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Predicting Perceived Likelihood of Course Change, Return to University Following Withdrawal, and Degree Completion in Glasgow University Students

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Abstract

Levels of student drop out have increased in the UK over recent years causing considerable concern to British universities, as they depend on students for funding. Furthermore, student attrition is of concern to the government, as policy is now aimed at high university completion rates. Research on student drop out is fairly extensive, but investigators often look at the roles of certain factors in predicting drop out, while neglecting others that have been studied elsewhere. This study is the first to examine a large proportion of the proposed predictors of student drop out at once, in terms of how they relate to measures of drop out intention.

Participants studying psychology, law, English literature and biology from all years of study completed an on-line questionnaire. This measured the predictive variables of current and past residence, year of study, alcohol use/attitude, confidence in course choice, student self-esteem, academic and social integration in university, social integration outside university, social support, academic self-confidence, goal and institutional commitment, and the outcome variables of how much they have thought about changing course, their perceived likelihood of degree completion, and the likelihood of returning to university/college if leaving their present course.

It was found that thinking about changing subject was significantly predicted by low academic integration, belief that course choice was not well informed, distance from Glasgow before starting university, and low social integration outside university. Perceived likelihood of degree completion was significantly predicted by year of study, goal commitment, low extraversion, belief that course choice was well informed, low conscientiousness, student self-esteem and a lack of understanding of the work-grade link. Finally, perceived likelihood of returning to university/college if leaving present course was significantly predicted by year of study, distance from Glasgow before starting university, openness, low understanding of the work-grade link, goal commitment, low extraversion, and social integration within university. It was also found that psychology students did not differ significantly from students who were not studying psychology in personality measures, thinking about changing subject, or intending to return to university if they left their current course, though they did consider degree completion significantly more likely.

It appears that academic and goal related concerns influence students in making drop out decisions more than do social concerns. The findings are discussed in relation to the life-span theory of control (Heckhausen & Tomasik, 2002) and other recent theories on drop out, and suggestions for future research are proposed.

Introduction

In the past decade there has been a considerable expansion of higher education in the United Kingdom, with an increasing number of people entering university courses. However, this expansion has been accompanied by increasing rates of student 'drop out', where students leave university without finishing their initial course of studies (Johnes & McNabb, 2004). In 2004, the non-completion rate from UK universities was around 17%, and at Glasgow University, 12% of those enrolling on courses in 2000 did not proceed to second year (Christie, Munro & Fisher, 2004; Patrick, 2001). Student drop-out, or student attrition as it is sometimes known, is an increasing concern for a number of reasons. First, the students who drop out may leave through circumstances that could have been avoided had the university provided sufficient support, or if they received more guidance at school, and thus miss out on potentially rewarding careers (Johnes et al, 2004). Second, from a more practical perspective, universities lose money when students fail to progress through their degrees, and it is in their interests to keep as many students as possible (Christie et al, 2004). Finally, government policy is now aimed at ensuring high university completion rates, and determining what makes some students remain at university while others leave is central to achieving this goal (Johnes et al, 2004).

Tinto (1975) was the first investigator to propose a longitudinal model of student drop out, that predicted, rather than simply explained this behaviour. His theory was based on Durkheim's (1961) theory on suicide, which suggested that suicide was most likely when an individual was insufficiently integrated into society, both in terms of insufficient collective affiliation, and also insufficient congruence with the moral values of society (Tinto, 1975). Tinto (1975) viewed drop out as analogous to suicide, and suggested it occurred when an individual had insufficient social integration with others at university, or when they did not fit in with the norms and value patterns of the university, and were unable to achieve academically to the required level (i.e. insufficient academic integration). Social integration occurs through informal peer group associations, semi-formal extracurricular activities, and also through interaction with university staff (Tinto, 1975). Academic integration on the other hand, is seen partly in grade performance, an extrinsic reward reflecting the institutions evaluation of the individual, and also in intellectual development, an intrinsic reward reflecting the individuals' fit within the intellectual climate of the institution (Tinto, 1975). A reciprocal functional relationship was proposed, whereby too much social integration could detract from academic integration, and vice versa (Tinto, 1975).

Further, attrition was proposed to occur via an interaction of the societal pressures of the institution, and certain personal characteristics of the individual (Brunsdon, Davies, Shevlin & Bracken, 2000). These personal characteristics include pre-entry attributes such as educational history, family

history, the individuals abilities and their personality, and these characteristics give rise to the individuals levels of commitment to the goal of university completion, and their commitment to the specific institution they attend (Tinto, 1975). Then, while attending university, their levels of goal and institutional commitment are constantly re-evaluated through their interaction with the social and academic spheres of university, as well as the impact of any external commitments (Tinto, 1975). It is the individuals' perceived, rather than actual level of integration that affects their commitments, which in turn lead to decisions on whether to persist or drop out. Tinto (1975) proposed that higher levels of integration lead to a reduced likelihood that a student will drop out.

Furthermore, Tinto (1975) distinguished between voluntary drop out due to insufficient social integration, or insufficient academic integration with the intellectual climate of the course/institution, and forced drop out due to insufficient academic integration in terms of grade performance. Voluntary drop out was proposed to occur after weighing up the costs and benefits of dropping out, and deciding that an option other than degree completion was more beneficial (Tinto, 1975). As an individual progresses through a degree, past costs become investments, and thus perceived benefits of degree completion increase throughout the degree making voluntary drop out less likely (Tinto, 1975). However, Tinto (1975) did not actually test the model.

Nevertheless, the model made testable predictions, and empirical studies have been largely supportive, with significant differences in levels of academic and social integration found between persisters and drop outs (Terenzini & Pascarella, 1977). On the other hand, few studies have tested the model as a whole, thus different studies support different parts of the model (Brunsden et al, 2000). Brunsden et al (2000) attempted to test Tinto's model as a whole, and found it did not adequately explain their data. However, they did not measure academic and social integration while at university, and instead measured students potential to be integrated academically and socially at the time of enrolment, so perhaps it is unsurprising that the data did not fit the model. Furthermore, they pointed out that Tinto did not rigidly define the concepts in his model, and that researchers therefore have to operationalise the concepts themselves, possibly accounting for conflicting findings in different studies (Brunsden et al, 2000). Nevertheless, research on student attrition has not all been carried out within Tinto's influential framework.

Christie et al (2004) looked at differences between continuing and non-continuing students at two Scottish universities and suggested that one of the main problems at present is that universities have considerably increased the number of people admitted, but have not provided adequate extra support systems for these new students. Further, they found that poor course choice and rushed decisions significantly predicted drop out, and that most student drop out occurred in 1st year

(Christie et al, 2004). Finally, based on prior evidence they predicted that strong emotional support from family and friends would predict persistence, but unexpectedly found it was not directly related to course completion. Another approach to the study of student attrition looks at the quantification and influence of social networks.

Thomas (2000) measured student social networks (i.e. how many other students an individual knows, and the nature of these relationships) and how these related to attrition, using the social network in the place of Tinto's concept of social integration. He also measured academic integration, goal commitment and institutional commitment, and found that the effects of academic and social integration on persistence were not mediated by goal and institutional commitment, as had been proposed by Tinto (Thomas, 2000). There had, however, been considerable support in the past for the progression from social integration to institutional commitment, and from there to persistence (Braxton et al, 1997). Some work on student attrition has combined Tinto's theory with other approaches.

Tinto (1993) stated that the dispositions of individuals entering university have a strong relationship with persistence. Based partly on this assertion, and also on work in occupational psychology on employee turnover, Lounsbury, Saudargas & Gibson (2004) studied the relationship between personality traits and intention to leave university. They highlighted the fact that the role of personality in student attrition had not been systematically evaluated, that any attempts that had been made used too many personality variables, and that they all used different personality frameworks, leading to fragmented results (Lounsbury et al, 2004). Lounsbury et al (2004) used the Big Five model of personality, which has emerged as the dominant personality framework, and measures the traits of Openness, Conscientiousness, Extraversion, Agreeableness and Emotional Stability (Costa & McCrae, 1994). Personality traits are defined as 'relatively enduring dispositions of individuals to behave in consistent ways over time and across situations' (Lounsbury et al, 2004). It was found that conscientiousness, agreeableness, extraversion and emotional stability were all significantly negatively correlated with intention to withdraw, with emotional stability and conscientiousness jointly accounting for 17% of the variance in withdrawal intention (Lounsbury et al, 2004). They suggest that the inclusion of personality in the study of student attrition may reduce the amount of variance in drop out attributed to the influence of environmental factors (Lounsbury et al, 2004). However, they did not include any measure of academic or social integration, neither did they look at commitments to university completion or to the institution, and they did not investigate the amount of social support the students perceived themselves to have. The extent of the influence personality has on drop out over and above environmental factors such as academic and social integration is therefore still not clear.

