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# A projective technique to help understand the non-rational aspects of withdrawal and undergraduate attrition

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## Abstract

This paper outlines some of the research on student attrition and recognises some of the sensitivities that may be involved for students in dealing with an action that may be characterised by some, as a type of failure. The paper claims that in research, student's responses to direct questions on the reasons for attrition may therefore be biased by social desirability. The paper therefore proposes a research technique involving projective devices that would help to circumvent the conscious defences of respondents and so help researchers gain a fuller, deeper and more complete understanding of the emotional issues involved in student attrition and retention. An example of what such a projective device could look like is presented and researchers in the area of student retention are invited to use this in their future research.

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## Introduction

The issue of undergraduate student attrition is the subject of much concern and discussion in universities around the world. It has been extensively studied and researched and there is a substantial and growing body of literature on the subject (Wetzel, O'Toole, & Peterson, 1999). It has been identified as one of the most widely studied topics in higher education and the number of academic research papers on the subject has been described as voluminous (Danaher, Bowser, & Somasundaram, 2008).

Indeed, such is the level of concern over this issue that higher education institutions and universities host whole conferences on motivating and engaging students. A recent conference on this was organised in 2008 by the Education Research Group of Adelaide. The conference was partly on the theme of how to reduce undergraduate attrition and a number of research based insights were presented, some of which are discussed in this paper. The bulk of attrition is said to take place in the student's first year of university and a lack of commitment to the course or academic program enrolled in has been identified as a commonly given cause of withdrawal by students (Danaher et al., 2008).

A key factor influencing withdrawal is the level of involvement in the current choice of course and university and the level of commitment to the course and university by the student (Mannan, 2007; Sichivista, 2003; Wetzel et al., 1999). The retention recipe is then to make sure that there is a high degree of commitment from the student and a high degree of involvement by the student in all aspects of university life. This is the situation where student values fit well with the university experience and when students are highly involved in the academic and social activities at the university.

The literature on undergraduate retention then, can be read as a description of the stressors affecting the degree of values fit and commitment to the university and the factors affecting involvement with the university, which together help determine rates of student withdrawal.

A well-known model developed in the academic literature on withdrawal is Tinto's model and this model has commitment and integration (i.e. involvement) as the two key elements which drive the decision to drop out of university (Brunsden, Davies, Shevlin, & Bracken, 2000). This model has largely been supported in the academic research literature, over the years since its first publication. Researchers testing Tinto's model have concluded that it is what happens to a student after arriving at a university that mainly determines their persistence or attrition, rather than this being determined by the pre-existing individual characteristics of the student (Sagy, 2000). Tinto's model has thus, previously been supported by empirical replications and tests (Sagy, 2000).

The model, developed in 1975, suggests that attrition is determined by the amount of social and academic integration a student has with the university. Further, that integration is fed by goal commitment and institutional commitment. The model proposes that these factors are in turn fed by a series of elements such as: previous academic success, satisfaction, self-esteem, university choice, degree choice, study preference and others.

Other researchers acknowledge the insights that can be gained using Tinto's model and suggest that elements of severance, from past ties before university entrance and connectivity to new ties after university entrance, feed into the feelings of connection and involvement that a student may come to have (Liu & Liu, 1999). These commentators have concluded that student-faculty relationships are crucial to student retention and that having an accessible faculty which students can relate to is a very important element of this, as it promotes involvement and integration with the university (Liu et al., 1999).

Involvement (called social integration in the paper concerned) and commitment were identified as being the two best predictors of intention to continue in a music education program in one piece of research (Sichivista, 2003). This again supports Tinto's model and its main elements of involvement and commitment. In another research paper that supported Tinto's model, academic and social integration were said to be compensatory to each other in terms of student perseverance, in other words, one type of integration was said to be a replacement for the other in terms of helping to prevent attrition (Mannan, 2007).

