Social Stressors, Cultural Factors and Psychological Distress Amongst First Nations Adults and Youth Living On-Reserve

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Introduction

- Indigenous peoples in Canada, the United States, Australia and New Zealand experience worse overall health compared to non-Indigenous populations,[1,2,3,4]
- In this regard, Indigenous peoples are more likely to report higher levels of psychological distress than their non-Indigenous counterparts [5,6,7,8]
- High psychological distress has been associated with substance/ alcohol abuse, suicidal ideation/attempt frequency and maladaptive changes in physiological immunity and pathology [9-13]
- Heightened psychological distress among Indigenous populations is believed to be linked with various aspects of colonization, such as the Indian Residential School (IRS) systems and other historical and ongoing stressors.
- Social stressors such as racism, verbal/physical aggression and bullying among First Nations adults and youth has been associated with increased psychological distress and other negative health outcomes [11-18,25,26]
- Various aspects of culture and cultural identity has long been thought to be essential to the psychological health of Indigenous peoples [14,15] and been associated with reduced negative health outcomes (direct links). In addition to the direct links, certain aspects of cultural identity have been shown to be protective against the negative outcomes associated with exposure to various social stressors [20-22]
- If various aspects of culture have different relationships with various outcomes [23-25] it is possible that the restoration and strengthening of particular facets of one's Indigenous cultural identity might *buffer* against increased feelings of psychological distress exacerbated by various social stressors (e.g., experiences of racism, bullying, aggression). That said, these relationships are complex between specific social stressors and specific subtypes of cultural identity and require further delineation.
- Research with non-Indigenous and Indigenous populations has shown that feelings of facets of cultural identity such as "community belonging" suggests can be a strong predictor of positive well-being and mental health [26-33]
- Although belonging has not been assessed as a moderator in FNs in Canada, related concepts, such as social ties with other members, have shown to be protective against the negative effects of discrimination in a small sample of First Nations adults from across Canada [34]
- In addition, amongst Indigenous populations in Canada and elsewhere, participation in traditional cultural activities has been associated with positive outcomes, such as reduced depressive symptoms [35,36].
- Regular participation in traditional practices has also shown to significantly *buffer* against depressive symptoms associated with perceived discrimination among a sample American Indians living on reserve in the United States [37]

Method

- Secondary analysis of the 2015/17 First Nations Regional Health Survey
- Representative sample of First Nations adults & youth living on-reserve from across Canada
  - Youth (n=4,968)
  - Adult (n=12,137)

Research Questions

1) Social Stressors → Psychological Distress (direct)

2) Culture-Related Variables → Psychological Distress (direct)

3) Culture-Related Variables as a buffer against negative effects of Social Stressors in relation to Psychological Distress (moderator)

Social Stressors
- Bullying & Cyber-bullying
- Physical and Verbal Aggression
- Racism

Culture-Related Variables
- Feelings of belonging in First Nations community
- Participation in community cultural events

Hypotheses

(H1) The presence of a social stressor will be associated with increased psychological distress;

(H2) An increased sense of community belonging, and an increased sense of community participation will be associated with decreased psychological distress; and

