aboriginal policy studies



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Leon Myles Ferguson University of Saskatchewan

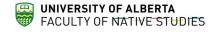
aboriginal policy studies Vol. 8, no. 1, 2019, pp. 25-46

This article can be found at: http://ejournals.library.ualberta.ca/index.php/aps/article/view/28227

ISSN: 1923-3299

Article DOI: 10.5663/aps.v8i1.29341

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Expectancy-Value Theory of Achievement Motivation: How Perceived Racial Prejudice Can Influence Ability Beliefs, Expectancy Beliefs and Subject Task Value of Métis Post-Secondary Students

Leon Myles Ferguson *University of Saskatchewan*

Abstract: To explore how the threat of prejudice can interfere with a learner's ability beliefs, expectancies of success and subjective task value, 165 Métis post-secondary students were asked to imagine themselves applying for a job with a non-Indigenous employer. Participants were grouped into high and low Métis identifiers and then placed into one of three groups: (1) Employer prejudiced, (2) Employer non-prejudiced, and (3) Employer's attitudes about *Indigenous peoples unknown. A 2x3 Analysis of Variance (ANOVA) was used to examine the* relationship between Métis identity (high/low) and five concepts: (1) expectations about being hired; (2) value placed on being hire; (3) learners' beliefs about the mock employer's integrity; (4) the extent to which learners held overgeneralized negative beliefs about non-Indigenous people; and (5) actual task performance. Although there were no interaction effects, a number of main effects were reported. While students with a stronger sense of Métis identity reported more overall optimism about being hired that those learners with a weaker sense of Métis identity, they nevertheless reported less motivation to perform an assigned task to the best of their respective abilities. Students in the prejudiced condition reported lower expectations about being hired and less motivation to perform the assigned task to the best of their ability. Students in the prejudiced condition also reported stronger negative generalized beliefs about both the mock employer and non-Indigenous people in general. Although the students in the prejudiced condition reported less motivation to exert high effort in the assigned task, their actual performance of the task was not related to whether the hypothetical employer was described as prejudiced, non-prejudiced, or neither toward Indigenous peoples. Future studies should explore how one's sense of Métis identity and other minority group identity may influence reactions to a threatening academic environment and suppress academic motivation.

Introduction

The Expectancy-Value Theory of Motivation, Prejudice, and Métis Post-Secondary Students

According to the Expectancy-Value theory, persistence in a learning task, vigor in carrying it out, and performance of a task are determined by a learner's ability beliefs, expectations of success, and how a student evaluates the relative merit or worth of a goal. In addition, research on prejudice shows that students who exhibit sensitivity to racial prejudice also report anxiety and stress that make it harder to keep their immediate and overall educational goals in mind, leaving them less motivated to perform at optimal levels.

aboriginal policy studies, vol. 8, no. 1, 2019 www.nativestudies.ualberta.ca/research/aboriginal-policy-studies-aps ISSN: 1923-3299 Canadian campuses are no stranger to racism. In 2010, the Canadian Federation of Students-Ontario released the *Final Report of the Task Force on Campus Racism at York University*. The Task Force investigated racism on college and university campuses across Ontario through 17 public campus hearings and individual submissions in 2009. Although there are types of prejudice besides that based on ethnicity (such as those pertaining to gender, religion, social class, etc.), racism is given a special place in the report because it is such a widespread and systematic feature of Ontario's post-secondary education system. The report concludes that, despite racism's pervasiveness, there is surprisingly little research into the experiences of racialized students in Canada's post-secondary schools.

A basic theme of the Expectancy-Value Theory of Motivation is that racial prejudice can create a threatening environment that can weaken the academic motivation of racialized students. Victims may experience a host of reactions in the face of actual or expected prejudice, including but not limited to evaluation apprehension; depressed expectations of success and task devaluing (Eccleston and Major 2010); hostility and mistrust of a potential victimizer (Stephan and Stephan 1985); and readiness to anticipate unfair treatment (Ancis, Sedlacek and Mohr 2000). Rutherford and Fancher (2012) also report that the more that targets perceive the possibility of mistreatment, the less they value obtaining a goal and the less motivated they are to persist in pursuing a goal.

All of the above reactions to a threat can coalesce into one observable outcome: prejudice can thwart a student's willingness to perform at an optimal level.

Stereotypes, Prejudice, and Discrimination

Stereotypes, prejudice, and discrimination are related but different concepts. Stereotypes are overgeneralized, often negative beliefs about what a group is like. Prejudice is a feeling toward person based on his or her membership in a group. As with stereotypes, prejudicial reactions can be either positive or negative. Discrimination involves behaviour or actions, usually negative, toward an individual or group of people. While prejudice includes all three components of an attitude (affective, cognitive and behavioural), discrimination only involves behaviour (Fiske 1998). People are often biased against those outside of their own social group, and may demonstrate emotional bias (prejudice), cognitive bias (stereotypes), and behavioural bias (discrimination).

The Métis

Traditionally, the Métis were a bicultural people who, to varying degrees, took part in the lives of First Nations and European (mainly French, English, and Scottish) cultures (Goulet and Goulet 2008). They adapted their attitudes, behaviours, spiritual traditions, values etc. to these cultures. The Michif language is a unique outcome of Métis mixed ancestry. Like other aspects of their culture, it was and is common for the Métis to combine elements of First Nations and Catholic or Protestant religions. The traditional music of the Métis was a blend of European (French, Scottish, Irish) and Native influences. Similarly, Métis art was greatly influenced by both European and First Nations cultures. The clothing of the Métis people was also a combination of both First Nations and European styles.

The Métis did have different educational experiences from First Nations people. For example, Métis children who were born during the fur trade era were educated in one of two ways. Those children who lived in or near First Nations communities were raised and educated in a traditional First Nations manner. Those who lived with the fur trade community were raised and educated in a Christian and European manner. The end result of the interaction between First Nations and European cultures was the creation of a distinct culture and people.

Métis identity is a highly controversial and debated subject among academics, governments, and Métis themselves. The Métis National Council adopted the following definition of "Métis" in 2002: "Métis" means a person who self-identifies as Métis, is distinct from other Aboriginal peoples, is of historic Métis Nation Ancestry and who is accepted by the Métis Nation.

In 2003, the Supreme Court of Canada (SCC) confirmed that the Métis are a rights-bearing Aboriginal people. The SCC judgement in *R v. Powley* defined "Métis" for the purpose of claiming Aboriginal rights under *Section 35* of the *Act* in the following manner: (1) self-identification as a member of a Métis community; (2) ancestral connection to a historic Métis community, and (3) acceptance by a modern community with continuity to the historic Métis community. As of 2011, the Métis population in Canada numbered nearly 452,000 (2011 National Household Survey).

