10

The role of psychological need satisfaction in promoting student identification

Katharine Greenaway, Catherine E. Amiot, Winnifred R. Louis and Sarah V. Bentley

The transition to university is a challenging period of adjustment and change (see also Cruwys, Gaffney and Skipper, Chapter 11, this volume). Students are expected to let go of a high school identity and embrace a new, more independent university identity. Individuals who manage this identity transition and develop ties with their new group membership have an advantage over those who do not. As is true in most domains of life, identifying with an educational group—such as a particular school or discipline or, more generally, as a student—confers decided benefits in terms of personal well-being and academic success.

As a result of these benefits, it is important to understand how educational identity can be fostered and nurtured, especially during times of academic transition that risk undermining the development of such an identity. As in other aspects of life, in the context of education, people are constantly transitioning (e.g., Antaki, Condor and Levine, 1996). Educational identities are necessarily transient as people progress through the educational system—from primary school to secondary school and possibly on to university. How do people navigate these identity transitions and come to adopt (or not) different educational social identities?

In this chapter, we explore the motivational factors that determine when and why people come to identify with educational groups. We adopt a theoretical framework outlined within self-determination theory—a theory of human motivation based on the satisfaction of three basic needs: autonomy, relatedness and competence. We employ this theory alongside the social identity approach and discuss how psychological need satisfaction underscores the development of educational social identity. We propose that individuals will be more likely to identify with educational groups when those groups satisfy members’ motivational needs for autonomy, competence and relatedness.
The social identity approach to education

Education researchers have long considered identity as an important ingredient in the educational process (e.g., Gee, 2001). Students are more likely to engage with the academic process if they adopt identities of ‘student’ or ‘learner’ into their self-concept (Osbourne and Jones, 2011). This process of identification influences students’ sense of belonging within the learning environment, which in turn affects their learning outcomes. Baumeister, Twenge and Nuss (2002) demonstrated the detrimental effect of lack of belonging on higher-order cognitive processes such as reasoning and comprehension. Similarly, Stephens, Fryberg, Markus, Johnson and Covarrubias (2012) revealed a reduction in academic performance for students whose social background did not match with the cultural norms of the educational context (see also Jetten, Iyer and Zhang, Chapter 6, this volume). From these findings, it is clear that a sense of connectedness and belonging is important for ensuring educational success.

The social identity approach can be, and has been, usefully applied to understand processes of social belonging and educational outcomes because it provides structure to the somewhat amorphous concept of ‘identity’ and outlines a range of concrete, testable hypotheses about the effects of social identification on educational outcomes (see Reynolds, Subasic, Lee and Bromhead, Chapter 3, this volume). As this volume demonstrates, there is emerging interest in the role of social identity and identification in educational systems, processes and outcomes. This interest is based on previous research showing the variety of positive outcomes that flow from possessing a strong educational identity, ranging from personal well-being to academic success (e.g., Cameron, 1999; Mavor, McNeill, Anderson, Kerr, O’Reilly and Platow, 2014; Oyserman, Bybee and Terry, 2006). It has also been observed within the education literature for some time that a process of dis-identification is a recognisable precursor to educational attrition (Finn, 1989).

In one application of social identity theorising to the educational context, Bizumic, Reynolds, Turner, Bromhead and Subasic (2009) surveyed staff and students at a high school. Students who identified strongly with the school showed a range of positive well-being outcomes, including higher self-esteem and positive affect, as well as lower rates of anxiety and depression. Highly identified students also tended to show better self-regulation abilities, reporting that they felt less aggressive than students who were not highly identified. School identification was associated with similar well-being benefits for teachers, predicting lower stress, anxiety and depression as well as greater job involvement.