(H3) An increased sense of community belonging, and an increased sense of community participation will moderate the relationship between exposure to social stressors and increased psychological distress.
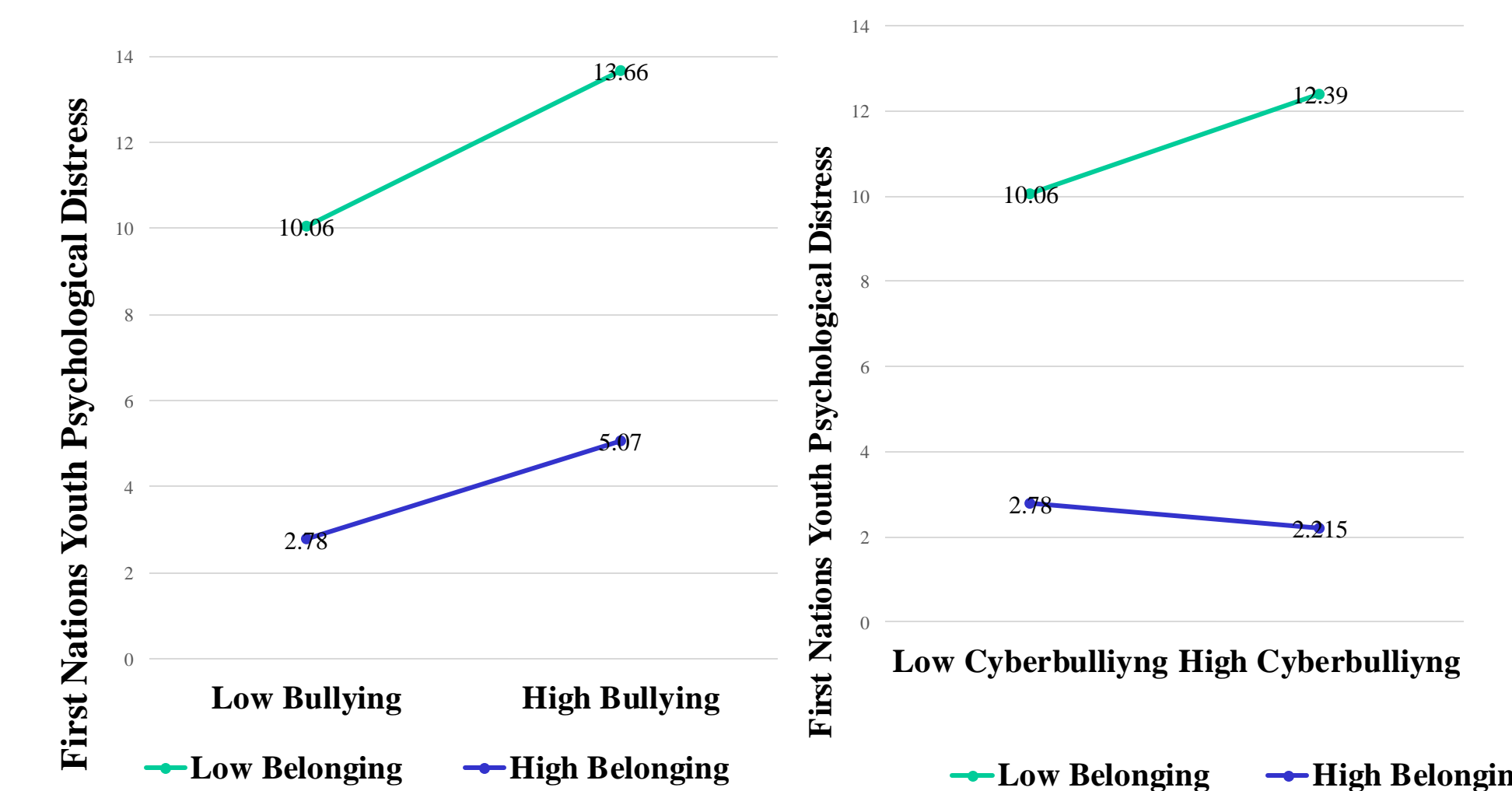
Results

Figure 1 & 2. First Nations youth who experienced heightened experiences of bullying or cyberbullying experience lower psychological distress when they have heightened feelings of community cultural belonging.

