

What Indigenous Students Think about School and is it any Different from the Anglos?

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In a series of studies with indigenous and non-indigenous on student motivation and related issues in school settings McInerney (1992, 1994; 1995; 2002, 2003a; McInerney, McInerney & Roche, 1994a, 1994b, 1995; McInerney, Roche, McInerney, & Marsh, 1997; McInerney & Sinclair, 1991, 1992; McInerney & Swisher, 1995) found there were few significant mean differences on mastery oriented motivation, self-esteem, academic self-concept, sense of purpose for schooling and general level of motivation at school, and that these factors were significant predictors of academic achievement outcomes for a diverse variety of cultural groups. In a more recent study (McInerney, 2003b) few differences were found in the relative salience of motivational predictors or their patterns of prediction across the wide range of groups studied. These results emphasise the importance of a mastery orientation over performance, extrinsic and social orientations to a wide range of cultural groups in school settings.

These results suggest first, that, far from lacking the motivation to achieve indigenous students are more or less motivated in the same ways as the non-indigenous groups, and their achievement values appear to be very similar to non-indigenous children. Second, the academic self-concept of the indigenous student is very similar to that of other non-indigenous students. This is in contrast to a number of studies, which suggest that the self-concept of minorities is, paradoxically, higher than that of the mainstream group despite poorer school performance. Third, there are, in general, no significant differences between groups on sense of self, such as self-esteem, sense of purpose for schooling, and sense of self-reliance. Fourth, the simple dichotomising of groups as individualist or collectivist is not supported by any of these studies. Groups commonly categorised as collectivist (Aboriginal and Navajo) were no more collectivist or individualist than the Anglo and other non-indigenous groups on the measures used in these studies.

What does all the above tell us about indigenous children and their motivation at school? The first and most important finding is that, across the broad range of scales used in these studies, the similarities between indigenous and non-indigenous groups far outweigh any differences. It would appear from these results that indigenous children, even in remote locations, are motivated by the same motives and self-beliefs that influence children from Anglo and other non-indigenous backgrounds. These results tell a positive story regarding the capacity of indigenous children to do well at school given the right sort of school environment. The findings also suggest that key variables used to distinguish Western and indigenous groups do not appear to be salient in the school contexts studied. These results, replicated on a number of occasions, suggest two paradoxes. First, if the motivational profiles of the indigenous and non-indigenous groups are so similar, why is there a difference in educational outcomes? Typically indigenous students have lower achievement outcomes than most others at school. Second, within the indigenous groups there are always some who achieve well, despite the relatively poor achievement levels of the group as a whole. What is it that the successful indigenous students 'have' or 'do' that distinguishes them from their unsuccessful peers?

These paradoxes suggest that at least five elements need to be considered in order to further our understanding of the motivational dynamics that influence academic achievement for

indigenous students. First, the motivational goals examined in the McInerney research may have failed to uncover motivational goals that are more salient to indigenous students; students' goals that, if supported in school settings, might better facilitate learning. Second, there is a need to examine the future time perspective of indigenous students, and in particular, the nature of the future goals that students' hold; their development over time, and their relationship to day-to-day achievement goals and learning processes. It is plausible that indigenous students do not do well at school because they have a different sense of the future and its relationship to their schooling and do not perceive the instrumental value of schooling in the same way as other students. Third, indigenous students may be subject to a range of factors both within and outside the school setting that impact negatively on their opportunities to do well at school which do not impact in the same way or to the same degree for non-indigenous students. Fourth, the historical experiences of indigenous people within assimilationist and often-racist educational institutions may moderate the future goals, achievement goals and perceived utility of schooling for these students. Finally, the quality of schooling indigenous students receive may be inferior for a variety of reasons (e.g., isolation, poor teachers, poor school facilities, perceived irrelevance of the curriculum) predisposing these students to achieve poorly relative to more advantaged groups.

In order to examine whether some salient issues, which might explain the paradox of relatively poorer school achievement of indigenous students despite little difference in school motivational profiles, had been missed in the psychometric research which forms the basis of the studies reported above, two forms of qualitative research were conducted along with the psychometric studies. First, at each school site individual students were interviewed about key elements of their school motivation and goals for the future. Second, in each year of the three year longitudinal study which forms the basis of the psychometric investigation of school motivation in cultural context reported in McInerney (2003a, 2003b), all students were asked a series of open ended questions to investigate: What types of things motivate them to work well at school, What things made it difficult for them to do well at school, Why they thought some students leave school before they complete high school, and What types of things would encourage them to complete high school and to go on to some further education such as college or university. It was anticipated that there would be qualitatively different responses to each of these questions by indigenous and non-indigenous students, and that these differences might give us a clue to the reasons why indigenous students do relatively poorly at school. This paper reports the results of this qualitative survey study.

Method

Students were asked to complete four open-ended questions related to school motivation and achievement. Permission was obtained from the Department of Education and Training (DET) and the University's Human Ethics Committee to conduct the study. Parents of the students completed informed consent forms, and all students were told that their completion of the survey was voluntary. Details of the purpose of the study were repeated at the beginning of each survey session. Survey sessions were conducted with intact class groups, or where the numbers were small, as in the rural centres, in full school groups. No teachers were involved in the administration of the survey.

