

Mental Health Literacy in Canadian Young Adults: Results of a National Survey

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ABSTRACT

The present study explored the mental health literacy of young adults (18–24 years of age), in comparison to older adults (25–64 years of age), in a national survey of the mental health literacy of Canadians. Overall, both age groups demonstrated adequate mental health literacy and yet young adults, especially males, preferred to manage problems on their own and indicated being more likely to seek out informal sources of help. The results support the importance of considering the unique needs and preferences of young adults in order to improve help-seeking in this group.

Keywords: mental health literacy, young adults, mental health care, mental health knowledge

Epidemiological data demonstrate that mental health problems are common among young adults (Gravel & Béland, 2005; Kessler, 2007; Kessler et al., 2005), with 10% of Canadian young adults suffering from depression in their lifetime and 12% suffering from an anxiety disorder (Nguyen, Fournier, Bergeron, Roberge, & Barrette, 2005). According to the Canadian Community Health Survey (Statistics Canada, 2005), young adults report higher rates of mental health problems (18.4%), in contrast to other age groups.

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Even though mental health problems are prevalent in young adults and effective treatments have been developed (Burns, Hoagwood, & Mrazek, 1999; Patel, Flisher, Hetrick, & McGorry, 2007), less than half of young adults with a mental health problem access mental health services (Cheung & Dewa, 2007; Lin, Goering, Offord, Campbell, & Boyle, 1996; Patel et al., 2007; Vanheusden et al., 2008). As a result, Canadian young adults have a higher rate of unmet mental health care needs than all other ages (Statistics Canada, 2002).

MENTAL HEALTH LITERACY

One frequently cited reason young adults do not seek help is that they have insufficient knowledge to identify mental health symptoms and to access treatment—a feature of poor mental health literacy (Rickwood, Deane, Wilson, & Ciarrochi, 2005; Vanheusden et al., 2008). The term *mental health literacy* was first used in 1997 to describe “knowledge and beliefs about mental disorders which aid in their recognition, management, and prevention” (Jorm et al., 2003, p. 1071). More recently this definition has been expanded to include “knowledge and skills that enable people to access, understand and apply information for mental health” (Canadian Alliance on Mental Illness and Mental Health, 2008, p. 8). Within medicine there is an increasing focus on “health literacy,” which the Canadian Public Health Association defines as “the ability to access, understand, evaluate and communicate information as a way to promote, maintain and improve health” (Rootman & Gordon-El-Bihbety, 2008, p. 11). The extensive literature on health literacy demonstrates that inadequate health literacy results in negative health outcomes and increases the burden of diseases (e.g., Nutbeam, 2008; Schillinger et al., 2002; Schwartzberg, VanGeest, & Wang, 2005). However, mental health literacy has been substantively less well investigated (Jorm, 2000).

The mental health literacy research to date, primarily from studies conducted outside of Canada, demonstrates that many people have poor mental health literacy as they do not recognize common mental health problems, do not know about treatments or their effectiveness, have negative attitudes about seeking help for mental health problems, and are not able to assist others to get appropriate help (Jorm, Barney, et al., 2006). Few studies, however, have explored the mental health literacy of young adults specifically. This is of concern as existing studies suggest low rates of mental health literacy in young adults. For example, only half of Australian young adults (aged 18–25) were able to correctly identify depression (Burns & Rapee, 2006; Cotton, Wright, Harris, Jorm, & McGorry, 2006; Rickwood et al., 2005; Wright et al., 2005).

The Canadian Standing Senate Committee on Social Affairs, Science and Technology (2006) recommended undertaking national efforts to improve mental health literacy. Yet to date, only one study has explored the mental health literacy of Canadians, and this focused solely on depression literacy (Wang et al., 2007). This study found a large percentage of Albertans were able to correctly identify depression (76%) while other aspects of mental health literacy appeared to need improvement, such as attitudes toward care (Wang et al., 2007). This single Canadian study did not explore differences by age. Hence the level of mental health literacy in Canadian young adults remains unknown.

SUMMARY AND CURRENT STUDY

Young adults are the “most vulnerable segment of the [Canadian] population” (Canadian Global Business and Economic Roundtable on Mental Health, 2006, p. 145) with high rates of mental health

problems (Wittchen, Nelson, & Lachner, 1998) and low rates of accessing care (Lin et al., 1996). It has also been argued that improved mental health literacy should assist in increasing help-seeking (Jorm, Barney, et al., 2006; Jorm et al., 2003). Unfortunately, little is known about mental health literacy in Canada, and the one provincial study (Wang et al., 2007) did not systematically compare young adults to older adults. In an effort to understand the mental health literacy of Canadian young adults, the current study used data from a large, nationally representative survey conducted by the Canadian Alliance on Mental Illness and Mental Health (CAMIMH). Respondents were adults 18 years of age and over and, as such, allowed comparison of mental health literacy between young and older adults.

