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# a MOTIVATIONAL PSYCHOLOGY for the EDUCATION of INDIGENOUS AUSTRALIAN STUDENTS

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## ■ Abstract

This article explores an integrative framework for a motivational psychology for the education of Indigenous students. Drawing on and adapting Graham's (1994) taxonomy for motivational psychology, it is suggested that enhancing the educational outcomes of Indigenous students involves addressing factors relevant to the self (positive identity, academic self-concept, and academic resilience), cognitive and affective factors (that facilitate motivation, engagement, achievement, and enjoyment of school), socialisation and child-rearing antecedents (the role of the family), failure dynamics (fear of failure and shame), the role of significant others and their contexts (peers, community, teachers, schools, and the scope for pastoral pedagogy), and the issue of young people's pathways and transitions. Values, attitudes, and approaches to school and schoolwork that are common across Aboriginal and non-Aboriginal students and the role of positive psychology are also explored as a means of contributing to a better general understanding of human behaviour.

## ■ Introduction

There are many factors relevant to the educational needs of Indigenous students. These include the role of culture, the interface with the non-Indigenous community, the family, prior educational experiences, socio-economic status (SES), health (physical and mental), welfare, school structure, and pedagogy to name but a few. Given that the range of factors relevant to Indigenous education is wide-ranging, it is proposed that there is a need for an integrative framework which also holds implications for psychological and educational practice. This article considers such a framework and focuses on the issue of motivation as well as centrally related factors encompassing achievement, attendance, educational transitions, and enjoyment of school.

In 1994, Graham identified a taxonomy for considering motivation amongst African-Americans. Notwithstanding the important historical and social factors that distinguish African-Americans from other racial "minority" groups (including Indigenous Australians), it is suggested that this framework provides a useful means by which to think about Indigenous students' educational status and outcomes. According to Graham, a motivational psychology must:

- be explicitly concerned with "self";
- incorporate a range of cognitive and affective determinants of behaviour;
- be particularly sensitive to the dynamics of failure, such as chronic failure patterns, drop out, and expulsion and suspension;
- recognise complex relations between race and social class;
- address socialisation and child-rearing antecedents of achievement strivings; and,
- should also contribute to the understanding of the general principles of human behaviour.

Additionally, upon consideration of the literature on Indigenous education, it is apparent that the role of significant others and their contexts (e.g., peers, teachers, school) and young people's pathways and transitions are two other themes to consider in this motivational psychology.

This article structures the discussion and analysis around these core themes. In relation to the theme of *self*, key considerations include positive Aboriginal identity, positive identity as a student, positive academic self-concept, and academic resilience. The theme of *cognitive and affective variables* encompasses academic achievement facilitators, academic motivation/engagement facilitators, attendance facilitators, and learning styles. In relation to the theme of *socialisation and child-rearing antecedents*, key elements involve the role of the family and the Indigenous community. In terms of the role of *failure dynamics*, key elements concern fear of failure and "shame". The theme of *significant others and their contexts* considers effective schools, the role of teachers, good relationships, and pastoral pedagogy. The *pathways and transition theme* recognises that Indigenous young people's lives are often not linear and that understanding the often complex pathways is important, particularly given the preponderance of cross-sectional "snapshot" research conducted to date. In terms of *contributing to a general understanding of human behaviour*, the discussion focuses on the values, attitudes, and approaches to school and schoolwork that are shared between Indigenous and non-Indigenous students and suggests that through positive psychology these are opportunities to enhance the motivation and achievement of all students. The theme relating to the *interplay of race and social class* is not addressed as a distinct issue as it emerges as a prevailing factor underpinning the other seven themes. Notwithstanding this demarcation of elements and themes, it must be recognised that disaggregation along these lines is more an heuristic for understanding a motivational psychology for Indigenous students than a prescriptive, non-negotiable, and immutable grouping of factors relevant to Indigenous motivation.

#### *Some important qualifications*

Although discussions such as that to follow address Indigenous education in the context of Indigenous and non-Indigenous students as two distinct groups, it is important to recognise that there is substantial diversity within each group. Factors that underscore heterogeneity within the Indigenous community include region (inner-urban, urban, regional, rural, and remote), socio-economic status, health (physical and mental), employment status, family structure and circumstances, and educational background. Hence, variation amongst Indigenous students can in some cases be large (as can differences amongst non-Indigenous students) and so the treatment of Indigenous and non-Indigenous students as two separate groups in this article is not to imply that they are two homogeneous groups. Also, for purposes of clarity, the discussion almost exclusively focuses on educational outcomes and educational factors relevant

to these outcomes. Although the article does not address in detail issues such as socio-economic status, health, employment status, and family structure and circumstances, this does not imply that these factors are not substantial in an Indigenous student's life.