Another individual characteristic that may influence drop out decisions is self-esteem. Brunsten et al (2000) included self-esteem in their test of Tinto's model, but did not state the strength of any relationship that may have been found between the self-esteem and drop out. It appears that no other recent study has examined self-esteem in relation to student attrition. Herrero & Gracia (2004), on the other hand, examined the relationship between self-esteem and social integration in the wider community in a sample of college students. In their study, however, social integration did not represent relationships with other students, but with the wider community outside the university. Self-esteem was found to be positively related to social integration, and a suggested explanation was that individuals with low self-esteem may feel inhibited from making friends and taking part activities in the community (Herrero et al, 2004).

A statistical analysis of the records of all students going through the central applications process in England and Wales in 1993 also yielded some interesting results (Johnes et al, 2004). It was found that students living in halls of residence or lodgings had significantly lower rates of attrition than those living in their parental homes, possibly due to a higher level of integration within the student community (Johnes et al, 2004). Furthermore, those attending university in the same region as their parental home were significantly more likely to drop out (Johnes et al, 2004). Differences were also observed in the patterns of voluntary as opposed to forced university withdrawal (i.e. failure) in different faculties, with only the 'hard' sciences being high in both forms of drop out.

A different approach, partially related to Tinto's (1975) theory, looks at the developmental dynamics of personal goals (Nurmi, Salmela-Aro & Koivisto, 2002). This is known as the life-span theory of control, and proposes that individuals over the course of their development are striving to achieve and disengaging from developmental goals that are synchronised with age and the opportunities that come and go over time (Heckhausen & Tomasik, 2002). These goals change over the course of development, and in adolescence these goals often concern social relationships, such as the goals of becoming part of an accepting social group and finding a romantic partner (Nurmi et al, 2002). However, towards the end of adolescence and the beginning of young adulthood comes the important transition from school to work or university/college, and at this stage individuals are faced with several environmental options and alternative goals (Nurmi et al, 2002). If an individual selects a particular goal, such as university completion with a view to a particular job, they are better able to focus their efforts on striving to meet the demands of the goal they have chosen. It has been found that when individuals view work related goals as important, and believe they can achieve them, they are more likely to be successful in gaining employment after leaving university (Nurmi et al, 2002). Further, a focus on the goal of university completion combined with task focused strategies considerably increases the likelihood of successful university completion (Nurmi

et al, 2002). This concept of goal selection and subsequent striving can be seen as analogous to Tinto's concept of goal commitment, and supports his assertion that higher levels of goal commitment leads to a higher likelihood of university completion.

Research on student attrition is therefore fairly extensive in terms of the factors investigated. However, no single study has ever measured all of the diverse factors mentioned above in relation to student withdrawal. The present study measures academic and social integration in university, social integration outside university, perceived social support, current and past residence (including whether the individual came from a rural or a city area), goal and institutional commitment, personality (using the five factor model), whether course choice was well informed, and year of study, and tests how much of the variance in the three outcome variables of Perceived Likelihood of Degree Completion, how much the individual has Thought about Changing Subject, and Likelihood of Returning to University/College if Leaving their Present Course they account for in a sample of Glasgow University students. Further, a modified version of Rosenberg's self-esteem scale is administered, which is intended to measure self-esteem as a student specifically, as this may be more closely linked to the three outcome variables than basic Self-Esteem.

Following recent research suggesting that alcohol use is becoming an important part of university culture, a question on alcohol consumption and one on whether the students' most pleasurable social experiences involve alcohol are included, as these factors may also influence the outcome variables (Dorsey, Scherer & Real, 1999; Yanovitzky, Stewart & Lederman, 2006). In addition, following research by Sander & Sanders (2003) on the link between academic self-confidence and expectations of higher education, a measure of academic self-confidence (or self-efficacy) is included. Academic self-confidence is essentially a students' confidence in his/her ability to perform well academically at university, and is included here as it may mediate the relationship between actual ability and academic integration, and thus may influence persistence intentions. Finally, due to several complaints from students at Glasgow University that they do not understand the link between the work they do and the grades they attain, a measure of understanding of the work-grade relationship is also included, as it is possible that a low level of understanding could dishearten students, and may make them less likely to persist.

All of the factors mentioned above (with the exception of current residence) are entered into separate stepwise multiple regressions to investigate how they combine in predicting intention to persist to the point of attaining a degree, how much they have thought about changing subject, and how likely they would be to return to university if they did leave their present course of studies. As current residence is a categorical variable with several values, it cannot be entered into the

regression calculations. It is therefore hypothesized that there will be a significant difference between different places of residence on measures of the three outcome variables.

Furthermore, as a large proportion of research on student attrition uses samples of psychology students, it is of interest to test whether these students differ from students of other disciplines in important background variables such as personality, and in their intentions with regards to persistence and changing subject. A non-directional hypothesis is therefore proposed, that psychology students differ from non-psychology students in measures of personality and in the three outcome variables of likelihood of course completion, thoughts of changing subject, and likelihood of returning to university/college if leaving their present course.

Method

Design

An on-line questionnaire was used to measure the predictive variables of students year of study, current and past residence, alcohol use/attitude, confidence in course choice decision, student self-esteem, academic and social integration in university, social integration outside university, social support, academic self-confidence, goal and institutional commitment, and the outcome variables of how much they have thought about changing course, perceived likelihood of degree completion, and likelihood of returning to university/college if leaving their present course. A correlational design was used, and three multiple stepwise regressions were carried out to test how much of the variance in the outcome variables was accounted for by the predictor variables.

Further, a cross-sectional design was used to determine whether psychology students differ significantly from students not studying psychology in levels of extraversion, agreeableness, conscientiousness, neuroticism, openness, thoughts of changing subject, likelihood of degree completion, and likelihood of returning to university/college if leaving current course. A cross-sectional design was also used to assess whether subjects from different places of residence differed significantly in thoughts of changing subject, likelihood of degree completion, and likelihood of returning to university/college if leaving current course

Participants

195 students from Glasgow University were recruited to participate in the study. To locate individuals willing to participate, a mass e-mail was sent to students studying psychology, law,

biology and English literature at all years of study, requesting their help. Further, a request for participation was displayed on the 'psychology portal', a Glasgow University internet site providing information resources for psychology students. The age of participants ranged from 18 to 59, with a mean age of 20. The sample consisted of 50 males (25.6%) and 145 females (74.4%), and the sex ratio remained roughly constant across years of study. Out of all the participants 138 were in first year (70.8%), 3 were in second year (1.5%), 5 were in third year (2.6%) and 49 were in fourth year (25.1%). 54 participants studied psychology (27.7%) and 141 did not (72.31%), and the distributions of year of study and sex were roughly equal in each group. However, 19 subjects were omitted from the final regression analyses due to missing data.

Measures

Demographic Variables

The questionnaire began with questions on age, year of study, subject studied and sex.

Personality

The personality measure used in this study was The Big Five Inventory (John & Srivastava, 1999), obtained from 'the Big Five Personality Test' website at www.outofservice.com/bigfive/. It is a relatively short questionnaire which begins with the statement 'I see myself as someone who...', followed by 48 items represented by statements (e.g. '...is talkative', '...tends to find fault with others'). Participants expressed their agreement or disagreement with the statements on a 5-point Likert scale (1=Disagree, 5=Agree)(Q's 1-48, see appendix 1). The questionnaire assesses the 5 broad traits of Extraversion (i.e. talkative, energetic, assertive), Agreeableness (i.e. sympathetic, kind affectionate), Neuroticism, (i.e. the inverse of emotional stability - tense, anxious, moody), Openness (i.e. imagination, insight, wide interests) and Conscientiousness (i.e. organised, thorough, plan orientated). One question ('...is very religious') was dropped from the final analyses, as it did not correlate with other measures of conscientiousness(Q46, see appendix 1)(For all intercorrelations between items in subscales, see appendix 2, for questions dropped or not included see appendix 3).

Residence

Place of current residence was assessed with a single item: 'where do you currently stay', with choices of 1: halls of residence, 2:at home with family, 3:in a flat with friends from home, 4:alone or 5: other(please specify)(Q50, see appendix 1). After data was collected, responses of 5(other)

were recoded based on the specifications given by participants. 5 corresponded to flat with friends from university, and 6 corresponded to flat/house with partner.

Distance

The distance from Glasgow that subjects lived before starting university was assessed with a single item: 'Before starting university, where did you live?'. Subjects chose from four options: within the Glasgow area; 1-2 hours away; 2-5 hours away; and 5+ hours away (Q 53, see appendix 1).