METHODS

Study Population and Procedure

In 2006, CAMIMH and COMPAS Research conducted a survey of the general Canadian adult population. A total of 1,004 Canadians were interviewed with 123 falling between the ages of 18 to 24 and 881 between the ages of 25 and 64 ($n = 167$, 25–34; $n = 243$, 35–44; $n = 259$, 45–54; $n = 212$, 55–64). Trained interviewers used Computer-Assisted Technology/Telephone Interviewing systems (CATI; Catlin & Ingram, 1988; Groves & Nicholls, 1986). CATI is an interactive computer system that aids interviewers in asking questions over the telephone and uses random digit dialing to select a nationally represented sample of participants. CATI methodology has been used in previous Mental Health Literacy surveys (Cotton et al., 2006; Glendinning, Buchanan, Rose, & Hallam, 2002; Wang et al., 2007) as this methodology can result in high quality data (Glendinning et al., 2002). Samples of $n = 1,000$ are deemed accurate to within 3.1 percentage points 19 times out of 20, exceeding the standards of the Common Measurements Tool (COMPAS, 2006, 2008). Within each household, the person aged 18 years and over, who was last to have a birthday, was selected to participate. Once an eligible participant was identified, the interviewer discussed the study process and asked the person to take part in a brief survey on issues relating to mental or emotional health. All eligible persons' consent for participation was received verbally before proceeding with the survey items. Survey development and execution followed Canadian Association of Marketing Research Organizations (2007) standards and the Marketing Research and Intelligence Association (MRIA) *Codes of Conduct*. The *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (Canadian Institutes of Health Research et al., 1998), last amended in 2005, applies to research conducted via the telephone, such as with CATI. For complete details of the CATI methodology, see Choi (2004) and Wright and colleagues (2005).

Measures

The survey used had the same format as previous mental health literacy surveys (Jorm, Christensen, & Griffiths, 2006; Wang et al., 2007) and was adapted from the 2004 Mental Illness Awareness Week survey and a Scottish national survey of mental health attitudes (Glendinning et al., 2002). This use of a similar survey format to past mental health literacy studies allowed for comparison of findings. The survey included items assessing each element of mental health literacy: recognition and knowledge about mental illness, etiology, and management. The questionnaire began with a vignette of an individual (randomly assigned to

be Robert or Mary) suffering from depression, anxiety, or schizophrenia (also randomly selected) according to *Diagnostic and Statistical Manual of Mental Disorders-IV* (American Psychiatric Association, 2000) criteria. The three vignettes presented the following scenarios:

1. Mary has been feeling really down for the last few weeks, finds it hard to concentrate on anything, and has no energy at all. She is feeling so down that she has lost her appetite, has trouble sleeping and has been unable to go to work.
2. Over the last few months, Robert has become convinced that people are spying on him and can hear what he is thinking. He has lost interest in work and family activities and is spending most of the day in his room. He has been hearing voices, even though nobody is around.
3. Things bother Mary more than they bother other people, and she worries a lot and is nervous much of the time.

Following the presentation of the vignette, participants were asked questions about problem recognition and knowledge about mental illness, etiology, and management.

Recognition and knowledge. Participants were asked what they thought was the matter with Robert/Mary with response options including depression, schizophrenia, stress, don't know/not sure, and no response. Correct recognition was identified as participants being able to correctly recognize what the person in the vignette was experiencing. Incorrect recognition also included responses of don't know, not sure, or no response. Based upon results from similar mental health literacy surveys, it was expected that 50–75% of participants would have accurate recognition, with slightly better rates for the depression vignette (Coles & Coleman, 2010; Jorm, Christensen, et al., 2006; Lawlor et al., 2008; Wang et al., 2007; Wright, McGorry, Harris, Jorm, & Pennell, 2006).

To assess their general mental health knowledge, participants were also asked, “Over a lifetime, how many Canadians will experience a mental health disorder?” A correct estimate was considered 1 in 10 or 1 in 5. Any lower response (1 in 1,000, 1 in 100, 1 in 50, don't know/not sure, or no response) was considered an underestimate and incorrect, with the expected range being 20–40% of participants responding correctly (Lawlor et al., 2008; Wright et al., 2006).

Etiology. Participants were also asked what might be the cause for what Robert/Mary is experiencing. In order to correspond to past mental health literacy surveys (Coles & Coleman, 2010; Jorm, 2000), the 10 options presented to the participants were grouped according to external causes (a stressful life event, a traumatic experience, a hard childhood, fate/God's will), biological causes (brain disease or chemical imbalance, genes), and personal causes (poor coping skills, lack of willpower, alcohol or drug abuse, weak character). Participants were also asked how strongly they personally agreed (1 = strongly disagree to 5 = strongly agree) with the following three statements about the cause of mental health problems: “Most mental health problems are inherited,” “Most mental health problems are caused by a chemical imbalance in the brain,” and “Trauma and stress can cause mental health problems.”

Management. Participants were asked to select the best way for Robert/Mary to deal with their symptoms out of eight possible options: Seek help from a family doctor; seek help from a psychiatrist; seek help from a counsellor, social worker, or psychologist; approach friends or family; join a support group; follow

a stress management program; search the Internet or read books; ignore the symptoms or feelings and hope they go away. Using past mental health literacy surveys as a benchmark (Angermeyer & Matschinger, 1996; Jorm et al., 1997; Jorm, Christensen, et al., 2006; Wang et al., 2007), it was expected that the top management options would be family doctors and counsellors, social workers or psychologists.

Participants were also asked how strongly they personally agreed (1 = strongly disagree to 5 = strongly agree) with the following statements about managing mental health problems: “Medications like antidepressants can be helpful for people with mental health problems,” “Medications for mental health problems can be harmful,” “Medications for mental health problems treat only the symptoms and not the underlying cause of mental health problems,” and “Psychotherapy can be helpful for people with mental health problems.” Participants were also asked how much they agreed with the following statements about the prognosis of mental health problems: “People can manage mental health problems on their own,” “People can recover completely from mental health problems,” and “Untreated mental health problems can result in suicide.”

