Ethnic Group Differences in the Academic Motivation of University Students

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Motivation is one of the most important psychological concepts in education today, and has in fact shown to be related to various learning and performance outcomes. While some research has begun to examine the motivation of various ethnic groups, and how this may impact on learning outcomes, little research has been conducted on the various ethnic groups present in New Zealand’s multicultural University setting. The present study aims to examine the academic motivation of Pakeha, Maori, Pacific Islands and Chinese students attending a New Zealand University. A revised version of the Academic Motivation Scale (measuring extrinsic, intrinsic, and amotivation) was administered to 318 undergraduate students, and results analysed as a function of ethnicity. Possible differences in the academic motivation of these ethnic groups will be discussed, along with implications for better structuring learning environments for these students.

Across all educational levels, there has been a huge focus over the years, as to why certain ethnic groups outperform others academically. When considering academic achievement however, particularly in a University context, it is likely that academic ability is only one determinant of success. Another significant factor is motivation (in particular, academic motivation). However much less attention has been given to measuring this construct. In a multicultural context such as a New Zealand university (in this case, the University of Auckland), it seems imperative to consider the academic motivation of students, not only to investigate the possibility of this construct being related to achievement, but also in order to better structure learning environments and support systems for these students.

There are many conceptual perspectives which have been suggested in order to understand academic motivation. One such perspective states that behaviour can be extrinsically motivated, intrinsically motivated, or amotivated. This approach to motivation appears rather pertinent to the field of education, particularly as motivational styles can lead to important and predictable consequences. The differing motivational styles are outlined briefly below-

**Intrinsic Motivation:**

Intrinsic motivation can be defined as "the fact of doing an activity for itself, and the pleasure and satisfaction derived from participation". If a person is intrinsically motivated, they will perform the behaviour without any material rewards or external constraints. An example of intrinsic motivation would be reading a book for the pleasure of learning something interesting. It has been suggested that there are in fact three differing types of intrinsic motivation, which can be identified as intrinsic motivation to know, to accomplish things, and to experience stimulation.

The first type of intrinsic motivation refers to the intrinsic motivation to know. This type of motivation occurs when someone performs an activity for the satisfaction and pleasure that one experiences while learning or trying to understand something new. The second type of intrinsic motivation (intrinsic motivation toward accomplishments) occurs when someone engages in an activity for the pleasure and satisfaction experienced when one attempts to accomplish and create something. The final type of intrinsic motivation, known as intrinsic motivation to experience stimulation, occurs when someone engages in an activity because they wish to experience stimulating sensations (such as sensory pleasure, aesthetic experiences, as well as fun and excitement) which are derived from one’s engagement in the activity.

**Extrinsic Motivation:**

Extrinsic motivation refers to a range of behaviours which are not engaged for their own sake but as a means to an end. Originally, it was thought that extrinsic motivation referred to behaviour that could only be prompted by external contingencies such as rewards. However, three differing types of extrinsic motivation have now been proposed - external regulation, introjection and identification. These will be discussed in turn.

External regulation corresponds to extrinsic motivation as it appears in the literature. This type of motivation occurs when behaviour is regulated through external means (usually through rewards or constraints). When considering introjection, as Pelletier et al. have stated, "with introjection, the formerly external source of motivation has been internalised such that its presence is no longer needed to initiate behaviour." (p. 38). The source of...
control is now within the individual, and behaviours are reinforced through internal pressures such as anxiety or guilt. It is important to note, that this type of internalisation (while internal to the person) is not a genuine case of self-determination as it is limited to the internalisation of external contingencies. Finally, identification, is in operation “when the individual comes to value and judge the behaviour as important and, therefore, performs it out of choice.”. In this case, while the activity is still performed for extrinsic reasons (for example, to achieve personal goals) it is actually internally regulated and self-determined.

**Amotivation**

It has been suggested that in order to fully understand human behaviour, a third type of motivation should be considered. This type of motivation (termed “amotivation”) is very similar to the concept of learned helplessness and can be defined as follows - "Individuals are amotivated when they do not perceive contingencies between outcomes and their own actions. They are neither intrinsically nor extrinsically motivated.". Individuals who are amotivated experience feelings of incompetence and lack of control. Amotivated behaviours can be seen as the least self-determined, as there is no expectation of reward or sense of purpose.

This multi-faceted approach to motivation can be seen as being particularly important, as the different types of motivation have been associated with important psychological consequences, such as learning and performance. Research suggests that as one progresses from amotivation to intrinsic motivation, the differing types of motivation are associated with increasingly positive consequences.