| First Nations Youth Variable (R² = 0.211)	B	SE	p-value
Age	0.751	0.109	<.001***
Gender: Transsexual or Two-Spirit versus Male	4.038	1.102	<.001***
Gender: Female versus Male	3.274	0.442	<.001***
Bullying	3.603	0.560	<.001***
Cyberbullying	2.328	0.981	<.001***
Sense of Belonging to First Nations Community	-7.283	1.412	<.001***
Community Cultural Event Participation	-0.918	1.416	.518
Cyberbullying * Community Cultural Event Participation	2.22	1.46	.129
Bullying * Community Cultural Event Participation	-0.298	1.85	.784
Cyberbullying * Sense of Belonging to First Nations Community	2.895	1.622	.076
Bullying * Sense of Belonging to First Nations Community	3.095	1.374	.026*
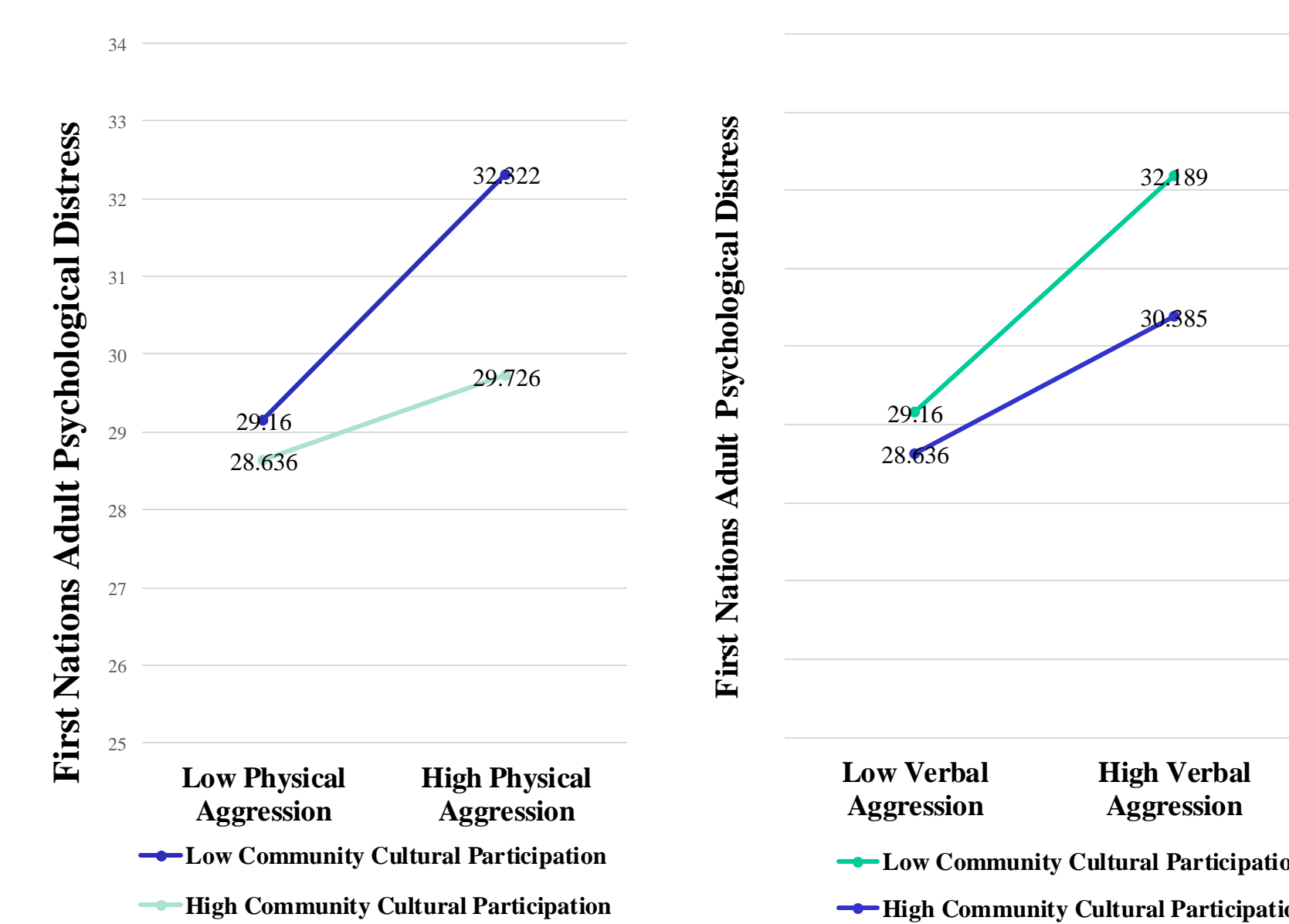
Figure 3 & 4. First Nations adults who experienced heightened experiences of physical aggression or verbal aggression experience lower psychological distress when they have heightened feelings of community cultural participation.
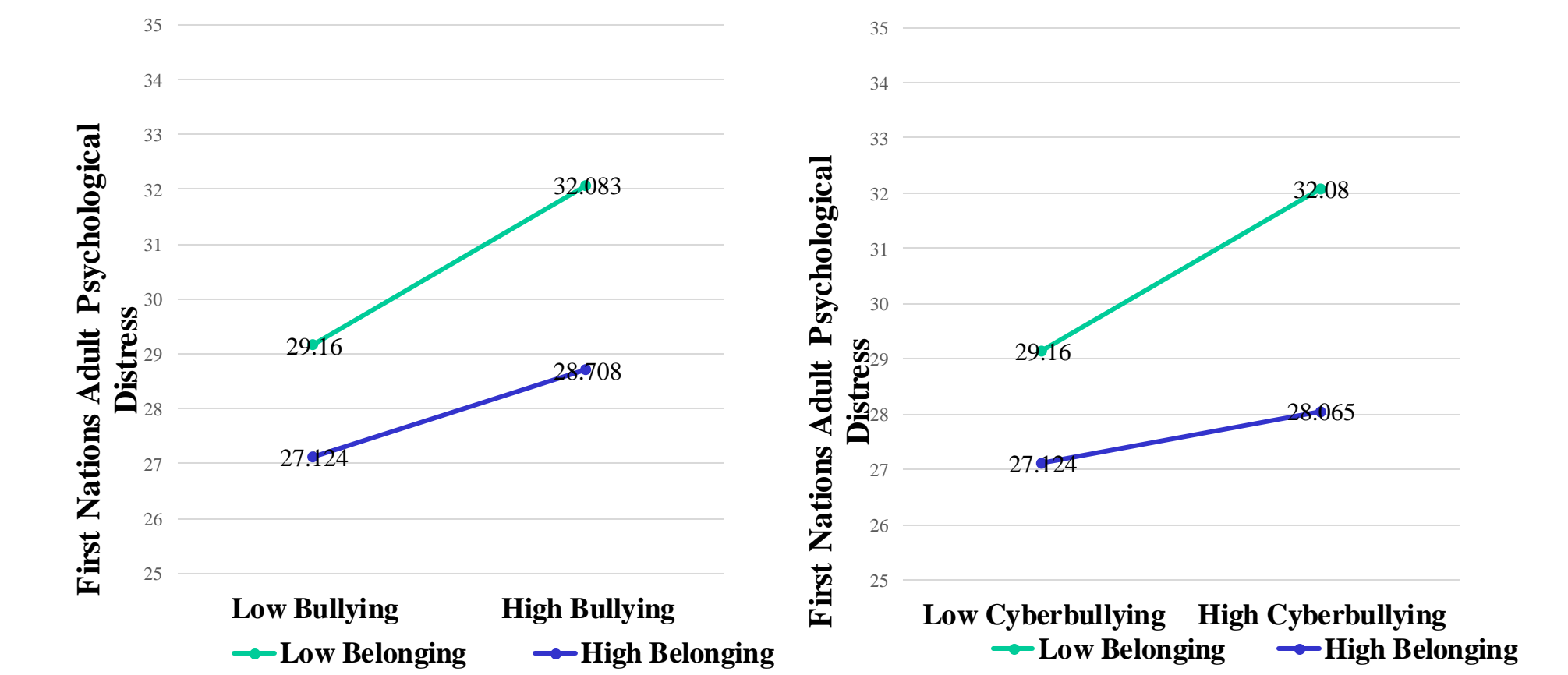

