorders such as mood and anxiety are also more prevalent in young women compared to young men. Research also points out that the motivations for using substances are different
for young men and women. Young men, for example, often use drugs to conform to social groups and to enhance positive emotions; young women, on the other hand, often use substances when under stress or experiencing other negative emotions. This pattern of results highlights the need for researchers studying relationships between substance use problems and social variables, like precarious employment, to take into account potential gender differences.

**Behavioural addictions.** Our understanding of behavioural addictions is undergoing considerable flux, as researchers and practitioners grapple with the mental health implications of expanded access to entertainment technologies, such as computer-video games, instant messaging, and media streaming. The visual and auditory capabilities of computers, tablets, mobile devices, and video games have become increasingly sophisticated, with the Internet providing an ever more seamless environment for linking what were once quite independent recreational activities. There is emerging evidence indicating that a number of specific behavioural addictions, particularly those characterized by dysfunctional preoccupations or repetitive behaviours (Internet or video/computer game abuse, online gambling and/or compulsive shopping, etc.), share clinical, comorbidity, and neurobiological parallels with substance addictions. It is worth noting that the Diagnostic and Statistical Manual-5 (DSM-5) appears to recognize this overlap with gambling disorder, since this disorder now belongs to the category of Substance Related and Addictive Disorders (the only behavioural addiction to be recognized in the DSM-5).

The comorbid nature of many different behavioural addictions continues to be of particular concern to researchers and clinicians. For many individuals, the easy access to gambling, video games, computer gaming, and Internet activities (activities increasingly linked together via integrated computer programs or applications) increases the likelihood for multiple behavioural additions. Overlap between gambling and various types of excessive behaviours has long been reported in various adult populations. In fact, the evidence seems to be accumulating that young adults are particularly vulnerable to various behavioural addiction problems with long-term mental health implications. For example, found substantial intercorrelations among gambling, use of multiple legal substances, compulsive exercising, and the use of the internet and television in undergraduate students. More recently, Sussman, Arpawong, Sun, Tsai, Rohrbach and Spruijt-Metz found high prevalence and co-occurrence of sex, exercise, Internet, and excessive work in a large (N = 717) sample of young adults. Parker, Taylor and Kennedy, using a larger set of behavioural addiction problems (problem gambling, excessive game playing, excessive online chatting, excessive sexual behaviour, shopping), also found young adults (18 to 29 years) to report more symptomatology than older adults (30 years and older).
RESEARCH QUESTIONS

The goal of this project was to utilize a unique dataset from the Quinte Longitudinal Survey (QLS)\textsuperscript{34, 35} to explore the relationships between precarious work and a range of mental health problems in a representative sample of Ontario young adults (under 30 years of age at the start of the QLS). The 5-year QLS\textsuperscript{36} was conducted between 2006 and 2011 with the broad goal of furthering research and understanding about problem gambling and other behavioural addictions. The longitudinal design of the database, and the size of the sample, also allow researchers to examine the stability across time of co-occurring behavioural addictions, as well as identify vulnerable groups (e.g., emerging adults).

Of particular interest in the present study was exploration of mental health problems connected to substance abuse and various behavioural addictions, for which young adults appear to be at elevated risk.\textsuperscript{30, 37, 38} To the knowledge of the authors, researchers who have studied precarious employment and mental health have not yet explicitly examined the relationship with behavioural addictions. Our literature review has shown that young adults are vulnerable to both behavioural addictions and precarious employment, and as such it is important to investigate the relationship between these two factors within this age group. Our current study aims to investigate this relationship, with particular emphasis on exploring potential gender differences.

The research questions involved in this project were organized around three broad themes or clusters (each with a variety of sub-components). The first was to evaluate the overall impact of precarious employment on mental health status for young men and women across the 5 years of data. The second was to examine the relationship between precarious employment and various behavioural addictions. Finally, with the third theme, we sought to examine the relationship between precarious employment and substance use problems.