Participants were also asked the main reason (out of seven possible options) Robert/Mary “might not choose to seek help from a doctor or other mental health professional.” The response options were that they (a) may not recognize that they have a mental health problem, (b) are ashamed or uncomfortable asking for help, (c) are concerned about the stigma of being diagnosed with a mental health problem, (d) may not know what to do or where to turn, (e) are unable to find help/no help available, (f) cannot afford the cost of seeking treatment, and (h) believe there are other ways of dealing with mental health problems that are more effective than seeing a doctor. Based upon previous mental health literacy and help-seeking literature, it was expected the top reasons for not seeking help would be related to the stigma associated with experiencing a mental health concern (e.g., Jorm, 2000; Saunders & Bowersox, 2007; Vogel, Wade, & Hackler, 2007).

Demographics. Participants were asked to provide information on their age, gender, level of education, household income, and country of origin. It was expected that the demographics would be similar to Canadian statistics in the same year the survey was conducted (2006) as outlined in Table 1.

Analyses

All analyses compared responses of young adults (aged 18–24; $N = 123$) to those of older adults (aged 25–64; $N = 881$). Responses about the person in the vignette (Robert/Mary) were compared across the diagnosis (anxiety/stress, depression, or schizophrenia) as perceived by the participant. A Bonferroni correction was applied to control Type I error rate when multiple questions were used to assess a similar construct. The analyses were conducted using SPSS 17.0. In addition, secondary analyses were conducted to explore possible differences between young adult male and female respondents.

RESULTS

In 2006 when CAMIMH contracted the mental health literacy survey to COMPAS Inc., no response rates were requested. COMPAS was thus unable to retrieve exact rates. They later reviewed studies for which the MRIA-defined response rate was known and estimated the corresponding rate on this survey to be approximately 22%. This response rate is in the acceptable range of surveys of moderate to high importance

that are in the field for at least three weeks as determined by the Advisory Panel on Telephone Public Opinion Survey Quality in its report to Public Works and Government Services of Canada (2007). The 22% response rate in the current study included only completed interviews. The remaining interviews involved invalid numbers (e.g., non-residential numbers), no response (e.g., no answer, refusal to participate), ineligible (e.g., not over 18), and those who were eligible but unable to complete the interview. This is in line with the MRIA estimation method of response rate calculation.

Demographics and Current Mental Health

Table 1 outlines the demographic and socioeconomic characteristics of the sample. This table also includes similar data from the Canadian population at the time the survey was conducted (Statistics Canada, 2006) to demonstrate that the survey respondents were fairly representative of the Canadian population. The young adult group, in contrast to the older adult group, had a higher proportion of males ($\chi^2(1) = 12.16, p < .001$), lower education ($\chi^2(2) = 17.15, p < .001$), and lower income ($\chi^2(1) = 14.33, p < .001$).

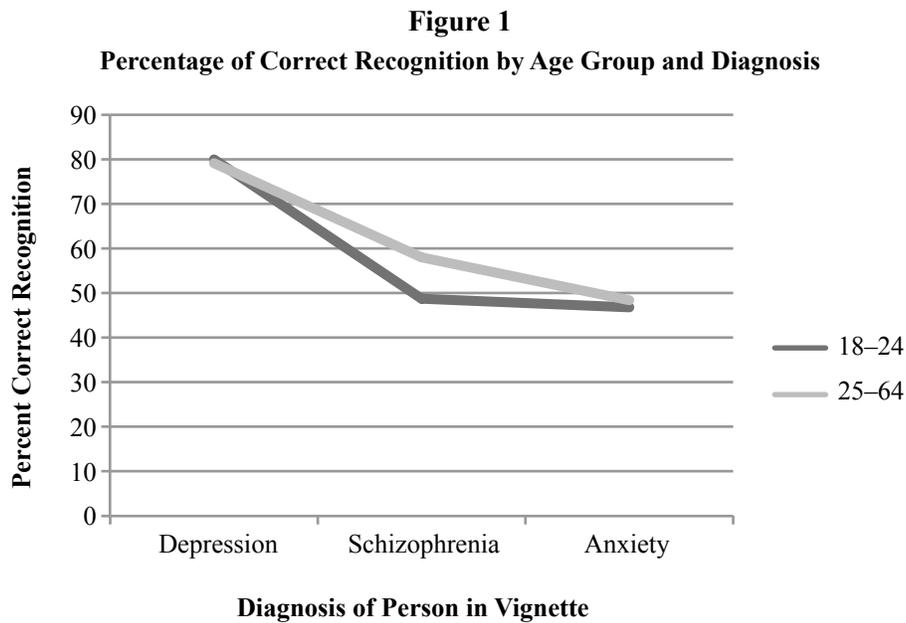
Table 1
Demographic Characteristics of the Participants Broken Down by Age Group and Compared to Canadian Statistics ($N = 1,004$)

Variable	18–24		25–64		Total		<i>p</i>	Canada in 2006 % (of Canadian population)
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%		
Observations	123	12.25	881	87.75	1,004	100	-	7.9% 18–24 years
Gender (male)	79	64.2	418	47.4	497	49.5	<.001*	48.95%
Highest level of education (high school or less)	56	45.5	240	27.3	296	29.6	<.001*	39.6% (aged 25+)
Household income (less than \$50,000)	51	57.3	258	36.5	309	38.9	<.001*	41%
Born in Canada	105	85.4	736	87.5	841	84.2	.41	80.2%
Region of Canada								
Western Canada	32	26.0	217	30.8	249	27.8		30.12%
Ontario	60	48.8	344	39.0	404	40.2	.09	38.47%
Quebec	26	21.1	258	29.3	284	28.3		23.87%
Atlantic Canada	5	4.1	62	7.0	67	6.7		7.23%