#### *Educational outcomes of Indigenous students*

Before considering the themes underpinning the proposed motivational psychology, it is important to provide the educational context for considering such issues. At the outset, it must be recognised that across a breadth of educational outcomes, Indigenous students are performing more poorly than non-Indigenous students. Table 1 presents a slice of the educational disparity between Indigenous and non-Indigenous students at the time of writing. Indigenous students are less likely to be attending an educational institution between the ages of 5 and 14 years. Indigenous students demonstrate lower levels of attendance. Across reading, mathematical literacy, and scientific literacy, Indigenous students perform more poorly than their non-Indigenous counterparts. A similar profile is found in national benchmarking of literacy and numeracy in Years 3 and 5. School retention rates for Indigenous students between Years 10 and 12 are nearly half that of non-Indigenous students. Moreover, the decline in retention from year to year in secondary school is markedly sharper for Indigenous students. There is approximately three times the number of non-Indigenous Year 12 certificate holders achieving tertiary entrance qualifications compared with Indigenous students achieving the same outcome.

Although some gains have been made by Indigenous students in recent years (e.g., increased enrolments in preschools and schools; improvement in apparent grade progression and retention; increase in the number of VET enrolments; improved employment outcomes for VET students; increased numbers of undergraduate degree enrolments, improved employment outcomes for Indigenous higher education graduates; DEST, 2002), these gains do little to mitigate the overwhelming educational disadvantage Indigenous students experience on so many other fronts (see also Calma-Holt, 1996; Groome & Hamilton, 1995; House of Representative Standing Committee on Employment, Training and Education, 1997; Rigney, 1996). Furthermore, the proportion of Indigenous children 0–4 years is double (12.9% of Indigenous population) that of the non-Indigenous population (6.4%) (DEST, 2002) and so the Indigenous community is a younger community thus bringing education into even sharper focus over the coming years. The impact of this educational disadvantage is far-reaching and ranges from problematic transitions into further education and training, difficulties gaining employment, diminished mental and physical health and even disproportionate representation in custody

(Johnson, 1991; Jonas, 2002). Given this, there is a very clear need to enhance the educational outcomes of Indigenous students.

■ Cognitive and affective variables

*Learning styles*

It has been reported that there is conflict between the values and goals of school and those values and goals held by Indigenous students and that this conflict can lead to disengagement and drop-out (Fogarty & White, 1994; Halse & Robinson, 1999). For example, it is reported that non-Indigenous students value mastery and performance goals, future time orientation, competition, success and individuality, whereas Indigenous students are more inclined to value harmony, present time orientation, anonymity, group orientations, and non-competitive environments (Fogarty & White, 1994; McInerney, 2000). Implicit in mastery and performance goals, for example, is the focus on individualism and this is tied to a “Western” conception of appropriate goals at school. Particularly in competitive school systems there is less focus on social goals and interdependence which are more

salient for students from non-Western backgrounds (Triandis, 1995).

This brings into consideration the issue of learning styles and there exists a body of research attesting to the divergent learning styles that occur for Indigenous and non-Indigenous students. It has also been argued that Indigenous learning styles favour group orientations (more than individualistic), spontaneous (more than structured), uncritical (more than critical), personal (more than impersonal), listening (more than verbalising), indirect questioning (more than direct questioning), and observation and trial (more than direct instruction) (Harris, 1984; Hughes, 1987, in Halse & Robinson, 1999; Kearins, 1981; NBEET, 1992). There is value, it is suggested, in alerting non-Indigenous teachers to Indigenous students’ alternative ways of learning (Stairs, 1994) provided the resultant pedagogy is not rigidly applied or unhelpful stereotypes are not initiated or exacerbated (Guild, 1994).

*Factors facilitating achievement and engagement*

Relevant to cognitive and affective factors in the proposed motivational psychology are those that have been found to facilitate Indigenous students’ educational outcomes. Significant predictors of

Table 1. Various education-related statistics for Indigenous and non-Indigenous Australian students (DEST 2002).

Description	Indigenous	Non-Indigenous
Proportion of persons 5-14 years attending an educational institution	87%	95%
Attendance rates		
• In government primary schools	75%-92%	85%-95%
• In government secondary schools	70%-86%	86%-92%
PISA 2000		
• Total reading score for 15 year olds	448.1 (sd=102)	530.8 (sd=100)
• Mathematical literacy score for 15 year olds	449.4 (sd=89.4)	535.1 (sd=88.1)
• Scientific literacy score for 15 year olds	447.8 (sd=97.9)	529.3 (sd=94.4)
Apparent grade progressions		
• Year 8 to Year 9	96.1%	99.8%
• Year 9 to Year 10	89.7%	98.6%
• Year 10 to Year 11	67.6%	89.4%
• Year 11 to Year 12	66.6%	86.5%
Apparent retention rates to Year 12 for students in Year 10 in 1999	43.6%	76.2%
2000 National Benchmarking Results		
• Year 3 Reading (% meeting benchmark)	76.9% (sd=6.5)	92.5% (sd=2.2)
• Year 3 Numeracy (% meeting benchmark)	73.7% (sd=7.1)	92.7% (sd=2.0)
• Year 5 Reading (% meeting benchmark)	62.0% (sd=4.8)	87.4% (sd=2.1)
• Year 5 Numeracy (% meeting benchmark)	62.8% (sd=4.5)	89.6% (sd=1.7)
Year 12 certificate holders achieving tertiary entrance qualifications	14%-23%	49%-57%

Indigenous students' motivation at school are self-reliance, confidence, task orientation, and striving for excellence (McInerney, 1991). Moreover, significant facilitating conditions for engagement are parental encouragement and support, positive peer influence, school influence (responsive to the needs of students and support and encouragement from teachers), school affect and values (e.g., liking school), and perceived valuing of school (McInerney, 1991).

