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**Exploring the impact of group identity at university on psychological and behavioural outcomes**

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## **Exploring the impact of group identity at university on psychological and behavioural outcomes**

With respect to supporting student well-being and success, the current research developed a peer support scheme, built on the principles of Social Identity Theory (SIT). This was targeted towards first year undergraduate psychology students, in which measures of collective identity, sense of belonging, group efficacy, happiness and resilience were obtained, along with attendance and academic attainment. Following one academic year of being part of our peer support scheme, participants ( $N = 90$ ) completed a questionnaire and consented to their attendance and attainment data to be used. It was found that students' collective identity was positively related to their sense of belonging, group efficacy beliefs and happiness. Further, the sense of belonging was a reliable predictor of happiness, but not attendance or academic attainment. Therefore, there is some evidence to suggest that a SIT-driven peer support scheme can support students' psychosocial well-being, although more is needed to ascertain whether this could be developed further to observe any course-related outcomes. Theoretical contributions to SIT are therefore presented, in which the insights can be applied to Higher Education beyond the UK.

**Keywords:** Sense of belonging; social identity; peer support; well-being; psychology; Higher Education

### **Introduction**

It is widely discussed that we are experiencing a “mental health crisis” particularly relating to young people in society, and this epidemic is becoming increasingly characteristic within the education sector (The Guardian, 2019). Higher Education is no different in this regard, and it is becoming increasingly evident that student mental health issues are a major source of threat to retention and success, in which recent figures show that poor mental health is the largest contributor to university drop-out and absenteeism (Eisenberg, Golberstein & Hunt, 2009; Eisenberg, Lipson & Posselt, 2016; Leary & DeRosier, 2012; Lipson & Eisenberg, 2018). To exacerbate this issue further, the removal of student number control by the UK Government in 2015, along with the popularity of Psychology as a subject choice at university level (OfQUAL, 2019), presents increased challenges to maintaining effective tutor-student relationships whereby staff do not necessarily have sufficient familiarity with all their students to recognise when specific students may be particularly at risk. This may bring out issues in respect of

intervening both in supporting students' psychological well-being but also in their academic engagement and performance.

Previous research has explored the psychological factors which may bolster well-being, and thus may be protective factors against poor mental health. For example, there is a wide literature to suggest that factors such as group identity and sense of belonging are important (Easterbrook & Vignoles, 2013), and can bring about positive well-being outcomes (e.g., Cameron, 1999, Greenaway, Haslam, Cruwys, Branscombe, Ysseldyk & Heldret, 2015; Hagerty, Williams, Coyne & Early, 1996; Scarf, Moradi, McGaw, Hewitt, Hayhurst, Boyes, Ruffman & Hunter, 2016). When theorizing these issues, particularly in relation to group identity, this may be best approached by applying the principles of Social Identity Theory (SIT; Tajfel, 1978, 1979; Tajfel & Turner, 1979). SIT proposes that identity is socially constructed, whereby we define ourselves by our membership to groups (Tajfel & Turner, 1979). This is said to be developed through three inter-related processes of social categorisation, social identification and social comparison. These processes therefore promote individuals to define themselves as "we" rather than "I" (categorisation), to adopt the norms and behaviours which are characteristic of a given group (identification) and to identify themselves as part of an in-group respective to those who may not be (comparison). Clearly, having a strongly defined sense of group identity has a close bearing on one's sense of belonging to a given group (Easterbrook & Vignoles, 2013).

These identity and belonging experiences have been shown to have a range of positive psychological and behavioural outcomes including; enhanced self-esteem, social competence, psychological well-being, resilience, and reduced loneliness (Crocker, Luhtanen, Blaine & Broadnax, 1994; Kaye, Carlisle & Griffiths, 2019; Kaye, Kowert & Quinn, 2017; Scarf et al., 2016). Previous work has highlighted the role of social identity on psychological well-being and how this is relevant in university students (Cameron, 1999). For example, when exploring the relationship between social identity and psychological well-being, Cameron (1999) found that this was mediated by two variables; self-esteem and group efficacy. Specifically in relation to the latter of these, group efficacy can go some way to highlight how there may be additional favourable outcomes to the psychosocial impacts previously described. Namely, group efficacy refers to a perception of one's group's capability to perform effectively (Gibson, 2003). This is based on the principles of self-efficacy theory (Bandura, 1997), and suggests that group

efficacy may influence positive motivational and performance outcomes (Gibson, Randel & Earley, 2000).