Recent research has investigated the relationship between educational social identification and academic processes. Bluic, Ellis, Goodyear and Hendres (2011; and Bluic, Goodyear and Ellis, Chapter 12, this volume) found that psychology students who identified strongly with the discipline of psychology were more likely to adopt a deep learning approach (characterised by an intrinsic interest in learning material and improving one’s understanding) compared to a surface learning approach (characterised by an aim to reproduce material rather than understand it). Adopting a deep learning approach has been reliably demonstrated
to predict better academic performance (Richardson et al., 2012). Research by Smyth, Mavor, Platow, Grace and Reynolds (2013; and Smyth, Mavor, Platow and Grace, Chapter 13, this volume) found that identification with one’s academic discipline predicted endorsement of deep learning norms, and conformity to those norms among high identifiers was associated with deep learning practices. The reciprocal relationship of learning approach and educational social identification has, therefore, been shown to improve academic outcomes through a process of conformity to student norms.

This cross-sectional evidence reveals associations between identification and positive learning outcomes, but it cannot answer the question of whether identification improves learning outcomes (i.e., suggesting the causal direction of the relationship). In this sense, the literature is particularly in need of longitudinal research that tests whether changes in group identity and identification are associated with changes in well-being and educational outcomes (Bizumic et al., 2009). Research by Platow, Mavor and Grace (2013) used a longitudinal approach to examine this question — surveying first-year psychology students across two semesters. The researchers found that adopting a deep learning approach in semester 1 (shown in previous work to be increased by high educational identification) predicted greater educational identification in semester 2. This relationship was mediated through actual learning assessed in terms of student grades.

Platow et al. (2013) concluded that as students develop an intrinsic interest in their field of study, they begin to adopt normative interests held by psychology students and so come to identify with the educational group. In this chapter, we build on this earlier work by developing and assessing a model of psychological need satisfaction in the educational domain — a precursor to intrinsic motivation (Deci and Ryan, 2000) — as aid to the development of educational social identity. We discuss the theory behind our argument and then present longitudinal evidence for our hypothesised model.

The self-determination approach to education

Self-determination theory (Deci and Ryan, 1985, 2000) is a theory of motivation based upon the notion that humans have a built-in propensity for autonomy, self-expression and self-determination. The theory outlines factors that allow individuals to meet their psychological needs. As noted above, individuals are assumed within self-determination theory to have three core needs: autonomy (freedom to choose), relatedness (closeness with others) and competence (demonstrated capability). When individuals’ psychological needs are met, they are more likely to internalise the behaviours, attitudes or ideas that are reinforced in the supportive social environment. That is, behaviours that allow a person to be autonomous, related and competent will be engaged in out of intrinsic interest and motivation rather than because of external reinforcements and constraints. So, too, environments that allow people to be autonomous, related and competent will foster intrinsic motivation to engage in tasks present in that context.
People are considered to be self-determined when their thoughts and actions are well internalised and endorsed out of choice. For example, a student who works on an assignment because she chooses to do so, believes it is important and finds it enjoyable would be labelled as more strongly self-determined. In contrast, people are considered non-self-determined when their thoughts or actions are not internalised but are emitted out of internal or external pressure. For example, a student who works on assignment because she feels forced to do so or fears the consequences of failure would be seen as non-self-determined. Motivation is, therefore, conceptualised as operating on a continuum ranging from fully self-determined (e.g., intrinsically motivated) to non-self-determined (e.g., externally regulated) and amotivated.

Self-determination theory has been applied to understanding motivation in a range of contexts, from work behaviour (Parker, Jimmieson and Amiot, 2010, 2013) to intergroup processes (Amiot, Sansfaçon and Louis, 2013), and experiences across the life span (Kasser and Ryan, 2001). Being self-determined is thought to be a positive state in and of itself, but it also has a variety of positive outcomes that range from greater well-being to improved performance. Having one’s psychological needs met predicts higher well-being (Bettencourt and Sheldon, 2001; Kasser and Ryan, 2001; Reis, Sheldon, Gable, Roscoe and Ryan, 2001), enhanced cognitive persistence (Deci, Eghrari, Patrick and Leone, 1994), greater engagement in physical exercise (Daley and Duda, 2006) and better performance at work (Baard, Deci and Ryan, 2004).

