Prevalence of Psychological Disorders Among the Indigenous Population of Canada

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Abstract

In the last several years, there has been an increase in interest in the history of Canada's Indigenous peoples. This, in turn, has called attention to health-related topics such as the proportion of the Indigenous population which suffers from a psychological disorder. Using statistics drawn from Statistics Canada's 2014 General Social Survey on Victimization, this study examines the percentage of respondents who report having a mental/psychological disorder and analyzes the percentage in terms of the heritage of the respondents. According to the findings, a larger proportion of Indigenous people reported having a psychological disorder than non-Indigenous people. The results, along with past literature, provide evidence which supports a statistically significant relationship between "Aboriginal group – Respondent" and "Mental/psychological disability status."

Keywords: psychological disorders, mental health, Indigenous peoples, Canada

Introduction

The mental well-being of Indigenous people is an underrated topic in published research, particularly in regard to psychological disorders. This area of research has only begun to be touched upon in recent years as more people become aware of the grim history of the Indigenous peoples of Canada. Today, mental health awareness is a growing subject in society. However, the majority of research is observed to be limited to people of European background. Therefore, the need for further, more culturally diverse literature must be of foremost concern. This study and its findings will be the next step in providing higher awareness, and in turn, bringing about the administration of adequate resources to the marginalized Indigenous population of Canada.

As limited as the research is, there appears to be a consensus among scholars that Indigenous people are more likely to develop psychological disorders throughout their lifetime in comparison to non-Indigenous people. Because many of these disorders are the generational effect of various historical injustices such as the cultural genocide amounting from residential school, it is challenging for current researchers to make correlations. This emphasizes the need for continued research. Nelson and Wilson (2017) found that although some key determinants of poor mental health such as the effects of colonialism have been identified, there are critical gaps in the literature to which studies such as this

must contribute. Furthermore, it is recognized that existing research overdramatizes substance abuse and suicide as determinants in related psychological disorders (Nelson & Wilson, 2017). The authors also stress that underrepresented determinants such as trauma stemming from residential schools, and colonialism in general, should be of critical use when conducting research related to Indigenous peoples (Nelson & Wilson, 2017).

Using survey data available from Statistics Canada, researchers Carrière, Bougie, and Kohen (2018) describe the data for mental health services and psychological disorders for Indigenous people as under-scored and lacking. The gaps were most associated with on-reserve populations (Carrière et al., 2018). They continue to state a possible reason behind this to be the absence of Indigenous identifiers in such data collected from Statistics Canada (Carrière et al., 2018). Results in their study identified substance-related disorders, mood disorders, and schizophrenic/psychotic disorders as the three dominating diagnosis groups in both Indigenous and non-Indigenous people (Carrière et al., 2018). Concerning results include substance-related disorders being the most significant disparity between Indigenous and non-Indigenous people, with Indigenous people being seven times more likely to be diagnosed than their non-Indigenous counterparts (Carrière et al., 2018). Focusing solely on the Indigenous population, the study from Nelson and Wilson as

well as the study from Carrière, Bougie, and Kohen conclude that psychological disorders are more prevalent in Indigenous people living on-reserve compared to off-reserve (Carrière et al., 2018; Nelson & Wilson, 2017). The need for more research into the mental health of the Indigenous population should be of high concern given that where data lacks most, psychological disorders are more common.

Comparable to their most recent 2018 article just discussed, Carrière, Bougie, Kohen, Rotermann, and Sanmarti (2016) published a study focusing on the leading causes for acute care hospitalization where once again, they elaborate on data gaps present in the research of Indigenous populations, specifically for hospitalization data (Carrière et al., 2016). The authors suggest several possible factors for the scarcity in data, such as socioeconomic determinants and insufficient access to primary care services in rural areas (Carrière et al., 2016). Their findings include mental and behavioural disorders being 3.6 times more common for Indigenous people than non-Indigenous people as a cause of hospitalization (Carrière et al., 2016).

The articles discussed thus far demonstrate how crucial it is to do further research on Indigenous healthcare and in turn, diminish the gaps. Similarly, this current study will provide additional information to make progress in the development of a higher quality healthcare system.