Indigenous Education Strategic Initiatives Programme (IESIP) providers have identified a number of factors affecting enrolments and attendance of Indigenous students. These include the need to keep school interesting and fun, provide supportive networks (particularly in high school) such as mentoring and role modelling, well-trained staff, rapport between staff and students, flexible learning plans, relevance, and achievability of work. Supporting these is the importance of addressing health and welfare needs and meeting basic logistical needs such as transport (DEST, 2002; see also Bourke, Rigby, & Burden, 2000).

It has been reported that a number of the factors that are relevant to Indigenous students' motivation share features salient in more generally disadvantaged students' academic lives (Craven, Tucker, Munns, Hinkley, Marsh, & Simpson, 2003). If this is the case, then the present framework can also draw on research that sheds light on the achievement and engagement of disadvantaged students. McRae (1990) identifies a number of factors directly relevant to disadvantaged students' educational outcomes including attendance, the need for a safe and secure climate, fluency in the language of instruction, a calm emotional state for attention and concentration, the ability to extract and produce basic patterns of meaning from text, suitable conditions to do schoolwork, and comfortable physical surrounds.



### The role of "self" in Indigenous motivation and engagement

#### *Identity as an Aboriginal person, identity as a student, and academic self-concept*

It has been suggested that if Indigenous students' identity as Aboriginal people is supported by the school there is greater scope to enhance their academic engagement and achievement (Groome & Hamilton, 1995). There are a number of ways schools can do this. The presence of Indigenous mentors at school that students respect along with appropriately proportionate representation of Indigenous teachers can encourage pride in their identity and reduce their alienation from school (Britton, 2000). Implementing a range of cross-cultural strategies – such as building Indigenous perspectives into diverse curriculum areas, drawing on the expertise of the Indigenous

community, linking with the home and community wherever possible, being mindful of Anglo-European bias in materials, and using culturally familiar and relevant resources – communicate cultural sensitivity (Halse & Robinson, 1999). The inclusion of Aboriginal studies as a necessary component of the curriculum facilitates greater awareness and understanding of Indigenous communities, culture and people by all students (Craven, d'Arbon, & Wilson-Miller, 1999).

However, it has also been suggested that acceptance of school and academic outcomes can be further enhanced by Indigenous students also positively identifying as a student (Purdie, Tripcony, Boulton-Lewis, Fanshawe, & Gunstone, 2000). Related to this is the relatively lower academic self-concept found among Indigenous students. Craven et al. (2003) found that Indigenous students' mathematics, verbal, and general school self-concepts are significantly lower than that of non-Indigenous students. According to Purdie et al. (2000) to enhance these students' identification as students and academic self-concepts it is important to enhance the perceived value in school and specific school subjects and this is developed through their sense of belonging at school and in class, good relationships with teachers, supportive and positive expectations, relevant curriculum, and support and encouragement from family, peers, and the community.

One barrier to their gaining a positive identity as a student and a positive academic self-concept is the alienation and resistance to school that Indigenous students experience. It has been argued that Indigenous students' resistance to school is a rational response to their view that school is not delivering educational success to their group (Munns, 1998). This interpretation of Indigenous students' school resistance emerges from Willis' (1977, 1983) work on resistance and cultural production proposing that individuals draw on their cultural resources to make sense of the world and this contributes to their resistance because school does not match their cultural background and resources. In terms of the issue under focus here, Indigenous students draw on cultural themes to make sense of school and conclude that school is just another place to wrestle with authority and "the system" and this leads to resistance of it (Munns, 1998). This line of thought strongly supports the proposition that Indigenous students' motivation and achievement cannot be properly addressed without taking into consideration their cultural background and the history of that culture.

#### *Academic resilience*

It may be that motivation and engagement alone are not sufficient to deal with the challenges presented at school. Without some level of academic resilience to various types of challenge and adversity, even the

motivated student's gains can be lost. In a general sense, resilience has been defined as the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances (Howard & Johnson, 2000). In the academic context, it can be defined as students' ability to deal effectively with academic setbacks, school-related stress, and school-related pressure (Martin & Marsh, 2006). School is an important place where resilience in young people can be enhanced (Cunningham, Brandon, & Frydenberg, 1999; Frydenberg, 1999; Fuller, 2001; Fuller, McGraw, & Goodyear, 1999; Howard & Johnson, 2000; Longaretti, 2001; Parker & Hendy, 2001; Speirs & Martin, 1999). However, studies of resilience as it pertains to school are still couched in terms of a young person's mental health and well-being (which are vital) but not in terms of their academic development (however, it is recognised that the two are correlated).

Martin and Marsh (2006) recently examined academic resilience in more detail to look at specific factors that best predicted students' academic resilience. They found that academic resilience is most strongly predicted by high self-belief, high control, high persistence, high planning, and low anxiety. Their analyses showed that academic resilience can be conceptualised in terms of the 5Cs: confidence (self-belief), control, commitment (persistence), coordination (planning), and composure (low anxiety). Moreover, of these five, by far the strongest predictor was composure (low anxiety). The multidimensionality of academic resilience holds implications for pedagogy because identifying specific facets of academic resilience enables more targeted intervention and support. This is likely to be more effective than global support directed at academic resilience as a global construct (Weisz, Weiss, Han, Granger, & Morton, 1995).