This approach to motivation has also been shown to be particularly useful in assessing students motivation for attending University. This is a particularly important area as it is important that students’ learning environments are structured in order to enhance motivation and thus optimise learning. Measures of academic motivation, such as the Academic Motivation Scale (AMS) have been found to correlate positively with other measures such as effort and achievement levels in class, time spent in academic activities, academic satisfaction and drop out rates. For example, Vallerand et al (1989) examined the motivation of University (College) students using the French-Canadian version of the AMS. These researchers found that both intrinsic motivation and identification were positively associated with educational outcomes. External regulation and introjection were either not related or slightly negatively related to outcomes. Amotivation was (not surprisingly) negatively related to educational outcomes. Despite the importance of fully understanding the motivation of University students, however, little work has been done in this area, particularly in a New Zealand context. Furthermore, research which has been conducted has focused on factors such as gender and not examined factors such as ethnicity.

Given that academic motivation cannot be understood without considering the social fabric in which it is embedded, it seems important to examine motivation in light of ethnicity, particular in a multicultural country such as New Zealand. Previous studies have examined university students motivation as a function of ethnicity, however few studies have looked at academic motivation specifically, or made use of the AMS to measure motivation amongst differing ethnic groups.

The present study has chosen to focus on four predominant groups in the population of Auckland University students – Pakeha, Maori, Chinese, and Pacific Islands. While all of these groups of students are studying at the same University, their cultural background, values, beliefs etc. are quite diverse, and it is likely that this will have an impact on their motivation, resulting in differing motivational profiles for each of the four groups. It is
expected that the differing motivational profiles of these students will reflect both the
differential achievement and differing cultural values of these groups.

Method

Subjects: Three hundred and eighteen undergraduate students enrolled in the School of
Education at the University of Auckland, participated in the study. These students were
mostly female (83%) and had an age range of 17 through 59 (mean = 25.8). The ethnic
make-up of this group included Pakeha (69%), New Zealand Maori (9%), Pacific Islands
(11%) and Chinese (11%).

Materials: The questionnaire used in the present study was adapted from the Academic
Motivation Scale. Minor wording changes were made to the 28 item questionnaire in order
to suit a University setting and a New Zealand context. This questionnaire measures each of
the previously mentioned types of motivation by asking students to rate their responses to
four statements for each of the seven sub-scales of motivation. Research by Vallerand and
his colleagues has shown that the AMS has high levels of concurrent and construct validity
as well as high reliability for the seven sub-scales.

Procedure: Ethics approval was sought and obtained through the University of Auckland
Human Subjects Ethics Committee. An initial pilot of 19 subjects of various ethnicity took
place in order to ensure that the questionnaire was suitable for use with students of different
cultures. No problems arose from this pilot.

Subjects were then invited to participate in the study during their regular lecture or tutorial
time. Participation was voluntary and all responses were anonymous. The AMS was
distributed as part of a booklet that also contained participant information, a coversheet
requesting demographic information, a social responsibility questionnaire, and a locus of
control scale. Questionnaires took approximately 10 minutes to complete and were
administered by a researcher during the students' normal class time. Instructions for
subjects were as follows: “Please circle the number that indicates the extent to which each
item corresponds to one of the reasons that you currently have for attending University”.
Results were computed by adding the four item scores for each of the sub-scales, giving
seven sub-scale scores for each subject. In addition, a total score was computed for both
intrinsic and extrinsic motivation scores.

Results

The means of the various ethnic groups on each of the seven sub-scales, as well as the total
scores for extrinsic and extrinsic motivation, can be seen in Table One.

These results were analysed in a series of one-way ANOVA’s as a function of ethnicity.
There was a significant effect for intrinsic motivation to accomplish \( (F(3, 309) = 5.101, \)
\( p=0.002) \), intrinsic motivation to experience stimulation \( (F(3, 314) = 2.376, p=0.07) \),
regulation \( (F(3, 314) = 3.066, p=0.028) \), total intrinsic score \( (F(3,305) = 2.161, p=0.051) \), and
amotivation \( (F(3, 312) =2.074, p=0.10) \).

Post-hoc tests were then conducted on the four sub-scales with gave initial significant
results (as stated above). These tests revealed that Chinese, Pacific Islands and Maori
students were all higher than Pakeha on intrinsic motivation to accomplish \( (p=0.002, \)
Discussion

As expected, the four ethnic groups showed differing motivational profiles on the AMS. However, somewhat surprising, these profiles do not all seem to relate back to the differing achievement levels of these groups. The findings can be explained however, if the cultural backgrounds of these differing groups is considered.