This corresponds to other findings that group identity and sense of belonging are related to a range of behavioural outcomes which may be particularly useful to organizational or educational settings. These include: task motivation, task intentions, willingness to contribute to collective goals, performance and academic outcomes (Ellemers, De Gilder, & Haslam, 2004; Oyserman, Brickman, Bybee & Cellious, 2016; van Knippenberg, 2000; Terry, Hogg & White, 1999; Tyler, 1999; Tyler & Blader, 2000; Walton & Cohen, 2011). For example, within a university sample, previous work has found that sense of belonging at university is positively related to academic motivation and a reduction in intention to drop-out (Suhlmann, Sassenberg, Magengast & Trautwein, 2018). Clearly these are relevant to Higher Education, particularly in relation to bolstering well-being and promoting favourable behaviours such as motivation and attendance. As such, it is pertinent to understand how group identity within Higher Education may be best fostered.

Based on the wealth of evidence to suggest favourable outcomes associated with positive collective identity, it seems logical to apply this to Higher Education strategies designed to support students. This may be particularly beneficial if this can draw out benefits both for student well-being and favourable study behaviours (e.g., attendance, task persistence, performance). Therefore, we propose that developing more effective peer support strategies which are based on the theoretical principles of SIT may be one way of providing a more effective proactive support structures for students. As such, this leads to the development of our Integrated Learning Communities (ILC) initiative which we propose as a peer support strategy monitored by tutors, designed to promote positive student well-being and course-related outcomes.

### **Integrated Learning Communities (ILC) Strategy**

Drawing on the principles of SIT, we developed a peer support strategy, particularly targeted towards a full cohort of first year undergraduate psychology students. As first year students entered onto their course in September 2018, they were placed in a “cluster” along with 12-15 other first year students. Each cluster had two academic staff who operated as Personal Tutors to students within their cluster. Across the academic year, a series of cluster sessions took place in which group activities were implemented, designed to promote collective identity. These

specifically were designed around the former two SIT processes of social categorisation and social identification, discussed next.

To facilitate the *social categorisation* process, within their Induction to university, students in their cluster took part in activities to establish the extent to which their social identities were representative of their respective cluster. This aimed to ascertain any similarities within clusters whereby some agreement was made on core shared attributes. This is an important part of the categorisation process, given findings showing how in-group similarity is related to feelings of belonging (Easterbrook & Vignoles, 2013). This was facilitated by Personal Tutors leading an activity where they asked their students about their feelings and thoughts about starting university. Once individual students had shared their ideas, these were compiled to build up a shared profile of similarities. These were then used as a basis for developing the social identification process via collective goal-setting which would be taking place in the next cluster session (early-mid Semester 1). Cluster members were also encouraged to develop an agreed cluster name, to further promote the collective categorisation process.

With respect to the *social identification* process, subsequent cluster sessions were focused on collective goal-setting activities. This supported clusters to define their group attributes and use these to develop group goals. Collective goal-setting has been highlighted to serve as a useful strategy which can be effective for group performance, and also supporting collective efficacy and group cohesion (Bray, 2004; Kleingeld, van Mierlo & Arends, 2011). The activities within this included supporting students on effective goal-setting principles (e.g., SMART goals) and discussing the sort of goals which may be useful for students to consider for their cluster (e.g., charity fundraiser, event organisation, assignment work etc). Following this, other cluster sessions across the academic year involved reviewing, re-evaluating and monitoring goals based on attributions of goal success or failure and the role of reinforcements within this process. For further detail on the ILC strategy and evaluation, see Spiridon, Kaye, Nicolson, Ransom, Tan and Tang (2020).