METHODOLOGY

PARTICIPANTS

The complete dataset included data from 4121 individuals (1867 men and 2254 women) collected via the Quinte Longitudinal Study (QLS)\textsuperscript{35} over a period of five years from 2006 to 2011. At the start of the study participants ranged in age from 17 to 80 years; the mean age for men was 47.2 (SD = 14.7) and 45.2 (SD = 13.6) for women. The sample was primarily White (87.1%), with 4.4% Aboriginal, 0.6% Asian, 0.3% Black, and 7.6% other or ethnicity not reported. For educational background, 31.2% had no more than completed high school, 21.8% had some technical school, college or university, 42.9% had completed technical school, college or university, and 4.1% had advanced degrees. For the purpose of our current study, sampling was restricted to participants under age 30 at Year 1 (2006). Analyses reported in this study were based on this subsample (n = 457). The demographic and descriptive statistics are present in Table 1.
PROCEDURE

Thorough methodological details on the QLS can be found in Williams et al.36 (see also McLaughlin, White, King, et al.39). Individuals were considered eligible for the study if they lived within a 70 kilometer radius of the city of Belleville, Ontario. Random digit dialing, where random telephone numbers are generated within the aforementioned radius, was used for recruitment. Although response rate was relatively low (21.3%) and comparable to studies in similar research areas,36 most individuals remained in the study once involved, with a high retention rate (93.9%). In the interest of having adequate representation of both the general population and those at risk for problem gambling, two samples were recruited: a “general population sample” (N = 3,065) and an “at risk” sample (N = 1,056). To be included in the “at risk” sample an individual had to report at least one or more of the following conditions: 1. spend $10 or more per month on lottery tickets, casino table games, bingo, or other games of skill against other people; 2. betting on horse racing or playing slot machines in the past year; 3. plan to gamble at a new gambling facility that was scheduled to be built in the area in the near future. Since the focus of the present study was on studying a cross-section of behavioural addictions the “general” and “at risk” groups were not differentiated.

An initial phone call was conducted to gain consent from the individuals to participate in the QLS. Once consent was gained, an individual was given three options to complete their surveys: online via an email link to the questionnaire, at the program office where they completed it on a computer, or if an individual was unfamiliar with computers, they were given the option to use a pen and pencil version of the questionnaire. Most respondents completed the online version of the survey at home (e.g., only 1.2 to 1.9% of participants completed the pen and pencil version of the survey). Each individual was given the opportunity to complete the survey once a year for five years.

MEASURES

The QLS involved a large number of variables and over five waves of data, however for the current study, only a subset of variables were used. Details about the other variables included in the QLS can be found in Williams et al.36

Gambling behaviours. The QLS adapted items from the NORC Diagnostic Screen for Gambling Problems-Self Administered (NODS-SA),40 a self-assessment tool designed to assist respondents in evaluating whether to seek help for their gambling behaviour. The instrument is based on the DSM-IV41 criteria for pathological gambling. Respondents were asked about their behaviours in the previous 12 months.

Substance use. The QLS adapted items from the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST).42 The ASSIST was designed to be a brief screening tool to detect psychoactive substance use and related problems. Respondents were asked
about their behaviours in the previous 12 months. The list of substances included tobacco products (cigarettes, chewing tobacco, cigars), alcoholic beverages (beer, wine, spirits), cannabis (marijuana, hashish, pot), hallucinogens (LSD, mushrooms, Special K), stimulants (amphetamine, cocaine, ecstasy) and other drugs (opiates, inhalants, nonmedical use of sedatives, sleeping pills, and other substances). The response from participants was coded as No = 0 and Yes = 1. To access the frequency of substance use, participants responded to the question; How often have you used ____ in the past 12 months? Respondents were given a list of forced choice which included daily, several times a week, a few times a week, once a week, a few times a month, once a month, several times a year, a few times a year, and once. Once was coded as “1” and daily was coded as “9”.

**Other behavioural addictions.** To assess the presence of various behavioural addictions, participants were asked a simple yes/no question: “Are there activities that you engage in where your over-involvement has caused significant problems for you in the past 12 months? Check off any that apply”. Participants were given the option of reporting on various behavioural addictions: sex or pornography, shopping, Internet chat lines, and video or Internet gaming. The Behavioural Addiction Measure, which was adapted from the Problem and Pathological Gambling Measure, was given to any individual who reported excessive behaviours, in order to assess the severity of that problem behaviour. The measure includes 21 items which make up three different sub categories: 13 items assessing psychosocial problems (e.g., financial or interpersonal), 3 items assessing impaired control (e.g., spending more time or money on the activity than intended), and 5 items assessing other characteristics (e.g., preoccupation, craving).