The finding that Chinese students scored highest on the total intrinsic motivation scale as well as the scales of intrinsic motivation to accomplish and to experience stimulation, is not surprising considering the traditionally high achievement of this group of students. Given that intrinsic motivation has been previously associated with positive educational outcomes, it makes good sense that this group of students scored high on this sub-scale. However, somewhat surprisingly, this group of students also scored highest on the amotivation sub-scale which has previously been associated with negative educational outcomes. This calls into question the validity of considering amotivation, extrinsic motivation and intrinsic motivation as a continuum associated with increasing positive educational outcomes.

Before considering possible reasons behind the Chinese students high intrinsic motivation, it is important to point out that the Pacific Islands group were particularly similar to the Chinese group in motivation profile (with the exception of the Chinese students high score on amotivation). This is somewhat surprising considering the traditionally low achievement of this group of students, however it is likely that that the high intrinsic motivation of both of these groups is related to similarities between these two cultures. Firstly, both groups of students are immigrants to New Zealand, therefore, their high intrinsic motivation may have been related to the fact that this is a group of students who, either by their own choice or their parents', have chosen to leave their home country, more than likely to pursue a better
education. It seems likely that such students would be highly intrinsically motivated. Another possibility could be related to the particularly high priority both cultures afford to education as well as the high educational expectations parents in both cultures have of their children. This may well foster the intrinsic value of learning and motivation in these students.

The remaining ethnic groups, Pakeha and Maori, interestingly enough also showed similar motivational profiles. This may be due to a high level of acculturation within this particular sample of Maori students (a possibility, given their high level of educational attainment thus far, as suggested by ). However, one surprising finding was the particularly high level of external regulation within this group. The Maori sample were much more externally regulated than all of the other ethnic groups studied. It is possible that this high level of external regulation (which is considered to be extrinsic motivation in the traditional form) may be due to these students efforts to “prove” themselves in a Pakeha world. They may see an external reward such as a degree or a good exam mark as proof of their success in this "world" which would thus result in pride from their iwi (tribe).

There are several other implications of these findings which should be briefly considered. The fact that the motivational profiles differed from what would have been expected of these groups considering their differential achievement is important to examine further. It was expected that the Pakeha and Chinese would be higher on intrinsic motivation and low on amotivation, while the Pacific Islands and Maori students would be higher on amotivation and possibly extrinsic motivation. This was obviously not the case in the present study. There are two implications of this: the first is (as mentioned previously), that students who are high on intrinsic motivation may not necessarily be low on extrinsic motivation and amotivation. While motivational researchers emphasise the need for multifaceted constructs and scales of motivation , it may in fact be dangerous to view extrinsic and intrinsic motivation as opposites and to see students who score highly on amotivation to have little or no motivation. Secondly, these motivational constructs may result in different outcomes in differing ethnic groups. There are obvious dangers in imposing Western constructs on other cultures from which they were not derived . While fostering intrinsic motivation in students from Western societies may be an appropriate teaching strategy, perhaps this is not quite so appropriate in other cultures with different values and conceptions of learning.

There are several limitations of the present study which must be considered. The fact that students were from a single department, and that a measure of achievement was not included are an obvious limitations. Assumptions unfortunately had to be made as regards the achievement levels of the groups in the sample due to the ethical constraints on obtaining students’ achievement data. Neither does the study take into account other factors such as gender, parent’s educational level, religious affiliations etc. which may have impacted on these students’ motivation. Future research could perhaps further study these factors as well as their possible interaction with ethnicity. When considering any future research it seems important to relate the concept of academic motivation to other motivational concepts in order to fully understand motivation amongst different cultures. Perhaps such research could take a more qualitative approach in order to better measure the motivational beliefs of these cultures. More culturally appropriate measures of motivation may be better able to assess those students who may be in danger of experiencing difficulty in an educational setting.

While there are obvious benefits from assessing the motivation of various ethnic groups, the fact that the learner is an individual with their own beliefs and values should not be overlooked. It would be dangerous to blindly apply the assumptions we have about a particular ethnic group to all individuals in that group without considering this fact. However, the present study has made a start at better understanding the motivation of University students in the context of ethnicity. It is also important to remember that while the product of
a student’s time at University is their degree, the process of obtaining that degree should be just as important. With that in mind, improving students’ motivation should be a goal in education in itself and efforts should be made to structure learning environments, in order to better promote the most appropriate form of motivation for every ethnic group.

References

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