For the purposes of the evaluation of the ILC strategy, specifically with regards to the SIT collective goal-setting approach, we focused on the extent to which this fostered group efficacy; that is, the belief that a cluster group can achieve its goals through collective action. This provides a sense of agency to individuals in the group and reinforces the identification and bonding process. Additional to this, we also focused on how this strategy could foster a

sense of belonging for our students. Theoretically, one would expect that if the social identity processes foster enhanced group identity, then group members will experience an elevated sense of closeness and belonging (Lee & Robbins, 1998), as well as have greater perceptions of group-related beliefs relating to group behaviour (Cameron, 1999; Hogg & Abrams, 1999). Based on the principles of SIT, these, in turn should also theoretically relate to psychosocial outcomes such as well-being. Specifically in this regard, we focused on resilience and subjective happiness (Cameron, 1999; DiFulvio, 2011; Miller & MacIntosh, 1999). Happiness was selected to capture a global impression of students' affective well-being, whereas resilience was chosen based on this being widely cited as a core attribute to bolster in student populations (e.g., APA, 2019; Eisenberg, Lipson, & Posselt, 2016; Grissom, 2015). In addition to psychosocial outcomes, we also included behavioural outcomes to ascertain whether our ILC initiative via collective goal-setting, related to favourable behaviours such as course attendance and academic performance. See Figure 1 for overview of the conceptual framework. A number of research questions (RQs) were devised:

RQ1. To what extent does cluster group identity relate to sense of social belonging and cluster efficacy beliefs?

RQ2. To what extent do sense of belonging and cluster efficacy beliefs relate to students' psychosocial well-being (resilience and subjective happiness)?

RQ3. To what extent do sense of belonging and cluster efficacy beliefs relate to students' course attendance and academic performance?

[Insert Figure 1 about here]

## **Method**

### **Design**

The current study was a cross-sectional study, in which the following variables were measured using validated questionnaires: cluster identity (Cameron, 2004), cluster group efficacy beliefs (Gibson, Randel & Earley, 2000), sense of belonging (Hagerty & Patusky, 1995), resilience (Smith, Dalen, Wiggins, Tooley, Christopher & Bernard, 2008), and subjective happiness (Lyubomirsky & Lepper, 1999). The other variables that measured behavioural outcomes:

attendance and academic performance were extracted from the students records with their permission. The study was approved by the Department of Psychology Research Ethics Committee. The predictor variables were the measures related to group aspects such as cluster identity, social belonging and efficacy and the outcome variables were psychological outcome (happiness and resilience) and behavioural outcomes (attendance and academic achievement).

## **Participants**

Initially, 100 responses were obtained, however 10 participants were excluded as they represented a programme of study which was not directly involved in the ILC initiative. Therefore, this left a final sample size of 90 who were first year undergraduate psychology students at a mid-sized university in the North West of England. There were 75 female students and 15 male students (18-39 years old;  $M = 19.50$ ;  $SD = 3.25$ ) of which 57 lived on-campus and 23 off-campus.

## **Measures**

### ***Cluster Identity***

Social identity to clusters was measured using the Three-Dimensional Strength of Group Identification Scale (Cameron, 2004). This 12-item scale consists of three subscales: centrality (e.g. 'I often think about my cluster'); in-group ties (e.g. 'I feel strong ties to other cluster members') and in-group affect (e.g. 'I am glad to be a member of my cluster'). Participants endorsed their agreement to the items on a 7-point scale anchored between 1 (strongly disagree) and 7 (strongly agree). This questionnaire resulted in high internal consistency ( $\alpha = .82$ ). Specifically, centrality  $\alpha = .86$ , in-group affect  $\alpha = .72$  and in-group ties  $\alpha = .65$ . Previous research has supported the factor structure of this scale and indicates that it is a valid measure of in-group identification (Obst & White, 2005). A total score was calculated for each subscale as well as overall for all 12 items. The latter of these was used within the main analyses.