Self-determination theory has also been applied to understanding of educational outcomes. In a study with French–Canadian high school students, Fortier, Vallerand and Guay (1995) found that the degree to which students felt autonomous, related and competent in the school setting predicted better academic performance across a range of subjects. Vallerand, Fortier and Guay (1997) extended this work to investigate high school dropout rates. Students who did not have their psychological needs met in the school environment showed greater dropout intentions and higher actual dropout rates compared with students whose needs were met.

The potential mediating role of identification in the process of need satisfaction is highlighted in Finn’s (1989) participation–identification model. Finn notes that the self-esteem rates among school dropouts and non-dropouts are high. He argues this persistence of high self-esteem among dropouts is due to these individuals dis-identifying with the educational context and reidentifying within an alternative non-educational context, presumably one better able to fulfill the individual’s basic psychological need requirements (see also Osbourne and Jones, 2011).

Combining self-determination and social identity approaches to education

Currently, we apply self-determination principles to understand how people come to identify with educational groups. We propose that individuals will be
more likely to identify with educational groups when those groups satisfy members’ motivational needs for autonomy, competence and relatedness. In turn, educational identification should mediate the positive impact of need satisfaction on a range of outcomes, including well-being and academic performance. As described below, we argue that psychological need satisfaction has positive effects on student outcomes by encouraging and strengthening the formation and development of educational social identity.

The university context may be particularly well suited to meeting one’s psychological needs. Students transition from a highly structured environment in high school to an unregulated university environment that allows for independent working and choice in a range of learning opportunities, thus meeting the need for autonomy. More demanding curricula and course assessment give students the opportunity to experience and demonstrate competence. Finally, universities provide a range of opportunities for relatedness in the form of connections with other students and staff and in participation in extracurricular activities unrelated to the learning process.

Just as the university context can meet people’s needs, groups, too, can provide a basis for need satisfaction. Indeed, groups provide individuals the possibility of bringing their own perspective to the collective (Jetten and Hornsey, 2011) – and, in this sense, support their autonomy and feelings of control (Cameron, 1999; Greenaway et al., 2015). Groups can also provide a blueprint for action and determine the rules to play by to function and become successful (Taylor, 2002) – hence fueling competence. Finally, groups act as a fundamental source of belonging and relatedness (Baumeister and Leary, 1995). This suggests that groups can satisfy individuals’ psychological needs. However, it also raises the possibility that groups that satisfy one’s needs will be internalised to a greater degree in one’s self-concept and will, hence, promote greater group identification. This is the main idea that we explore in this chapter.

In considering what factors might lead individuals to identify with educational groups, we propose that it is partly through satisfaction of one’s autonomy, competence and relatedness needs that educational social identity is developed. This is a departure from the traditional emphasis in the social identity approach on socio-structural variables, such as status, legitimacy, stability and the permeability of group boundaries. For example, Ellemers, van Knippenberg, de Vries and Wilke (1988) found that individuals were particularly likely to identify with groups that possessed impermeable boundaries and high status. While acknowledging the importance of intergroup relations in social identification, a great deal of recent research in this area is consistent with the proposition advanced by Amiot, de la Sablonnière, Terry and Smith (2007) that, in addition to socio-structural beliefs, the satisfaction of individual needs feeds into group identification. From a social identity perspective, the concept of individual need satisfaction as an antecedent can perhaps be accommodated in the self-categorisation theory concept of perceivers readiness. This is simply the assumption that people (i.e., perceivers) vary as to how ready they are to identify with some groups rather than
others (e.g., Turner, Oakes, Haslam and McGarty, 1994). We elaborate on this point below.

Early evidence relevant to the association between self-determination and identity was put forward by Barreto and Ellemers (2002). They found that individuals who were allowed to choose the group they joined were more highly identified and willing to cooperate with other group members compared to individuals who were not given the option of choosing their group. This work suggests that factors such as autonomy may play a role in directing the development of group identification. Similarly, Bettencourt and Sheldon (2001) found that individuals whose needs for autonomy and relatedness were met experienced more positive affect during a group task. Moreover, Sheldon and Bettencourt (2002) found that psychological need satisfaction predicted greater commitment towards the group, over and above other variables.