### *Failure dynamics*

An alternative but equally culturally-relevant interpretation of Indigenous students' resistance to school is found in theory and research relevant to fear of failure. Martin and colleagues (Martin & Marsh, 2003; Martin, Marsh, & Debus, 2001; see also Covington & Omelich, 1991) have proposed that there exists a cascading model of failure fearing that ultimately leads to failure acceptance or resistance. At first, students respond to their fear of failure with diligence and effort (these students are called "over-strivers"). After setback, pressure, or stress, students are at risk of responding to failure in more self-protective ways such as in the form of defensive pessimism (setting unrealistically low expectations leading up to a performance situation – so that failure is less likely against the reduced standard) and then more counter-productive strategies such as self-handicapping (putting obstacles in one's path to success – such as procrastination, wasting time, and

withdrawing effort – to establish an alibi in the event of poor performance). Martin and colleagues have argued that these may offer protective gains for a time but lose their utility in the face of an extended run of poor performance. It is at this point that students may come to accept failure and become disengaged. It is suggested here that for some students, their disengagement may also comprise active resistance to school.

The issue of fear of failure is a significant one for all students – particularly in excessively competitive school climates. However, there are some issues relevant to fear of failure that are particular to Indigenous students. It has been reported that Indigenous students are particularly sensitive to criticism, being singled-out, and being shamed through failure as these reduce their willingness to participate, lead to them rejecting their teacher's instruction, and increase the likelihood of truancy (Halse & Robinson, 1999) – consistent with the cascading model of failure fearing described above.

The issue of shame often emerges in accounts of Indigenous engagement. According to Groome and Hamilton (1995), Indigenous students can fear failure to a greater degree than non-Indigenous students. Munns found that even though Indigenous students would take risks in many other parts of life, they would not take educational risks: "The classroom appeared to be the site of their greatest danger. Reluctance to take risks was closely associated with the Aboriginal concept of shame" (1998, p. 179). Interestingly, Munns found that although there was no shame associated with quitting school, there was great shame in not being able to read in the classroom. It seemed that it was preferable not to run the race at all than run with the prospect of losing. This not only significantly impeded their opportunities for success but also yielded other negative outcomes: "Avoiding shame continually influenced the classroom responses of the Koori students, and this avoidance was likely to be manifested and/or interpreted as classroom 'misbehaviour'" (Munns, 1998, p. 181). For a number of Indigenous students, this fear of failure and shame led to the development of "survival" strategies such as faking work, copying, and looking busy (Munns, 1998).

Research suggests that ways to reduce students' fear of failure include promoting the belief that enhanced effort and strategy improve performance and do not imply the student lacks ability (Covington & Omelich, 1979), demonstrating that failure and mistakes provide information about how to improve and can be important ingredients for future success (Covington, 1992), and downplaying the emphasis on competition and promoting a cooperative classroom climate (Johnson & Johnson, 1989; Qin, Johnson, & Johnson, 1995). Taken together, these are aimed at reducing links students make between their achievement and their worth as a person, reducing the sting of fear, promoting a constructive

view of poor performance, and shifting students' focus onto factors such as effort and strategy that are controllable and away from factors that students see as less controllable or more threatening to their self-worth (see Martin & Marsh, 2003).

### Socialisation and child-rearing antecedents: The role of family

Although the role of the family is central to all students' motivation and achievement at school, it seems to be brought more sharply into focus for Indigenous students for a number of reasons (some cultural, some related to generational educational disadvantage, some related to disadvantage in other aspects of life, and others related to factors such as health, welfare, and socio-economic status). The role of parents/caregivers in all students' engagement is critical. For example, more adaptive academic functioning has been associated with a good relationship between parent and child (Furrer & Skinner, 2003), parents' optimistic expectations for their child (Dandy & Nettelbeck, 2000), parents' encouragement of their child (Hermans, ter Laak, & Maes, 1972), parents' positive academic goals for their child (Zimmerman, Bandura, & Martinez-Pons, 1992), and educational values and standards held by parents (Marchant, Paulson, & Rothlisberg, 2001). Indeed, research interventions that include parents have a greater impact on students' valuing of education than those that do not include parents (Day, Borkowski, Punzo, & Howsepian, 1994).

Given the significant impact of parents/caregivers on students' academic functioning at school, it is important to consider research that examines the role of parents/caregivers in Indigenous students' academic lives. Britton (2000) reports that Indigenous students' families do not have a great deal of involvement with school and in numerous cases can be fearful of or antagonistic towards school (see earlier discussion of resistance theory and Indigenous' individuals' alienation from school). Richer, Godfrey, Partington, Harslett, and Harrison (1998) argue that Indigenous students are disadvantaged at school partly as a function of their parents'/caregivers' educational disadvantage and economic circumstances evidenced through low levels of education, fewer educational resources at home, parents'/caregivers' lack of skills to help their child, and parents'/caregivers' low confidence to approach teachers. In fact, it appears that it is not so much education that parents/caregivers of Indigenous children and students have difficulty negotiating. Rather, it is the nature of school and schooling that presents difficulties (Phillips, 1990).