In previous literature reviews in the areas of student retention and progression, researchers have identified a number of areas that have an effect on undergraduate completion and withdrawal rates. These include the extent of the social and academic integration into university life, the appropriateness of the course chosen and the importance of first year experiences in determining whether degrees are completed (Cartney & Rouse, 2006).

These researchers note that it has been found that promoting and facilitating small groups of students to form and meet for the purposes of learning together, promotes student retention because it gives students a sense of identity and belonging (Cartney et al., 2006). Involvement with other students and with lecturers are also both recognised as being important aspects to a successful university experience (Turnbull et al., 2006). These clearly fall into the involvement category of factors affecting withdrawal.

Feelings of anonymity, isolation and loneliness are stress factors acknowledged to contribute towards withdrawal with issues of transition, engagement and attendance being strongly

interconnected with each other to influence withdrawal (Falkner, 2008). Modern accounts of stress identify a feeling of “anomie” or meaninglessness as the main cause of stress and clearly feelings of anonymity, isolation and loneliness would logically engender such a feeling of meaninglessness. A main symptom of this lack of integration and commitment is a lack of academic progress and this has been identified by researchers as a leading indicator of attrition (Wetzel et al., 1999).

Interestingly, the findings of a recent report on retention and attrition indicate that the profile of undergraduate dropouts at one university, in terms of previous academic achievement and other measures, is the same as the profile of those who remain in their degree programs (Anonymous, 2008). This logically suggests that academic failure at undergraduate level is a symptom of something other than academic ability. In possible answer to this the literature on retention would suggest that academic failure at undergraduate level is a symptom of a lack of social and academic integration and thus a lack of commitment to the university.

Students are reported to experience difficulties in the transition to a different learning environment than they were used to at school. In particular they find studying on their own to be more demanding and a large minority of undergraduates also find that the standard expected of them is higher than they were expecting (McInnis, 2001). These transition difficulties, experienced as students move to a different academic environment, mean that they experience self-motivation difficulties and this can lead to them missing difficult classes.

Missed classes contribute to further disengagement as students wonder whether they can catch up with work. Disengaged students fail to form bonds with their peers and therefore suffer from further transition difficulties (Falkner, 2008). A vicious circle of negativity can then develop unless intervention of some kind occurs. Falkner suggests that the implementing of collaborative learning approaches to student teaching and learning activities help to bond students together and thus break the circle of negativity. This sounds remarkably similar to the small group learning approach suggested by Cartney and Rouse (2006). This approach could be expected to promote student involvement and social integration.

Another researcher suggests running focus groups with students to, among other things, facilitate social networking among students (Keuskamp, 2008) which is again a type of small group involvement and interaction method of promoting student integration. These approaches to student involvement and retention implicitly recognise the importance of the emotional element to attrition. If students do not feel that they fit in socially or academically then they leave.

A further researcher suggests promoting the use of on-line networks such as *Facebook*, among students, to facilitate social integration and academic engagement, noting that this works well with both local and international students as it removes any initial barriers due to language (McCarthy, 2008). The use of internal alternatives to *Facebook* is also advocated by researchers for the same reasons (Turnbull et al., 2006).

Engagement (which may be called involvement) has also been identified by other researchers as a key influence on retaining students (Francis, 2008; Nielsen & Hamilton, 2008; Walker, 2008) and is obviously a key factor in the decision of students whether to stay or leave university. New students need to make a large adjustment to their previous lives in order to engage with their new university and to join in the academic, cultural and social activities of that university. This is reported to be a particularly difficult process for non-traditional students who may be unfamiliar with the culture of universities because they are the first

in their families to attend university (Cartney et al., 2006). Non-traditional students are defined as those who do not come directly from secondary schools to university and these are reported to have higher attrition rates than traditional students (Deng, Lu, & Cao, 2007).

In other research it has been found that the undertaking of research activities by undergraduate students has been reported to be rated highly by students and has been linked to increased levels of student satisfaction (Willison & O'Regan, 2007). The undertaking of research may be characterised as an involvement activity at the undergraduate level as it is often undertaken in teams. Teamwork promotes social involvement and academic integration and these promote retention.