More recent research has applied self-determination principles directly to predicting social identification in groups. Self-determined motivation has been shown to predict stronger identification with national groups – Amiot and Sansfaçon (2011) found that, beyond any between-context influences on national identification (i.e., the specific type of intergroup relations; stronger cognitive category salience), citizens were more likely to identify strongly when they believed that their nationality affords them more choices and freedoms. Similarly, Amiot, Terry, Wirawan and Grice (2010) found that the degree to which the group was perceived as meeting needs for autonomy, competence and relatedness predicted greater identification among both university students and online gamers. In both groups, psychological need satisfaction operated through group identification to predict greater psychological well-being.

While a full elaboration of a theory of social identity development is beyond the scope of this chapter (see Amiot et al., 2007), it may be noted that contrasting individual need satisfaction and traditional social identity approaches to identification highlights two clear differences in emphasis. The present model generates a focus on motivation rather than cognition and a focus on individual differences rather than contextual factors (see also Monaghan and Bizumic, Chapter 14, this volume). To take the latter point first, the social identity analysis of contextual factors as the key drivers of group identification sits oddly with the common practice of operationalising social identification in terms of within-group, within-context individual differences (e.g., see Postmes and Branscombe, 2002). While intergroup relations clearly shape appraisals of identity between groups and make more or less salient particular social categories between contexts, the measurement of individual differences within groups and within contexts invites theoretical analysis of why such differences might emerge. Some of the individual differences in identification clearly derive from variation in cognitive appraisals of the intergroup relationship and in socio-structural beliefs (e.g., Johnson, Terry and Louis, 2005). However, motivational factors are, arguably, also relevant as previous research clearly demonstrates (Amiot and Sansfaçon, 2011; Amiot et al., 2010; Baretto and Ellemers, 2002; Bettencourt and Sheldon, 2001; Sheldon and...
Bettencourt, 2002). Our theoretical model that individual differences in need satisfaction predict differences in identification, with important follow-on consequences in the educational context, is subjected to empirical testing below. Specifically, we tested the relationships between need satisfaction, educational social identification, and positive educational outcomes cross-sectionally and longitudinally, investigating the impact of need satisfaction via educational social identification on perceptions of identity conflict, conformity to group norms and academic satisfaction.

Model testing

We surveyed university students early in their university studies, most within the first semester of their first year of study. This is a critical transition period for university students in which they give up their secondary school identity and move to a new, more independent university social identity. What causes some people to embrace and adopt this new social identity more so than others? As highlighted above, we propose that it is in part the degree to which people perceive the new university group as meeting their needs for autonomy, competence and relatedness that determines the degree to which they develop identification and, so, reap the benefits of a strong student social identity (Amiot and Sansfaçon, 2011; Amiot et al., 2007, 2010). Students who feel more pressured or coerced in their choice of field or in their studies, along with students who feel socially isolated or incompetent in meeting university standards, would be expected to dis-identify and thereby to experience worse outcomes. We tested these hypotheses in two samples to investigate the development of student social identification over time and the role that psychological need satisfaction plays in this process.

We assessed four main outcome variables in this research, selected on the basis of their theoretical interest for scholars of university student integration and of identity and social influence more broadly. First, we measured two variables associated with strong group identification in past research on social influence: greater conformity to group norms and lower identity conflict. Considerable research within the social identity approach demonstrates that highly identifying individuals are more likely to conform to group norms (e.g., Terry and Hogg, 1996, 2001; see also Turner, 1991). In contrast, identity conflict is understood as the degree to which people perceive a group identity to conflict within their own personal self-concept. This failure to internalise a particular social identity, such as that of being a university student, manifests as a sense of inauthenticity; even if individuals enact a group identity, they experience the behaviours in that role as not reflecting who they perceive themselves as really being. We hypothesise that identity conflict should be lower if students embrace the educational social identity more strongly and internalise it into their own self-concept (e.g., Oyserman et al., 2006; see Amiot et al., 2007). Moreover, we hypothesised that, cross-sectionally and over time, psychological need satisfaction would predict greater...
student social identification which, in turn, would predict greater conformity to student norms and lower perceptions of identity conflict.