Figure 5 & 6. First Nations adults who experienced heightened experiences of bullying or cyberbullying experience lower psychological distress when they have heightened feelings of community cultural belonging.

First Nations Adult Variable (R² = 0.23)	B	SE	p-value
Age	-0.013	0.005	.013**
Gender: Transsexual or Two-Spirit versus Male	-5.122	0.480	.000***
Gender: Female versus Male	-4.128	0.482	.000***
Cyberbullying	-2.923	0.771	.000***
Perceived Racism	-0.345	0.306	.261
Physical Aggression	-3.162	0.350	.000***
Verbal Aggression	-3.029	0.273	.000***
Sense of Belonging to FNs Community	-2.036	1.226	.099
Participation in Community Cultural Events	-0.524	1.436	.716
Verbal Aggression * Sense of Belonging to FNs Community	-0.087	0.675	.897
Physical Aggression * Sense of Belonging to FN Community	0.338	0.780	.665
Perceived Racism * Sense of Belonging to FNs Community	1.339	0.616	.031*
Cyberbullying * Sense of Belonging to First Nations Community	-1.979	1.194	.099
Verbal Aggression * Community Cultural Events Participation	1.280	0.620	.041*
Physical Aggression * Community Cultural Events Participation	-2.072	0.783	.009**
Perceived Racism * Community Cultural Events Participation	0.558	0.637	.382
Cyberbullying * Community Cultural Events Participation	1.070	1.245	.391

Conclusions

- **1) Youth & Adults:** Experiences of social stressors linked with increased distress (only racism not significant in adults when controlling for other social stressors)
- **(2) Youth:** Community belonging had direct links with reduced distress (in expected direction for adults but ns)
- **(3) Youth & adults:** Community belonging buffered against negative effects of bullying
- **(4) Adults:** Participation in community cultural events buffered against negative effects of aggression, belonging buffered against negative effects of racism on distress