### ***Cluster group efficacy beliefs***

Group efficacy beliefs were measured through the Group Efficacy Beliefs Potency measure (Gibson et al., 2000). This is a 10-point scale (1 = to no extent, 10 = to a great extent), on which participants rate the extent to which they endorse their cluster's operationalization efficacy.

Among the eight items which consist this scale, examples include: “My cluster has confidence in itself” and “No task is too tough for my cluster”. After reversing half of the scale to ensure internal consistency in the direction of measurement, the scale was found to be a reliable measure of efficacy ( $\alpha = .88$ ). A mean score was computed, which consolidated the scores for all cluster groups and was used in the subsequent analyses.

### ***Sense of Belonging***

Sense of Belonging was measured by using the Sense of Belonging Instrument (SOBI-P; Hagerty & Patusky, 1995). This is an 18-item scale upon which participants endorse their level of agreement on a 5-point scale (1 = strongly disagree, 5 = strongly agree), to a series of statements. Examples include: “I am just not sure if I fit in with my friends” and “I feel like an outsider in most situations”. Most items on this scale are framed in negative terms, therefore a high score would represent low social belonging. To aid conceptual meaning, all items except item 4 (“I generally feel that people accept me”) were reverse scored, therefore meaning that a high score would indicate greater social belonging. The scale was found to have high internal consistency ( $\alpha = .89$ ), and a total score of the 18 items was used as a measure of the sense of belonging for subsequent analyses.

### ***Resilience***

The Brief Resilience Scale (Smith et al., 2008) was used to garner data on participants’ resilience. This is a six-item scale, in which participants endorse their level of agreement on a 5-point scale (1 = strongly disagree, 5 = strongly agree), to a series of statements. Examples include: “I tend to bounce back quickly after hard times” and “It does not take me long to recover from a stressful event”. A mean score was calculated and used for the subsequent analyses. This scale was found to be internally consistent ( $\alpha = .87$ ).

### ***Subjective Happiness***

The Subjective Happiness Scale (Lyubomirsky & Lepper, 1999) was used to measure overall happiness. This scale includes four items which all include the prefix “In general, I consider myself...”. The items then are presented to include anchor descriptions on which participants indicate their endorsement on a 7-point scale. For example, the first item is: “In general, I consider myself... “Not a very happy person” (1) to “A very happy person” (7). A total score



was calculated from participants' responses from these four items and used in the analyses. This measure was found to be adequately internally consistent ( $\alpha = .83$ ).

### **Attendance**

Attendance was calculated based on participants' average attendance in all taught sessions across their first year of study. This was obtained at the end of Semester 2 (around April), when all taught sessions had been completed.

### **Academic performance**

Academic performance was calculated based on participants' average overall module mark for the modules they were registered on within their first year of study. This was obtained at the end of the academic year, in respect of first sitting results.

### **Procedure**

Upon agreeing to participate, participants were first presented with an information sheet and consent form. Following their consent, they completed a short demographics questionnaire, to obtain data on gender, age, cluster number, programme of study and residence (on or off campus). Following this, participants then completed a series of questionnaires (in a counter balanced order) measuring the variables of interest. Within the consent process, participants also indicated their agreement for the research team to access their attendance and academic attainment data from the university student records system for the purposes of the research. Upon completion of the questionnaires, participants were debriefed and thanked for their participation, and reimbursed with either £2 or research participation credit.

## **Results**

Descriptive analysis was conducted on all study variables. This was undertaken in respect of the full sample but also broken down by residential status (on versus off campus). See Table 1 for descriptive statistics.