Recognition and Knowledge

See Figure 1 for the percentage of participants, by age group, who correctly identified what the person in the vignette was suffering from. Overall, both younger and older adults were able to correctly recognize major mental health problems at moderate rates, with no differences between age groups across vignettes

($\chi^2(1) = 1.067, p = .324$) and no gender differences within the young adult group ($\chi^2(1) = 0.72, p = .85$). Both age groups recognized depression at higher rates than anxiety and schizophrenia ($\chi^2(3) = 594.42, p < .001$). In terms of basic mental health knowledge, both age groups were similarly good at estimating the prevalence of mental health disorders in Canada, with 68.7% of young adults and 64.5% of older adults providing correct estimates ($\chi^2(1) = 4.45, p = .162$). Among the young adults, both males and females were similarly good at estimating the prevalence rates ($\chi^2(1) = 0.19, p = .21$).



Etiology

Young adults and older adults differed in their attributions for the cause of what the person in the vignette was experiencing ($\chi^2(2) = 6.39, p = .041$), with younger adults more likely to see mental health problems as having a biological cause ($\chi^2(1) = 5.50, p = .019$). For both age groups, respondents were more likely to see schizophrenia as having a biological cause compared to depression or anxiety ($\chi^2(2) = 79.79, p < .001$), which were regarded as mostly the product of external factors. Personal factors were also considered most likely to be causing anxiety, in contrast to depression or schizophrenia ($\chi^2(2) = 16.71, p < .001$). When asked about their belief about the etiology of mental health problems in general (Table 2, top panel), young adults were significantly less likely to report a chemical imbalance as a cause for mental health problems. Age groups did not differ in viewing mental health problems as inherited or as caused by trauma and stress.

Table 2
Beliefs about Etiology, Management, and Prognosis of Mental Health Problems by Age Group

Variables	<i>t</i> values	18–24 Mean (<i>SD</i>)	25–64 Mean (<i>SD</i>)	Cohen's <i>d</i> effect size	95% CI for effect size	<i>p</i>
<i>Etiology</i>						
Most mental health problems are inherited	-.45	2.57 (1.02)	2.62 (1.11)	-.05	-.24 to .14	.65
Most mental health problems are caused by a chemical imbalance in the brain	-3.97	3.12 (1.14)	3.52 (1.11)	-.36	-.55 to -.17	<.001*
Trauma and stress can cause mental health problems	-1.79	4.14 (.89)	4.30 (.93)	-.17	-.36 to .02	.073
<i>Management</i>						
Medications like antidepressants can be helpful for people with mental health problems	-2.90	3.5 (1.18)	3.81 (1.12)	-.27	-.46 to -.09	.004*
Medications for mental health problems can be harmful	.97	3.61 (1.12)	3.49 (1.23)	.10	-.09 to .29	.33
Medications for mental health problems treat only the symptoms and not the underlying cause of mental health problems	.31	3.74 (1.04)	3.71 (1.18)	.03	-.16 to .22	.75
Psychotherapy can be helpful for people with mental health problems	-1.86	3.71 (1.09)	3.90 (1.02)	-.18	-.37 to .01	.064
<i>Prognosis</i>						
People can manage mental health problems on their own	3.41	2.36 (1.1)	2.00 (1.09)	.33	.14 to .52	.001*
People can recover completely from mental health problems	-1.89	3.51 (1.22)	3.73 (1.16)	-.19	-.38 to .00	.059
Untreated mental health problems can result in suicide	-4.80	3.93 (1.10)	4.38 (.96)	-.46	-.65 to -.27	<.001*

Management

Table 3 presents the participants' choices, as a function of age group, of the best management option for the person in the vignette. For all problem types, young adults were more likely than older adults to suggest approaching friends or family for support ($\chi^2(1) = 14.79, p < .001$) with no gender differences within the young adults ($\chi^2(1) = 1.76, p = .26$). Young adults were also less likely than older adults to regard seeking help from a family doctor as the best way to approach mental health problems ($\chi^2(1) = 21.98, p < .001$). This result did not differ by gender among the young adults ($\chi^2(1) = 1.79, p = .19$). For schizophrenia, compared to anxiety or depression, respondents in both age groups were more likely to indicate that the best course of action would be to seek help from a psychiatrist ($\chi^2(3) = 76.79, p < .001$). Within the young adult group, there were no significant gender differences across all management options ($\chi^2(8) = 10.42, p = .24$).