In addition to factors that likely explain the gaps, research in preventative measures to the problems identified in Indigenous health are also sparse. One notable study by T.N. Marsh, D.C. Marsh, J. Ozawagosh, and F. Ozawagosh (2018) considered not only the gap in the literature for recognizing psychological disorders in Indigenous people but also the even larger void of research for methods to improve the issues identified with the disorder. The authors assert that the key to mitigating psychological disorders faced by Indigenous people is the reclamation of Indigenous identity (Marsh et al., 2018). Articles such as “Indigenous identity: what is it and who really has it?”, in which Lakota scholar Hilary N. Weaver (2001) explores three dimensions of Indigenous identity—self-identification, community identification, and external identification—could be useful for healthcare professionals who are providing therapies or want to encourage patients to take part in traditional Indigenous healing activities.

Researchers of the Northern Ontario School of Medicine and the Atikameksheng Anishawbek First Nation studied the feasibility of incorporating the scarcely studied traditional Indigenous healing practices into modernized treatment models to mitigate both substance use disorders and intergenerational trauma (Marsh et al., 2018). It should be noted that prior to their study, there is virtually no medical research on the validity and efficacy of traditional healing practices (Schiff & Moore, 2006; Marsh et al., 2018). Consequently, their study revealed the potential benefits of the integration of the two practices (Marsh et al., 2018). What was first questioned for efficacy and validity was found to be a potential treatment for psychological disorders in Indigenous people. Therefore, it can be argued that

additional research into mental disorders in Indigenous people is imperative in order to influence recovery.

Another issue identified in Indigenous research is lack of access to healthcare in remote communities, where 48.2% of the Indigenous population resides (Statistics Canada, 2017). One article explains that in addition to having limited research on rural Indigenous communities, the small amount of research that is accessible is not the most accurate (Firestone, Smylie, Maracle, Mcknight, Spiller, & O’Campo, 2015). Significant data provided from the study by Firestone et al. includes a 42% diagnostic rate of psychological disorders in a sample from the Indigenous population (Firestone et al., 2015). This study recognizes the growing Indigenous population and will address the disparities between Indigenous and non-Indigenous people.

Significantly, Firestone et al. (2015) found a major flaw in the Canadian Community Health Survey (CCHS), one of the current methods for data collection amongst the Canadian population. Although this survey collects data for both on- and off-reserve Indigenous populations, it is criticized for having a high rate of response bias, as it is not administered by the community (Firestone et al., 2015). In contrast, the Indigenous community developed the First Nations and Inuit Regional Longitudinal Health Survey (RHS) distributed directly by the community to collect on-reserve population-based samples (Firestone et al., 2015). Not only is the available data limited, compounding the issue is the lack of validity and reliability of the data.

Advancing the research between psychological disorders and the Indigenous population has many potential benefits, most notably in strengthening and improving the current healthcare system for Indigenous peoples. Scholars such as Nelson & Wilson, Carrière et al., and Marsh et al. agree that determinants such as colonialism, cultural genocide, and discrimination must be of focus as they may be significant factors in the diagnosis of psychological disorders. Additional research could raise public awareness of Indigenous issues and in turn decrease discrimination against Indigenous peoples. It could also reduce the stigma presently associated with psychological disorders among the entire Canadian population.

To adequately address these issues and influence recovery from the historical trauma of Indigenous peoples, additional research is imperative. The purpose of this study is to explore the relationship between psychological disorders and the Indigenous population of Canada. This study will generate population-based measures of mental disorders in both Indigenous and non-Indigenous populations in order to produce a conclusive analysis of these variables. As no other published studies have used the 2014 GSS to address the research, it is with confidence that this study will contribute to closing the considerable gap in literature today and provide conclusive results using methods described in the next section.

Methods

The data used in this study are drawn from Statistics Canada's 2014 General Social Survey on Victimization, where mental health was one of the most influential factors associated with victimization risks. The target population for the GSS is the Canadian population aged 15 and over, living in the provinces and territories. Canadians residing in institutions are not included. The response rate for the telephone survey is 52.9 percent, and the final sample size is approximately 33,089 respondents. All analyses are weighted to account for the complex sampling design of the survey.