City/Town

A further item determined whether subjects were from a rural or a city area before starting university: 'Which of these choices best describes where you lived before starting university: 1-city/city suburbs or 2- small town/rural area' (Q 54, see appendix 1).

Alcohol Use/Attitude

Responses to three items on alcohol consumption frequency, quantity and attitude to alcohol use were summed to form the alcohol use/attitude measure. Items were: 'On how many nights per week do you consume alcohol, on average?: 0, 1-2, 3-4, 5-6, 7'; 'On a typical drinking night, how many units of alcohol would you consume on average?: 1-2, 3-4, 5-6, 7-8, 9-10, 11-12, 13+'; and subjects were asked to rate their agreement/disagreement with the statement: 'I feel that my most enjoyable social experiences usually involve alcohol consumption', on a 5 point Likert scale ranging from 1= disagree strongly to 5= agree strongly (Q's 56-58, see appendix 1). Responses to the three items were moderately positively correlated (around $r=0.5$) (see appendix 2).

Course Choice

Participants views on how well informed their choice of course had been were assessed with a single item: 'I feel I made a well informed decision when choosing my university course'. Participants rated their agreement/disagreement on a 5 point Likert scale (1=disagree strongly, 5=agree strongly) (Q 59, see appendix 1).

Student Self-Esteem

Student Self-Esteem was assessed using a modified version of the 10-item Rosenberg Self-Esteem Scale (1965). Items were contextualised to apply more directly to students following research showing that it is possible to enhance the validity of personality scales using minor wording changes that reflect the appropriate context (Schmit, Ryan, Stierwalt & Powell, 1995) (Q's 60-69,

see appendix 1). For example, ‘On the whole, I am satisfied with myself’ was changed to ‘As a student, I am satisfied with myself’. Participants rated agreement/disagreement on a four point Likert scale (1=strongly disagree, 4=strongly agree). Responses to these items were all fairly highly correlated (roughly $r = 0.5$ or -0.5).

Academic Integration

Tinto’s (1975) concept of academic integration was operationalised with 17 items presented as statements, with which participants rated their agreement/disagreement on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree)(See appendix 1, Q’s 70-89). They were asked to answer with respect to the subject they felt they were most likely to study to third year or honours (or which they were studying at third year/honours). e.g. ‘I enjoy studying this subject’; ‘I do not think that I have adjusted well to the working environment within this university’. However, responses to 4 items (Q’s 76, 77, 78 & 86) were not included in the final analyses, as responses to these items did not sufficiently or significantly correlate with responses to the other items. Responses to all other items were moderately positively correlated (for positive and negative items separately)(see appendix 2).

Social Integration Within University

Tinto’s (1975) concept of social integration was operationalised with 21 items presented as statements, with which participants rated their agreement/disagreement on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree)(See appendix 1, Q’s 103-123). e.g. ‘I feel comfortable being a student at this university’; ‘I sometimes feel alienated by the social environment at university’. However, responses to five items (Q’s 104, 107, 110, 117 and 123, see appendix 1) were not used in the final analyses, as they did not sufficiently correlate with responses to the other items. All other items were moderately positively correlated (for negative and positive items separately).

Social Integration Outside University

An additional measure of participants social integration in the wider community (with regard to being a student) was assessed with ten items (Q’s 124-133, see appendix 1). Statements were rated on a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Examples of items are: ‘I do not feel comfortable with being a student in Britain today’; ‘Being a student will cause me problems in getting on with people outside the university (e.g. family, friends, employers)’. Three items were not included in the final analyses (Q’s 126, 127 & 130) as they did not sufficiently

correlate with responses to the other seven items, which were all moderately/weakly correlated with each other.

Academic Self-Confidence

Confidence in academic ability (or academic self-efficacy) was measured using 5 items (Q's 98-102, see appendix 1) from Sander & Sanders' (2003) Academic Confidence Scale. Participants rated their confidence in their ability (from 1 = not at all confident to 5 = very confident) in several academic areas. For example 'How confident are you that you will be able to study on your own in independent private study'. Responses to the five items were all strongly positively correlated.

Understanding of Work Requirements

Participants understanding of the link between the work they do and the grades they receive was measured using 8 items (Q's 90-97, see appendix 1), rated for agreement/disagreement on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). e.g. 'If I wanted to improve my grades, I'm confident I know how to do this'; 'I don't know what the people who grade my assignments are looking for'. Responses to two items (Q's 91 & 92) were not used in the final analyses, as they did not correlate with responses to the other six items, which were all moderately/weakly correlated.

Social Support

Perceived social support was measured using 5 items (Q's 138-142, see appendix 1), which assessed the degree of support from family and friends, and the number of acquaintances that could be relied on for a small favour at university. For example 'If I feel very ill at university, I'm confident that someone I know will look after me (e.g. friends, flatmate, family etc)', followed by a 5-point Likert rating of agreement/disagreement. The items were all moderately positively correlated with each other.

Goal Commitment

Tinto's (1975) concept of goal commitment was operationalised using three items (Q's 134-136, see appendix 1). Subjects rated their agreement/disagreement on a five-point Likert scale. For example: 'obtaining a degree is an important part of my overall career plan'. Responses to the items were all highly positively intercorrelated.

Institutional Commitment

Participants commitment to Glasgow University was assessed with a single item (Q 137, see appendix 1), rated on a five-point Likert scale: 'I am glad to be a student at this university, and would dislike it if I had to transfer to another institution'.

Outcome Variables

The extent to which participants had thought about changing subject was assessed with the question, 'How much have you thought about changing subject', with responses ranging from 1 = never to 7 = constantly (Q149, see appendix 1).

Likelihood of degree completion was assessed with the question, 'Do you think you are likely to continue with your present course of university studies to the point of obtaining a degree', with responses rated on a 7-point scale (1 = very unlikely, 7 = very likely)(Q150, see appendix 1).

Finally, participants were asked, 'If you did leave your present course of studies, how likely would you be to study something else at university/college', with responses again rated on the same 7-point scale (Q151, see appendix 1). 7-point scales were used on these items to increase item variance.

Additional Unused Measures

The original questionnaire assessed some additional variables not mentioned above. One question asked participants to estimate the number of lectures there had been in their course so far. However, the estimates given were not realistic (e.g. 'millions'), and the data could therefore not be used. Also, the number of predictors that can be entered into a stepwise multiple regression calculation is restricted by sample size, so it was decided to omit certain questions (for full questionnaire see appendix 1. For questions omitted see appendix 3).

Procedure

After gaining ethics approval from Glasgow University Psychology department, participants were recruited by e-mail and an advert on the Glasgow University psychology resources page in December 2005. The questionnaire was on-line, and participants gave their consent by clicking on the 'I Accept' button. They were told they could miss out any questions they were not comfortable with answering, and would then complete the on-line questionnaire covering all of the measures reported above. Participants were told they could contact the researchers for details of the results of the study. In February 2006 the data was collected, and intercorrelations for questions in the

individual subscales were carried out, and then any questions which did not suitably correlate with the others were removed from the analysis (see appendix 2 for tables of correlations). To calculate scores for the subscales, responses to positively worded questions were summed, and responses to negatively worded questions were subtracted. The data was then subjected to statistical analysis.

Results

The present study was interested in discovering how much of the variance in the three outcome variables of Thinking About Changing Subject, Perceived Likelihood of Degree Completion, and Likelihood of Returning to University/College if not Completing Present Course was explained by Year of Study, Academic Integration, Social Integration Within University, Social Integration Outside University, Personality, Student Self-Esteem, Understanding of Work-Grade Link, Academic Self-Confidence, Perceived Social Support, Distance of University from Previous Home, Coming from a Rural or a City Area, Alcohol Use/Attitude and Whether Choice of Course was an Informed Decision. Further, it was non-directionally hypothesised that Psychology students differ from non-psychology students in personality and the three outcome variables.

Table 1 displays descriptive statistics for the three outcome variables of interest. The mean rating for changing subject was 2.7 with a standard deviation of 1.7, indicating that on average, students did not regularly think about changing subject. The mean rating for Perceived Likelihood of Degree Completion was 6, with a standard deviation of 1.5, indicating that on average, students tended to consider degree completion quite likely. Finally, The mean rating for intention to return was 5.1, with a standard deviation of 2.1, indicating that most students think they would be quite likely to return to university/college if they left their present course of studies.