**Mental health.** The Composite International Diagnostic Interview-- Short Form (CIDI-SF) is a series of screening scales designed to assess a range of mental disorders according to DSM-IV criteria. The 12-month version was used to assess the following disorders: PTSD, major depression, mania, generalized anxiety, panic attacks and agoraphobia, obsessive compulsive, bulimia, and substance abuse and dependence.

**Work variables.** There is a lack of consensus about how best to assess precarious employment. At the time the Quinte Longitudinal Survey was developed and implemented no measurement tool existed to measure precarious employment. Using the approach chosen by Canivet, Bodin, Emmelin, Toivanen, Moghaddassi and Ostergren, we created a dichotomous variable: non-precarious vs. precarious employment. This new variable was created using employment history data from all five waves (i.e., forced choice items in the database about being “unemployed”, “homemaker”, “full-time student”, “on sick leave/disability”, “employed part-time”, or “employed full-time”). Using employment history over the 5-year period, participants were defined as being “non-precarious” if they worked full-time or part-time over most of the 5-year period. Participants who were unemployed for most of period, or who shifted from full-time to part-time over the course of the study were defined as “precariously employed”.
RESULTS

Table 1 summarizes the sociodemographic characteristics of participants in the present study, as well as the number of individuals in the precarious and non-precarious groups. Seventy percent of participants in the precarious employment group were women and 30% were men. Fifty-seven percent in the non-precarious group were men and 43% were women. There were almost twice the number of women in the precarious employment group as in the non-precarious group (70% vs 43%). The results summarized in this report are an overview of work reported (or to be reported) in several more detailed documents.46-48 Research findings in this report are organized around three broad clusters: 1. overall impact of precarious employment on mental health status; 2. implications of precarious employment for behavioural addictions; and 3. implications for precarious employment on substance use problems.

OVERALL MENTAL HEALTH IMPLICATIONS OF PRECARIOUS WORK

To explore the overall impact of employment group, a gender by employment group (precarious vs non-precarious) by wave (Time 1 versus Time 5) repeated measures ANOVA was conducted with total number of serious mental health problems (measured with the CIDI-SF)44 as the dependent variable. The means and standard deviations for the CIDI-SF variables are presented in Table 2.

The main effects for gender were significant F(1, 448) = 8.03, \( p < .005 \), with women reporting more mental health problems across the waves of data compared to men. The main effect for employment group was also significant F(1,448) = 7.83, \( p = .005 \), with the precarious employment group reporting more mental health problems than the non-precarious group. The main effect for time, 2-way interactions, and 3-way interactions were not significant. Univariate analyses found that the gender difference was consistent for Time 1 and Time 5 (\( p < .01 \)), as was the difference for employment groups (\( p < .05 \)), with the precarious employment group consistently reporting more mental health problems than the non-precarious group. These results for Ontario young adults are highly consistent with data reported by researchers studying young adults in several developed countries.15, 16, 18, 19

BEHAVIOURAL ADDICTIONS AND PRECARIOUS WORK

Owusu Ansah,46 Owusu Ansah, Crane et al.47 examined the relationships between six excessive behaviours (gambling, sex, shopping, internet/gaming, exercise, and internet use) separately by employment group (precariously employed versus non-precariously employed) and gender. Collapsing across the five waves of data, several consistent patterns emerged. For individuals in the precarious employment group, gambling was found to be associated with a broad cluster of other excessive behaviours (particularly exercise, internet, shopping, and video gaming). Importantly, the same clustering of excessive behaviours did not occur in the non-precarious groups.
There were also a number of gender differences in the relationship between excessive behaviours to note. Whereas excessive gambling behaviour in women in the precarious group was significantly associated with internet, sex, and shopping, these associations were non-significant for young men in the precarious group. Interestingly, the association between excessive gambling and exercise was significant for men in precarious employment but non-significant for women.

Owusu Ansah,46 Owusu Ansah, Crane et al.47 also used a series of repeated measure ANOVAs to investigate each of the addictive behaviours in relation to employment type (precarious versus non-precarious) and gender over time. Each of the ANOVAs were conducted for difference excessive behaviours across the 5 years of data. There were no employment group or gender differences for exercise, internet use, or video gaming. For excessive shopping, women were found to score significantly higher than men. Men were found to score significantly higher than women on excessive gambling, but both men and women in the precarious group were found to score significantly higher on excessive gambling than young adults in the non-precarious group. While men scored significantly higher than women on excessive interest in sex, there was a significant interaction for gender and employment groups. Men in the precarious group scored higher than men in the non-precarious group; the same pattern of results was found for young women with respect to excessive interest in sex.