It has been proposed that the involvement of parents/caregivers of Indigenous students in their child's education would impact positively on the child's behaviour, attitude, and aspirations (Richer et al., 1998). To do this, McIntyre and Clark (1976)

suggest there is a need to increase parents'/caregivers' aspirations and awareness of education, increase parents'/caregivers' knowledge of education and its structure, increase parents'/caregivers' knowledge of their child's progress and participation, and significantly improve school-home links. Importantly, Indigenous parental involvement at school needs to be more than simply work in the canteen (and the like). Rather, there is a need for cooperation on projects and activities of substance (Eckerman, 1985). Moreover, the involvement (over and above mere participation) of parents/caregivers of Indigenous children is also vital for ensuring the curriculum is culturally appropriate and therefore relevant for Indigenous students. Parent/caregiver involvement resides along a continuum ranging from the informal and low-level such as parent-school social activities and book-covering through to involvement in the curriculum, resource development, and the pedagogy itself (Harslett, Harrison, Godfrey, Partington, & Richer, 1999).

### *Effective schools*

When exploring cases where Indigenous students are positively engaged with school and the curriculum, Groome and Hamilton (1995) found that such cases were more frequently found in schools that shared particular features and approaches to Indigenous education. Successful schools in their research were those that respected and valued the individuality of students, linked effectively with Indigenous families, created an environment that welcomed students, developed an academic curriculum that was demanding but accommodating, demonstrated high tolerance, supported innovative teaching strategies and practices (particularly in the early years of high school), and facilitated positive relationships between teachers and students. These schools also recognised and accommodated the fact that poverty and alternative lifestyles can impact on students' academic lives. Taken together, it is evident that there are school-level factors that impact on the educational outcomes of Indigenous students.

Groome and Hamilton also found that, *inter alia*, there appeared to be two influential approaches to dealing with Indigenous students. The first was to confront and then remove the child from the school. The second was a stated policy of not wanting to lose students. The latter – which was considered to be the most effective in engaging a greater diversity of Indigenous students – encompassed a supportive and accepting approach rather than a confrontational and challenging one, accepted students as individuals, nurtured high standards of honesty and relationships, and developed and sustained strong links with the Indigenous community. According to Groome and Hamilton (1995, p. 45), “we were repeatedly told by older Aboriginal adolescents that they want education,

they want to achieve and be successful, they have high aspirations but they cannot cope with the confrontational and alienating climate which they find in so many schools”.

### *The role of teachers*

Just as there can be variation in educational outcomes as a function of school, there is also significant variance between classes/teachers. In the broadest sense, there are three levels at which achievement varies: the student level, the class/teacher level, and the school level. Rowe (2000; see also Hill & Rowe, 1996; Lingard & Ladwig, 2001) has shown a substantial proportion of residual variance in student achievement is explained by teacher- and classroom-related factors. These findings are not confined to the mainstream. The quality of teaching and the characteristics, strategies, and approaches by teachers have a substantial impact on the educational outcomes of Indigenous students (Hill, 1989) – in some cases more than any other single factor.

An early report by Fanshawe (1976) identified the characteristics of effective teachers of Indigenous students and it is suggested that they are as relevant today as they were when first proposed. Fanshawe (1976, 1989) identified five pivotal domains of effective teaching. The first, personal characteristics of effective teachers, encompassed warmth, friendliness, high (but realistic) standards, and imagination and stimulation (see also Collins, 1993; Partington & McCudden, 1992). The second, attitudes and values of effective teachers, included confidence in students, positive attitude towards Aboriginality, and respect for Indigenous culture. The third, essential knowledge and skills of effective teachers, included knowledge of content, knowledge of students, and knowledge of effective means of facilitating content acquisition. The fourth, strategies for effective teaching, involved knowledge of remedial teaching techniques, individualised approaches, techniques for handling intergroup relations and developing cooperation, traditional methods of Indigenous education, and ability to ascertain academic, intellectual, social, and emotional development (see also Sommerland & Duke, 1973, in Fanshawe, 1976). The fifth, roles of effective teachers, encompassed being a student of Indigenous culture, becoming accepted by the community, being an innovator of teaching techniques, being an agent of social change, and liaising with the home (see also Hart, 1974).

Craven et al. (1999) discuss the role of teacher as facilitator in enhancing the educational outcomes of Indigenous students. These teachers organise the environment to enable student learning, have sound knowledge of learning theory and their learners (including prior experiences and their home environment), suspend personal judgement, accept an

environment where a variety of views are respected and explored, have community involvement where possible, foster a commitment to taking responsibility for the future, and respect Indigenous ways of knowing and forms of knowledge.