Table 1: Descriptive Statistics for Outcome Variables

Variable	N	Minimum	Maximum	Mean	Standard Deviation
Changing subject	195	1	7	2.697	1.698
Likelihood of Degree Completion	195	1	7	5.979	1.475
Intention to Return	193	1	7	5.140	2.106

Prior to carrying out inferential statistics, correlations of responses to questions within each subscale were calculated, separately for positively and negatively worded questions. If responses to a question did not sufficiently or significantly correlate with responses to other questions within the subscale, the responses to the question were not used in calculating the scores for the subscale. Responses to questions 46, 76, 77, 78, 86, 91, 92, 104, 110, 123, 126 and 127 were not used in analysis (see appendix 1 for questionnaire, and appendix 2 for correlation tables).

Psychology students and students not studying psychology were compared for scores on each personality subscale, and on each of the three outcome variables using separate one-way ANOVA calculations. No significant differences were found between psychology and non-psychology students on any personality subscale score, on Thoughts of Changing Subject, or on Intention to Return if Leaving Course ($p > 0.05$), so the null hypothesis cannot be rejected. However, a significant difference was found between psychology and non-psychology students on Perceived Likelihood of Degree Completion ($F(1) = 4.37, p < 0.05$). Psychology students scored significantly higher on perceived likelihood of Degree Completion, with the 95% confidence interval for the difference being between 0.028 and 0.9. Thus the hypothesis that psychology students differ from non-psychology students in Perceived Likelihood of Degree Completion was supported, with psychology students considering successful degree completion slightly more likely than non-psychology students.

As Place of Current Residence is a categorical variable with several values, it would be inappropriate to enter it into the stepwise multiple regressions. Separate One-Way ANOVAs to test for significant differences in the three outcome variables between different places of residence were carried out. A significant difference was found between those in halls of residence and those in a flat with friends from university on Likelihood of Degree Completion ($F(5) = 3.1, p < 0.05$), and the 95% confidence interval for the difference showed that those in a flat with friends from university considered themselves more likely to complete their degrees than those in halls of residence (see appendix 2).

A significant difference was also found between subjects in halls of residence and subjects in a flat with friends from home on Likelihood of Returning if Leaving Current Course ($F(5) = 3.35, p < 0.05$), and the 95% confidence interval for the difference showed that those in a flat with friends were less likely to return to university. No significant differences between places of residence were found on the measure of Thinking About Changing Subject ($F(5) = 0.77, P > 0.1$). However, having examined the tabulated statistics for Place of Residence and Year of Study, it appears that residence is confounded by Year of Study. 95% of those in halls of residence were in 1st year, whereas 88%

of those in a flat with friends were in 4th year. Also, 61% of those in a flat with friends from home were in 4th year. It was therefore not possible to determine the actual contribution of Place of Residence to any of the outcome variables (see appendix 2).

A stepwise multiple regression was carried out using Year of Study, Academic Integration, Social Integration Within University, Social Integration Outside University, Personality, Student Self-Esteem, Understanding of Work-Grade Link, Academic Self-Confidence, Perceived Social Support, Distance of University from Previous Home, Coming from a Rural or a City Area, Alcohol Use/Attitude and Whether Choice of Course was an Informed Decision (confidence in decision) as predictors of Thinking About Changing Subject. This determined the amount of variance in Thinking About Changing Subject explained by the predictors, and the outcome is displayed in Table 2.

Table 2: Results of Stepwise Multiple Regression Analyses for Significant Predictors of Thinking About Changing Subject

Step	Variable	R-sq	R-sq (adjusted)	R-sq (adj) Change
1	Academic Integration	0.1388	0.1338	0.1338
2	Confidence in Decision	0.1794	0.1700	0.0362
3	Distance From Glasgow	0.2043	0.1904	0.0204
4	Social Integration Outside University	0.2206	0.2024	0.012

n = 176

Academic integration entered the equation first, accounting for 13.4% of the variance in thinking about changing subject, and was a significant negative predictor ($p < 0.01$). Next came Confidence in Decision, accounting for an additional 3.6% of the variance, and was also a significant negative predictor ($p < 0.05$). Third into the equation came Distance from Glasgow (before going to university), accounting for an additional 2% of the variance, and significantly positively predicting thinking of changing subject ($p < 0.05$). Last into the equation was Social Integration Outside University, accounting for an additional 1.2% of the variance, and was a negative predictor, though not significant at the $p < 0.05$ level ($p < 0.1$). Together, the predictors accounted for 20.2% of the variance in Thinking About Changing Subject.

A further stepwise multiple regression was carried out using Year of Study, Academic Integration, Social Integration Within University, Social Integration Outside University, Personality, Student Self-Esteem, Understanding of Work-Grade Link, Academic Self-Confidence, Perceived Social Support, Distance of University from Previous Home, Coming from a Rural or a City Area, Alcohol Use/Attitude and Whether Choice of Course was an Informed Decision (confidence in decision) as predictors of Likelihood of Persistence. This determined the amount of variance in Likelihood of Persistence explained by the predictors, and the outcome is displayed in Table 3.

Table 3: Results of Stepwise Multiple Regression Analyses for Significant Predictors of Perceived Likelihood of Persistence

Step	Variable	R-sq	R-sq (adjusted)	R-sq (adj) Change
1	Year of Study	0.1112	0.1061	0.1061
2	Goal Commitment	0.1777	0.1682	0.0621
3	Extraversion	0.2021	0.1882	0.02
4	Confidence in Decision	0.2186	0.2003	0.0121
5	Conscientiousness	0.2311	0.2085	0.0082
6	Student Self-Esteem	0.2456	0.2188	0.0103
7	Understanding Work-Grade Link	0.2607	0.2299	0.0111

n = 176

First to enter the equation was Year of Study, accounting for 10.6% of the variance in Likelihood of Persistence, and was a significant positive predictor ($p < 0.001$). Goal Commitment entered second, accounting for an additional 6.2% of the variance, and was also a significant positive predictor ($p < 0.01$). Third into the equation was Extraversion, accounting for an additional 2% of the variance, and was a significant negative predictor ($p < 0.05$). Confidence in Decision entered fourth, explaining an extra 1.2% of the variance, and was a positive predictor, though not quite at the $p < 0.05$ level ($p < 0.06$). Conscientiousness explained a further 0.8% of the variance, and was a significant negative predictor ($p < 0.05$). A further 1% of the variance was accounted for by Student Self-Esteem, a significant positive predictor ($p < 0.05$). Finally, Understanding of the Work-Grade relationship accounted for a further 1.1% of the variance, and was a negative predictor, but not quite at the $p < 0.05$ level ($p < 0.1$). Therefore, 23% of the variance in Perceived Likelihood of Persistence was explained by the seven predictors described above.

A final stepwise multiple regression was carried out using Year of Study, Academic Integration, Social Integration Within University, Social Integration Outside University, Personality, Student Self-Esteem, Understanding of Work-Grade Link, Academic Self-Confidence, Perceived Social Support, Distance of University from Previous Home, Coming from a Rural or a City Area, Alcohol Use/Attitude and Whether Choice of Course was an Informed Decision (confidence in decision) as predictors of Likelihood of Returning to University/College if Ending Present Course of Studies. This determined the amount of variance in Likelihood of Returning explained by the predictors, and the outcome is displayed in Table 4.

Table 4: Results of Stepwise Multiple Regression Analyses for Significant Predictors of Perceived Likelihood of Returning to University/College if Ending Present Course of Studies

Step	Variable	R-sq	R-sq (adjusted)	R-sq (adj) Change
1	Year of Study	0.032	0.0264	0.0264
2	Social Integration Outside University	0.0591	0.0482	0.0218
3	Distance From Glasgow	0.0817	0.0656	0.0174
4	Openness	0.105	0.0839	0.0183
5	Understanding Work-Grade Link	0.1205	0.0945	0.0107
6	Goal Commitment	0.1388	0.108	0.0135
7	Extraversion	0.153	0.1175	0.0095
8	Social Integration Within University	0.1646	0.1244	0.0069
9	Social Integration Outside University REMOVED	0.1619	0.1267	0.0023

n = 175

Year of Study entered the equation first and accounted for 2.6% of the variance in Likelihood of Return, and was a significant negative predictor ($p < 0.01$). Second into the equation was Social Integration Outside University which accounted for an additional 2.2% of the variance, but was subsequently removed from the equation in step 9. Third into the equation was Distance from Glasgow, accounting for an additional 1.7% of the variance, and was a significant positive predictor ($p < 0.01$). Next came Openness, accounting for a further 1.8% of the variance, and was also a significant positive predictor ($p < 0.05$). Understanding of the Work-Grade Link was a significant negative predictor ($p < 0.05$), and accounted for an extra 1.1% of the variance. Goal Commitment, a

significant positive predictor ($p < 0.05$) accounted for a further 1.4% of the variance, and Extraversion, a significant negative predictor ($p < 0.05$) explained an additional 1% of the variance. Social Integration Within University explained a further 0.7% of the variance, and the removal of Social Integration Outside University from the equation in step 9 allowed the model to explain an additional 0.2% of the variance. Social Integration Within University was a significant positive predictor of Likelihood of return ($p < 0.05$). When taken together, all of the variables mentioned above with the exception of Social Integration Outside University account for 12.7% of the variance in Likelihood of Return to University/College if Ending Present Course of Studies.