After reviewing a large number of responses a preliminary coding master sheet was prepared by the chief investigator and two research assistants to guide the categorisation of responses to each of the questions. All responses were then content analysed for emerging and recurring themes and new categories added until saturation. Once saturation had been

reached responses were coded prior to data entry into spss. In order to ensure that the coding was reliable and accurate the chief researcher conducted reliability checks, and the two coders regularly checked each other's coding. Each student could make more than one response to each question and each specific response was counted only once. If a particular student made the same response twice within an answer it was only counted once. Frequency tallies were made of how many students made particular responses to each question. In order to estimate the salience of a particular response relative to other responses a weighted percentage was calculated of each coded response rate over the total responses to each question. Hence, if there were a total of 500 responses and a particular response was made 250 times it comprised 50% of the responses and hence was highly salient across the group of participants being one in every two of the responses made.

Participants

Participants were from Grades 7, 8 and 9 at five rural and six urban high schools in NSW (N=1103), and two Navajo middle schools in the United States (N=870, 406 males and 464 females). There were 270 Aboriginal children (129 males and 141 females). There were 833 Anglo-Australian students (432 males and 401 females).

Survey Instrument

The survey instrument consisted of four open-ended items that supplied a frame of reference for respondents' answers, but put no constraint on the answers and their expression. Among the questions asked were ones specifically designed to elicit information concerning the perceived difficulties students had in continuing schooling.

What types of things motivate you to work well at school?

What things make it difficult for you to do well at school?

Why do you think some students leave school before they finish high school?

What types of things would encourage you to complete high school and to go on to some further education such as college or university?

Coding

Content analysis of the responses to these four questions provided the following categories (with sample descriptions included)

What types of things motivate you to work well at school?

- Extrinsic reward (rewards, awards and certificates, encouragement and praise)
- Intrinsic reward (learning, doing interesting things, working for personal goals, doing things one is good at, understanding things, knowing what to do and how to do it, doing fun things when learning, challenges, having hard work, working at one's own pace)
- School mark and reports
- Sport
- Curriculum (subject interest, exciting things like experiments, specific subjects)
- Friend (supportive friends, friends helping, helping others, working together, friends praise, people being proud of one, people believing in one)
- Parent/family (a supportive family, family encouragement, family believing in one)
- Teacher (when teacher keeps pushing students to do better, good learning environment, good resources, good equipment)
- Future orientation (money, career, further education, getting married, doing better than parents)

- Self-motivation (doing better than last time, knowing one's done well, having opportunities others might not get, believing in self, knowing one can do well)
- Nothing (nothing motivates because not good at school, not interested in school)
- Don't know

What things make it difficult for you to do well at school?

- Negative peer influence (bullies, gangs, drugs, laziness, fights, playing too much, too much social life, kids that make trouble in class, friends, talking in class, people stopping one from learning, loud noises, distractions, disruptions, kids that are stupid and don't listen to the teacher, people who don't learn as quickly as others)
- Negative teacher influence (teacher absence, teachers not explaining things well, teachers not answering questions, teachers putting one down, teachers yelling, not getting encouraged, rewarded, attention, and not being supported by teachers, disrespect shown by teachers, teachers using putdowns, racism, lack of technology and resources)
- Maths/science
- English
- Difficult schoolwork (excluding maths, English and science, things not good at, not understanding, assignments, tests, not enough time, feeling that one is not getting anywhere, too disorganised to complete work properly)
- Boring schoolwork (including subjects not liked, not paying attention or concentrating or tiredness)
- Nothing (nothing makes it difficult for me to do well at school)
- Learning difficulty (ADHD, behavioural problems, being bad and getting into trouble, lack of confidence)
- Don't know
- Negative parental influence (stress from the family, pressure to do well)

Why do you think some students leave school before they finish high school?

- Ability (low confidence in ability, low self-esteem, being dumb, scoring low school marks)
- School work (too hard)
- School alienation (want to get out, don't like school, school is boring, lack of freedom at school, school is irrelevant, not caring about school, lack of application, not caring about the future)
- Job opportunity (career, money)
- Substance abuse (drugs)
- Pregnancy (and want to be married or live with boy or girl friend)
- Negative parental influence (helping parents around house, family can't afford education, lack of parental interest and support)
- Negative peer influence (to impress others, to look cool)
- Negative teacher influence (can't control class so students don't learn much, always on student's back)
- Lack of effort (don't have a goal, no ambitions, not motivated, not willing to ask for help)
- Don't know

What types of things would encourage you to complete high school?

- Extrinsic reward (rewards, awards, certificates, encouragement, scholarships)
- Intrinsic reward (interest in subject; trying your best in everything; desire to do well, learning, enjoying school, fun, challenging work)
- School mark
- Sport
- Curriculum
- Friends and support (mentoring, looking to people with experience, looking to others who do good work, supportive and encouraging people, people believing in one, people encouraging one)
- Parent (family support and encouragement, together with a cultural dimension)
- Teacher (good advice, tutoring, good relationships with students)
- Future orientation (money, career, further education, getting married)
- Self-motivation (own satisfaction, pushing oneself further, being smart, good at study, believing in oneself, confidence)
- Nothing (nothing would encourage me to complete high school)
- Don't know

Results

What types of things motivate you to work well at school?