### *Good relationships*

Central to quality pedagogy is the issue of teacher-student relationships. Indeed, a variety of studies in the general student population reflect this. Enhanced adaptive academic functioning has been associated with a good relationship between teacher and student (Furrer & Skinner, 2003). Students who believe their teacher is a caring one also believe they learn more (Teven & McCroskey, 1997). Students' feelings of acceptance by teachers are associated with emotional, cognitive, and behavioural engagement in class (Connell & Wellborn, 1991). Teachers higher in warmth tend to develop greater confidence in students (Ryan & Grolnick, 1986). Teachers who support a student's autonomy tend to facilitate greater motivation, curiosity, and desire for challenge (Flink, Boggiano, & Barrett, 1990). Although these findings emanate from studies conducted amongst students generally, research conducted amongst Indigenous students has found much the same (see, for example, Collins, 1993; Groome & Hamilton, 1995; Martin, 2003; Richer et al., 1998). Moreover, the fact that many Indigenous students experience difficulties with their teacher (Richer et al., 1998) is a critical concern and a very important one to resolve when seeking to enhance the educational outcomes of Indigenous students.

It has been suggested that there are three levels of relationships relevant to educational outcomes (Munns, 1998). The first, relationship with school, involves a daily active connection with the school and people within it and is underpinned by connections with the Indigenous community, includes Aboriginal studies as part of the curriculum, and has the interests of Indigenous students as a priority (together, these enhance students' morale; Munns, 1998). The second, personal relationships, involves teachers getting to know students, developing trust within the class and school, and developing teachers' cultural knowledge and understanding. The third, pedagogical relationships, involves connecting with students in the forms of challenging and interesting work, effective helping strategies, and positive expectations by teachers for students. In the context of Indigenous education, predictors of this latter and less widely recognised level of relationship include teacher satisfaction, appropriate and respectful ideological views of students' Aboriginality, collaborative school planning, and effective early intervention policy and programming that is on a planned and regular basis rather than a needs-only basis (Munns, 1998).



### *Pastoral pedagogy*

Pedagogical relationships also bring into consideration the notion of "pastoral pedagogy". Pastoral pedagogy has been defined by Martin (2006) as pedagogy that connects to the individual student on three levels: the level of substance and subject matter, the interpersonal level, and the pedagogical level (see Martino & Pallotta-Chiarolli, 2003 and Munns, 1998, for additional perspectives on such pedagogy). Essentially, then, pastoral pedagogy comprises three key relationships: the substantive relationship (the connection between the student and the subject matter and substance of what is taught), the interpersonal relationship (the connection between the student and the teacher him or herself), and the pedagogical relationship (the connection between the student and the pedagogy/teaching).

Martin (2006) identifies core elements of the "substantive relationship". These include setting work that is challenging, assigning work that is important and significant, building variety into content and assessment tasks, assigning interesting work, drawing on material that is fun to learn, where possible and appropriate, and utilising material and assigning tasks that arouse curiosity. Key elements of the "interpersonal relationship" include actively listening to students' views, allowing student input into decisions that affect them, getting to know the students, showing no favouritism and affirming all students, accepting students' individuality, and having positive but attainable expectations for students. Core components of the "pedagogical relationship" include maximising opportunities for students to succeed and develop competence, providing clear feedback to students focusing on how they can improve, explaining things clearly and carefully, injecting variety into teaching methods, encouraging students to learn from their mistakes, clearly demonstrating to students how schoolwork is relevant and/or meaningful, and ensuring all students keep up with the work and allowing for opportunities to catch up. Pastoral pedagogy, it is suggested, provides enhanced opportunities to meet Indigenous students' social and emotional needs within the academic context and the joint operation of these are proposed to yield enhanced academic engagement.

### ■ Pathways and transitions

#### *Young people's pathways*

It is important to recognise that young people's lives are becoming increasingly complex, less linear, and hence, less predictable (Dwyer & Wyn, 1998; Wyn & Dwyer, 1999). In the context of Indigenous education, although the bulk of research provides a great deal of cross-sectional data on single points in these young people's lives, there is less analysis of

longitudinal pathways and not a clear framework that accommodates the diverse challenges in their non-linear and often complex transition through school and into further education and training or work. It is therefore proposed that another element of a motivational psychology for Indigenous education revolves around the notion of pathways.


As an emerging area in young people's transitions, pathways-related research provides potentially useful directions for further research in Indigenous education. It is important to follow up on the issue of interrupted transitions and pathways in Indigenous students' lives. Following from this, it is important to know more about the reasons why Indigenous young people make the decisions they do and how they think through their decision to change their course of direction. In line with the notion of interrupted pathways is the issue of re-entry points through these pathways. This can involve re-entry to school, further education and training, or indeed, the labour market. Not a great deal of research has been conducted into re-entry. Further work is required into why transition can be difficult and often unsuccessful, the most ideal and productive points of re-entry, the conditions under which re-entry is likely to be most successful, and the reasons why some young people make a successful re-entry (see Keys Young, 2000).

#### *Educational transitions*

Pathways research is also centrally-related to the issue of transition. As Table 1 indicated, transition is a significant issue for Indigenous students with markedly decreasing numbers of students not advancing to subsequent year levels. Educational transition points can be something of a double-edged sword. Some students can have difficulty making successful transitions while others find transition to be a time when they can make a fresh start. Thus transition points are a time of risk and opportunity. The issue of transition emerges in numerous reports on Indigenous education. For the most part, they are considered to be points of vulnerability for Indigenous students.