Discussion

The results of the present study suggest that the extent to which a student thinks about changing subject is significantly predicted by academic integration, belief that course choice was well informed, distance from Glasgow before starting university, and social integration outside university. Further, perceived likelihood of degree completion appears to be significantly predicted by year of study, goal commitment, extraversion, belief that course choice was well informed, conscientiousness, student self-esteem and understanding of the work-grade link. Finally, perceived likelihood of returning to university/college if leaving present course was significantly predicted by year of study, distance from Glasgow before starting university, openness, understanding of the work-grade link, goal commitment, extraversion, and social integration within university.

Furthermore, it was found that psychology students did not differ significantly from students not studying psychology on any of the personality variables, on likelihood of returning to university if leaving present course, or on thinking about changing subject. Psychology students, however, considered degree completion significantly more likely than did students of other disciplines. It would therefore seem reasonable to assume that psychology students do not differ in any significant way from non-psychology students in personality. The fact that psychology students consider degree completion more likely than do non-psychology students is interesting, but should not have affected the relationships found in the present study. It was, however not possible to determine any differences between students in different places of residence on measures of the outcome variables, as residence was confounded by year of study. The nature and implications of each significant predictor variable will be discussed in turn below.

Academic Integration

Tinto's (1975) concept of academic integration was significantly negatively correlated with thinking about changing subject, and accounted for 13.4% of the variance in that outcome. This supports Tinto's (1975) assertion that voluntary withdrawal can come about as a result of insufficient academic integration, as low integration either in terms of poor grade performance or a poor fit with the intellectual climate of the subject would seem to make individuals more likely to consider changing to a different subject. However, academic integration was not significantly correlated with perceived likelihood of degree completion, contradicting Tinto's theory that low academic integration should make individuals more likely to withdraw, whereas high academic integration should make individuals more likely to persist. On the other hand, Tinto proposed that individuals with poor grades but sufficiently high social integration or goal commitment would persist nevertheless. The design of this study did not allow an examination of the interaction of these variables, just which variables accounted for the most variance in perceived likelihood of completion.

Academic integration was also not a significant correlate of likelihood of returning to university if not completing course, but this is perhaps to be expected, as individuals with high academic integration will be unlikely to intend to change course, and thus may rate their likelihood of returning as low. Further, individuals with low academic integration may leave due to poor grades, and as such may not intend to return to university. Academic integration would not therefore consistently relate to likelihood of return.

Social Integration Within University

The present study found little support for the role of Tinto's concept of social integration within university, which was only related to likelihood of return if ending present course, and only accounted for a small amount of the variance. However, this does suggest that students are more likely to want to return to university following withdrawal if they have enjoyed good social relationships with other students and with university staff. Social integration within university did not significantly predict perceived likelihood of course completion, contrary to Tinto's (1975) theory that high social integration should make students want to persist, regardless of academic ability. However, again Tinto's (1975) theory was a little more complex, suggesting that individuals low in social integration may persist if they had sufficient academic integration and goal commitment, and the design of the present study could not test the interaction of these variables in predicting likelihood of persistence. Furthermore, thinking about changing course was not

significantly predicted by social integration, but this was to be expected, as Tinto (1975) proposed that the decision to change course would be predicted by academic, but not social integration.

Social Integration Outside University

Interestingly, social integration outside university negatively predicted thinking about changing course. Social integration outside university was not included in Tinto's (1975) original model, and the questions used in the present study to assess it have not been used before. However, it is possible that items such as 'Being a student will cause me problems in getting on with people outside the university (e.g. family, friends, employers)' may tap ill feeling from friends who are not at university, or from family. For example, friends or family may consider an individual's course to be a waste of time, or as leading to a profession with a bad reputation, and the expression of these views may make the student more likely to consider alternative courses considered more worthwhile or acceptable by family and friends. More research is required to determine the nature of this effect, as the correlations between items measuring this concept were relatively low.

Goal Commitment

Goal commitment was the second biggest predictor of perceived likelihood of degree completion after 'year of study', accounting for an additional 6.2% of the variance. This strongly supports Tinto's (1975) assertion that high levels of goal commitment lead to greater levels of persistence. It also partially contradicts the findings of Thomas (2000), who found that the effects of academic integration were not mediated by goal commitment, as in the present study only goal commitment, and not academic integration, was a significant correlate of perceived likelihood of completion. Goal commitment was also a significant positive predictor of likelihood of return, suggesting that those who are high in goal commitment are more likely to try again at a different course in the event of leaving their present course. The observed role of goal commitment is also supportive of the life span theory of control, as it appears that those with strong goal commitment, in terms of career and educational goals, consider themselves more likely to use their time and resources successfully in attaining their desired goal of university completion (Nurmi et al, 2002). The fact that participants with high goal commitment also considered themselves more likely to return if not completing their present course provides further support for the theory, as it appears that the goal of university completion as part of an overall career plan provides the impetus to start again if necessary (Nurmi et al, 2002).

Goal commitment was not, however, significantly related to participants' thoughts on changing subject. It is possible that this could be because some of those high in goal commitment may have

chosen a subject appropriate to their career goal, and as such would not want to change subject. On the other hand, others high in goal commitment may have chosen a subject appropriate to their goal, but subsequently found they did not enjoy it or were not good at it. They may therefore have thought about changing subject for another route to their desired goal. Nevertheless, goal commitment appears to be an important factor in student attrition.

Choice of Course

Considering course choice to be well informed negatively predicted thinking about changing course and positively predicted perceived likelihood of degree completion. This provides support for the finding of Christie et al (2004) that poor course choice and rushed decisions significantly predicted drop out, and emphasises the importance of the guidance and advice on university application provided by schools to students in their final years.

Year of Study

Year of study was the biggest single predictor of perceived likelihood of degree completion, and accounted for 10.6% of the variance, as those in later years of study considered degree completion more likely than those in earlier years. This is in line with Tinto's (1975) theory that in progressing through a degree, past costs become investments, and therefore the perceived benefits of degree completion will outweigh the costs. For those in earlier years of study, however, where more work is still to be done, and there is more time before course completion, there will be more perceived costs. In deciding how likely they are to complete their degree, students may weigh the costs against the benefits, and those in later years will be more likely to find the benefits outweigh the costs, and thus consider themselves more likely to complete their degree.

However, year of study negatively predicted likelihood of return after ending a course, with those in later years considering themselves less likely to return to university if leaving their present course. This could again be due to the time and effort invested into their current course, with those in later years of study feeling reluctant to go through all effort of a second degree. Those in earlier years, on the other hand, have spent less time and effort on their current degree, and may not consider starting again to be such a waste of their previous investment.

Distance From Glasgow Before Beginning Course

Distance from Glasgow before beginning course was a significant positive predictor of thinking about changing subject, and was also a significant positive predictor of likelihood of return. Johnes et al (2004) had found that people studying in the same region as their parental home were more

likely to drop out than those coming from further away, but the results of the present study may seem to contradict this finding. Participants studying in the same region as their parental home (i.e. Glasgow) were less likely to think about changing subject. On the other hand, the finding that participants from further away were more likely to consider themselves likely to return if they did leave their course does suggest that they are less likely to drop out of higher education entirely. It may be speculated that students travelling from further away might consider university to be a greater investment than do those studying in the region of their parental home, both in terms of upheaval and also financially. They may therefore be more inclined to question their choice of course, but also be less prepared to leave without a degree, as they have already invested more effort and money into university attendance than those studying in the region of their parental home. More research is required to clarify the nature of the relationship between the distance from the parental home, and the likelihood of successful degree completion.

Student Self-Esteem

Student self-esteem was found to be a significant positive predictor of perceived likelihood of degree completion. This suggests that students who view themselves positively in the university context are more likely to see themselves as capable of obtaining a degree, and will be more inclined to persist to the point of successful degree completion. Herrero et al (2004) found that college students' self-esteem predicted social integration in the wider community, and it would appear that self-esteem in the university context is predictive of persistence intentions. It seems that this effect is not due to student self-esteem affecting social integration in university, as only student self-esteem significantly predicted perceived likelihood of degree completion. It is, however, possible and feasible that social integration influenced student self-esteem. A longitudinal study measuring both student self-esteem and social integration within university would be required to determine the temporal ordering of the variables.