Colonization and Métis Education

Historically, the Métis have had an uneasy working relationship with a Eurocentric education system. Although the majority of residential school survivors are First Nations, the Métis also have their own stories to tell about their residential school experiences. For those Métis who attended residential school, their experiences were similar to those of First Nations people. In their attempts to assimilate the Métis, governments pressured them to abandon the First Nations side of their identity and thoroughly incorporate the dominant Eurocentric culture. This meant moving into settler communities, speaking English or French exclusively, and accepting a Eurocentric education that belittled the voices and experiences of Indigenous peoples (Aboriginal Healing Foundation 2006). Many early Métis actively resisted often-blatant attempts to educate the Métis out of them. Consequently, many Métis chose to distance themselves from Whites and flourish on their own outside of mainstream settler areas. Of course, keeping the Europeans at arms' length also meant rejecting their educational systems, which, in the long run, further cultivated the marginalization of the Métis (Anuik 2009).

Although some Métis children attended residential schools, early federal and provincial government policy excluded many Métis children from these schools for a simple reason: Since the Métis did not hold title to land and did not pay taxes, federal and provincial governments refused to accept responsibility for their education. Most Métis thus did not receive any government-funded education. Exceptions occurred when some residential schools placed Métis in their systems to promote the assimilation of Indigenous peoples,

although they had no legislative authority to do so (Canadian Council on Learning 2010). In Saskatchewan, it was not until the election of the Co-operative Commonwealth Federation (CCF) in 1944 that the Saskatchewan government accepted any responsibility for the education of Métis children (Racette 2010). Schools were then constructed in many Métis communities, and within a decade all Métis children in Saskatchewan had access to an elementary education. Unfortunately, decades of isolation and government neglect were difficult to overcome. Despite the CCF's efforts, very few Métis graduated high school, attended university, or participated in other post-secondary training. And continued ambivalence regarding the educational overtures of White society helped relegate the Métis to the fringes of the ever-growing dominant society (Giraud 1986).

Quite apart from the early reluctance of the Métis to accept the education offered to them by colonists, contemporary research has enumerated the long list of challenges faced by those who have pursued schooling According to the 2012 Aboriginal Peoples Survey, (APS) Métis high school leavers reported that they had left high school for a number of reasons, including wanting to work (21 percent); experiencing problems in school (21 percent); a lack of interest (17 percent); and experiencing financial problems (15 percent). Nearly 55 percent of Métis high school non-completers also had parents who did not graduate from high school. In addition, 39 percent of high school leavers cited racism as a factor in leaving their schooling behind.

Turning to post-secondary education, 2012 APS respondents who had attended a post-secondary institution were asked why they had failed to graduate. Reasons cited by Métis aged 18 to 44 included: wanting to work (20 percent); losing interest or motivation (16 percent); becoming pregnant or caring for children (16 percent); or finding courses too difficult (four percent). The reasons why Métis post-secondary leavers felt stymied in furthering their education can be easily extended: leavers were too busy (48 percent), lacked confidence (46 percent), did not find furthering their education a personal priority (41 percent), or found that courses did not match their needs (30 percent).

Attending university carries in its wake all of the above challenges and more (APS 2012). Dorian and Yang (2000) reported that many Métis students attending college or university often discover that the elementary and secondary education they received did not properly prepare them to succeed in the academic rigor of most post-secondary institutions; Métis university students are routinely admitted to university with high school grade point averages much lower than that of general first year students. Many potential Métis university students are also intimidated by the possibility of assuming a large student debt. For a people who sometimes earn less than the typical Canadian, a student debt of \$30,000 to \$50,000 will seem that much more imposing.

Reciprocal Stereotyping

While research generally focuses on the negative attitudes that dominant-group members harbour against minority-group members, little attention is paid to the reverse possibility: the negative attitudes that minority-group members (often the victims of discrimina-

tion) harbour against dominant-group members (often the perpetrators). Corenblum and Stephan (2001) report that Indigenous people invariably harbour their own negative general attitudes about non-Indigenous people, who may be regarded as unfriendly, hostile, and unfair. Allen (1996) suggests that many Indigenous people suspect non-Indigenous people of being generally somewhat "cruel," "selfish," "unfeeling," "corrupt," and "prejudiced." Indigenous students may have to struggle against a cross-current: their perceptions about the biases against them held by non-Indigenous people, as well as the negative beliefs that they themselves harbour regarding non-Indigenous peoples.

High and Low Métis Identifiers

Psychologists commonly use the term "identity" to describe personal identity or the idio-syncratic features that make a person unique. A second form of identity refers to the group to which one belongs (social identity). Sociologists often use the term "social identity" to describe how the collection of groups of which one is a member defines an individual (Paul 2015). While individuals will have a sense of their identities defined by their membership of a particular race or ethic group, social identity will vary along a continuum. While each of us has a range of different, cross-cutting social identities, including those derived from clearly delineated groups (such as Black/White, Indigenous/Non-Indigenous, professor/student, mother/father), an important consideration is that the social self may differ from one group member to the next, depending on how the individual sees him- or herself in terms of a particular social group. In other words, the strength of association with a particular social category can vary from one person to the next. While one person might identify strongly with being Métis, another might be far less committed to such an identity.

Just as there is considerable individual variation in racial/ethnic identity, there can be considerable variation in how high and low identifiers of traditional outgroups (that have been historic targets of mistreatment) perceive the possibility of mistreatment and react to that possibility (Tajfel and Turner 1986). The more a person's race/ethnicity matters to him or her, the more sensitive or alert the individual might be to the possibility of a threat (Falomir-Pichastor, Gabarrot, and Mugny 2009; Operario and Fiske 2001). For example, a Black American whose race is perhaps the most important part of his or her social identity might be more sensitive or alert to the possibility of mistreatment in a situation than another Black American whose race does not play as strong a role in influencing how he or she understands and experiences a situation. The implications of this for the present study are obvious: The more a Métis student's identity as a Métis (a group that has been the target of historical discrimination) matters, the more alert the student might be to a threat to his or her social identity as Métis.

Expectancy-Value Models of Motivation and the Demotivating Effects of Prejudice

Expectancy-value theory has been applied to diverse fields such as health, economics, and education. Although the model may differ in its meaning and implications for each field, a general principle is that one's expectations, as well as values and beliefs, may affect

subsequent goal-directed behaviour (Eccles and Wigfield 2002). An overarching theme of Expectancy-Value theories of motivation is that when a learner anticipates that his/her efforts to succeed might be thwarted by someone in a position of authority, a number of states of mind may emerge. The learner might be less likely to *expect* to be able to reach a goal (such as doing well in class), place *less value* on doing well, and consequently be *less motivated* to put in the effort needed to do well. It is against this backdrop that Métis students are investigated.