One particularly critical transition point is that between primary and high school. Such transitions are eased through staff being fully briefed on students' backgrounds, fully briefing students about high school, facilitating relationships between students and teachers, and assisting with any literacy and numeracy difficulties (Groome & Hamilton, 1995). The end of Year 10 is another important transition point and the decision to go on to Year 11 is a big one for Indigenous students. School and the home need to be very supportive of this decision and a communication gap between school and home can be unhelpful to students' effective decision-making at this time (Groome & Hamilton, 1995).

Although much of the focus of the present article is on school-age students, there are some lessons to be learnt from other educational transitions. Howard (1992; see also DiGregorio, Farrington, & Page, 2000) identifies four primary difficulties faced by Indigenous students upon entering higher education. The first, personal difficulties, relates to low self-confidence, lower levels of success experiences at school, and non-completion of school. The second, family difficulties, relates to having children of one's own, ill health, overwhelming family responsibilities, and family tension. The third, community-related difficulties, relates to a lack of positive role models, negative expectations for academic success held by Indigenous and non-Indigenous communities alike, and also not wanting to leave the community to undertake further education and training. The fourth, institution-related difficulties, relates to lecturers' inexperience dealing with Indigenous students, little access to lecturers, and little emphasis on relationships with staff. In addition to these difficulties, O'Neill (2000) identified difficult academic demands, heavy workload, and feelings of alienation in class as being barriers to Indigenous students' successful transition to higher education. Importantly, factors that have been found to facilitate Indigenous students' adjustment to university include: helpfulness and encouragement of teaching staff, approachability of staff, effective feedback on academic progress, feeling welcome at university, and the confidence, commitment, and determination of the student (O'Neill, 2000).

 Contributing to a general understanding of human behaviour

### *The role of positive psychology in Indigenous education*

In focusing on Indigenous students' motivation and engagement, it is apparent that lessons learnt in that domain have broader applicability and offer scope to better understand many other students and student groups. In this sense, then, assisting Indigenous students has the potential to benefit all stakeholders operating in any teaching and learning context in which motivation and engagement are relevant constructs. Therefore, recognising the common ground between Indigenous and non-Indigenous is one way to progress our understanding of human behaviour. Research indicates that there are shared strengths across cultures and it is important that these be given attention. Focusing exclusively on differences runs the risk of promoting an unbalanced deficit approach to Indigenous education. Such an approach is one that excessively focuses on what Indigenous students lack at the expense of Indigenous students' strengths (Chaffey, 1998; Eckerman, 1982; Munns, 1998). An

unbalanced deficit approach can result in reduced teacher expectations, a compromised curriculum, and restricted academic demands (Hatton, Munns, & Nicklin Dent, 1996).

Against this deficit model are approaches that focus on Indigenous students' strengths and use these as a means to develop areas of need. This concept has recently been developed to consider the scope for positive dimensions of individuals' lives to address aspects of their lives that are not so positive. This has been the pursuit of positive psychology. Moreover, a positive focus along these lines has the capacity to not only reflect a healthy end-state but also is a means to achieving psychological growth and improved well-being over time (Fredrickson, 2001). Positive psychologists refer to this as the "broaden and build theory" of positive emotions (Fredrickson, 2001). The "broaden and build theory" proposes that positive emotions and processes provide the potential to broaden individuals' momentary thought-action repertoires and also increase individuals' capacity to enhance their personal resources. It is suggested that examining positive psychology in the context of Indigenous education offers scope to shed light on our understanding of educational processes and outcomes more generally. In the context of Indigenous education, positive psychology recognises that there are gaps in their lives and the system more generally but that there are also dimensions on which Indigenous students do not under-perform and in many cases succeed. Hence, a focus on key principles underpinning Indigenous education would encompass building on strengths, encouraging pride in one's cultural heritage, and emphasising proactive rather than reactive approaches to education (Britton, 2000). It would also emphasise key catalysts to enhanced educational outcomes that include healthy family and school environments, adaptive intrapersonal factors, positive motivation and engagement, and constructive interests and attitudes (Gagne, 1991).

### Summing up

It is clear that Indigenous students experience substantial educational disadvantage relative to their non-Indigenous counterparts. This article has attempted to detail some of the factors that emerge more consistently in the literature on Indigenous education with particular focus on motivation and engagement. To assist interpretation, these factors have been grouped into an integrative framework that draws on Graham's (1994) proposed motivational psychology. A summary of this framework and related findings is presented in Table 2.

The role of Aboriginal identity is salient and the importance of developing classroom and school climates that support and celebrate this and then reduce school resistance cannot be underestimated.

Table 2. A motivational psychology for Indigenous students: Core themes and elements/strategies.