Friends and parents appear important influences for Anglo, Aboriginal and Navajo students with over 15% of students mentioning both of these, although more Anglo mentioned parents and friends than the other two groups. More Anglo and Navajo students than Aboriginal students mention extrinsic reward systems and school marks. Anglo students mentioned intrinsic rewards more frequently (17%) than either Aboriginal students (10%) or Navajo students (11%). More Anglo and Navajo students mentioned the curriculum than Aboriginal students (16%, 14% and 10% respectively). 12% of Anglo students mentioned teachers in comparison to 9% Aboriginal and 8% Navajo students. There were similar percentages of students responding across the other categories. Relatively low numbers of students mentioned future orientation and self-motivation. In order of frequency, motivation to work well at school seems to be influenced by friends, parents and extrinsic rewards for both the Anglo and Aboriginal students. A slightly different pattern emerged for the Navajo group with school marks also being highly salient.

A comparison with the weighted percentages shows that there is little difference between the three groups on the perceived importance of parents and friends, with friends making up approximately 15% of all responses and 14% for parents, slightly higher for the Aboriginal group (15%). These two influences appear more salient than most of the other influences except school marks which is also highly salient for the Navajo students (15%). It is interesting to note that when weighted percentages are considered parents form a slightly higher percentage of responses for the Aboriginal group (15% of total responses made). Extrinsic rewards appear equally salient to each group although slightly higher for the Anglo group (13%). Intrinsic rewards appear somewhat more salient to the Anglo group (12%) than for the Aboriginal group (10%) and Navajo group (9%). The curriculum is marginally more salient for the Anglo and Navajo groups (12%) than for the Aboriginal group (10%). It is also interesting to note that teachers and self-motivation appear a little more salient to the Aboriginal group making up 9% and 6% of their responses respectively. As a weighted

percentage fewer responses referred to future orientation and self-motivation across the three groups. In summary, using weighted percentages parents and friends are highly salient to Anglo, Aboriginal and Navajo students, but school marks are also highly salient to the Navajo group.

Figure 1: Motivation to Work Well at School by Culture % Response

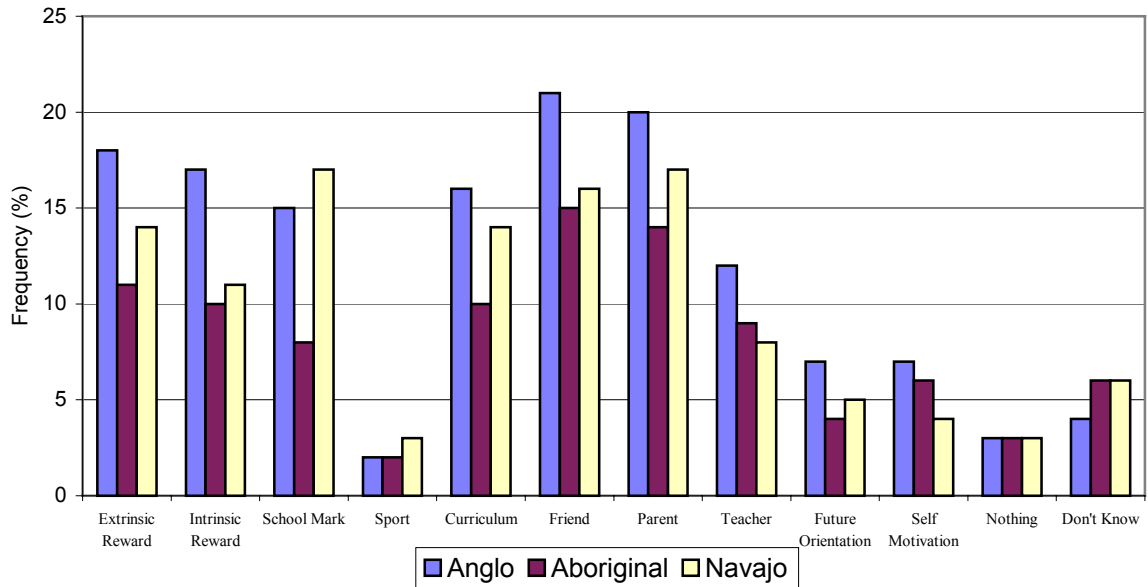
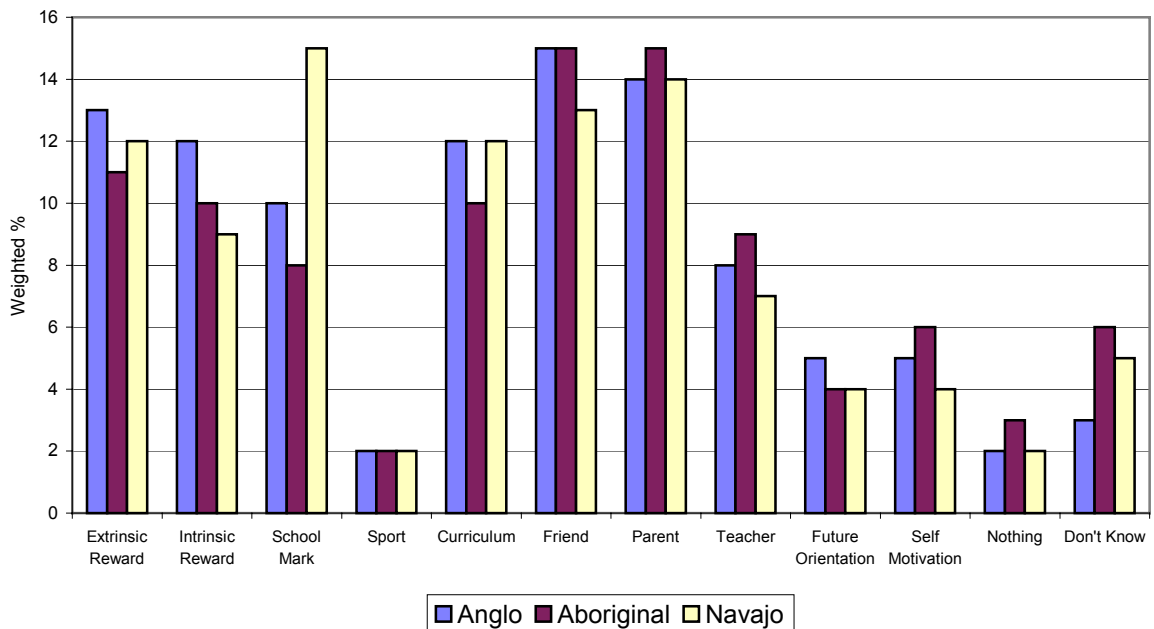