SUBSTANCE ABUSE PROBLEMS AND PRECARIOUS WORK

Owusu Ansah,46 Owusu Ansah, Taylor et al.48 examined the relationships among six types of substance usage: tobacco, alcohol, cannabis, hallucinogens, stimulants, and other drugs (i.e., opiates, inhalants, nonmedical use of sedatives, other). These analyses were conducted separately by employment type (precariously employed vs non-precariously employed) and gender. Collapsing across the five waves of data, several consistent patterns emerged. For men in the precarious group, while there were several specific moderate correlations (e.g., use of stimulants and the use of hallucinogens), most of the associations were low; for men in the non-precarious group the overall pattern of inter-correlations were generally higher. The pattern for women was reversed. For women in the non-precarious group, there were several specific moderate correlations (e.g., use of cannabis and the use of hallucinogens), but most of the associations were low; for women in the precarious group the overall pattern of inter-correlations were generally higher.

Owusu Ansah,46 Owusu Ansah, Taylor et al.48 also used a series of repeated measure ANOVAs to investigate each of the substances in relation to employment type (precarious versus non-precarious) and gender over time. Each of the ANOVAs was conducted based on frequency of problematic substance use across the 5 years of data. There was a significant main effect of gender for alcohol abuse, with men scoring higher than women. However the
interaction of gender and employment group was also significant for alcohol. Men in the precarious group abused alcohol more often than men in the non-precarious group. The pattern of results was reversed for women; women in the precarious group abused alcohol less frequently than their counterparts in non-precarious group.

There were no employment group or gender differences for tobacco, stimulants, hallucinogens, or other drugs (nor any significant interactions). There was, however, a gender difference for cannabis, with women reporting more use of this substance than men. The main effect for employment group was not significant (or a significant interaction).

DISCUSSION

Consistent with research with young adults in other developed countries,\textsuperscript{15, 16, 18, 19} young Ontario adults working in precarious jobs were found to experience significantly more serious mental health problems than their peers experiencing non-precarious employment. This finding was consistent for both men and women and has a number of important policy implications. As noted by Pinto, Hassen, and Craig-Neil,\textsuperscript{49} mental health professionals need to raise better awareness (to the public and to their peers) of employment as a key social determinant of health. In Canada, helping people gain employment is typically viewed as within the sphere of government agencies and/or charitable organizations. However, the health sector may have a key role in helping people respond to and cope with precarious employment; incorporating employment interventions into health care settings offers an innovative and underutilized way to help young adults.\textsuperscript{49}

Although a number of previously documented gender differences were found for several excessive behaviours (for reviews see Parker et al.\textsuperscript{33}; Sussman et al.\textsuperscript{22}), both men and women in the precarious group were found to score significantly higher on excessive gambling than their peers in the non-precarious group. Moreover, for individuals in the precarious employment group, gambling was found to be associated with a broad cluster of other excessive behaviours (particularly exercise, internet use, shopping, and video gaming)—a pattern not found for men and women in the non-precarious group. Health care professionals developing and/or utilizing gambling prevention and intervention programs may want to prioritize targeting young adults experiencing (or at risk for experiencing) precarious employment.

A number of previously documented gender differences were found for several substance abuse problems (see Khan et al.\textsuperscript{20}; Ramo et al.\textsuperscript{21}, however men in the precarious group abused alcohol more often than men in the non-precarious group. This pattern was reversed for women, where individuals in the precarious group abused alcohol less frequently than their peers in the non-precarious group. There was also evidence that women in the precarious group were more likely to abuse multiple substances (at levels much higher than for women in
the non-precarious group). Health care professionals working with precariously employed young adults may want to screen broadly for potential substance-abuse issues.

LIMITATIONS AND FUTURE DIRECTIONS

The limitations of the QLS have been reviewed elsewhere, although there are a number of issues relevant to the present study. The sample was from a very specific geographic region (within 70 kilometers of the city of Belleville, Ontario); the sample was primarily White, which limits the generalizability of the present findings. As noted by Thege et al., the fact that the prevalence rate of many excessive behaviours was the highest at the first assessment period and generally lower at time 5, is an unusual feature of the dataset. It remains unclear whether participants over-reported at time 1 and underreported at later time points because they felt less anonymous or to reduce the number of items needed to complete the survey. It is also possible that completing the survey raised participants’ awareness about potential mental health issues, thus subtly changing future behaviours.