Table 3
Best Way to Deal With Symptoms as a Function of Vignette Diagnosis and Age Group

	Anxiety		Depression		Schizophrenia	
	18–24 <i>n</i> (%)	25–64 <i>n</i> (%)	18–24 <i>n</i> (%)	25–64 <i>n</i> (%)	18–24 <i>n</i> (%)	25–64 <i>n</i> (%)
Seek help from a family doctor	<i>n</i> = 4 (16.7%)	<i>n</i> = 69 (41.1%)	<i>n</i> = 10 (24.4%)	<i>n</i> = 173 (51.0%)	<i>n</i> = 6 (30.0%)	<i>n</i> = 78 (42.6%)
Seek help from a psychiatrist	<i>n</i> = 2 (8.3%)	<i>n</i> = 9 (5.4%)	<i>n</i> = 7 (17.1%)	<i>n</i> = 39 (11.5%)	<i>n</i> = 6 (30.0%)	<i>n</i> = 60 (32.8%)
Seek help from a counsellor, social worker, or psychologist	<i>n</i> = 8 (33.3%)	<i>n</i> = 27 (16.1%)	<i>n</i> = 8 (19.5%)	<i>n</i> = 46 (13.6%)	<i>n</i> = 2 (10.0%)	<i>n</i> = 18 (9.8%)
Approach friends or family for advice, help, or emotional support	<i>n</i> = 5 (20.8%)	<i>n</i> = 24 (14.3%)	<i>n</i> = 9 (22.0%)	<i>n</i> = 34 (10.0%)	<i>n</i> = 4 (20.0%)	<i>n</i> = 1 (5.5%)
Join a support group of people experiencing similar problems	<i>n</i> = 5 (20.8%)	<i>n</i> = 14 (8.3%)	<i>n</i> = 2 (4.9%)	<i>n</i> = 19 (5.6%)	<i>n</i> = 1 (5.0%)	<i>n</i> = 6 (3.3%)
Follow a stress management program	<i>n</i> = 0 (0.0%)	<i>n</i> = 13 (7.7%)	<i>n</i> = 2 (4.9%)	<i>n</i> = 5 (1.5%)	<i>n</i> = 0 (0.0%)	<i>n</i> = 2 (1.1%)
Search the Internet or read books for more information about the problem and how to manage the symptoms	<i>n</i> = 0 (0.0%)	<i>n</i> = 5 (3.0%)	<i>n</i> = 0 (0.0%)	<i>n</i> = 7 (2.1%)	<i>n</i> = 0 (0.0%)	<i>n</i> = 2 (1.1%)
Ignore the symptoms or feelings and hope they go away	<i>n</i> = 0 (0.0%)	<i>n</i> = 1 (0.6%)	<i>n</i> = 1 (2.4%)	<i>n</i> = 4 (1.2%)	<i>n</i> = 0 (0.0%)	<i>n</i> = 1 (0.5%)

Note. Columns do not add up to 100 as not all participants selected one of the available response choices.

While age groups did not differ in their beliefs that medications could be harmful or that medications treat only the symptoms of mental health problems, young adults were significantly less likely to indicate that medications could be helpful in managing mental health problems (Table 2, middle panel). There was also a marginal trend for young adults to be less likely to agree that psychotherapy could be helpful. There were no differences by gender in responses to these items within the young adult group. (Medications could be harmful: females $M = 3.71$, $SD = 1.13$; males $M = 3.55$, $SD = 1.12$, $t(116) = -.75$, $p = .46$. Medications treat only the symptoms: females $M = 3.83$, $SD = .99$; males $M = 3.70$, $SD = 1.07$, $t(119) = -.69$, $p = .49$. Medications could be helpful: females $M = 3.70$, $SD = 1.09$; males $M = 3.38$, $SD = 1.22$, $t(121) = -1.47$, $p = .14$. Psychotherapy can be helpful: females $M = 3.93$, $SD = .98$; males $M = 3.59$, $SD = 1.13$, $t(120) = -1.94$, $p = .10$.)

Regarding the prognosis of mental health problems (Table 2, bottom panel), young adults felt more strongly than older adults that people can manage mental health problems on their own and less strongly that untreated mental health problems can result in suicide. Young adult males ($M = 2.52$, $SD = 1.12$) felt more strongly than young adult females ($M = 2.07$, $SD = .97$) that they can manage mental health problems on their own ($t(121) = 2.24$, $p = .027$, Cohen's $d = .42$, 95% CI .05 to .79). There was also a marginally significant tendency for young adults to be less likely to agree that people can recover completely from mental health problems, with no differences by gender (females: $M = 3.70$, $SD = 1.11$; males: $M = 3.41$, $SD = 1.27$, $t(121) = -1.31$, $p = .19$).

Younger and older adults, regardless of what the person in the vignette was suffering from, agreed on the main reasons that an individual may not seek help from a doctor or other mental health professional ($\chi^2(9) = 5.65$, $p = .774$). The most commonly cited reason for not seeking help was lack of recognition as having a mental health problem (37% of all participants), followed by "being ashamed or uncomfortable asking for help" (22% of all participants), and "concern about the stigma of being diagnosed with a mental health problem" (17% of all participants).

DISCUSSION

The current study is the first national Canadian survey to compare mental health literacy rates between young (aged 18–24) and older adults (25–64). There were no significant differences between these two groups in recognition and general mental health knowledge, although this could be improved across both age groups, and there were few differences in beliefs about the etiology of mental health problems. The rates of recognition and mental health knowledge of the current participants were similar to previous studies, including the higher rates of depression recognition in contrast to anxiety or schizophrenia (Coles & Coleman, 2010; Wang et al., 2007; Wright et al., 2006). However, differences did emerge most prominently between age groups in the management of mental health problems.