[Insert Table 1 about here]

Firstly, to ascertain whether there were any differences in the psychological experiences of students as a product of their university residence, a one-way MANOVA was conducted whereby all study variables were compared by students' residential status (on-campus versus off-campus). This revealed there were statistically significant differences in psychological experiences based on a students' residential status,  $F(7, 72) = 2.51, p < .05$ ; Wilk's  $\Lambda = .81$ , partial  $\eta^2 = .20$ . Specifically, it was found that happiness was significantly higher for those students off-campus ( $M = 22.57, SD = 4.88$ ), compared to those on-campus ( $M = 20.11, SD = 4.42$ );  $F(1, 78) = 4.79, MSE = 95.17, p < .05$ , partial  $\eta^2 = .06$ . None of the other variables revealed any significant differences between the sub-samples, so all data was combined for the subsequent analyses.

To establish the relationships between all study variables, correlational analysis was undertaken. See Table 2 below.

[Insert Table 2 about here]

This revealed that cluster identity was positively related to cluster efficacy beliefs ( $r = .51, p < .001$ ), sense of belonging ( $r = .25, p < .05$ ) and happiness ( $r = .25, p < .05$ ). It was not related to either attendance or academic performance (both  $p > .05$ ). Additionally, sense of belonging was related positively to resilience ( $r = .38, p < .001$ ) and happiness ( $r = .70, p < .001$ ), but not the behavioural outcomes (both  $p > .05$ ).

Following this, regression analyses were conducted to assess the extent to which cluster identity may explain cluster efficacy beliefs. A linear regression yielded a significant model  $F(1, 88) = 30.996, MSE = 1.57, p < .001, R^2 = .26$  in which 26% of the variance in efficacy beliefs was explained by cluster identity. Specifically, cluster identity ( $\beta = .51, p < .001$ ) was found to significant predict cluster efficacy beliefs.

Subsequent regression analyses were conducted to identify whether cluster identity may be a predictor of sense of belonging. A linear regression yielded a significant model  $F(1, 88) = 6.08$ ,  $MSE = 135.68$ ,  $p < .05$ ,  $R^2 = .07$  in which 7% of the variance in social belonging was explained by cluster identity. Specifically, cluster identity ( $\beta = .25$ ,  $p < .05$ ) was found to significantly predict social belonging.

Similarly, a simple linear regression analysis was conducted to examine the cluster identity on happiness. This yielded a significant model that accounted for a small proportion of the variance in happiness,  $F(1, 88) = 6.06$ ,  $MSE = 88.04$ ,  $p < .05$ ,  $R^2 = .06$ . The results indicated that the Cluster identity was a significant predictor of happiness ( $\beta = .13$ ,  $p < .05$ ).

However, following a simultaneous multiple regression with the social belonging, cluster identity and the interaction between the two as predictors (see Table 3), only the social belonging was found to be a predictor of happiness ( $t = 8.71$ ,  $\beta = .68$ ,  $p < .001$ ). The overall regression model was significant  $F$  change (3,86) = 29.71,  $MSE = 12.01$ ,  $p < .001$ .

[Insert Table 3 about here]

In the relation to the behavioural outcomes, attendance was found to be a significant predictor of academic performance ( $t = 6.15$ ,  $\beta = .57$ ,  $p < .001$ ) based on a linear regression analysis  $F(1,78) = 37.85$ ,  $MSE = 36.85$ ,  $p < .001$ ,  $R^2 = .33$ .

## **Discussion**

The current study aimed to explore the extent to which a SIT-derived peer support strategy within a psychology course could promote favourable psychosocial and behavioural outcomes for first year students. Specifically, it aimed to ascertain the extent to which our ILC scheme, in building social “cluster” identity, was related positively to students’ group efficacy beliefs and sense of belonging, and whether this, in turn may be related to psychosocial and

behavioural course-related outcomes. The main findings and implications are discussed in the following sections.