Understanding of the Link Between Work Done and Grades Awarded

Understanding of the work-grade link was found to significantly negatively predict perceived likelihood of degree completion and likelihood of returning. In other words, students who understood the link between the work they do and the grades they attain were less likely to consider degree completion likely, and were less likely to return to university if leaving their present course. This seems counterintuitive, and as the use of this variable was essentially exploratory, it is possible that the wording of the items used may have been a little ambiguous e.g. 'I know just what to do to

get a good mark, but sometimes I don't make the effort'. Someone who agreed strongly with the previous statement would score highly on understanding, but the question also measures the amount of effort they tend to exert on coursework, and strong agreement suggests low effort. Someone exerting little effort would probably not consider themselves particularly likely to complete their degree. In future, when measuring understanding, questions should be more carefully worded to ensure they only tap understanding of the work-grade link.

Personality

Extraversion was found to significantly negatively predict both perceived likelihood of course completion and likelihood of returning to university if leaving current course. This is contrary to the findings of Lounsbury et al (2004) that extraversion negatively predicted intention to withdraw. It may be that those scoring highly in extraversion in the present study spend more time socialising than doing course work, and thus consider themselves less likely to complete their degrees. However, the personality questionnaire used in the present study was considerably shorter than that used in Lounsbury et al's (2004) study, and it is therefore possible that it may not measure extraversion as reliably.

Conscientiousness was also found to significantly negatively predict perceived likelihood of degree completion. Again, this is contrary to Lounsbury et al's (2004) finding that conscientiousness negatively predicted intention to withdraw. One possible explanation would be that students who are more conscientious are more aware of the potential pitfalls of a university course, whereas those low in conscientiousness may not be as aware of ways in which they could fail, and therefore rate their likelihood of degree completion as higher. However, as mentioned earlier, this could be due to the short personality questionnaire used in the present study being less reliable than that used by Lounsbury et al (2004).

It was also found that openness to new experiences significantly predicted the likelihood of returning after leaving current course, whereas Lounsbury et al (2004) found no relationship between openness and intention to withdraw. However, being prepared to return to university after leaving a course is not the same as intending to withdraw, and it seems reasonable that having wide interests, being insightful and being open to new experiences might make an individual more prepared to begin studying a new subject and meet new people.

Non-Significant Variables

Academic self-confidence did not significantly predict any of the outcome variables, and this is perhaps surprising, as it would be expected that confidence in one's academic abilities would predict

perceived likelihood of course completion. However, the measure of student self-esteem partially assessed participants' confidence in their abilities relative to other students, as well as confidence in a more social sense, and this may explain why student-self esteem accounted for a greater proportion of the variance in likelihood of completion than did academic self-confidence.

Student's alcohol consumption frequency, quantity and attitudes, as well as whether they came from a rural or a city area were also tentatively tested as predictors of the outcome variables, but did not enter any of the regression equations. The inclusion of these factors was exploratory, and it is possible that they play little or no role in changing subject, successful degree completion, and return to university after leaving a course, or that they were simply not measured in the best way.

Similarly to Christie et al (2004), but perhaps contrary to intuition, perceived social support from family and friends did not significantly predict any of the outcomes. Maybe when students consider whether they will complete their course, change subject, or return after a break, they are using largely academic and goal based reasoning, and place less emphasis on social factors than has previously been thought.

Finally, contrary to Tinto's (1975) theory, institutional commitment was not a significant predictor of any of the outcome variables. Tinto (1975) proposed that institutional commitment would strongly influence the decision to stay in university, and that it was influenced by social integration. However, as with social integration, the present study finds little support for this relationship. This provides further support for the notion that academic and goal based reasoning are more prominently used in drop out decisions.

Study Limitations and Directions for Future Study

The main limitation to this study was that all of the variables of interest were assessed in a single questionnaire. Drop out is generally considered to be a longitudinal process, and a single questionnaire cannot capture the temporal ordering of variables. It is not certain that the outcome variables were truly 'predicted' by the predictor variables, just that they tended to co-occur with the predictors. A causal relationship cannot be determined in a correlational study.

Second, the outcome variables measured perceived likelihood of course completion, perceived likelihood of returning to university in the event of leaving an ongoing course, and how much subjects have thought about changing subject. While this type of outcome measure has been used in the past in research on student attrition, it is not clear how well these measures predict behavioural outcomes such as drop out, course change and return to university (Lounsbury et al, 2004). A longitudinal study measuring the predictors and outcome variables used in this study at

repeated times over the course of degree completion, as well as actual drop out and course change, would be required in order to determine their predictive utility. This would also help to clarify the temporal ordering and inter-relationships of the predictors, such as that between academic and social integration.

A further limitation was the absence of any measures of family background and educational history, two background variables Tinto (1975) considered important in the drop out process. Also, as Tinto (1975) never explicitly specified a way of measuring his concepts, they had to be operationalised by the researcher, and it is possible that the questions and subscales used did not sufficiently tap the concepts intended. The correlations between questions in some of the subscales were perhaps not as strong as would be desired, and as mentioned earlier, the wording of some questions may have occasionally been a little ambiguous.

Females were over-represented in the sample (74.4%), making the results a little less generalisable. Furthermore, due to limitations of sample size, certain concepts measured in the original questionnaire could not be included in the final regression calculations. The influence of place of residence could also not be determined as it was confounded by year of study. This was unfortunate, as other studies have found an influence of place of residence on drop out (Johnes et al, 2004).

The questionnaire itself was on-line, which has the advantages of ease of administration to a large sample without excessive paper waste, data could be collected quickly, and incorrectly entered data would in some cases lead to an error message prompting subjects to re-enter their response. However, one disadvantage of this method was the possibility of double entry, as happened once. This was remedied, however. Further, the sample could be seen as self-selected, as it may have only been completed by students who were interested in the topic. Two other possible disadvantages of this technique were possible fatigue through answering a seemingly endless page of questions, and also the questionnaire may have been seen as lacking a personal touch. However, questions in different sections were coloured differently in the hope of overcoming these limitations.

As mentioned earlier, future research will require a longitudinal design and possibly a larger sample from a variety of institutions, and should measure actual, as well as perceived likelihood of drop out. Concepts such as social integration outside university and understanding of the work-grade link also require further investigation to determine their true contribution to drop-out behaviour. It would also be advantageous for researchers on student attrition to work together on formally

operationalising Tinto's (1975) concepts, as well as the many other factors thought to affect drop out.

Conclusions

The most important predictors of student attrition in this study appear to be year of study, academic integration and goal commitment. This partially supports Tinto's (1975) model, as with increasing year of study students consider degree completion more likely, and likelihood of returning to university if leaving an ongoing course is considered less likely. This possibly occurs through students weighing up costs and benefits associated with degree completion, with past costs being seen as an investment. The role of academic integration was also supported, as students low in grade performance, or with insufficient fit with the intellectual climate of their course, were more likely to consider a change of subject. Goal commitment was also important in predicting perceived likelihood of degree completion, as well as likelihood of return following cessation of current study. It would therefore appear that academic and goal based concerns are more important to students than social issues when considering whether to drop out or change subject. Tinto (1975) may therefore have overemphasised the importance of university social life in predicting attrition.

However, these findings add support to the life-span theory of control, as it seems that commitment to the goal of university completion, possibly combined with career aspirations, leads students to maximise their efforts in attaining these goals (Nurmi et al, 2002). Perhaps social goals are of more importance in early and middle secondary school, while educational and career goals come to dominate in later adolescence and early adulthood. If individuals fail to develop appropriate career and educational goals at the correct time, they may be less likely to successfully complete their degrees and attain a job.

Another factor that emerged as an important predictor was students' confidence that they had made a well-informed decision when selecting their university course, adding support to the findings of Christie et al (2004). Confidence in their decision predicted less consideration of changing course, and a greater perceived likelihood of degree completion. This emphasises the great importance of guidance and advice on course choice provided in the later years of secondary school. Perhaps more thorough and helpful advice would considerably reduce the number of students dropping out and changing course.

While this study has found predictive relationships between a number of factors and perceived likelihood of degree completion, changing course and return following departure, the amount of variance explained in each outcome was relatively small. This highlights the need for considerably

more research to account for more of the variance, and thus direct efforts towards lowering student attrition rates. Successful achievement of these goals is of vital importance to universities, the government, and most importantly, to students themselves.

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Appendix 1:

Questionnaire as it appeared on-line

(Please Turn Over)

SURVEY ON ASPECTS OF THE EXPERIENCE OF BEING A STUDENT

Researcher: Neil Duncan - 0005581d@student.gla.ac.uk

Supervisor: Steve Draper - s.draper@psy.gla.ac.uk

The following questionnaire is part of a Maxi Project being conducted by a final year Honours Psychology student at the University of Glasgow.