The relevance of a particular course, as perceived by students, has also been identified as being a critical factor in course failure and non-completion rates (Jerram, 2008). Students are motivated by courses which they think will be useful to them in their future careers and demotivated by courses that are perceived as being irrelevant. Relevance is thus clearly linked to involvement in the university course. Jerram says that university teachers need to not only make sure that their courses are relevant, interesting and engaging, but also have to convince students that this is the case by explaining the relevance to them. Whether students get enrolled in their course of first preference is also a factor in attrition rates, with those who do not get into their preferred course being more likely to leave (Deng et al., 2007). This pertains to the level of involvement a student can be expected to have in a particular course.

One of the disappointments which students identified in a survey of their first year experiences was reportedly a reaction to the amount of academic autonomy and independence they were expected to demonstrate (Brinkworth, McCann, Matthews, & Nordstrom, 2008; McInnis, 2001). This made for a difficult transition from school to university. Students also reported, in this survey of their first year experiences, that they expected rapid and detailed feedback on returned work and easy access to teachers but did not get these needs met. To this extent the degree of fit between student values and expectations and what is delivered is a poor one in their first year at university. Poor quality teaching has also been identified as a reason for student withdrawal with students reportedly saying in a survey, as reasons for withdrawal, that academics did not display enough interest in them and did not provide helpful feedback to them (Deng et al., 2007).

Brinkworth and colleagues argue for an increase in what is offered by the university in terms of offering non-specialised bridging courses to ease the transition of first year students from school to university. They also argue for earlier and more proactive intervention strategies involving such things as transition coordinators and for a transition charter to outline the transition process steps necessary to motivate students to stay at university (Brinkworth et al., 2008).

Deng and colleagues (2007) found in their own research among 10,542 students at one South Australian university in 2005, that dropouts were significantly lower for fee paying students, Chinese speaking students and students born in Australia (Deng et al., 2007). Looking at these findings in the light of Tinto's well known commitment-integration model may help to explain why fee paying students are less likely to drop out. They have made a financial investment in their education and this investment acts as a barrier to withdrawal. It also entails a level of involvement that is probably greater than for a non-fee paying student as it signifies a commitment to the educational goal of the student. Students born in Australia may have a better social and academic values fit to the university environment than those born overseas and this may explain the finding that they are less likely to withdraw. Chinese

speaking students may be culturally disposed to value education for its own sake and for the career benefits it is reported to bring and so may be more committed to university completion than other cultural groups and this may explain the finding that they are less likely to withdraw than other students are.

In conclusion then, both social and academic integration can be anticipated to have emotional elements (a feeling of belonging, a feeling of being useful and wanted) to them. However, these emotional elements are hard to measure because of the difficulties of accessing them from respondents, who may be unable or unwilling to display or verbalise such sensitive, emotional material.

### **Proposed Research Methodology**

Market researchers and psychologists have long known that asking rational questions activates the rational side of the brain and results in getting rational answers rather than the more emotional elements of personality that drive human behaviour (Anderson, 1978; Boddy, 2004a; Lilienfeld, Wood, & Garb, 2000; Nancarrow, Barker, & Wright, 2001). Further, in the context of student attrition there is sometimes an implicit assumption that withdrawal is somehow a reflection of individual failure or maladjustment (Liu et al., 1999). Social desirability bias (Fisher, 1993) can therefore be expected to come into play in the answers that students give to direct and personal questions concerning their own reflections on their intentions to leave university.

Answers given by students who have dropped out or are considering dropping out of university may thus often be mere rationalisations. Underlying feelings like loneliness and isolation may be avoided, un-confronted and unacknowledged by the conscious mind.