In general, Canadian young adults are significantly less favourably disposed toward using professional care for addressing mental health problems compared to their older adult counterparts. Specifically, Canadian young adults, in contrast to those who were above the age of 25, were less interested in seeking help from a family doctor. These findings echo previous research which shows that young adults are not favourably disposed to speak with their family doctor about mental health concerns (Mauerhofer, Berchtold, Michaud,

& Suris, 2009). Canadian young adults were also less likely to regard medications as helpful in the treatment of mental health problems, and were marginally less likely to believe that psychotherapy could be helpful. This is consistent with previous mental health literacy studies conducted in other countries (Wright et al., 2006). Given that young adults are especially vulnerable to experiencing mental health problems, it is particularly concerning that young adults do not appear interested in many of the treatment options that the current mental health care system provides.

Instead of an interest in professional mental health services, Canadian young adults, especially young men, reported being more interested in managing mental health problems on their own or with the support of friends or family. Previous research has found that if young people speak with someone about their mental health concerns, they are most likely to speak with someone that they feel comfortable with and trust (Booth et al., 2004). It is not surprising then that young adults are more likely to seek help from informal sources, such as friends and family, than professional mental health care services (Boldero & Fallon, 1995; Rickwood et al., 2005).

In terms of limitations, conclusions about the causal relationship between variables cannot be made from this cross-sectional self-report study. Moreover, while the measure used to assess mental health literacy has not been validated, it was the same format as measures used in the majority of other mental health literacy studies (Glendinning et al., 2002; Jorm, Christensen, et al., 2006; Mental Illness Awareness Week, 2004; Wang et al., 2007). Additionally, accurate recognition of mental health problems is likely more complex than responding to a simple vignette. Despite this, vignettes are one of the most common methodological approaches to studying mental health literacy (e.g., Jorm et al., 1997; Wang et al., 2007; Wright et al., 2005) as they present a more “elaborate stimulus” to participants, have good construct validity, and allow for random presentation (see Link, Yang, Phelan, & Collins, 2004). Only those who had landline telephone access were included, and other populations such as highly disadvantaged individuals would not be included. Lastly, the older group of adults may not be a homogenous group in terms of their mental health literacy, as conceptualized in the present paper. However this grouping was considered the most appropriate as the goal was to explore the mental health literacy of young adults specifically.

Conclusions

The results of the present study suggest that while young and older adults have similar levels of recognition of mental health problems, young adults have unique views and needs with respect to the management of mental health problems. These differences point to the importance of developing interventions and treatment systems that are tailored to this important target group (Kelly, Jorm, & Wright, 2007). Such efforts are particularly important given the high prevalence of untreated mental health problems among young adults.

To date, most of the interventions focusing on young adults have been conducted in Australia and have been poorly evaluated (Kelly et al., 2007; Morgan & Jorm, 2007). Canadian education campaigns should build upon these interventions while incorporating the specific needs of Canadian young adults, such as the need for autonomy and preference for informal supports. This focus should result in increased personal and community empowerment, a key factor in health promotion (World Health Organization, 1998) that may improve use of mental health information and services (Nutbeam, 2000). Interventions that focus on

development of informal supports, such as self-help or peer support for example, may be more productive than solely attempting to improve attitudes toward professional services. The development of peer support may serve to increase empowerment and build on social capital, while also providing potential role models of recovery and hope (Lawn, Smith, & Hunter, 2008; Miller & Stiver, 1998; Nutbeam, 2000). Peer support initiatives, for example, have been shown to be highly effective in improving mental health outcomes (Lawn et al., 2008; Solomon, 2004). However, to date, no known peer-driven initiatives have been developed to help Canadian young adults interact with and use mental health information.

In conclusion, initiatives to improve access to care should be based on the needs and preferences of Canadian young adults, whose mental health literacy is differentiated from older adults on the dimension of management preferences for mental health problems. Future efforts should be aimed at both improving attitudes about existing treatment options and developing alternative youth-friendly options for managing mental health problems. The development of these mental health literacy interventions is vital to improve access to treatment for this group of people who are suffering and yet not receiving adequate care. Lastly, these findings also suggest the need for future mental health literacy studies to explore demographic differences, such as those as a function of age, in more depth.

RÉSUMÉ

Cette étude a comparé la littératie des jeunes adultes (18 à 24 ans) en matière de santé mentale à celle des adultes plus âgés (25 à 64 ans) par le moyen d'un sondage national sur la littératie en santé mentale. Les deux groupes présentaient un niveau de littératie adéquat. Par contre, les jeunes adultes, surtout les jeunes hommes, préféraient résoudre leurs problèmes de façon autonome et avaient plus tendance à chercher de l'aide informellement. Selon ces résultats, la spécificité des besoins et des préférences des jeunes adultes devrait être prise en compte afin d'améliorer leur recherche d'aide.

Mots clés : littératie en santé mentale, jeunes adultes, soins de santé mentale, connaissance en santé mentale

REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Angermeyer, M. C., & Matschinger, H. (1996). Public attitude towards psychiatric treatment. *Acta Psychiatrica Scandinavica*, *94*, 326-336.
- Boldero, J., & Fallon, B. (1995). Adolescent help-seeking: What do they get help for and from whom? *Journal of Adolescence*, *18*, 193-209.
- Booth, M. L., Vernard, D., Quine, S., Kang, M., Usherwood, T., Aplerstein, G., & Bennett, D. L. (2004). Access to health care among Australian adolescents: Young people's perspectives and their sociodemographic distribution. *Journal of Adolescent Health*, *34*, 97-103.
- Burns, B. J., Hoagwood, K., & Mrazek, P. J. (1999). Effective treatment for mental disorders in children and adolescents. *Clinical Child and Family Psychology Review*, *2*, 199-244.
- Burns, J. R., & Rapee, R. M. (2006). Adolescent mental health literacy: Young people's knowledge of depression and help seeking. *Journal of Adolescence*, *29*, 225-239.
- Canadian Alliance on Mental Illness and Mental Health. (2008). *National integrated framework for enhancing mental health literacy in Canada*. Ottawa, Ontario. Retrieved from <http://camimh.ca/key-reports/mental-health-literacy>
- Canadian Association of Marketing Research Organizations, Marketing Research and Intelligence Association. (2007). *Codes of conduct*. Retrieved from www.mria-arim.ca/STANDARDS/CODE2007.asp