It was found that cluster identity was positively related to both sense of belonging and group efficacy beliefs (RQ1). This was found both within the correlational and regression analyses. This goes some way to suggest that the ILC strategy functioned upon fostering collective identity within clusters in a way which promoted efficacy beliefs towards this reference group. This is likely to be attributed to the collective goal-setting strategies we used as a mechanism to support this process. This finding is not especially surprising as this supports the principles outlined by group efficacy theory (Bandura, 1997; Gibson, 2003) although in the case of the current study, specifically applies these within a Higher Education setting, a context which has previously received scant empirical enquiry in this regard. Specifically, this suggests that collective goal-setting focused around mutual interests and intentions may bolster these perceptions. Within this, it is important to acknowledge how these efficacy beliefs are monitored and supported within the process. That is, to ensure a high level of group efficacy, practical recommendations are to ensure students are supported by a tutor or mentor to monitor, evaluate and review collective goals on a regular basis. This may be best undertaken in respect of identifying the attributing factors for success or failure, whereby internal attribution is dedicated to goal success in an effort to maintain group efficacy experiences. These were features of the current ILC scheme, although additional evaluation is needed to ascertain the extent to which these specific aspects of the goal monitoring were effective for maintaining group efficacy perceptions.

It is reassuring to observe the current findings of the positive relationship between cluster identity and sense of belonging, as one may have expected based on previous literature. Indeed, this corroborates much previous work in this area (Easterbrook, & Vignoles, 2013; Lee & Robbins, 1998) and extends our understanding of how SIT-derived interventions may support student integration in Higher Education. Specifically, social identity was referenced towards “cluster” group and whilst identity arguably operates on multiple levels, it is encouraging to see this was a positive attribute associated with belonging for students. There may be many mechanisms underpinning this finding, but this may be attributed to aspects of the social categorisation process, in which students consolidated their similarities as a basis for developing collective goals. Given the evidence that intragroup similarity fosters a sense of

belonging (Easterbrook & Vignoles, 2013), it is conceivable this categorisation process was supportive factor for promoting sense of belonging in the current findings.

In addition, sense of belonging was positively related to happiness (as well as resilience within the correlational analysis) (RQ2), which is to be expected based on the extant literature observing these associations (e.g., Hagerty et al., 1996; Suhlmann et al., 2018). However, sense of belonging and group efficacy were not significantly related to any of the behavioural outcomes (RQ3). There may be a number of explanations for this. Firstly, both attendance and attainment are affected by a wide range of factors and thus these measures are perhaps not sensitive enough to map onto the variables of interest. Secondly, in respect of methodological concerns, the current study may be restricted by the fact that it was a relatively small self-selecting sample, who may not be representative of the whole student body. As such, the observed findings may vary in other samples and in different university contexts, therefore the generalisability of the findings should be inferred with caution. It seems therefore that whilst these peer support strategies, drawing upon the principles of SIT, may hold some psychosocial benefits, there is some way to go to understand whether there could be behavioural impacts such as for promoting course attendance, engagement, adherence and attainment. Further research could seek to follow up these findings to explore their relevance across different student cohorts, subject areas or university settings. This could be aligned with well-being strategies which seek to support students in their transitions and journeys in Higher Education.

## **Conclusion**

Based on the principles of SIT, we developed our ILC scheme, with the intention of supporting student well-being and encouraging favourable study behaviours. Although we did not observe any significant effects of our scheme on course attendance or performance, we did find that collective identity garnered from student cluster group was related positively to a range of psychological variables including students' sense of belonging, group efficacy beliefs and subjective happiness. These remain important considerations in light of student well-being concerns which are increasingly prevalent in Higher Education.

**Data Availability Statement:** Participants of this study did not consent to any statements relating to their data to be shared publicly, so supporting data is not available.