Figure 2: Motivation to Work Well at School by Culture Weighted % Response



What things make it difficult for you to do well at school?

Negative peer influence is the most frequently mentioned difficulty across all three groups with 34% of Anglos and 25% of Aboriginal and Navajo students mentioning peer influences. The next factor mentioned by significant numbers of students was difficult schoolwork with 26% of Anglo, 12% of Aboriginal and 20% of Navajo mentioning this. The third factor mentioned by a considerable number of students was negative teacher influence with 20% Anglos, 17% Navajo and 9% of Aboriginal students mentioning this. There were striking similarities in the frequency of responses across the other categories. However, of interest, a higher percentage of Navajo students (4%) mentioned negative parental influences than the other two groups with quite a small percentage of Aboriginal students mentioning this. In order of frequency distribution negative peer influence, difficult schoolwork and negative teacher influence appear the most important difficulties experienced across the three groups.

When the weighted percentages are considered some striking patterns emerge. While the order of salience of variables is the same as with percentage response we see that almost 40% of the Aboriginal students' responses dealt with negative peer influences in contrast to 34% for Anglo and 29% for the Navajo students. Difficult schoolwork is salient for each group making up 25% of responses for the Anglo, 23% for the Navajo, and 18% for the Aboriginal group. If the percentages allocated to specific subjects are counted in to difficult schoolwork, difficult schoolwork then accounts for 29% of the Anglo responses, 23% of the Aboriginal responses, and 29% of the Navajo responses. Clearly, after negative peer influence this is the most salient reason given by students for their difficulty in doing well at school, and the percentages across the three groups are quite similar. Negative teacher influence was also quite salient making up 20% of the responses for the Anglo and Navajo students and 13% for the Aboriginal group. We also note that boring schoolwork is more salient to Aboriginal than Anglo or Navajo students making up 5% of their responses. In summary, using weighted percentages, the order of the most significant influences is the same across the three groups. However, negative peer influences make a higher percentage of responses for the Aboriginal group.