The variables used from the survey are "Aboriginal group – Respondent" and "Mental/psychological disability status." Both variables are categorical as there is a fixed amount of values that each variable can take on. In this case, both variables have values corresponding simply with "1 = Yes" and "2 = No." Additional values for both variables include "6 = Valid skip," "7 = Don't know," "8 = Refusal," and "9 = Not stated." These values, which are not included in the analysis, are indicated as missing values and therefore do not require recoding.

Given that the variables are categorical, a crosstabulation along with a chi-square test was done to analyze the percentage of respondents who answered "yes" or "no" and the statistical significance of the relationship between the variables respectively. The following results were used to evaluate the proportion of respondents who identify as Indigenous or non-Indigenous and if they do or do not possess a mental/psychological disorder.

Results and Discussion

Table 1 is a descriptive table presenting the percentages of respondents who identify as Indigenous or non-Indigenous and the percentage of respondents who reported having any emotional, psychological or mental health conditions. The percentage of respondents in the sample who identified themselves as Indigenous was 4.1% while the percentage for those who did not was 95.9%. The percentage of respondents who were of mental/psychological disability status was 6% while those who were not was 94%.

Table 2 demonstrates the results from performing a crosstabulation and chi-square test on the "Mental/psychological disability status" and "Aboriginal group – Respondent" variables. Of the respondents who self-reported as part of an Indigenous group, 10.4% were found to be of mental/psychological disability status and 89.6% were not. Of the respondents who identified as non-Indigenous, 6.4% reported to be of mental/psychological disability status while 93.6% did not. The results, discussed in the next section, were found to be statistically significant at 0.000 ($p < 0.001$).

While interpreting the crosstabulation, it was found that the proportion of Indigenous respondents with a mental/psychological disability was nearly twice as high as the proportion of non-Indigenous respondents. As shown in

table 1, only 4.1% of respondents in the survey identified as part of an Indigenous group, yet those respondents still had a higher rate of 10.4% in the "mental/psychological disability status" variable. Comparably, out of the more significant 95.9% of respondents who did not identify as part of an Indigenous group, only 6.4% identified to be of mental/psychological disability status.

These findings were consistent with the relationship between psychological disorders and Indigenous peoples described in past research. Along with the previous research, these findings have contributed to the data gaps in Indigenous health studies, such as those discussed by Carrière et al., and have thereby decreased the void present in this area of research. Nelson and Wilson critically reviewed over 200 articles related to Indigenous mental health, generating results that indicate a generally higher rate of mental illness in Indigenous populations (Nelson & Wilson, 2017). Given the large sample number of articles that Nelson and Wilson analyzed, it can be argued that their results, similar to the results in this study, are valid and representative of the Canadian population.

Much of the past literature discusses similar determinants of Indigenous peoples' mental health which are part of the unique history of Indigenous peoples. To summarize, cultural genocide and the intergenerational effects of colonialism are thought to be some of the more significant constituents in the psychological disorders seen today (Nasreen, Brar, Brar, Maltby, & Wilk, 2018), including but not limited to mood disorders (depression), anxiety disorders, post-traumatic stress disorders (transgenerational trauma), and substance use disorders. Furthermore, it can be deduced that the results from this paper are also rooted in the more common explanations discussed in past literature including the effects of colonialism and residential schools. Overall there is a substantial amount of evidence that correlates Indigenous groups and higher rates of psychological disorders.

An additional possible explanation for higher psychological disorder rates is the discrimination experienced by Indigenous people as a result of colonialism. Living life as a visible minority would surely have detrimental effects on one's self-esteem and overall mental well-being. The implications of the data presented in this study cause concern for the welfare of Indigenous people. This, in turn, has the potential to influence further research in methods to mitigate symptoms from mental disorders, discussed in the conclusion.