The final two constructs we examined were well-being and satisfaction with one’s academic performance – two variables that illustrate students’ successful or unsuccessful transition to university. Self-determined motivation and social identification have been shown in past research to converge by predicting, in separate studies, higher personal well-being and stronger academic performance (e.g., Bizumic et al., 2009; Kasser and Ryan, 2001; Platow et al., 2013; Reis et al., 2001; Vallerand, Fortier and Guay, 1997). In the present research, we drew on these two theoretical approaches, hypothesising that psychological need satisfaction would predict greater student social identification, which in turn would predict greater well-being and academic satisfaction.

**Model test 1: cross-sectional assessment of motivated identification**

In our first test of our model, we sampled 521 University of Queensland (UQ) students (302 female, $M_{age} = 19.08$, $SD = 4.25$, age range 17–59) in the early stages of their university studies. Students were surveyed in first- and second-year lectures (30 per cent of the sample), approached in public areas on campus (55 per cent of the sample), or completed the survey in the lab for course credit (15 per cent of the sample). Approximately 24 per cent of the sample majored in the Sciences, 22 per cent in the Social Sciences, 16 per cent in Business, 14 per cent in the Arts, 11 per cent in Engineering, and 2 per cent in Physical Therapies. The remaining 11 per cent were unclassified.

Students reported the degree to which the group ‘UQ students’ supported their autonomy, competence and relatedness needs (e.g., ‘How free and choiceful do you feel when being in this group?’; Sheldon and Bettencourt, 2002); their level of social identification as a UQ student (e.g., ‘I have a lot in common with other UQ students’; Cameron, 2004); perceptions of identity conflict (e.g., ‘Being a UQ student clashes with who I consider myself to really be’; see Smith, Amiot, Smith, Callan and Terry, 2013); personal well-being over the past two weeks (e.g., ‘I felt alive and vital’; Ryan and Frederick, 1997); and academic satisfaction over the past two weeks (e.g., ‘I achieved my goals academically during this time’). Perceived descriptive student norms and intentions were examined for five behaviours relevant to university students: studying, partying, trying to fit in, finishing their degree and valuing the university. Across the five items, the within-participant correlation between perceived norms and behavioural intentions was taken as an index of conformity. High positive correlations indicated that the behaviours participants rated as descriptively more normative (more commonly engaged in by other students) were also the behaviours they intended more strongly to engage in themselves. In contrast, scores of ‘zero’ indicated that there was no association between students’ intentions and their perceptions of what other students did; and negative scores indicated that students intended to
Greenaway, Amiot, Louis and Bentley engage more in behaviours that they saw as being less normative (i.e., behaviours that were uncommon for other students).

Reported need satisfaction was modelled as an antecedent to student identification, which was in turn used to predict intentions to conform to student norms, identity conflict perceptions, academic satisfaction and personal well-being. The initial model provided a poor fit to the data, $\chi^2(10) = 93.58$, $p < 0.001$; CFI = 0.794, RMSEA = 0.127, SRMR = 0.083, and modification indices revealed that two direct paths should be added from need satisfaction to personal well-being and to academic satisfaction. When these paths were included, the final model provided acceptable fit, $\chi^2(9) = 19.17$, $p = 0.024$; CFI = 0.975, RMSEA = 0.047, SRMR = 0.041. As shown in Figure 10.1, need satisfaction was associated with higher student identification, which in turn was associated with higher norm conformity and lower identity conflict, but not with personal well-being or academic satisfaction. Need satisfaction was directly associated with personal well-being and academic satisfaction. Bootstrap analyses using bias–corrected CIs with 10,000 resamples confirmed the significant indirect effects of need satisfaction via student identification on identity conflict and intentions to conform to student norms.

**Model test 2: longitudinal assessment of motivated identification**

In the second test of our model, we sampled 79 students who participated in our first model test (48 female, $M_{age} = 19.67$, $SD = 5.83$, age range 17–59); they were
contacted approximately six weeks after the first questionnaire to complete a second wave of the survey. All students at Time 1 had been contacted if they had provided email addresses and indicated willingness, so the Time 2 sample represents significant attrition (> 80 per cent). Students completed the same survey as at Time 1, and their responses were matched via an anonymous code generated in the first survey.