Figure 3: Difficult to Do Well at School by Culture % Response

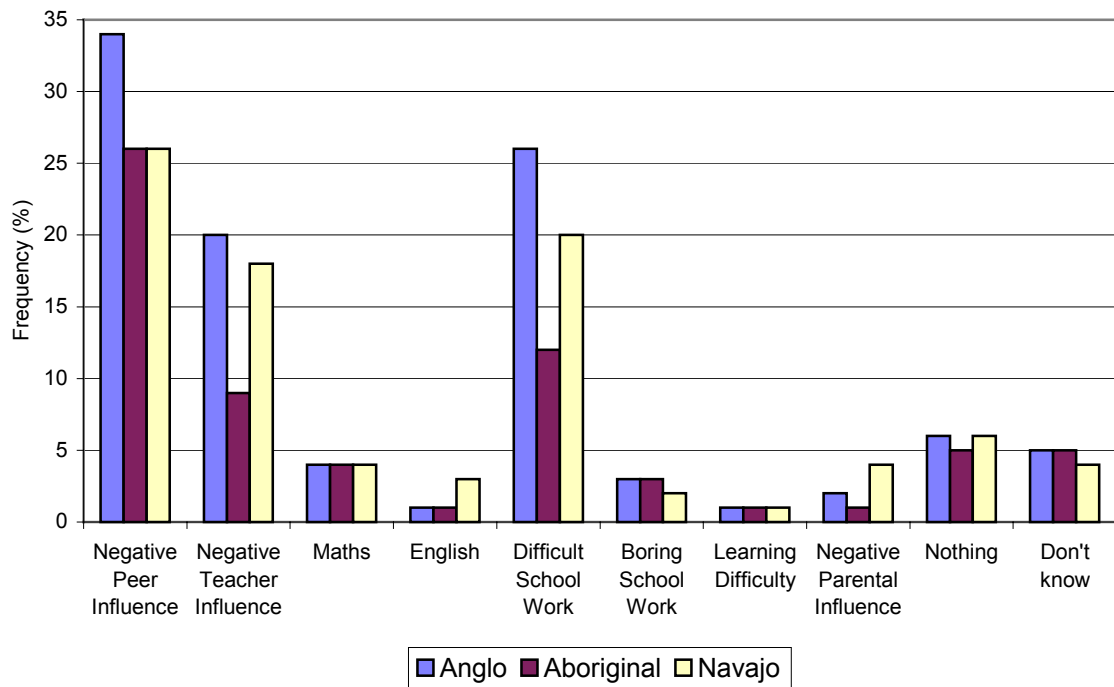
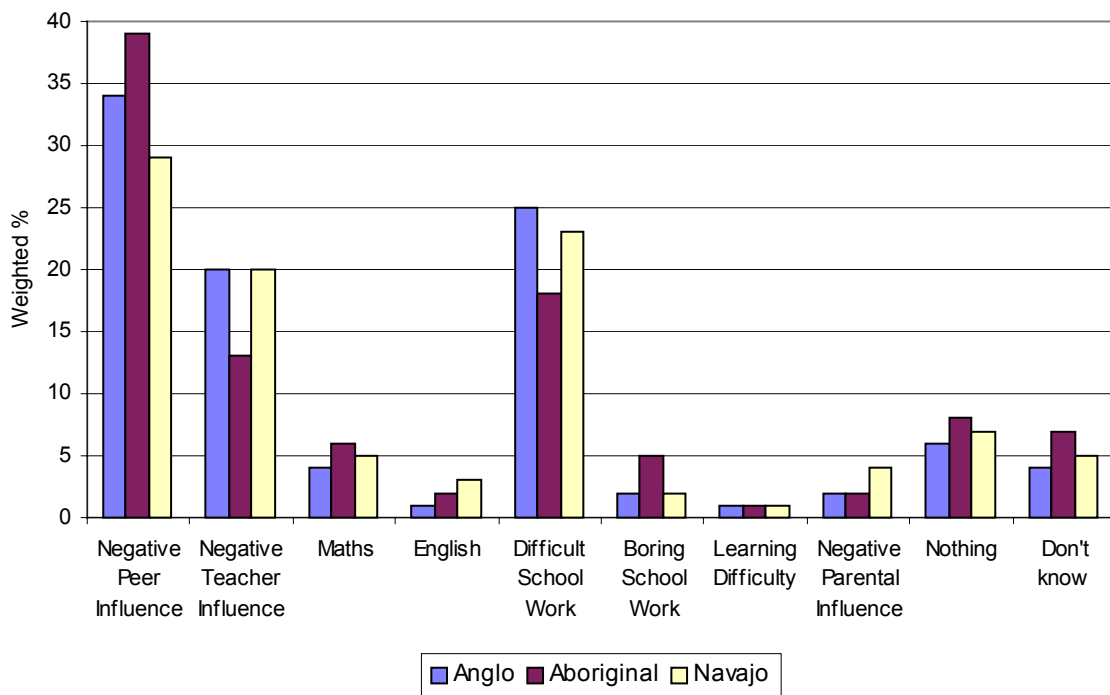


Figure 4: Difficult to Do Well at School by Culture Weighted % Response



Why do you think some students leave school before they finish high school?

Students from each cultural group most commonly mentioned ‘school alienation’ as a reason why students leave school before they finish high school with 44% Anglo, 42% Navajo and 33% Aboriginal making this response. More Anglo (32%) and Aboriginal students (16%) cited ‘job opportunities’ as a reason than Navajos (5%), although considerably more Anglo students did. Pregnancy was mentioned by 17% of the Navajo students and substance abuse by 8%. These factors were not mentioned at all by the Anglo students and by very few Aboriginal students. Negative parental, peer and teacher influences are mentioned by a relatively small number of students in each group. More Anglo (16%) and Navajo (14%) students mention ‘ability’ and ‘difficult schoolwork’ than Aboriginal (7%) students. In order of frequency distribution leaving school early seems to be most associated with school alienation, job opportunity and ability for the Aboriginal and Anglo students. However, pregnancy, rather than job opportunity, is highly salient for the Navajo group.

When we consider the weighted percentages it is obvious that school alienation is more salient to the Aboriginal students. 43% of their responses are related to school alienation in comparison to 38% for Anglo and 36% for Navajo. However, school alienation in its various guises is quite high across all groups. The next most salient influence for Anglo and Aboriginal students is job opportunity with 27% and 20% of the responses respectively. This was a minor influence for the Navajo group, for whom pregnancy was the second most salient reason (16%), which when put with substance abuse (7%) makes a strong point about relative influences across the groups. Ability and difficult schoolwork accounts for similar levels of responses (approximately 10%) across the three groups. In summary, while there were differences in the weighting of percentages the most salient reasons given for students leaving school early related to school alienation and job opportunities for the Aboriginal and Anglo students. Pregnancy and substance abuse was more salient than job opportunity for the Navajo group.

Figure 5: Why Students Leave School Before They Finish High School by Culture % Response