- Canadian Global Business and Economic Roundtable on Mental Health. (2006). *Business and economic plan for mental health and productivity: An agenda for progress*. Retrieved from www.mentalhealthroundtable.ca
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada. 1998. *Tri-council policy statement: Ethical conduct for research involving humans* (with 2000, 2002, and 2005 amendments). Retrieved from <http://www.pre.ethics.gc.ca/english/policystatement/introduction.cfm>
- Canadian Standing Senate Committee on Social Affairs, Science and Technology. (2006). *Out of the shadows at last*. Retrieved from www.parl.gc.ca/39/1/parlbus/commbus/senate/com-e/soci-e/rep-e/pdf/rep02may06high-e.pdf
- Catlin, G., & Ingram, S. (1988). The effects of CATI on costs and data quality: A comparison of CATI and paper methods in centralized interviewing. In R. M. Groves, P. P. Biemer, L. E. Lyberg, J. T. Massey, W. L. Nicholls, & J. Waksberg (Eds.), *Telephone survey methodology*. New York: Wiley.
- Cheung, A., & Dewa, C. (2007). Mental health service use among adolescents and young adults with major depressive disorder and suicidality. *Canadian Journal of Psychiatry, 52*, 19-23.
- Choi, B. C. (2004). Computer assisted telephone interviewing (CATI) for health surveys in public health surveillance: Methodological issues and challenges ahead. *Chronic Diseases in Canada, 25*, 21-27.
- Coles, M. E., & Coleman, S. L. (2010). Barriers to treatment seeking for anxiety disorders: Initial data on the role of mental health literacy. *Depression and Anxiety, 27*, 63-71.
- COMPAS Inc. (2006). *State of the teaching profession: 2006 annual survey*. Report prepared for the Ontario College of Teachers. Retrieved from www.compas.ca/data/060827-StateOfTeaching-PCB.pdf
- COMPAS Inc. (2008). *Preparing for crises: Findings and implications from the national survey on emergency preparedness in Canada*. Report prepared for the Canadian Centre for Emergency Preparedness. Retrieved from www.ccep.ca/ccepweb.asp?m=49&ap=5
- Cotton, S. M., Wright, A., Harris, M. G., Jorm, A. F., & McGorry, P. D. (2006). Influence of gender on mental health literacy in young Australians. *The Australian and New Zealand Journal of Psychiatry, 40*, 790-796.
- Glendinning, R., Buchanan, T., Rose, N., & Hallam, A. (2002). *Well? What do you think? A national Scottish survey of public attitudes to mental health problems*. Retrieved from www.scotland.gov.uk/Publications/2002/12/15967/15273
- Gravel, R., & Béland, Y. (2005). The Canadian community health survey: Mental health and well-being. *Canadian Journal of Psychiatry, 50*, 573-579.
- Groves, R. M., & Nicholls II, W. L. (1986). The status of computer-assisted telephone interviewing: Part II. Data quality issues. *Journal of Official Statistics, 2*, 117-134.
- Jorm, A. F. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. *British Journal of Psychiatry, 177*, 396-401.
- Jorm, A. F., Barney, L. J., Christensen, H., Highet, N. J., Kelly, C. M., & Kitchener, B. A. (2006). Research on mental health literacy: What we know and what we still need to know. *Australian and New Zealand Journal of Psychiatry, 40*, 3-5.
- Jorm, A. F., Christensen, H., & Griffiths, K. M. (2006). The public's ability to recognise mental disorders and their beliefs about treatment: Changes in Australia over 8 years. *Australian and New Zealand Journal of Psychiatry, 40*, 36-41.
- Jorm, A. F., Griffiths, K. M., Christensen, H., Korten, A. E., Parslow, R. A., & Rodgers, B. (2003). Providing information about the effectiveness of treatment options to depressed people in the community: A randomized controlled trial of effects on mental health literacy, help-seeking and symptoms. *Psychological Medicine, 33*, 1071-1079.
- Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). Mental health literacy: A survey of the public's ability to recognize mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia, 166*, 182-186.
- Kelly, C. M., Jorm, A. F., & Wright, A. (2007). Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. *Medical Journal of Australia, 187*, S26-30.
- Kessler, R. C. (2007). The global burden of anxiety and mood disorders: Putting the European Study of the Epidemiology of Mental Disorders (ESEMeD) findings into perspective. *Journal of Clinical Psychiatry, 68*, 10-19.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry, 62*, 593-602.