At Time 2, residual scores were created to measure change by regressing Time 2 variables upon their Time 1 counterparts. Change in need satisfaction from Time 1 to Time 2 was then modelled as an antecedent of change in student identification, which was in turn used to predict changes in norm conformity, identity conflict, academic satisfaction and personal well-being. Identity conflict was allowed to covary with norm conformity and academic satisfaction.

The initial model provided acceptable fit, $\chi^2(8) = 11.57, p = 0.172$; CFI = 0.970, RMSEA = 0.076, SRMR = 0.068. As shown in Figure 10.2, increased need satisfaction was associated with increased student identification, which in turn was associated with increased personal well-being, academic satisfaction and decreased identity conflict perceptions. Increased identification was not significantly associated with conformity to student norms, however, despite a trend in the expected direction. As with the first model, bootstrap analyses using bias-corrected CIs with 10,000 resamples revealed significant indirect effects of increased need satisfaction via increased student identification on increased well-being, increased academic satisfaction, and decreased identity conflict. There was no significant indirect effect of increased need satisfaction via increased student identification on intentions to conform to student norms.

**FIGURE 10.2** Change in need satisfaction indirectly predicts increased well-being and academic satisfaction and decreased identity conflict via change in student identification

*Note: standardised regression coefficients reported, **p < 0.001*
Need satisfaction promotes educational identification with positive consequences for students

In this chapter, we united perspectives from the social identity and self-determination traditions to understand the development of educational social identity during critical transition phases for students. Previous research, and much of the work published in this volume, shows the benefit of identifying with educational groups for student well-being and academic outcomes. Our goal in this chapter was to explore, theoretically and empirically, the question of how students come to identify with educational groups, particularly in stages of transition that may otherwise undermine the development of group identification. We proposed that it is when educational groups support the psychological needs of their members that identification becomes internalised as a motivational force.

Consistent with our model, we confirmed that the degree to which the educational group met students’ needs for autonomy, relatedness, and competence predicted greater group identification both in the short term and over the longer term. This is consistent with an emerging research agenda that applies self-determination principles to understanding intra-group and intergroup processes (e.g., Amiot and Sansfaçon, 2011; Amiot et al., 2007, 2010, 2013; Legault, Green-Demers and Eadie, 2009; Legault, Green-Demers, Grant and Chung, 2007). This work unites two theoretical perspectives that are rooted in traditionally separate literatures of individual (self-determination theory) and group (social identity theory) functioning.

We examined, more specifically, how need satisfaction fuels social identification cross-sectionally and longitudinally. Linking these two variables lets us test explicitly if need satisfaction allows a new group identity to develop over time. Indeed, the sources of need satisfaction that are typically investigated in self-determination theory are located at the individual and interpersonal levels of analysis. As well, while self-determination theory incorporates self and identity processes in its theorising (e.g., Ryan, 1995; Ryan and Deci, 2003), these formulations have traditionally considered only the individual self. Investigating the effect of need satisfaction via the group in the context of social identity change also allows us to answer recent calls for research into: (1) how new social identities develop over time and (2) apart from the more cognitive processes accounted for by self-categorisation theory, what social and motivational factors fuel this sense of social identification over the long term.

We observed that the development of an educational social identity had a range of benefits for students at an early stage in their university schooling and up to six weeks later. To the degree that students felt self-determined in their educational group, they reported greater group identification and consequently higher well-being, greater academic satisfaction and less identity conflict. The importance of these positive outcomes for students’ quality of life is self-evident. To the extent that universities and academics benefit from higher retention and more
engaged students, or that societies benefit from more educated citizens and workers, the societal importance of the findings is also easy to argue.