Answers given may be expressed as the more socially acceptable reasons, such as that the course content was not as interesting as expected or as relevant as expected. Therefore, in future research, the current researcher proposes that using a projective research technique that circumvents the conscious defences of respondents and directly accesses the creative and more emotional side of the brain may be useful (Branthwaite & Cooper, 2001; Chandler & Owen, 2002). In this case the use of a project technique is proposed for this purpose, to try to catch and measure the more emotional side of the attrition decision.

Projective techniques are questioning techniques that depersonalise the question to the respondent thereby desensitising the respondent to the answer they give and deactivating their conscious defences about the answer they give (Boddy, 2005b; Ramsey, Ibbotson, & McCole, 2006; Vinten, 1995). An example of how such a projective question may look is given below. The question can be undertaken qualitatively or quantitatively and answers can be analysed via the usual Gaussian statistics involved in positivist research.

The plan was to use this technique for research into retention at a certain Australian university. However, this research was cancelled. Researchers in the area of student attrition and retention are therefore invited to use this technique in their future research.

“Question: Below is a cartoon picture of two undergraduate students talking to each other. One student asks the other why they are thinking of leaving university. Please fill in the speech and thought bubble of the student who is thinking of leaving university.”

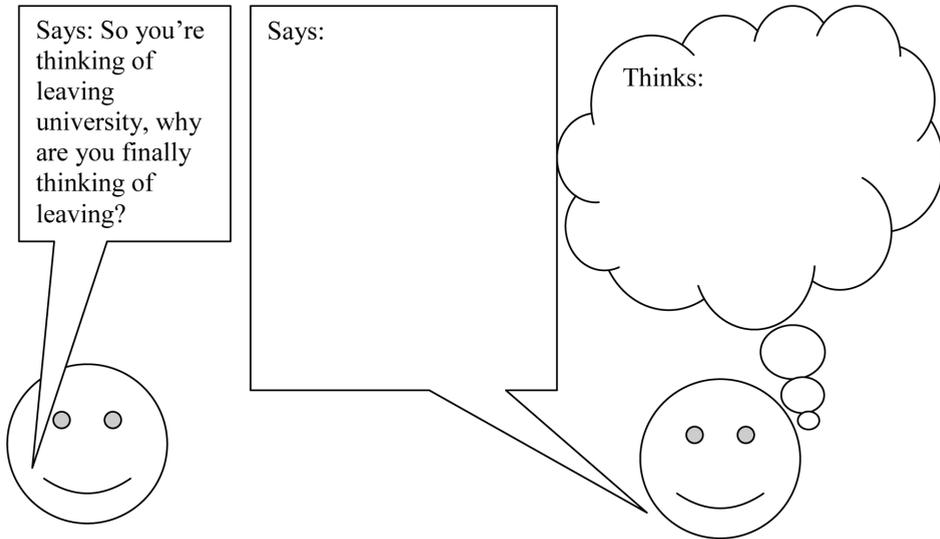


Figure 1: Example of cartoon to determine student thoughts.

The use of projective questions and techniques originated from Freud's work on paranoia, which was undertaken at the time of the first moving picture projectors. Freud conceptualised projection as a defence mechanism by which people unconsciously attribute their own unwanted, undesirable or negative personality traits onto others (Lilienfeld et al., 2000). Freud's work was subsequently developed by psychoanalysts and psychologists based on his projective hypothesis, i.e. that research subjects project aspects of their personalities in the process of disambiguating, or making meaning of, various unstructured stimuli.

Several different techniques were developed such as the well-known Rorschach technique, or 'ink-blot test', where subjects are assumed to project aspects of their personality onto the ambiguous features of a defined set of blots of ink (Graca & Whiddon, 1990). Market researchers use projective techniques in a much more structured way than the Rorschach technique, to facilitate deeper responses from respondents than direct questions obtain (Haire, 1950; Hofstede, vanHoof, Walenberg, & deJong, 2007).