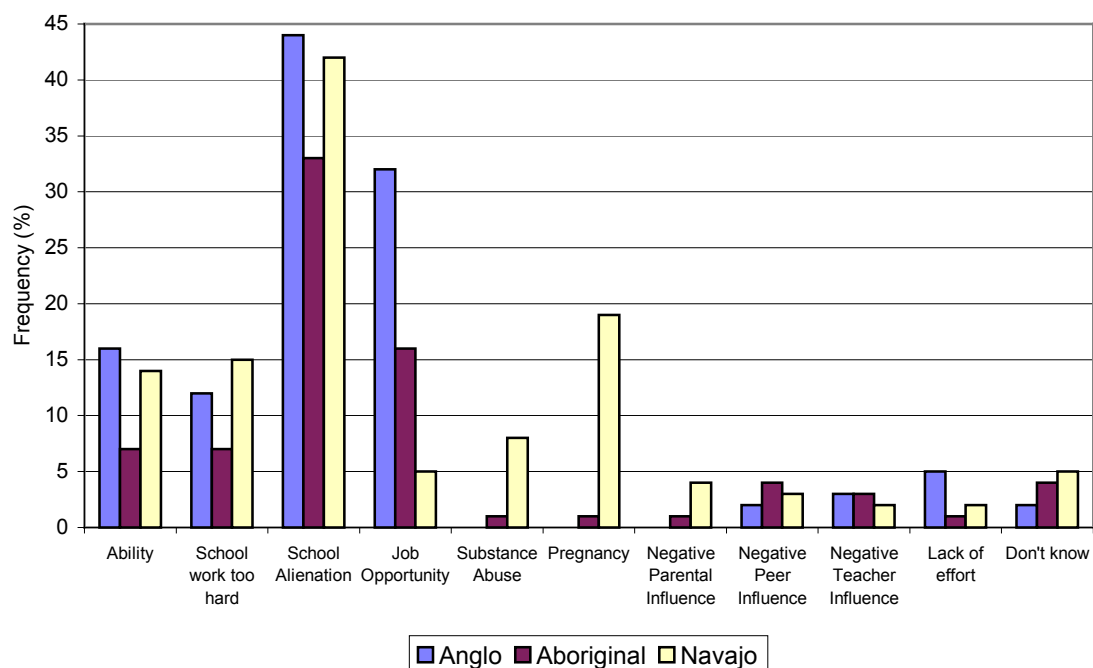
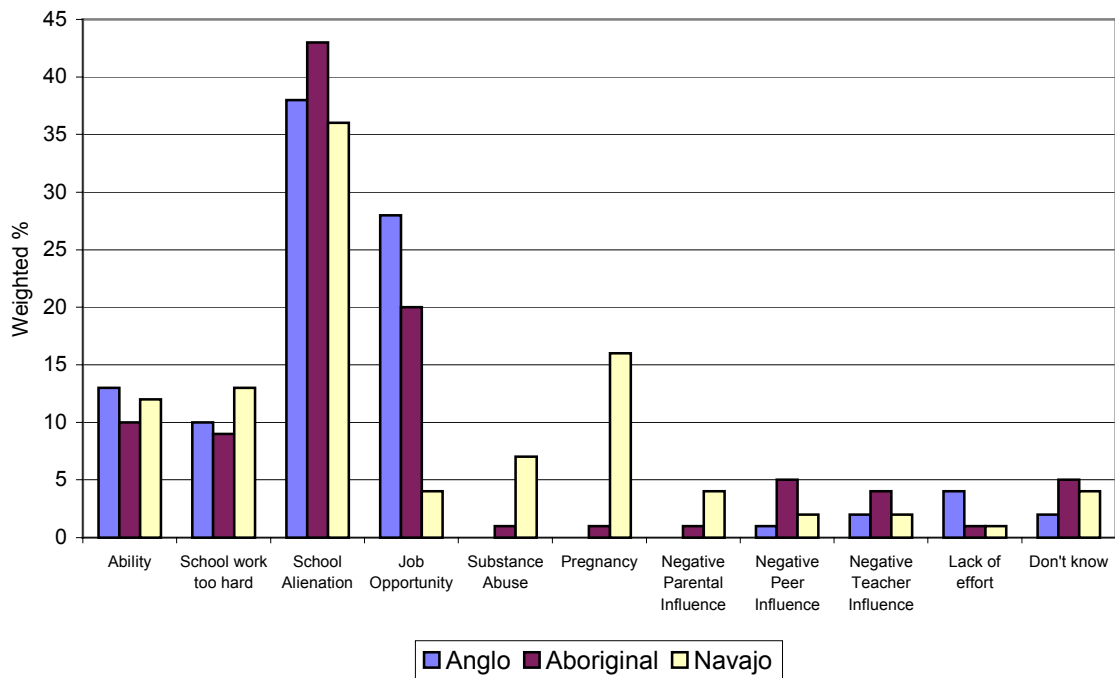


Figure 6: Why Students Leave School Before They Finish High School By Culture Weighted % Response



What types of things would encourage you to complete high school and to go on to further education such as college or university?

More than 36% of Anglo students mentioned ‘future orientation’ as a motivation to complete school and pursue further education, which far exceeds Aboriginal students (13%) and Navajo students (25%). There is a clear drop then to parent influence (15%) for the Anglo group. Slightly more Aboriginal students mentioned parents as a critical influence (14%) than future orientations (13%), and friends were also important (13%). Parents were also important for the Navajo group (21%). More Anglo students mentioned school marks (13%) than Aboriginal (7%) and Navajo (11%). In order of frequency Anglo motivation to complete high school and to go onto further education is most associated with future orientation and parent influence. A similar pattern characterised the Navajo students. In contrast, in order of frequency, Aboriginal motivation to complete school appears to be most associated with parental influence, friends and future orientation.

When the weighted percentages are considered we see that future orientation makes up 16% of the Aboriginal responses in contrast to 31% and 23% for the Anglo and Navajo students respectively. The salience of parents is considerably higher for the two indigenous groups making up 18% and 19% for the Aboriginal and Navajo students respectively and 13% for the Anglo group. Friends are also considerably more salient to the Aboriginal group making up 17% of their responses in contrast to 9% for both Anglo and Navajo students. Response rates for school marks and intrinsic rewards appear similar across the three groups, while self-motivation is slightly higher for the Anglo students.