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Table 1. Study variables by residential status

	<b>Total</b>	<b>On-Campus</b>	<b>Off-Campus</b>
	<b>(<i>N</i> = 90)</b>	<b>(<i>n</i> = 57)</b>	<b>(<i>n</i> = 23)</b>
	<b><i>M</i> (<i>SD</i>)</b>	<b><i>M</i> (<i>SD</i>)</b>	<b><i>M</i> (<i>SD</i>)</b>
Cluster identity	42.67 (9.65)	43.91 (8.48)	40.22 (11.39)
Cluster group efficacy beliefs	4.35 (1.45)	5.00 (1.27)	4.38 (1.68)
Sense of belonging	66.92 (11.92)	65.41 (12.73)	69.52 (10.57)
Resilience	3.13 (.87)	3.04 (.78)	3.28 (.97)
Subjective happiness	21.32 (4.86)	20.11 (4.42)	22.57 (4.88)
Attendance	91.55 (8.77)	91.49 (9.38)	92.00 (7.21)
Academic performance	68.88 (7.35)	69.79 (6.49)	68.88 (7.35)

Table 2. Correlational analysis of study variables

	2	3	4	5	6	7
1. Cluster Identity	.51**	.25*	.13	.25*	.15	.01
2. Cluster Efficacy Beliefs		.11	-.03	.03	.11	-.01
3. Sense of belonging			.38**	.70**	-.02	-.06
4. Resilience				.45**	.002	-.07
5. Happiness					.001	-.02
6. Attendance						.57**
7. Academic Performance						

\*\*  $p < .001$     \* $p < .05$

Table 3. Summary of Simultaneous Regression Analysis with happiness as the outcome variable

	b	SE	$\beta$
Cluster Identity	.04	.04	.08
Social Belonging	28**	.05	.68**
Cluster Identity x Social Belonging	.01	.003	.11

\*\* =  $p < .001$

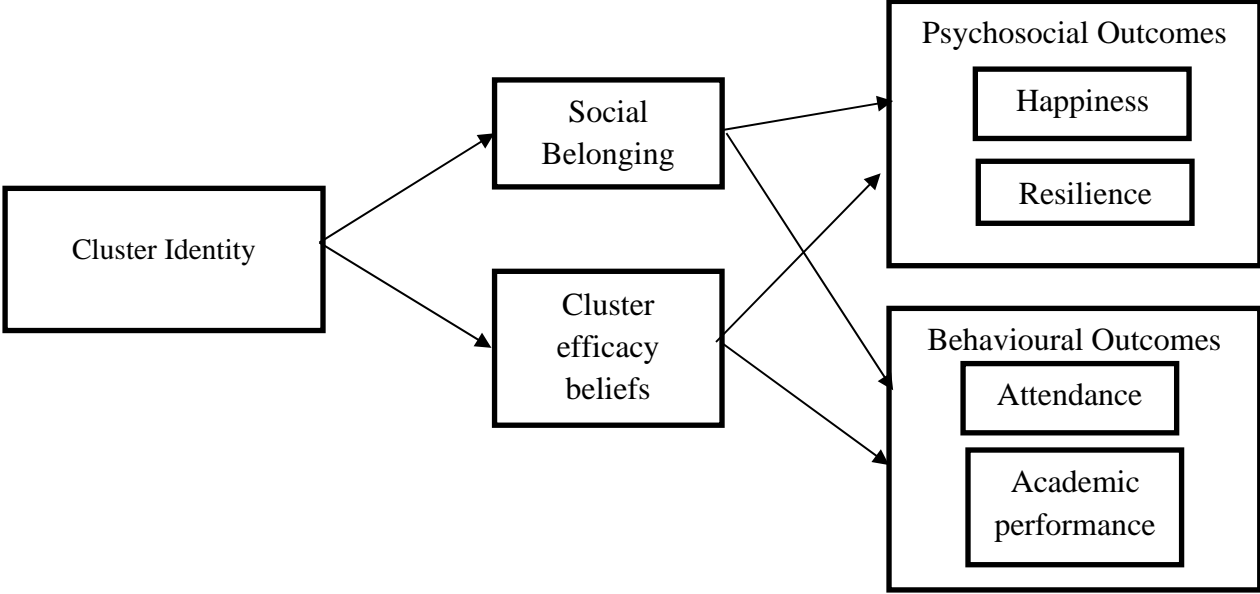


Figure 1. Conceptual model of the research