The direction of the causal relationships is, of course, open to discussion. Cross-sectionally, greater identification was associated with conformity to student norms, which supports a long line of research demonstrating that identification encourages people to adopt and follow ingroup norms (e.g., Terry and Hogg, 1996, 2001). Interestingly, this trend was not borne out over time; change in identification was not associated with change in conformity to ingroup norms. More broadly, our research here focuses on identification as an outcome of need satisfaction and as mediating the impact of need satisfaction on other variables. However, in other past research, scholars have argued for the existence of positive feedback loops in the educational setting whereby educational identification leads to better academic outcomes and better academic outcomes feed educational identification (e.g., Platow et al., 2013; Smyth et al., 2013). We propose that this may occur, in part, through a process of enhanced self-determination. As needs of autonomy, competence and relatedness are met through the educational group, students become more intrinsically motivated to study, thus internalising the educational social identity more strongly into their self-concept. Future work could explore this feedback process more explicitly, including the possibility that stronger social identification leads to greater perceived need satisfaction (a reverse causality) or that need satisfaction moderates the association between identification and outcomes. Perhaps identification leads to higher well-being when needs are satisfied; but when needs are thwarted, social identification could be linked to lower well-being (see also, Haslam, Jetten, Postmes and Haslam, 2009), suggesting a more negative role for social identification under certain conditions. Here, social identification and need satisfaction were highly positively correlated ($r > 0.50$) as would be expected in permeable groups where dissatisfaction would lead to dropouts (Finn, 1989). Experimental research could be useful to clarify the nature of the interactions if identification and need satisfaction are independently manipulated.

The consistent pattern of results in our two samples combined with previous work showing a link between psychological need satisfaction and group identification (e.g., Amiot et al., 2010) leads us to be optimistic about the generalisability of the findings. It should be acknowledged that both group identification and need satisfaction were considered at a global level, which might be interesting to unpack in future research. For example, need satisfaction could be assessed separately for competence, autonomy and relatedness in relation to separate dimensions of identification, such as cognitive centrality, affect and group ties (Cameron, 1999). It would not be surprising, for example, if satisfying group members’ needs for relatedness was especially important in strengthening perceptions of group ties, while satisfying autonomy needs impacted particularly strongly on affect. If unique patterns emerged at this lower level of analysis, they might inform the development of tailored interventions where deficits are noted for marginalised groups of students.
Conclusions

This chapter represents one of the earliest attempts to combine the social identity and self-determination approaches and apply them to an educational context. Our theorising and findings have implications for uniting research perspectives from diverse theoretical backgrounds as well as practical implications for the well-being and performance of students during a critical transition to university. We hypothesised and found that as students come to internalise the educational social identity, they experience less identity conflict, which should ease the transition from secondary to tertiary education. The development of educational social identification also protected the well-being of students during this transition period. Finally, students who successfully developed strong group identification reported being more satisfied with their academic performance.

Understanding the factors that foster educational identification will contribute to the development of interventions designed to keep students achieving, happy and – perhaps most important of all – in school. Whereas interventions based on the self-determination theory approach in the context of education have beneficial outcomes for students’ motivation and adjustment, we suggest that adding the group component into the equation further contributes to improving positive adjustment and academic outcomes.

Acknowledgements

Preparation of this paper was facilitated by an award to the lead author from the Canadian Institute for Advanced Research: Social Interactions, Identity and Well-being programme.

Note

1 Missing data were imputed using the expectation-maximization maximum likelihood algorithm in SPSS version 20.0 (Gold and Bentler, 2000). Model fit was assessed using the comparative fit index (CFI), the root-mean-square error of approximation (RMSEA) and the standardised root mean residual (SRMR; see Hu and Bentler, 1998, for a discussion of fit indices). Based on the recommendations of Hu and Bentler (1999), the cut-off values employed for these indices were CFI > 0.95, RMSEA < 0.06, and SRMR < 0.08. We also report the results of the chi-square test ($\chi^2$), but due to the sensitivity of $\chi^2$ when used in large samples, we refer to practical fit indices to make our main judgements about model fit. To test for mediation, we used bias-corrected bootstrapping with 10,000 bootstrap resamples to generate estimates and 95 per cent confidence intervals (CIs) of indirect effects (Cheung and Lau, 2008; Shrout and Bolger, 2002).

References