The Current Study

The current study examines how anticipating prejudice in interethnic interactions can trigger a stress response measured through self-reported expectations, subjective valuing, and achievement motivation, as well as by imposing overgeneralized negative beliefs on a potential victimizer and that person's perceived outgroup.

The researcher developed a mock employment scenario in which a non-Indigenous employment manager is characterized in a written scenario as possessing attitudes of varying degrees of negativity toward Indigenous people. The students were assigned randomly to one of three situations involving (1) a prejudiced manager, (2) a non-prejudiced manager, or (3) a manager whose attitudes about Indigenous people were unspecified. Once the students read a scenario describing the job for which they were applying and the manager's attitudes toward Indigenous people, they were polled about their expectations of being hired, the importance or value placed on being hired, their beliefs about the manager's sense of fairness as well as the extent to which the students read overgeneralized or negative beliefs (that is, stereotypes) into the mock manager and non-Indigenous people in general. Students were also administered a cognitive exercise that measured degree of motivation.

Methodology

Participants

The study involved 165 Métis post-secondary students who were enrolled in an academic institution in Saskatchewan. The institution provides education and employment services exclusively to Métis students. While some of the students (N = 63) were enrolled in a university-level program, others (N = 37) were enrolled in a trade-based program, and yet others (N = 65) were enrolled in a basic adult education program. Forty-one participants (25 percent) were male. One hundred and twenty-two participants (75 percent) were female. The average age of the participants was 26.0 years (SD = 7.0).

Measures

1. Controlled Oral Word Association Test (COWAT; Straus and Sherman 2006): The COWAT is a cognitive exercise that purports to measure motivation. Participants are asked to produce as many words as possible within a category in 60 seconds. The categories in this

instance included (1) words beginning with the letters FAS; (2) items from the kitchen; and (3) animals. Research demonstrates that performance on the COWAT is correlated with achievement motivation; that is, as motivation declines, so does the rate of production of words (Smith 2010; Gruenewald and Lockhead 1980). Ruff, Light, and Parker (1996) reported a coefficient alpha for the COWAT of r = .83, which shows that the scale items are a consistent measure of verbal fluency.

- 2. Selection Attitudes (SA) Scale: The SA Scale was modeled on a scale developed by Eccleston and Major (2010). The measure consists of three subscales:
 - (a) Expectations of being hired: Items included "I expect that the manager's impression of me will be a positive one"; and "I believe the manager will hire me." The respondents chose one of seven ranked options (1 = Not at all, 7 = Very Much). Eccleston and Major (2010) report that the items formed a reliable measure ($\alpha = .86$).
 - (b) Value placed on obtaining a goal: Items included "It is important to me to be hired," "Whether I am selected will not have an effect on me," and "It doesn't matter to me one way or the other whether I am chosen." The respondents chose one of seven ranked items (1 = Not at all, 7 = Very Much). Eccleston and Major (2010) reported that the items formed a reliable measure ($\alpha = .88$).
 - (c) Beliefs about manager's sense of fairness: Items included "I believe that the manager's judgments of me will be biased," "I believe that the manager will act justly towards me," "I believe that the manager will judge my work fairly," and "I believe that the manager's judgments of me will be impartial" (1 = Not at all to 5 = Very much). Eccleston and Major (2010) report that these four items formed a reliable measure ($\alpha = .92$).
- 3. Stereotyping of Whites (SW) Scale: A negative stereotyping index developed by Corenblum and Stephan (2001) was used to assess the extent to which the Métis students harboured negative attitudes about non-Indigenous people. Participants were asked to indicate the percentage of non-Indigenous people who possess each of 12 traits: calm, uneducated, clean, boastful, lazy, loud, passive, sophisticated, reliable, spiritual, considerate, and aggressive. These traits were derived from several earlier studies that assessed the attitudes that Indigenous people often report toward non-Indigenous people (for a review of studies see Corenblum and Stephan 2001).

The response format consisted of a 11-point scale representing 10 percent increments running from zero percent to 100 percent. In addition to providing percentage estimates for each trait, participants rated the favourability of each trait. These evaluations employed a 11-point format ranging from -5 (Very unfavourable) to +5 (Very favourable). The percentage estimate of each trait was multiplied by its evaluation, and the resulting products were averaged to create a stereotype/evaluation index of the Métis students' attitudes toward non-Indigenous people.

4. The Métis Identity (MI) Scale was used to categorize the students as high or low Métis identifiers. The scale was created by the researcher by selecting and adapting items from a number of scales used in previous research. From the Collective Self-Esteem Scale (Luhtanen and Crocker 1992), four items were modified from the Importance of Identity subscale: "Being a Métis is an important part of my self-image," "Being a Métis contributes to what kind of person I am," "Being a Métis has very little to do with how I feel about myself," and "I identify with other Métis people." Respondents were asked to circle one of five response options (1 = Strongly disagree, 3 = Undecided, 5 = Strongly agree). Luhtanen and Crocker (1992) reported a Cronbach's alpha of 0.85 for their items, which showed that respondents were responding to the items in a stable, consistent manner.

Four items were modeled after the *Group Identification Measure* used by Doosje, Ellemers, and Spears (1995): "I see myself as a Métis person," "I am glad to be a Métis," "I feel strong ties with the Métis people," and "How much do you identify yourself as Métis?" Respondents were asked to circle one of five response options (1 = Not at all, 3 = Undecided, 5 = Extremely; Doosje et al. (1995) reported that their four items formed a reliable scale, with a Cronbach's alpha of 0.83.

Procedure

Permission to conduct the study was obtained from each of the three post-secondary schools in Saskatchewan that provide education and employment services to Métis students. The researcher then travelled to various locations in Saskatchewan to invite students to participate in the study. All participation was voluntary, and students were told by the researcher that their participation had no consequences for their academic program.

Students read and completed the measures in their classroom. The students were asked to read a scenario that told them that a provincial forest resource management company wanted to develop a provincial forest management plan that would provide long-term benefits to Indigenous people in the province. Participants went on to read that a company employment manager would hire Indigenous students who would work closely with that manager. Participants also read that it is a common practice for companies to administer aptitude tests to help employers decide whether a job candidate is an appropriate fit for positions in their companies.