Conclusion and Next Steps

In conclusion, limitations that could have weakened the results of this study should be considered. Firstly, it should be noted that the "Mental/psychological disability status" variable is self-reported rather than being reported by a licensed physician or through legal documentation. Through this limitation, measurement error through over-reporting could have the potential to alter the data. Secondly, 48.2% of

the Indigenous population of Canada resides in remote rural communities where access to government surveys may not be possible. Since the GSS did not cover remote areas, one could perhaps notice a higher rate of mental disabilities given that the measure of the Indigenous population would be more accurate should these areas be included in the survey. Nevertheless, the findings in this paper are of importance and will contribute to the literature on Indigenous health.

Results from this study warrant further research in not only psychological disorders among Indigenous people, but more so the healthcare experience in the Indigenous population. Building onto this research, researchers may want to focus on the effectiveness of community-based preventative measures such as mental health services developed by Indigenous communities themselves. This, in turn, could introduce new methods of prevention and decreasing symptoms. An additional suggestion would be studying the relationship between urban and rural Indigenous communities and how geographical location may affect one's mental well-being. This study presented results that suggest a statistically significant relationship between mental/psychological disorders and people of Indigenous origins: disorders are more prevalent with Indigenous people. The comprehensive message, however, is the importance of healthcare equality and empowering marginalized communities and their ability to provide community-based healthcare.

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References

- Carrière, G., Bougie, E., & Kohen, D. (2018). Acute care hospitalizations for mental and behavioural disorders among First Nations people. *Health Reports*, 29(6), 11-19. Retrieved from <https://www150.statcan.gc.ca>
- Carrière, G., Bougie, E., Kohen, D., Rotermann, M., & Sanmartin, C. (2016). Acute care hospitalization by Aboriginal identity, Canada, 2006 through 2008. *Health Reports*, 27(8), 3-11. Retrieved from <https://www150.statcan.gc.ca>
- Firestone, M., Smylie, J., Maracle, S., Mcknight, C., Spiller, M., & O'Campo, P. (2015). Mental health and substance use in an urban First Nations population in Hamilton, Ontario. *Canadian Journal of Public Health- Revue Canadienne de Sante Publique*, 106(6), 375-381. doi:10.17269/cjph.106.4923
- Marsh, T. N., Marsh, D. C., Ozawagosh, J., & Ozawagosh, F. (2018). The sweat lodge ceremony: a healing intervention for intergenerational trauma and substance

use. *International Indigenous Policy Journal*, 9(2) doi:10.18584/iipj.2018.9.2.2

- Nasreen, S., Brar, R., Brar, S., Maltby, A., & Wilk, P. (2018). Are indigenous determinants of health associated with self-reported health professional-diagnosed anxiety disorders among Canadian First Nations adults?: Findings from the 2012 Aboriginal peoples survey. *Community Mental Health Journal*, 54(4), 460-468. doi:10.1007/s10597-017-0165-0
- Nelson, S. E., & Wilson, K. (2017). The mental health of Indigenous peoples in Canada: A critical review of research. *Social Science & Medicine*, 176, 93-112. doi:10.1016/j.socscimed.2017.01.021
- Schiff, J. W., & Moore, K. (2006). The impact of the sweat lodge ceremony on dimensions of well-being. *American Indian and Alaska Native Mental Health Research*, 13(3), 48-69. doi:10.5820/aian.1303.2006.48
- Statistics Canada. (2017, October 25). Aboriginal peoples in Canada: Key results from the 2016 Census. Retrieved from <https://www150.statcan.gc.ca/n1/daily-quotidien/171025/dq171025a-eng.htm>
- Weaver, H. N. (2001). Indigenous identity: what is it and who really has it? *The American Indian Quarterly*, 25(2), 240-255. doi:10.1353/aiq.2001.0030

Tables and Figures

Table 1 : Descriptive statistics for the variables selected in this study (n = 22,699,497)

Percentage	
<u>Aboriginal group - Respondent</u>	
Yes	4.1%
No	95.9%
<u>Mental/psychological disability status</u>	
Yes	6%
No	94%

Table 2: Relationship between mental/psychological disability status and whether the respondent identified themselves as part of an Aboriginal group (n = 22,581,300)

<u>Aboriginal group - Respondent</u>		
	Yes	No
<u>Mental/psychological disability status</u>		
Yes	10.4%	6.4%
No	89.6%	93.6%