Figure 7: Motivation to Complete School and Pursue Further Education by Culture % Response

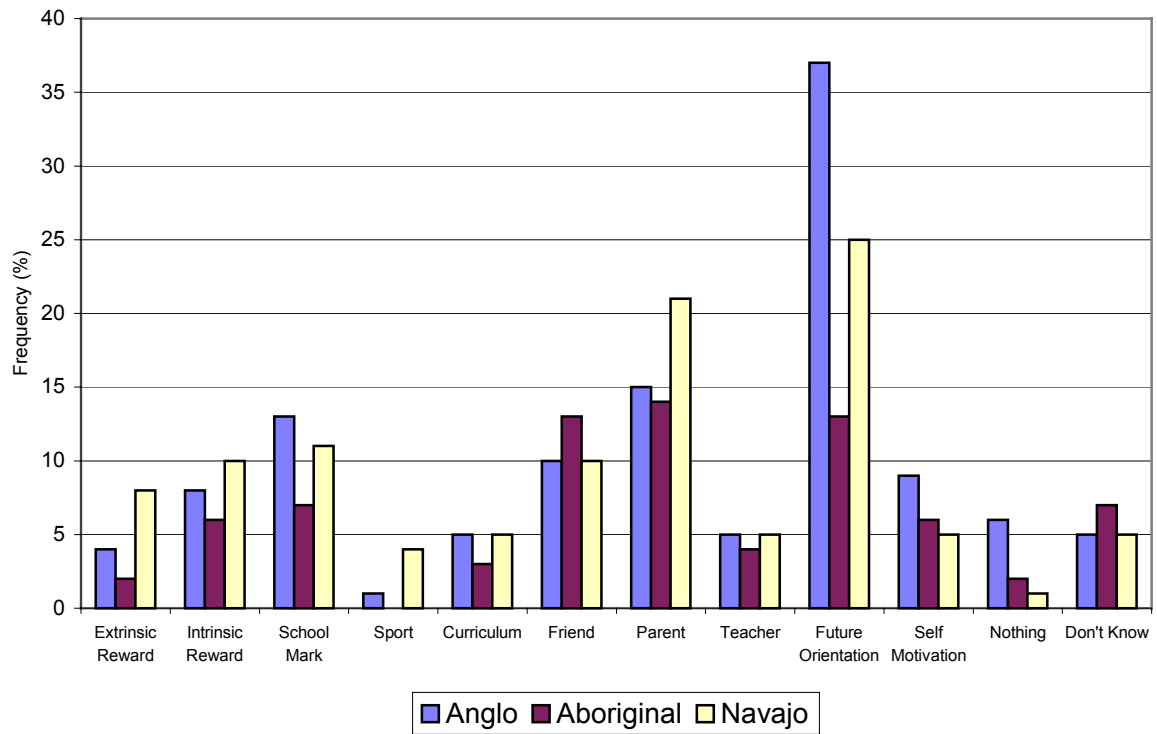
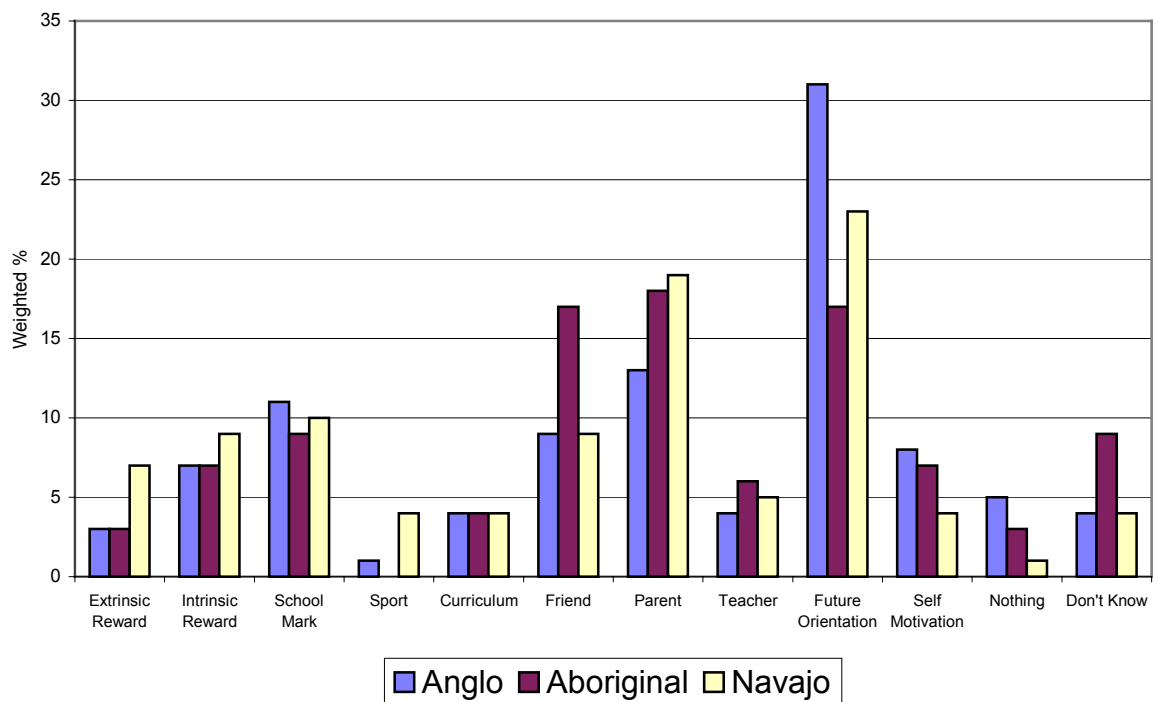