Participants were assigned randomly to one of three conditions that constituted the prejudice-manipulation aspect of the study: (1) prejudice by employer imminent, (2) employer non-prejudiced, and (3) employer's attitudes about Indigenous people unknown. Participants then read that the employment manager would evaluate their aptitude test performance and decide whether or not to hire the applicant. Participants in the prejudiced condition read a statement suggesting that the employment manager was White and agreed with statements such as the following: "I cannot work easily with Aboriginal people because they tend to be unreliable" and "I cannot work easily with Aboriginal people because they tend to be less educated than Whites." Participants in the non-prejudiced condition read: "The manager, who is White, feels very comfortable with Aboriginal people." The

manager agreed with statements such as the following: "I can work easily with Aboriginal people because they tend to be reliable" and "I usually work easily with Aboriginal people because the ones I have worked with tend to be well-educated for the job." Participants in the unknown attitudes condition were not given any information about the attitudes of the manager towards Indigenous people. The participants only read that "The manager is White and has been the employment manager for a number of years."

After the participants had read the description of the non-Indigenous manager, they were asked to complete the battery of measures. Participants completed the surveys anonymously in a paper-and-pencil format with no personal identifiers being placed on any of the test forms. Completed surveys were gathered by the researcher, and subsequently entered into a database for analysis.

Hypotheses

While some members of a stigmatized social group identify with their social group quite strongly, others might be less committed to their social identity. The current study examined how the reactions of high and low Métis-identifying post-secondary students can be affected by potential prejudice. Research shows that high and low identifiers can differ in how they interpret a situation and how they react to the possibility of mistreatment.

Six hypotheses were investigated.

- (H1) It was hypothesized that, while there would not be a significant difference between the high and low Métis identifiers in the number of words produced on the Controlled Oral Word Association Test (COWAT) when both groups were in the prejudiced condition, the high identifiers would produce fewer words when they were in both the unknown attitudes and non-prejudiced conditions.
- (H2) It was hypothesized that, while there would not be a significant difference in the overall attitudes of the high and low identifiers when it came to the total score of the Selection Attitudes (SA) Scale when both groups were in the prejudiced condition, the high identifiers would report less overall optimism than the low identifiers when they were in both the unknown attitudes and non-prejudiced conditions.

Turning to the hypotheses involving the subscales of the SA Scale, it was hypothesized that, even though there would not be a significant difference between the high and low identifiers in terms of their ratings on the (H2b) expectations, (H2c) motivation, valuing (H2d), and fairness (H2e) subscales when both groups were in the prejudiced condition, the high identifiers would report less-favourable ratings on the three subscales when they were in both the unknown attitudes and non-prejudiced conditions.

(H3) It was hypothesized that, even though there would not be a significant difference in how the high and low identifiers evaluated the manager on the Stereotyping of Whites (SW) Scale when both groups were in the prejudiced condition, the high identifiers would evaluate the non-Indigenous manager more negatively when they were in both the unknown attitudes and non-prejudiced conditions.

Results

Reliability Analysis

The Selection Attitudes (SA) Scale measured (a) the students' expectations of being hired, (b) how much the students valued being hired, and (c) students' beliefs about the manager's sense of fairness.

However, the reliability analysis of the valuing subscale found that the three items on the subscale ("It is important to me to be hired," "Whether I am selected will not have an effect on me," "It doesn't matter to me one way or the other if I am chosen") were unreliable. According to de Vaus, if an inter-item correlation is below r = .3, the item should be removed from the scale (2014). The inter-item correlation for each item was less than .3. Since the alpha for the subscale would only be .47 with the removal of the first item, and since this coefficient was still below an acceptable level of 0.6, the subscale was removed from subsequent analysis.

Factor analysis was used as a test of construct validity (the extent to which a concept or construct can be mathematically inferred from the items used to measure the concept). Factor analysis ensures that the various items used to measure a construct cluster together as expected. For example, three items were used to measure subjective value. However, as noted above, the three items were not intercorrelated, showing that they did not cluster together as a measure of subjective value.

A subsequent common factor analysis was conducted in order to verify the above finding. The factor analysis (with oblique rotation) of the SA scale found that the communalities of the three items on the valuing subscale were less than 0.4. Furthermore, when interpreting a factor, only 53 items with factor loadings of .32 and above were interpreted (Tabachnick and Fidell 1996). None of the items on the valuing subscale loaded successfully onto a factor. Therefore, it was decided to remove the valuing subscale and its items from further consideration. Table 1 reports that reliability coefficients of the final versions of the various scales, once the valuing subscale was removed. Although the reliability analysis for the fairness subscale is low ($\alpha = .60$), the coefficient is marginally acceptable. The table shows that the various items used to measure the various concepts (or constructs) did so in a consistent, reliable manner.

Table 1 Coefficient Alpha of the Controlled Oral Word Association Test, Métis Identity Scale, the Selection Attitudes Scale, and the Stereotyping of Whites Scale

	N		
Scale	Items	N	α
Pilot Study			
Métis Identity Scale	8	35	.83
Primary Analysis			
Métis Identity Scale	7	165	.87
•			
Selection Attitudes			
Expectations	2	164	.91
Motivation	2	165	.70
Fairness	3	164	.60
Stereotyping of White			
Attributes	12	141	.74
Favourability of			
attributes	12	137	.95

Hypotheses Tested

Hypothesis 1: It was hypothesized that, while there would not be a significant difference in the number of words produced on the Controlled Oral Word Association Test (COWAT) between the high and low Métis identifiers when both groups were in the prejudiced condition, the high identifiers would produce fewer words when they were in both the unknown attitudes and non-prejudiced conditions.

A 2 x 3 analysis of variance (ANOVA) was conducted to examine the effect of Métis identity (high, low) and the prejudice factor (prejudiced, non-prejudiced, unknown) on the number of words produced on the COWAT. There was no significant main effect for identity, F(1,160) = .03, p = .72, or for the prejudice factor, F(2,160) = 1.1, p = .33. There were no significant differences in score between the two groups of students in both the unknown attitudes and non-prejudiced conditions that would support the hypothesis. There was no significant interaction between Métis identity and the prejudice factor on the COWAT, F(2,160) = .06, p = .85.

Hypothesis 2A: It was hypothesized that, while there would not be a significant difference in the overall attitudes of the high and low identifiers on the total score of the Selection Attitudes (SA) Scale when both groups were in the prejudiced condition, the

high identifiers would report less overall optimism than the low identifiers when they were in both the unknown attitudes and non-prejudiced conditions.

A 2x3 ANOVA was conducted to examine Métis identity (high, low) and the prejudice factor on the total score of the Selection Attitudes (SA) Scale. There was a main effect for identity: F(1,160) = 8.3, p < .01, $\eta^2 = .05$, with the low-identifying students scoring lower (M = 48.2, SD = 7.2) than the high-identifying students (M = 51.0, SD = 6.0). The finding indicates that the high-identifying students reported more positive attitudes about being hired than did the low-identifying students. There was no significant main effect for the prejudice factor, F(2,160) = 2.0, p = .13. The finding indicates that the students did not react differently depending upon whether they were in the prejudiced, non-prejudiced or unknown attitudes condition. There was no significant interaction between Métis identity and prejudice to support the hypothesis, F(2,160) = 2.1, p = .12.