- Lawlor, E., Breslin, J. G., Renwick, L., Foley, S., Mulkerrin, U., Kinsella, A., Turner, N., & O'Callaghan, E. (2008). Mental health literacy among Internet users. *Early Intervention in Psychiatry, 2*, 247-255.
- Lawn, S. A., Smith, A., & Hunter, K. (2008). Mental health peer support for hospital avoidance and early discharge: An Australian example of consumer driven and operated service. *Journal of Mental Health, 17*, 498-508.
- Lin, E., Goering, P., Offord, D. R., Campbell, D., & Boyle, M. H. (1996). The use of mental health services in Ontario: Epidemiologic findings. *Canadian Journal of Psychiatry, 41*, 572-577.
- Link, B. G., Yang, L. H., Phelan, Y. C., & Collins, P. Y. (2004). Measuring mental illness stigma. *Schizophrenia Bulletin, 30*, 511-541.
- Mauerhofer, A., Berchtold, A., Michaud, P. A., & Suris, J. C. (2009). GPs' role in the detection of psychological problems of young people: A population-based study. *British Journal of General Practice, 59*, 308-314.
- Mental Illness Awareness Week. (2004). Mental health literacy survey. Unpublished survey. Retrieved from www.miaaw-ssmm.ca.
- Miller, J. B., & Stiver, I. P. (1998). *The healing connection*. Boston, MA: Beacon Press.
- Morgan, A., & Jorm, A. (2007). Awareness of beyondblue: The national depression initiative in Australian young people. *Australasian Psychiatry, 15*, 329-333.
- Nguyen, C. T., Fournier, L., Bergeron, L., Roberge, P., & Barrette, G. (2005). Correlates of depressive and anxiety disorders among young Canadians. *Canadian Journal of Psychiatry, 50*, 620-628.
- Nutbeam, D. (2000). Health literacy as a public health goal: A challenge for contemporary health education and communication strategies into the 21st century. *Health Promotion International, 15*, 259-266.
- Nutbeam, D. (2008). The evolving concept of health literacy. *Social Science and Medicine, 67*, 2072-2078.
- Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: A global public-health challenge. *Lancet, 369*, 1302-1313.
- Public Works and Government Services of Canada. (2007). *Advisory panel on telephone public opinion survey quality: Final report*. Retrieved from www.tpsgc-pwgsc.gc.ca/top-por/rapports-reports/comitephone-panelphone/tm-toc-eng.html
- Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australasian e-Journal for the Advancement of Mental Health [Supplement] 4*, 1-34. Retrieved from www.auseinet.com/journal/vol4iss3suppl/rickwood.pdf
- Rootman, I., & Gordon-El-Bihbety, D. (2008). *A vision for a health literate Canada: Report of the Expert Panel on Health Literacy*. Prepared for the Canadian Public Health Association. Retrieved from www.cpha.ca/en/portals/h-l/panel.aspx
- Saunders, S., & Bowersox, N. (2007). The process of seeking treatment for mental health problems. *Mental Health and Learning Disabilities Research and Practice, 4*, 99-123.
- Schwartzberg, J. G., VanGeest, J. B., & Wang, C.C. (Eds.). (2005). *Understanding health literacy: Implications for medicine and public health*. American Medical Association.
- Schillinger, D., Grumbach, K., Piette, J., Wang, F., Osmond, D., Daher, C., ... Bindman, A. B. (2002). Association of health literacy with diabetes outcomes. *JAMA, 288*, 475-482.
- Solomon, P. S. (2004). Peer support/peer provided services: Underlying processes, benefits, and critical ingredients. *Psychiatric Rehabilitation Journal, 27*, 392-401.
- Statistics Canada. (2002). *Canadian community health survey: Mental health and well-being*. (82-617-X1E). Retrieved from www.statcan.gc.ca
- Statistics Canada. (2005). *Canadian community health survey: Mental health and well-being*. (82-617-X1E). Retrieved from www.statcan.gc.ca
- Statistics Canada. (2006). *2006 Canadian Census*. Retrieved from www12.statcan.gc.ca/census-recensement/index-eng.cfm
- Vanheusden, K., Mulder, C. L., van der Ende, J., van Lenthe, F. J., Mackenbach, J. P., & Verhulst, F. C. (2008). Young adults face major barriers to seeking help from mental health services. *Patient Education and Counseling 73*, 97-104.
- Vogel, D. L., Wade, N. G., & Hackler, A. H. (2007). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology, 55*(1), 40-50.
- Wang, J., Adair, C., Fick, G., Lai, D., Evans, B., Perry, B. W., Jorm, A., & Addington, D. (2007). Depression literacy in Alberta: Findings from a general population sample. *Canadian Journal of Psychiatry, 52*, 442-449.

MENTAL HEALTH LITERACY OF YOUNG ADULTS

- World Health Organization. (1998). *Health promotion glossary*. Geneva.
- Wittchen, H. U., Nelson, C. B., & Lachner, G. (1998). Prevalence of mental disorders and psychosocial impairments in adolescents and young adults. *Psychological Medicine*, *28*, 109-126.
- Wright, A., Harris, M. G., Wiggers, J. H., Jorm, A. F., Cotton, S. M., Harrigan, S. M., Hurworth, R. E., & McGorry, P. D. (2005). Recognition of depression and psychosis by young Australians and their beliefs about treatment. *Medical Journal of Australia*, *183*, 18-23.
- Wright, A., McGorry, P. D., Harris, M. G., Jorm, A. F., & Pennell, K. (2006). Development and evaluation of a youth mental health community awareness campaign—The compass strategy. *BioMed Central Public Health*, *6*, 215. Retrieved from www.biomedcentral.com/1471-2458/6/215