Figure 8: Motivation to complete school and pursue further education by culture Weighted % Response



Discussion

These data provide some insight into the perceptions students have, and the presumption is that they are using their own frames of reference as Aboriginal, Anglo, or Navajo students for their perceptions. At the beginning of the paper I suggested five issues that need to be addressed in order to provide information that might shed further light on the differential performance of indigenous and non-indigenous students. First, I suggested that the quantitative research referred to earlier in the paper may have failed to address motivational goals that might be more salient for indigenous students in school settings. While not specifically targeting student perceptions of motivational goals the questions asked did allow the opportunity for students to mention what they thought was particularly important to motivate them. This qualitative research did not discover any further goal orientations other than mastery, performance, social and extrinsic that might be salient for the Aboriginal and Navajo groups.

Second, I suggested that indigenous students might have a limited future time perspective, and a different sense of the future and its relationship to their schooling than non-indigenous students. They may not perceive the instrumental value of schooling in the same way as other students. This research certainly reveals that there are considerable differences between the groups on the salience of future orientation. For the Anglo group future orientation was the most important reason given for students completing school and pursuing further education, far outstripping any other reason. While not as important, it was still quite important for the Navajo group, along with parent influence. However, future orientation was considerably less important for the Aboriginal group, and no more important than parents and friends. I think this is a really crucial dimension that may indeed give us a clue as to the reason why many indigenous students, and in particular Aboriginal students, do not complete school and go on to further education. While parents and friends were important to Anglos for being motivated **at** school, they appear to be relatively unimportant to motivation **to complete** school.

A further issue I thought should be addressed is the nature of the factors that might inhibit a student doing well at school, and whether these were similar or different across the groups. Again, while there was broad similarity in the salience of the factors mentioned across the groups, there were some striking differences. It appears from the data that negative peer influence is relatively more salient to the Aboriginal students. It was somewhat surprising that this was higher than for the other groups (weighted percentages), while aspects that I would have thought would perhaps be more salient to the Aboriginal students, such as negative teacher influence and difficult schoolwork, were less salient than they were for the other two groups. Alienation was a strong perceived cause for students leaving school early for each of the groups, far outweighing other factors, such as ability and difficult schoolwork that might have been presumed to be more important. However, school alienation appears considerably more salient (weighted percentages) for the Aboriginal students, far outweighing other reasons given by Aboriginal students for students dropping out of school. Pregnancy and substance abuse seem to be very salient for the Navajo group. Hence, as with future orientation, these data give us a further clue as to the factors that might impact to reduce the likelihood of students completing school and their differential impact on indigenous students.

In my introduction I suggested that the historical experiences of indigenous people within assimilationist and often-racist educational institutions might moderate the future goals, achievement goals and perceived utility of schooling for indigenous students. While the

survey questions did not address this issue specifically we can 'read between the lines' of some of the responses and suggest whether these issues are important. First and foremost, the relatively low level of future orientation of Aboriginal children suggests that their identity as Aboriginal does appear to impact on their future time perspective, their view of their future and the utility value of school to achieve this. Without doubt, this is an artefact of their historical circumstances, family experiences with education, and the lack of 'payoff' in the wider society for achieving at school in terms of enhanced life opportunities. Second, the relatively high incidence of comments related to negative peer influences and alienation, which is higher for the Aboriginal group than either of the other two groups (weighted percentages), suggests that covert racism and unsatisfying interpersonal relationships may be strongly influencing current students and continuing the pattern that was established for their forebears.

Finally I suggested in the introduction that the quality of schooling for indigenous students might be inferior. There is some evidence for this in the data on school alienation and negative peer influences already cited. However, on other key indicators of poor education, such as negative teacher influence (which in our descriptors included facilities) and difficult schoolwork, there were minimal differences between the groups and relatively few students mentioned these, and indeed, considerably fewer Aboriginal students cited negative teacher influence on why it was difficult to do well at school than either of the other two groups. Furthermore, on the question why students leave school before they finish high school very few Aboriginal or Navajo students cited negative teacher influence, and none cited an irrelevant curriculum. In contrast, on indicators of good school quality, such as teacher influence, curriculum influence and reward structures on motivation the indigenous students were quite positive with significant numbers mentioning these as sources of students' motivation to work well at school.

There are some other interesting patterns that might suggest reasons for the differences in academic outcomes between indigenous and non-indigenous students. While important to all groups, parents and friends appear relatively more important positive influences on completing school for Aboriginal students. Pregnancy and substance abuse appear to be important factors differentiating the Navajo from the other groups. It is also significant to note that most of the negative factors that appear to be implicated in poor performance and early dropout behaviour are not internal factors but rather external to the student. In other words, ability and learning difficulty, which might be considered internal beliefs about one's self, do not appear to be important reasons given for poor performance or early dropout behaviour. Rather it is external factors, such as alienation and negative peer influences that appear to be implicated. This is a rather positive finding as the circumstances producing such perceptions in students are largely within the control of the school.

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