Hypotheses 2 B, C, D, E

Turning to the hypotheses involving the subscales of the SA Scale, it was hypothesized that, even though there would not be a significant difference between the high and low identifiers in their ratings on the (H2b) expectations, (H2c) motivation, (H2d) valuing, and (H2e) fairness subscales when both groups were in the prejudiced condition, the high identifiers would report less-favourable ratings on the three subscales when they were in both the unknown attitudes and non-prejudiced conditions.

Hypothesis 2B: Performance on the Expectations Subscale by High and Low Métis Identifiers and Prejudice Factor

A 2x3 ANOVA was conducted to examine the effects of Métis identity (high and low) and the prejudice factor on students' expectations of being hired. There was no significant main effect for identity, F(1,161) = .61, p = .54. There was a main effect for the prejudiced condition: F(2,161) = 8.6, p < .001, $\eta^2 = .10$. The post-hoc test indicates that the mean for the prejudiced condition (M = 8.5, SD = 3.7) is significantly lower than the means for both the unknown (M = 10.7, SD = 2.8) and non-prejudiced (M = 10.5, SD = 2.5) conditions, F(2,163) = 8.6, p < .001. The finding demonstrates that the students in the prejudiced condition reported a lower expectation of being hired than did the students in both the non-prejudiced and unknown-attitudes conditions. There is no significant interaction effect between identity and prejudice condition, F(2,161) = .42, p = .65.

Hypothesis 2C: Performance on the Motivation Subscale by High and Low Métis Identifiers and Prejudice Factor

A 2x3 ANOVA) was conducted to examine the effects of Métis identity (high, low) and degree of prejudice on students' reported motivation. There was a significant main effect for identity, F(1,163) = 12.3, p = .001, $\eta^2 = .07$. The mean for the high-identifying students (M = 11.4, SD= 2.4) was larger than the mean for the low-identifying students (M = 11.4, SD= 2.4), indicating that the high-identifying students reported more motivation to perform the cognitive task (COWAT) than did the low-identifying students. However, the effect size was small, $\eta^2 = .07$. There was also a main effect for prejudice, F(1,162) = 8.3, p < .001. Post hoc examination of the means indicated that, while the mean for the prejudiced condition (M = 11.2, SD = 2.2) was not significantly different from the mean for the non-prejudiced

condition (M = 11.9, SD = 2.1), it was significantly lower than the mean of the unknown attitudes condition (M = 12.7, SD = 1.9), F(2,162) = 7.0, p < .001. There was no significant interaction effect between identity and the prejudice condition, F(2,162) = .15, p = .86. The hypothesis was not supported.

Hypothesis 2D: As previously noted, the valuing subscale was found to be unreliable and removed from the analysis.

Hypothesis 2E: Performance on the Fairness Subscale by High and Low Métis Identifiers and Prejudice Factor

A 2x3 ANOVA was conducted to examine the effects of Métis identity (high, low) and degree of prejudice on the fairness subscale scores. There was no significant main effect for the prejudice factor, F(1, 162) = .60, p = .55. There were no significant differences in score between the two groups within the three prejudice conditions that would support the hypothesis. There was no significant main effect for identity, F(1, 162) = 1.9, p = .16. There was no significant interaction effect between the identity and prejudice conditions, F(2, 162) = .01, p = .99. The finding indicates that the students did not differ significantly in their judgments of the manager's fairness regardless of how strongly they identified as Métis or whether they were in the prejudiced, non-prejudiced or unknown attitudes condition.

Hypothesis 3: Performance on the Stereotyping of Whites (SW) Scale by High and Low Métis Identifiers and Prejudice Factor

A 2x3 ANOVA was conducted to examine the effects of Métis identity (high, low) and the prejudice factor on the SW Scale. There was no main effect for Métis identity, F(1,143) = .63, p = .43. There was a significant main effect for degree of prejudice, F(2,144) = 15.0, p = .001, $\eta^2 = .18$. The subsequent post hoc test showed that the mean for the prejudiced group (M = -2.2, SD = 7.3) was significantly less than the means for both the non-prejudiced and unknown attitudes groups (M = 4.1, SD = 6.4 and M = 4.2, SD = 6.4 respectively), F(2,145) = 15.2, p < .005. The finding showed that the participants in the prejudiced condition evaluated non-Indigenous people more negatively than did the participants in both the unknown attitudes and non-prejudiced conditions. There was no significant interaction between Métis identity and the prejudiced condition, F(2,143) = 1.4, p = .26. The hypothesis was not supported.

Discussion

A major tenet of the Expectancy-Value theory is that expectations affect subsequent behaviour in addition to values and beliefs. When applied to intergroup relations, the theory implies that a perceived threat of prejudice from a member of a dominant group will mediate a number of "causal" variables and negative attitudes, including the expectations of a potential victim of prejudice about being able to achieve a goal, the value placed on achieving a desired outcome, and the motivation needed to sustain and focus goal-directed behaviour. In addition, theories of mutual stereotyping suggest that negative stereotyping can move in two directions. Not only can a dominant group member stereotype a member of an outgroup, but members of the outgroup might also develop fixed, usually pejorative, attitudes toward their victimizers. In addition, identity theories contend that personal identity lies on

a continuum. While one person with Métis heritage might identify very strongly with that heritage, another might only be weakly sympathetic toward that social identity. Building on the above components, the present paper proposed that high and low Métis identifiers would vary in their reactions to a perceived threat to their social identity.

Although there were no significant interaction effects between Métis identity (high, low) and the prejudice factor on the various outcome measures, several other (main effect) findings of interest emerged. The high identifiers reported more motivation and optimism about being hired than did the low Métis identifiers. There were also several main effects for the prejudice factor. As expected, students in the prejudiced condition reported the lowest expectation of being hired, which suggests that the experimental manipulation, exposure to different levels of prejudice, was successful. Students in the prejudiced condition also reported less motivation than did the students in the unknown attitudes condition. Students in the prejudiced condition also stereotyped the non-Indigenous manager more negatively than did the students in the unknown attitudes and non-prejudiced conditions. Thus, the students in the prejudiced condition were liable to react most negatively, but their reactions were generally independent of the strength of their Métis identity. Since the students were randomly assigned to each of the three prejudice conditions, the findings lend credence to the assertion that anticipating the possibility of discriminatory treatment can influence Métis students' motivation, expectations, and the extent to which they not only resent a potential victimizer, but also make judgments about widely held, but fixed and oversimplified, images or ideas of non-Indigenous people; that is, the student makes generalizations that belittle a potential victimizer.