Theme	Sub-theme	Key elements/Strategies
Self	Positive identity as an Aboriginal person	Encouraging pride in culture, teachers understand cultural background and history of culture, professional development of teachers, Aboriginal studies/perspectives in curriculum, drawing on expertise of Indigenous community, mindful of Anglo-European bias in materials, use of culturally familiar and relevant materials.
	Positive identity as student and academic self-concept	Sense of belonging at school and in class, good relationship with teachers, supportive and positive expectations, relevant curriculum, support from peers, parents and community.
	Academic resilience	The 5Cs: Confidence, Control, Commitment, Coordination and Composure.
Cognitive and Affective	Academic achievement facilitators	Parental/caregiver encouragement and support, positive peer influence, quality pedagogy, inclusion at school.
	Academic motivation/engagement facilitators	Self-reliance, confidence, task orientation, parental/caregiver support, positive peer influence, valuing of school, enjoyment of school, effective schooling.
	Attendance facilitators	Interesting and fun schoolwork, supportive network, mentoring, role modelling, well-trained staff, flexible learning plans, relevance, achievability of work, transport, addressing health and welfare, safe and secure environment, fluency in language of instruction, affective state conducive to attention and concentration.
	Learning styles	Group orientations, cooperative learning, spontaneous, personal, listening, indirect questioning, spatial and visual, observation and trial.
Failure Dynamics	Fear of failure and shame	Careful with criticism, not singling students out, constructive and courageous view of mistakes, reducing link between worth of person and academic failure, cooperative learning climate.
Socialisation and Child-Rearing	Role of family	Optimistic expectations for student, encouragement and support of student, positive academic goals, valuing of school and education, nurturance of child, supportive autonomy. Strong school-home links (a) recognising parents'/caregivers' educational disadvantage, few educational resources at home, lack of skills to help child, parents'/caregivers' lack of confidence to approach teacher and (b) increasing parents'/caregivers' knowledge of the education system, knowledge of child's progress, cooperation on school activities and projects of substance.
Pathways and Transition	Educational transition	Fully briefing staff on students' backgrounds, professional development to help deal with Indigenous students and issues, fully briefing students about high school, developing inclusive and embracing school climate, facilitating teacher-student relationships (approachability, availability, helpfulness), early intervention with literacy and numeracy difficulties, good school-home links, supportive parents/caregivers and peers, confidence of student, commitment and determination of student, maximise opportunities to succeed, peer support/mentoring, positive role models, positive expectations by all stakeholders.

Table 2. A motivational psychology for Indigenous students: Core themes and elements/strategies (cont.).

Theme	Sub-theme	Key elements/Strategies
Significant Others and their Contexts	Effective schools	Good leadership (particularly), respect and value individuality of student, link effectively with families/home and community, create a welcoming environment for students, demanding but accommodating academic curriculum, high tolerance, supportive and innovative teaching strategies, facilitate positive teacher-student relationships, affirm cultural heritage of students.
	Effective teachers	Possess specific (a) personal characteristics (warmth, friendliness, high but realistic standards), (b) attitudes and values (confidence in students, positive attitude towards Aboriginality, respect for Indigenous culture), (c) knowledge and skills (knowledge of content, students, effective means of facilitating content acquisition), (d) strategies for effective teaching (individualised approaches, handling group dynamics, facilitating cooperation, appropriate remedial instruction), and (e) roles (being a student of Indigenous culture, innovator of teaching techniques, an agent of social change, school-home liaison, community involvement).
	Good relationships	(a) Between teacher and student – caring teacher, acceptance by teacher, teacher high in warmth, teacher supportive of student autonomy, getting to know students, developing trust and respect, developing teachers’ cultural knowledge; (b) between student and school – connections between school and Indigenous community, inclusion of Aboriginal studies, Indigenous teachers; (c) between student and pedagogy – challenging and interesting work, effective helping strategies, positive expectations of teachers for students, teacher satisfaction, respectful ideological view of Indigenous culture, collaborative school planning, and effective early intervention.
	Pastoral pedagogy	Three key relationships in the classroom: (a) ‘Substantive relationship’ – subject matter important, interesting, arouses curiosity, authentic etc; (b) ‘Interpersonal relationship’ – warmth, positive expectations, getting to know students, respecting individuals etc; (c) ‘Pedagogical relationship’ – teaching that engages, variety in methods, arouses curiosity, clear explanations, not too rushed etc.
Contribution to General Principles of Behaviour	Positive Psychology	Avoid unbalanced deficit approach, identify and build on strengths (‘broaden and build theory’ of positive emotion), encouraging pride of Indigenous heritage, proactive rather than reactive approaches to areas of need, foster catalysts in the school (intrapersonal such as self-esteem, motivation, positive attitude, interest in schoolwork).

There appear to be divergences in learning styles and these offer some direction for individualising instruction. A number of factors have been identified that facilitate Indigenous students' achievement and engagement. Some of these include confidence, task orientation, self-reliance, parental encouragement, positive peer influence, and effective schools (that include well-trained staff, good teacher-student relationships, flexible learning plans, and pastoral pedagogy). Pathways and educational transition are critical considerations and it is important that transition points are eased for the student and used strategically so that what could be a point of vulnerability becomes a point of opportunity. Fear of failure and associated shame emerge consistently as barriers to positive academic engagement and these pose a challenge to educators, particularly in competitive environments and educational systems. The role of the family in supporting Indigenous students' engagement at school is vital and invokes not only educational considerations but also socio-economic, health, employment and welfare considerations. Finally, the common ground between Indigenous and non-Indigenous students is important to recognise and underpinning this is the need for a positive psychology that has optimistic expectations and aspirations for Indigenous students with a view to redressing the educational disadvantage in their lives.

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