The QLS contains a wealth of variables for future follow-up. For example, having identified specific relationships between precarious employment and various mental health problems in young men and women, it would be interesting to compare results with older adults. Are the unique risk profiles found for young men and women (precariously or non-precariously employed) consistent across adulthood, or are they a unique artifact of older adolescents making the transition to adulthood?
**Table 1: Participant demographics and employment status (precarious versus non-precarious). (N = 457)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>M / Pct.</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>457</td>
<td>24.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>270</td>
<td>59.1</td>
<td>-</td>
</tr>
<tr>
<td>Male</td>
<td>187</td>
<td>40.9</td>
<td>-</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some elementary</td>
<td>1</td>
<td>0.2</td>
<td>-</td>
</tr>
<tr>
<td>Some high school</td>
<td>35</td>
<td>7.7</td>
<td>-</td>
</tr>
<tr>
<td>Completed high school</td>
<td>124</td>
<td>27.1</td>
<td>-</td>
</tr>
<tr>
<td>Some post-secondary</td>
<td>101</td>
<td>22.1</td>
<td>-</td>
</tr>
<tr>
<td>Completed technical school</td>
<td>12</td>
<td>2.6</td>
<td>-</td>
</tr>
<tr>
<td>Completed college or university</td>
<td>178</td>
<td>38.9</td>
<td>-</td>
</tr>
<tr>
<td>Professional degree/ Ph.D.</td>
<td>6</td>
<td>1.3</td>
<td>-</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>171</td>
<td>37.4</td>
<td>-</td>
</tr>
<tr>
<td>Married</td>
<td>147</td>
<td>32.2</td>
<td>-</td>
</tr>
<tr>
<td>Common-law</td>
<td>126</td>
<td>27.6</td>
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</tr>
<tr>
<td>Separated</td>
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<td>-</td>
</tr>
<tr>
<td>Divorced</td>
<td>4</td>
<td>0.8</td>
<td>-</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Precarious</td>
<td>276</td>
<td>60.4</td>
<td>-</td>
</tr>
<tr>
<td>Non-precarious</td>
<td>181</td>
<td>39.6</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 2: Means and standard deviations (by gender and employment group) for total number of serious mental health problems (Time 1 vs Time 5). (N = 452)

<table>
<thead>
<tr>
<th>Employment Type</th>
<th>N</th>
<th>Time 1 M (SD)</th>
<th>Time 5 M (SD)</th>
<th>Total M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precarious</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>78</td>
<td>0.36 (0.64)</td>
<td>0.31 (0.68)</td>
<td>0.67 (1.08)</td>
</tr>
<tr>
<td>Women</td>
<td>189</td>
<td>0.69 (1.10)</td>
<td>0.53 (0.92)</td>
<td>1.22 (1.68)</td>
</tr>
<tr>
<td>Total</td>
<td>267</td>
<td>0.59 (0.99)</td>
<td>0.46 (0.86)</td>
<td>1.05 (1.54)</td>
</tr>
<tr>
<td>Non-precarious</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>102</td>
<td>0.24 (0.63)</td>
<td>0.20 (0.72)</td>
<td>0.43 (1.12)</td>
</tr>
<tr>
<td>Women</td>
<td>83</td>
<td>0.36 (0.74)</td>
<td>0.32 (0.73)</td>
<td>0.68 (1.24)</td>
</tr>
<tr>
<td>Total</td>
<td>185</td>
<td>0.29 (0.68)</td>
<td>0.25 (0.72)</td>
<td>0.54 (1.18)</td>
</tr>
<tr>
<td>Total sample</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>185</td>
<td>0.29 (0.64)</td>
<td>0.25 (0.70)</td>
<td>0.54 (1.11)</td>
</tr>
<tr>
<td>Women</td>
<td>267</td>
<td>0.59 (1.02)</td>
<td>0.47 (0.87)</td>
<td>1.06 (1.58)</td>
</tr>
<tr>
<td>Total</td>
<td>452</td>
<td>0.47 (0.89)</td>
<td>0.38 (0.81)</td>
<td>0.85 (1.43)</td>
</tr>
</tbody>
</table>
REFERENCES