Two findings that are also important involved the total score on the Selection Attitudes (SA) Scale and the measure of motivation to achieve (COWAT). The high identifiers reported a more positive overall outlook on the SA Scale than did the low identifiers. The high identifiers also reported the greatest motivation to achieve. Generally, depending upon the nature and strength of a threat, a high identifier in a stigmatized group who anticipates a threat, experiences a stronger and more neutralizing cluster of negative thoughts and feelings than a low identifier, who is likely less sensitive to insult. However, some high identifiers will defy expectations and will hunker down in reaction to a threat in the only way they can: they will rebel against the threat. In a survey situation, where the only available option is to rebel on paper, the high identifier might report a more positive attitude than expected in order to appear confident and resilient to both him/herself or to a potential victimizer (Major, Quinton and Schmader 2003; Furnham 1986). This helps explain why the high identifiers in the present study reported more overall optimism on the SA Scale, and more motivation than the low identifiers.

Limitations

The sample of Métis students attended an institution that is devoted exclusively to Métis students. The sample was also a sample of convenience. While more than one-third of the students in the present sample were enrolled in a university level program, many (62%)

were not. Some were enrolled in a technical trade program. Others were enrolled in an adult basic education program covering grades 10 through 12. Consequently, one cannot generalize the findings from the present study directly to all young Métis adults or to those pursing a university education.

In addition, most of the Métis students who participated in the study might have been high identifiers even before the study began. The goal of the research was to sample Métis students who range along a continuum from those who only identify weakly with their heritage to those who identify strongly. It can be noted that, in addition to their other course offerings, the school attended by the Métis students is also devoted to teaching the Métis students more about their history, culture, past conflicts with the settler culture and its governments, as well as contemporary political, economic and legal issues faced by the Métis. Given the emphasis placed on their culture and identity, the students may not have reflected the range of Métis identity found in the general population of young adult Métis people. Consequently, the sample might not have included many low Métis identifiers found in the Métis population. If so, the sample may have lacked variability, which is an important prerequisite for making comparisons between groups, particularly in studies such as the current one, which used a median split to distinguish between so-called high and low identifiers.

The mean for the low identifying students was 3.3; for the high identifying students, the mean was 4.5. Since the Métis Identity Scale would assume an equal distance between each response option (Strongly disagree to Undecided through to Strongly agree), a mean of 3.3 would place the so-called low identifiers within the middle or intermediate category. For the so-called high identifiers, a mean of 4.5 would place them within the "somewhat" category. To the extent that the so-called high and low Métis identifiers were not as different from each other as the labels "high" and "low" imply, we might not expect their reactions to the different employment scenarios to be particularly polarized. Consequently, we recommend a refinement and re-administration of the MI scale to other Métis samples to obtain a better sense of the range of Métis identification as measured by this scale.

The valuing subscale was found to be unreliable and removed from further consideration. This result was not expected because the three items were basically the same three items used by Eccleston and Major (2010), who reported that the items formed a reliable measure ($\alpha = .88$).

Unfortunately, removing the valuing subscale eliminated the possibility of gaining insight into an important dimension of achievement motivation in Métis students. An expectancy is an individual's judgment about their capabilities or chances of success at a task. It answers the question, "Can I do this task?" A value is an individual's belief about the importance of something or the reasons why they may engage in certain tasks. It answers the question, "Do I want to do this task and why?" In expectancy-value theory, both expectancies and values play an important role in predicting an individual's future decisions, engagement, persistence, and achievement. Thus, motivation depends on an individual's retention of positive expectancies and values.

The situation within which the Métis students found themselves was very artificial. After all, they were only applying for a hypothetical job, and only read a brief story about the attitudes of a White person of authority. A question remains as to whether the scenario was threatening enough to activate the student's feelings of threat significantly enough to affect their expectations and subjective values. While some research suggests that even the mere suggestion or spectre of prejudice can be sufficient to activate the fears of potential targets (e.g., Adams, Garcia, Purdie-Vaughns, and Steele, 2006; Pratto and John 1991), other studies have suggested that the threat posed by the social context must work above the minimum level needed to activate one's identity interests and apprehensions (Falomir-Pichastor, Gabarrot, and Mugny 2009; Toure-Tillery and Fishbach 2014). Thus, the employment scenarios in the present study may not have been threatening enough to stimulate a strong, negative reaction among the various students.

Conclusions and Reflections

The Expectancy-Value Theory posits that a student's motivation is proximally determined by two main factors: how much he or she values an academic goal, and whether the student expects to succeed (Eccles and Wigfield 2002). In addition, various distal factors interact with these central factors of valuing and expecting success (Eccles and Wigfield 2002). Distal factors can include prior experiences (for instance, with prejudice), demographic factors (such as age and gender), as well as suspicions that someone in authority (such as an instructor) harbours negative racial/ethnic attitudes. Motivation can thus be influenced by the two central factors of valuing and expectation of success, which can in turn be mediated by various distal factors, such as prejudice.

Other research has demonstrated that ethnic identity lies along a continuum. While one person might identify quite strongly with his or her ethnicity, another person might be less committed (Tajfel and Turner 1986). Moreover, high and low identifiers within stigmatized groups can differ in how they experience and react to the possibility of prejudice (Tajfel and Turner 1986; Falomir-Pichastor, Gabarrot, and Mugny 2009). A high Métis identifier might be particularly sensitive to cues that threaten his or her social identity. For the high-identifying student, a situational expectation of unfair treatment can foster a belief that, since one's efforts may be sabotaged, it is not worthwhile to expend maximum effort on a school-related task; that is, the strength of the student's drive is reduced.

The preceding comment reminds us that the Métis are diverse. While some identify quite strongly with their heritage and actively promote it, others might be much less interested in their families' pasts or in contemporary economic, legal, and political issues involving the Métis. This is why the study distinguished between high and low Métis identifiers. While some students in the sample used in the present study might identify quite strongly with historic Métis culture, others, other Métis growing up under different circumstances, might be less committed to their identity as Métis.

The Expectancy-Value model warns us not to overemphasize the influence of prejudice on academic achievement. As noted in the introduction to this paper, a number of factors, alone or in combination, can damage one's desire to succeed in school. "Concern about prejudice" is but one factor —a distal one— among others that can influence a student's motivation. Much the same can be said about Métis identity.

The present study considered Métis identity as a distal factor. In the above model, the Métis student is an actor trying to sustain his or her motivation to succeed in school. Empirical research has demonstrated that anticipating prejudice is a stressor that can reduce academic motivation and productivity (Eccles and Wigfield 2002). However, concern with both prejudice and Métis identity does not predict that a condition or event (such as reduced academic motivation) will definitely happen; rather, a person may simply be at risk for a particular condition or event.