In the case of the research into attrition proposed here, students responding to the survey or other form of research would be told that the picture in Figure 1 is of two undergraduates talking to each other. They would be asked to fill in the speech and thought bubble of the second student. It can be anticipated that because the second student is an anonymous identity, respondents will project their own thoughts and feelings into the answers given, particularly into the thoughts section of the answers. Experience with using this technique over twenty-four years of research has shown that this is, to varying degrees, always the case (Boddy, 2008).

Respondents seem to unconsciously view the question, as giving them permission to display their real thoughts and feelings about the sensitive situation or issue involved (Boddy, 2007). This is because it is not a direct question, and is therefore non-threatening to them personally and because it is visually different, unusual and stimulating. An example of how such an approach was used to gauge a measure of teaching effectiveness can be found in

Boddy (2004a). Boddy claimed that using such a technique gave insights into his teaching style that were not apparent from such alternatives as reports from peer observation of teaching.

Other projective questions that could also be usefully used for the same purposes may involve sentence completion exercises, narrative story-telling and metaphorical answer requests. The aim of this approach to research would help to understand the real, underlying, and more emotional reasons for student attrition so that a retention strategy can be developed that is not just based on rationalisations or on relatively shallow evidence. It may be anticipated from experience, that using such an approach would gain the usual rational answers from the speech bubble of the leaving student but would provide deeper insights of a more emotional and sensitive nature from the answers to the thought bubble. It may be hypothesised that the results from such an approach would tend to support Tinto's model and demonstrate that involvement and the concomitant levels of commitment are what really drive undergraduate attrition. It may be further hypothesised that the findings from such research would also tend to support Tinto's view that what happens to an undergraduate after reaching university is what determines their retention or withdrawal behaviour.

### **The Usefulness of Projective Techniques**

Psychologists and market researchers who are used to using projective techniques both claim that they are very useful, and Simeonoff, for example, (1976) says:

"People who have experience of projective techniques realize the insight they can give, not only into other people's mental processes but also into one's own". (Simeonoff, 1976).

The definition of projective techniques given in the 'Dictionary of Marketing Terms', (Anonymous, 2007) gives an insight as to why these techniques are found to be useful, they are defined as being:

"A psychological method of uncovering subconscious material within subjects".

This ability to uncover subconscious material makes them useful in such work as brand development research (Chandler et al., 2002), in educational research (Catterall & Ibbotson, 2000), in consumer research (Chang, 2001) and in psychological counselling (Clark, 1995). This is because their use helps people to articulate and acknowledge facets and feelings that may otherwise prove hard to access and may therefore remain unrecognised. They have been used in market research since the reported success of their use in studies in the early 1950's (Haire, 1950).

In previous research among business academics and postgraduate business students, respondents were given a presentation on the usefulness of projective techniques and then asked to complete the verbal reply bubble and thought reply bubble in reply to another researcher asking them what they thought about using projective techniques in business research (Boddy, 2004b; Boddy, 2005a). When the business academics in this study became aware of projective techniques, they reported that they regarded them as helpful and that they wanted to find out more about them so that they could use them in their own research. It was apparent in this study that although market researchers and psychologists use projective techniques frequently in their research, most academics do not. However, once they had become familiar with the theory behind projective techniques and with their use in practice, academics were persuaded as to the potential benefits of using these techniques.

## Conclusions

Withdrawal decisions may well be tinged with sensitive emotional issues of failure, rejection, loneliness and anomie. These issues may be hard to access using straightforward questioning techniques because respondents find it hard to understand, confront, acknowledge or access and verbalise such thoughts and feelings. Projective techniques, by providing a non-threatening questioning technique, may provide the breakthrough understanding needed to fully understand this issue. Projective techniques are deemed to be very useful among a variety of researchers who have used them in different disciplines. Their use in research on student retention may provide insights that would otherwise be difficult to access. Retention strategies can then be worked out on the basis of all the evidence, not just the rationalisations commonly collected by researchers working in the positivist scientific paradigm.

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