When addressing the question of mutual stereotyping, intergroup contact and prejudice will have different effects depending on whether the groups are equal in social and economic status or are on different levels in the social hierarchy (Tajfel 1981). The point is that in response to living in an economically or racially stratified society, people of colour routinely complain about the dominant in-group. Of course, the dominant group will interpret power differences differently from "outsiders," and frustration and resentment will play out strongly in the discourse of the alienated (Memmi 2003). Although many will condemn "reverse discrimination," it must be remembered that biases that Indigenous people might harbour against non-Indigenous people are largely borne of a history of colonization and may simply be a coping mechanism for withstanding racism rather than actual anti-White bias (Nittle 2018). At any rate, the Métis have opinions about non-Indigenous people, some positive, others negative, and their (perhaps justifiable) negative opinions serve as yet another form of stress driving a wedge between them and other Canadians. Just as it is important to understand how non-Indigenous Canadians view the Métis, it is also important for future research to explore how the Métis view and understand other Canadians.

Many education policies target the education achievement gaps between Indigenous peoples and the general student population, and the lack of confidence that many Indigenous people might have in the mainstream educational system. Research often emphasizes the social determinants of education, such as socioeconomic status (SES), family educational attainments, neighborhood environment, and racism. Recognizing the importance of identity disposition provides another avenue for understanding how the possibility of experiencing biased attitudes can affect some Métis (and First Nations) students more than others. It is important for Métis identity to be mapped and defined because of its variability. Further research into Métis identification will further illuminate why some Métis individuals are more likely to be adversely affected than others in a threatening school situation. It is also important for research to focus on Métis apart from First Nations people. Many Canadian studies routinely place Métis, First Nations, and Inuit people into a single "Indigenous" category with little regard for their differences. Consequently, Métis people are often "lost in the crowd."

Although researchers often emphasize a historic view of Métis identity (for example, involving colonization, descent of mixed ancestry, battles for recognition and acceptance), it would be instructive to explore *contemporary* views of Métis identity. The Métis students

involved in the present study were all young Métis located in central Saskatchewan. Perhaps they are experiencing their identity, their relationship with other ethnicities (particularly customary dominant groups), and potential threats to their identity in new ways. Another important goal for future research is to focus tightly on the Métis and elaborate on how their "identity disposition" might be changing and how it relates to such demographic characteristics as gender, region, and urban/rural differences, as well as their beliefs about the extent to which the typical Canadian holds unfavourable opinions about Indigenous people in general or the Métis in particular. This issue arises because social identity is a fluid construct, an idea created and accepted by people that can vary depending on time, place, and circumstance (Tanti, Stukas, Halloran and Foddy 2011).

The Future

Educational administrators and practitioners are encouraged to be mindful of the effects of prejudice on academic attitudes and performance, particularly among Métis post-secondary students. The results of the present study lead us to encourage researchers to examine the school experiences of Métis students and other ethnically marginalized students to learn how important prejudice, real or perceived, is to their academic lives and performance.

References

- Aboriginal Healing Foundation. 2006. *Métis History and Experience and Residential Schools in Canada*. http://www.ahf.ca/downloads/Métis eweb.pdf.
- Aboriginal Peoples Survey. *The Education and Employment Experiences of First Nations People Living Off Reserve, Inuit, and Métis: Selected Findings from the 2012 Aboriginal Peoples Survey* 2012. http://www.statcan.gc.ca/daily-Quotidien/131125/dq131125b-eng.pdf.
- Adams, G., D. M. Garcia, V. Purdie-Vaughns, and C. M. Steele. 2005. "The Detrimental Effects of a Suggestion of Sexism in an Instruction Situation." *Journal of Experimental Social Psychology* 42, no. 5: 602–615.
- Allen, B. P. 1996. "African Americans' and European Americans' Mutual Attributions: Adjective Generation Technique (AGT) Stereotyping." *Journal of Applied Social Psychology* 26, no. 10: 884–912.
- Ancis, J. R., W. E. Sedlacek, and J. J. Mohr. 2000. "Student Perceptions of Campus Cultural Climate by Race." *Journal of Counselling and Development* 78, no. 2: 180–185.
- Anuik, J. 2009. "Métis Families and Schools: The Decline and Reclamation of Métis Identities in Saskatchewan, 1885–1980." PhD diss., University of Saskatchewan.
- Brown, L. M., and H. Dobbins. 2004. "Students' of Color and European American Students' Stigma-Relevant Perceptions of University Instructors." *Journal of Social Issues* 60, no. 1: 57–174.
- Canadian Council on Learning. 2010. "Métis Post-Secondary Education Systems: Literature Review." Saskatoon, SK: Aboriginal Learning Knowledge Centre, University of Saskatchewan.
- Canadian Federation of Students. 2010. *The Final Report of the Task Force on Campus Racism. Summary of Recommendations*. Retrieved March 23, 2015 from http://cfsontario.ca/en/section/81.
- Corenblum, B., and W. G. Stephan. 2001. "White Fears and Native Apprehensions: An Integrated Threat Theory Approach to Intergroup Attitudes." *Canadian Journal of Behavioral Science* 33, no. 4: 251–268.
- Dorion, J., and K. R. Yang. 2000. "Métis post-secondary education: A Case Study of the Gabriel Dumont Institute." In *Aboriginal Education: Fulfilling the Promise*, edited by M. B. Castellano et al., Vancouver, BC: UBC Press.
- Doosje, B., N. Ellemers, and R. Spears. 1995. "Perceived Intragroup Variability as a Function of Group Status and Identification." *Journal of Experimental Social Psychology* 31, no. 5: 410–436.

- Eccles, J. S., and A. Wigfield. 2002. "Motivational Beliefs, Values, and Goals." *Annual Psychological Review* 53: 109-132.
- Eccleston, C. P., and B. Major. 2010. "An Expectancy/Value Perspective on the Demotivating Effects of Prejudice." *Journal of Applied Social Psychology* 40, no. 7: 1728–1746.
- Falomir-Pichastor, J. M., F. Gabarrot, and G. Mugny. 2009. "Group Motives in Threatening Contexts: When Loyalty Conflict Paradoxically Reduces the Influence of an Anti-Discrimination Ingroup Norm." *European Journal of Social Psychologyn Aboriginal Education: Fulfilling the Promise* 39, no. 2: 196–206.
- Fiske, S. 1998. "Stereotyping, Prejudice and Discrimination." In *The Handbook of Social Psychology*, 4th ed., edited by D. T. Gilbert, S. T. Fiske, and L. Gardner, 357–362. Boston, MA: McGraw-Hill.
- Furnham, A. 1986. "Response Bias, Social Desirability and Dissimulation." *Personality and Individual Differences* 7, no. 3: 385–400.
- Giraud, M. 1986. *The Métis in the Canadian West*. Lincoln, NB: University of Nebraska Press.
- Goulet, G., and T. Goulet. 2008. *The Métis. Memorable Events and Memorable Personalities*. Calgary, AB: FabJob Inc.
- Gruenewald, P. J., and G. R. Lockhead. 1980. "The Free Recall of Category Examples." *Journal of Experimental Psychology: Human Learning and Memory* 6, no. 3: 225–241.
- Howe, E. 2011. "Bridging the Aboriginal Education Gap in Saskatchewan." Saskatoon, SK: Gabriel Dumont Institute of Native Studies and Applied Research.
- Hulleman, C. S., S. M. Schrager, S. M. Bodman, and J. M. Harackiewicz. 2010. "A Meta-analytic Review of Achievement Goal Measures: Different Labels for the Same Constructs or Different Constructs with Similar Labels?" *Psychological Bulletin* 136, no. 3: 422–449.
- Indigenous and Northern Affairs Canada. 2011. Fact Sheet—2011 National Household Survey Aboriginal Demographics, Educational Attainment and Labour Market Outcomes. https://www.aadnc-aandc.gc.ca/eng/1376329205785/1376329233875.
- Inzlicht, M., and T. Schmader, eds. 2012. *Stereotype Threat: Theory, Process, and Application*. New York, NY: Oxford University Press.
- Levy, D. J., J. A. Heissel, J. A. Richeson, and E. K. Adam. 2016. "Psychological and Biological Responses to Race-Based Social Stress as Pathways to Disparities in Educational Outcomes." *American Psychologist* 71, no. 6: 455–473.

- Library and Archives Canada. 1996. *Report of the Royal Commission on Aboriginal Peoples*. https://www.bac-lac.gc.ca/eng/discover/aboriginal-heritage/royal-commission-aboriginal-peoples/Pages/final-report.aspx.
- Lischke, U., and D. T. McNab. 2007. *The Long Journey of a Forgotten People: Métis Identities and Family Histories.* In *Aboriginal Education: Fulfilling the Promise*, ON: Wilfrid Laurier University Press.
- Luhtanen, R., and J. Crocker. 1992. "A Collective Self-Esteem Scale: Self-Evaluation of One's Social Identity." *Personality and Social Psychology Bulletin* 18, no. 3: 302–318.
- Major, B., W. J. Quinton, and T. Schmader. 2003. "Attributions to Discrimination and Self-Esteem: Impact of Group Identification and Situational Ambiguity." *Journal of Experimental Social Psychology* 39, no. 3: 220–231.
- Mendoza-Denton, R., G. Downey, V. J. Purdie, A. Davis, and J. Pietrzak. 2002. "Sensitivity to Status-Based Rejection: Implications for African-American Students' College Experience." *Journal of Personality and Social Psychology* 83, no. 4: 896–918.
- Memmi, A. 2003. The Colonizer and the Colonized. New York: Orion Press.
- Nittle, N. K. 2018. "What is Racism: A Definition and Examples." https://www.thoughtco.com/what-is-racism-2834955.
- Operario, D., and S. T. Fiske. 2001. "Ethnic Identity Moderates Perceptions of Prejudice: Judgments of Personal versus Group Discrimination and Subtle versus Blatant Bias." *Personality and Social Psychology Bulletin* 27, no. 5: 550–561.
- Patacchini, E., and P. Zenou. 2006. *Racial Identity and Education*. Bonn, Germany: Institute for the Study of Labor. http://ftp.iza.org/dp2046.pdf.
- Paul, J. 2015. "Despite the Terrors of Typology: The Importance of Understanding Categories of Difference and Identity." *International Journal of Postcolonial Studies* 17, no. 2: 174–195.
- Pratto, F., and O. P. John. 1991. "Automatic Vigilance: The Attention-Grabbing Power of Negative Social Information." *Journal of Personality and Social Psychology* 61, no. 3: 380–391.
- Ruff, R. M., R. H. Light, and S. B. Parker. 1996. "Benton Controlled Oral Word Association Test: Reliability and Updated Norms." *Archives of Clinical Neuropsychology* 11, no. 4: 329–338.
- Racette, S. (2010). Métis education in Saskatchewan. http://aborigin.sasktelwebhosting. com/Resources/October_2010.pdf

- Rutherford, R. E., & A. Fancher. 2012. "Pioneers of Psychology: A History." New York, NY: W. W. Norton.
- Smith, J. M. 2010. "A Note on Achievement Motivation and Verbal Fluency." *Journal of Projective Techniques and Personality Assessment* 34, no. 2: 121–124.
- Steele, C. M. and J. Aronson. 1995. "Stereotype Threat and the Intellectual Performance of African Americans." *Journal of Personality and Social Psychology* 69, no. 5: 797–811.
- Stephan, W. G., and C. W. Stephan. 1985. "Intergroup Anxiety." *Journal of Social Sciences* 41, no. 3: 157–175.
- Straus, E., and E.M.S. Sherman. 2006. In *Aboriginal Education: Fulfilling the Promise A Compendium of Neuropsychological Tests*. 3rd ed. London, UK: Oxford University Press.
- Tabachnick, B.G., & Fidell, L.S. (1996). Using multivariate statistics (3rd Ed.). New York: HarperCollins College Publishers.
- Tajfel, H. 1981. Human Groups and Social Categories. Cambridge, UK: University Press.
- Tajfel, H. and Turner, J. C. (1986). The social identity theory of inter-group behavior. InS. Worchel and L. W. Austin (eds.), Psychology of Intergroup Relations. Chicago:Nelson
- Tanti, C., A. A. Stukas, M. J. Halloran, and M. Foddy. 2010. "Social Identity Change: Shifts in Social Identity During Adolescence." *Journal of Adolescence* 34, no. 3: 555–567.
- Toure-Tillery, M., and A. Fishbach. 2014. "How to Measure Motivation: A Guide for the Experimental Social Psychologist." *Social and Personality Psychology Compass* 8/7: 328–341.
- Warwick, J. 2016. "More First Nations and Métis Youth are Graduating from High School." *The Saskatoon StarPhoenix*, June 6, 2016. http://thestarphoenix.com/news/local-news/first-nations-graduation-rates-improving.
- Zerr, A. 2013. "Support Key to Retaining Aboriginal Students." *Regina Leader Post*, September 5, 2013. http://nationtalk.ca/story/support-key-to-retaining-aboriginal-students-regina-leader-post.