The project is supervised by a member of academic staff at the Department of Psychology.

If you choose to participate, you will complete a short questionnaire measuring various aspects of your personality, as well as your feelings about yourself as a student in both academic and social terms. There will also be questions on alcohol consumption and your current and previous places of residence. Finally you will be asked about your friendships with others and your plans for the future.

If you wish to participate, you should read this consent form and select 'I Accept'.

The questionnaire will take roughly 20-25 minutes to complete.

Participant anonymity is assured. Results will only be passed on in the form of averages, and individuals' answers will be confidential to the researchers. If you give your matriculation number when asked, your responses may also be linked to any course changes you make, so we can assess which student feelings most tend to affect this.

There is no discomfort or risk involved in the procedure, and you will be free to leave the study at any time. If you do not wish to answer a question you may leave it blank, and you are free to request that your results be discarded. Please try to answer questions honestly.

If you want to be informed of the results of this study (in March) please contact Steve Draper with your e-mail address.

YOUR CONSENT

I have read and understood the above description of the study. I understand that it complies with the ethical guidelines laid down by the British Psychological Society.

I understand that my participation will take roughly 20-25 minutes, and I am free to leave blank any answers to questions or to withdraw from the study at any time.

I ACCEPT

SURVEY ON ASPECTS OF THE EXPERIENCE OF BEING A STUDENT

Matriculation (You can enter 1111111 if you wish to remain anonymous)

Age

Gender Male Female

What year are you in ?

What subject are you studying this year ?

Subject 1

Subject 2

Subject 3

I see myself as someone who...

1. ...Is talkative

Strongly Disagree Disagree Neutral Agree Strongly Agree

2. ...Tends to find fault with others

Strongly Disagree Disagree Neutral Agree Strongly Agree

3. ...Does a thorough job

Strongly Disagree Disagree Neutral Agree Strongly Agree

4. ...Is depressed, blue

Strongly Disagree Disagree Neutral Agree Strongly Agree

5. ...Is original, comes up with new ideas

Strongly Disagree Disagree Neutral Agree Strongly Agree

6. ...Is reserved

Strongly Disagree Disagree Neutral Agree Strongly Agree

7. ...Is helpful and unselfish with others

Strongly Disagree Disagree Neutral Agree Strongly Agree

8. ...Can be somewhat careless

Strongly Disagree Disagree Neutral Agree Strongly Agree

9. ...Is relaxed, handles stress well

Strongly Disagree Disagree Neutral Agree Strongly Agree

10. ...Is curious about many different things

Strongly Disagree Disagree Neutral Agree Strongly Agree

11. ...Is full of energy

Strongly Disagree Disagree Neutral Agree Strongly Agree

12. ...Starts quarrels with others

Strongly Disagree Disagree Neutral Agree Strongly Agree

13. ...Is a reliable worker

Strongly Disagree Disagree Neutral Agree Strongly Agree

14. ...Can be tense

Strongly Disagree Disagree Neutral Agree Strongly Agree

15. ...Is ingenious, a deep thinker

Strongly Disagree Disagree Neutral Agree Strongly Agree

16. ...Generates a lot of enthusiasm

Strongly Disagree Disagree Neutral Agree Strongly Agree

17. ...Has a forgiving nature
 Strongly Disagree Disagree Neutral Agree Strongly Agree
18. ...Tends to be disorganized
 Strongly Disagree Disagree Neutral Agree Strongly Agree
19. ...Worries a lot
 Strongly Disagree Disagree Neutral Agree Strongly Agree
20. ...Has an active imagination
 Strongly Disagree Disagree Neutral Agree Strongly Agree
21. ...Tends to be quiet
 Strongly Disagree Disagree Neutral Agree Strongly Agree
22. ...Is generally trusting
 Strongly Disagree Disagree Neutral Agree Strongly Agree
23. ...Tends to be lazy
 Strongly Disagree Disagree Neutral Agree Strongly Agree
24. ...Is emotionally stable, not easily upset
 Strongly Disagree Disagree Neutral Agree Strongly Agree
25. ...Is inventive
 Strongly Disagree Disagree Neutral Agree Strongly Agree
26. ...Has an assertive personality
 Strongly Disagree Disagree Neutral Agree Strongly Agree
27. ...Can be cold and aloof
 Strongly Disagree Disagree Neutral Agree Strongly Agree
28. ...Perseveres until the task is finished
 Strongly Disagree Disagree Neutral Agree Strongly Agree
29. ...Can be moody
 Strongly Disagree Disagree Neutral Agree Strongly Agree
30. ...Values artistic, aesthetic experiences
 Strongly Disagree Disagree Neutral Agree Strongly Agree
31. ...Is sometimes shy, inhibited
 Strongly Disagree Disagree Neutral Agree Strongly Agree
32. ...Is considerate and kind to almost everyone
 Strongly Disagree Disagree Neutral Agree Strongly Agree
33. ...Does things efficiently
 Strongly Disagree Disagree Neutral Agree Strongly Agree
34. ...Remains calm in tense situations
 Strongly Disagree Disagree Neutral Agree Strongly Agree
35. ...Prefers work that is routine
 Strongly Disagree Disagree Neutral Agree Strongly Agree
36. ...Is outgoing, sociable
 Strongly Disagree Disagree Neutral Agree Strongly Agree
37. ...Is sometimes rude to others
 Strongly Disagree Disagree Neutral Agree Strongly Agree
38. ...Makes plans and follows through with them

- Strongly Disagree Disagree Neutral Agree Strongly Agree
 39. ...Gets nervous easily
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 40. ...Likes to reflect, play with ideas
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 41. ...Has few artistic interests
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 42. ...Likes to cooperate with others
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 43. ...Is easily distracted
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 44. ...Is sophisticated in art, music, or literature
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 45. ...Has high self-esteem
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 46. ...Is very religious
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 47. ...Is politically liberal
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 48. ...Is often on bad terms with others
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 49. Is this the first time you have studied at university? (i.e. not repeating a year or studying a 2nd degree)
 Yes No
 50. Where do you currently stay ?
 Halls of residence at home with family in a flat with friends from home alone other (please specify below)

 52. Before starting university, where did you live ?
 Within the Glasgow area 1-2 hrs away 2-5 hrs away more than 5 hrs away
 53. Which of these choices best describes where you lived before starting university ?
 city / city suburbs small town / rural area
 54. I felt happy and comfortable with my social life in my home town/city
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 55. I was looking forward to starting university studies
 Strongly Disagree Disagree Neutral Agree Strongly Agree
 56. On how many nights per week do you consume alcohol, on average ?
 Less than once per week 1-2 3-4 5-6 7
 (If you never drink alcohol, please ignore the following question)
 57. On a typical drinking night, how many units of alcohol would you consume on average ? (1 unit is equivalent to a small glass of wine, half a pint of beer, or 1 measure of spirits)
 1-2 3-4 5-6 7-8 9-10 11-12 13 or over
Please indicate the extent to which you agree or disagree with the following statements:
 58. I feel that my most enjoyable social experiences usually involve alcohol consumption
 Strongly Disagree Disagree Neutral Agree Strongly Agree

59. I feel I made a well informed decision when choosing my university course

- Strongly Disagree Disagree Neutral Agree Strongly Agree

60. As a student, I am satisfied with myself

- Strongly Disagree Disagree Agree Strongly Agree

61. Sometimes at university I think I am no good at all

- Strongly Disagree Disagree Agree Strongly Agree

62. I feel that as a student I have a number of good qualities

- Strongly Disagree Disagree Agree Strongly Agree

63. I am able to do things as well as most other students

- Strongly Disagree Disagree Agree Strongly Agree

64. As a student I feel I do not have much to be proud of

- Strongly Disagree Disagree Agree Strongly Agree

65. I certainly feel useless at times in university

- Strongly Disagree Disagree Agree Strongly Agree

66. At university I feel that I'm a person of worth, at least on an equal plane with other students

- Strongly Disagree Disagree Agree Strongly Agree

67. I wish I could have more respect for myself as a student

- Strongly Disagree Disagree Agree Strongly Agree

68. I am inclined to feel that I am a failure as a student

- Strongly Disagree Disagree Agree Strongly Agree

69. I take a positive attitude toward myself as a student

- Strongly Disagree Disagree Agree Strongly Agree

70. Which of your subjects would you most like to continue / are currently studying at third year / honours ?

Please indicate your agreement or disagreement with the following statements with regard to the subject you would most like to continue with to third year / honours:

71. I enjoy studying this subject

- Strongly Disagree Disagree Neutral Agree Strongly Agree

72. I find this subject boring

- Strongly Disagree Disagree Neutral Agree Strongly Agree

73. What I am studying is useful

- Strongly Disagree Disagree Neutral Agree Strongly Agree

74. I feel that I am progressing poorly with my studies so far

- Strongly Disagree Disagree Neutral Agree Strongly Agree

75. My current university studies are leading to the career I want

- Strongly Disagree Disagree Neutral Agree Strongly Agree

76. Getting a good degree is not important to me

- Strongly Disagree Disagree Neutral Agree Strongly Agree

77. Getting good grades is important to me

- Strongly Disagree Disagree Neutral Agree Strongly Agree

78. The methods of studying this course are not as I expected them to be (lectures, tutorials, labs etc)

- Strongly Disagree Disagree Neutral Agree Strongly Agree

79. If the methods of studying are not as you expected, please specify any differences and difficulties, if you have time

80. This course involves types of work that I like to do. E.g. problem solving, showing skill in essay writing

Strongly Disagree Disagree Neutral Agree Strongly Agree

81. I do not think that I have adjusted well to the working environment within the university

Strongly Disagree Disagree Neutral Agree Strongly Agree

82. I like the kinds of study and work that this course requires of me

Strongly Disagree Disagree Neutral Agree Strongly Agree

83. There are learning methods that I think would help me understand my studies better, but which are not used

Strongly Disagree Disagree Neutral Agree Strongly Agree

84. This course demands kinds of study and work that I have trouble with

Strongly Disagree Disagree Neutral Agree Strongly Agree

85. If so, please state what you have difficulty with, if you have time

86. I am good at taking notes in lectures

Strongly Disagree Disagree Neutral Agree Strongly Agree

87. I am not learning as much as I would like to in this course

Strongly Disagree Disagree Neutral Agree Strongly Agree

88. I feel that I sufficiently understand the material in this course

Strongly Disagree Disagree Neutral Agree Strongly Agree

89. I have been achieving poor marks so far, by my standards

Strongly Disagree Disagree Neutral Agree Strongly Agree

90. If I wanted to increase my grades I'm confident I know how to do this

Strongly Disagree Disagree Neutral Agree Strongly Agree

91. When I get a good mark, I don't know why

Strongly Disagree Disagree Neutral Agree Strongly Agree

92. When I don't put much effort into a bit of coursework, I always get a poor mark

Strongly Disagree Disagree Neutral Agree Strongly Agree

93. Making extra effort has little effect on my marks

Strongly Disagree Disagree Neutral Agree Strongly Agree

94. I know just what to do to get a good mark, but sometimes I don't make the effort

Strongly Disagree Disagree Neutral Agree Strongly Agree

95. My marks are what I deserve for the quality of work I do

Strongly Disagree Disagree Neutral Agree Strongly Agree

96. When my work receives a low grade, I don't know what I've done differently compared to other pieces of coursework that received a higher grade

Strongly Disagree Disagree Neutral Agree Strongly Agree

97. I don't know what the people who grade my assignments are looking for

Strongly Disagree Disagree Neutral Agree Strongly Agree

How confident are you that you will be able to:

98. Study effectively on your own in independent private study

Not at all confident Not confident Neutral Confident Very confident

99. Manage your workload to meet course deadlines

Not at all confident Not confident Neutral Confident Very confident

100. Attain good grades in your work

Not at all confident Not confident Neutral Confident Very confident

101. Understand the material outlined and discussed with you by lecturers

Not at all confident Not confident Neutral Confident Very confident

102. Produce your best work in coursework assignments

Not at all confident Not confident Neutral Confident Very confident

Please indicate the extent to which you agree or disagree with the following statements:

103. I feel comfortable being a student at this university

Strongly Disagree Disagree Neutral Agree Strongly Agree

104. I would rather not get to know staff at this university

Strongly Disagree Disagree Neutral Agree Strongly Agree

105. I would like to get to know other students at this university

Strongly Disagree Disagree Neutral Agree Strongly Agree

106. I do not feel like a part of this university. To me it is just a source of qualifications

Strongly Disagree Disagree Neutral Agree Strongly Agree

107. I think that getting to know university staff is useful to me

Strongly Disagree Disagree Neutral Agree Strongly Agree

108. I sometimes feel alienated by the social environment at university

Strongly Disagree Disagree Neutral Agree Strongly Agree

109. I think that getting to know other students is useful to me

Strongly Disagree Disagree Neutral Agree Strongly Agree

110. Student life does not fit well with my preferred kinds of socialising (e.g. pubbing and clubbing, sports, dinner parties, etc)

Strongly Disagree Disagree Neutral Agree Strongly Agree

111. I feel that the kind of conversation I like to have goes down well with other students

Strongly Disagree Disagree Neutral Agree Strongly Agree

112. I feel that the kind of conversation I like to have is poorly received by university staff

Strongly Disagree Disagree Neutral Agree Strongly Agree

113. I think I know how to make friends with other students

Strongly Disagree Disagree Neutral Agree Strongly Agree

114. I do not know how to talk to other students

Strongly Disagree Disagree Neutral Agree Strongly Agree

115. I enjoy the social activities other students propose

Strongly Disagree Disagree Neutral Agree Strongly Agree

116. I do not enjoy the kind of conversation I find myself having with other students

Strongly Disagree Disagree Neutral Agree Strongly Agree

117. The kind of conversation I find myself having with university staff is enjoyable

Strongly Disagree Disagree Neutral Agree Strongly Agree

118. I am disappointed with the number of friends I have made at university

Strongly Disagree Disagree Neutral Agree Strongly Agree

119. I feel I am able to get the kind of conversations I like at university

Strongly Disagree Disagree Neutral Agree Strongly Agree

120. I feel unable to ask staff questions when I need to or want to

- Strongly Disagree Disagree Neutral Agree Strongly Agree
121. I feel that I fit in with other students in my class
- Strongly Disagree Disagree Neutral Agree Strongly Agree
122. I feel like I do not fit in with other students in the university
- Strongly Disagree Disagree Neutral Agree Strongly Agree
123. I have no problem collaborating on the group course work required of me / participating in seminars
- Strongly Disagree Disagree Neutral Agree Strongly Agree
124. I do not feel comfortable with being a student in Britain today
- Strongly Disagree Disagree Neutral Agree Strongly Agree
125. Having attended this university will fit with the kind of person I want to be in the future
- Strongly Disagree Disagree Neutral Agree Strongly Agree
126. I do not care about getting on with people outside the university
- Strongly Disagree Disagree Neutral Agree Strongly Agree
127. When I am around non-students outside the university, I do not feel embarrassed to be a student
- Strongly Disagree Disagree Neutral Agree Strongly Agree
128. Being a student will cause me problems in getting on with people outside the university (e.g. family, friends, employers)
- Strongly Disagree Disagree Neutral Agree Strongly Agree
129. Being a student makes me feel better about myself than if I was doing something different
- Strongly Disagree Disagree Neutral Agree Strongly Agree
130. I feel uncomfortable telling others that I attend this university
- Strongly Disagree Disagree Neutral Agree Strongly Agree
131. Attending university makes me fit better into life outside of university
- Strongly Disagree Disagree Neutral Agree Strongly Agree
132. I feel that people outside of university fail to give me the recognition and respect I expect from them
- Strongly Disagree Disagree Neutral Agree Strongly Agree
133. Being at this university is impressive to others
- Strongly Disagree Disagree Neutral Agree Strongly Agree
134. Successful completion of my present course of studies is very important to me
- Strongly Disagree Disagree Neutral Agree Strongly Agree
135. I am highly committed to obtaining a good degree
- Strongly Disagree Disagree Neutral Agree Strongly Agree
136. Obtaining a degree is an important part of my overall career plan
- Strongly Disagree Disagree Neutral Agree Strongly Agree
137. I am glad to be a student at this university and would dislike it if I had to transfer to another institution
- Strongly Disagree Disagree Neutral Agree Strongly Agree
138. If I feel very ill at university, I'm confident that someone I know will look after me (e.g. friends, flatmate, family etc)
- Strongly Disagree Disagree Neutral Agree Strongly Agree
139. I currently have access to at least one person with whom I feel very comfortable
- Strongly Disagree Disagree Neutral Agree Strongly Agree
140. If I have an academic crisis at university, I have at least one person with whom I can helpfully discuss it (e.g. friends, family, university staff)
- Strongly Disagree Disagree Neutral Agree Strongly Agree

141. If you felt the need for some company, how easy would it be for you could get in touch with a good friend and meet ?

1 (very hard) 2 3 4 5 (very easy)

142. Roughly how many people within the university do you know well enough to ask for a small favour (e.g. borrow notes, find out lecture times, sign your petition) ?

0 1-2 3-5 6-10 11-20 21-50 >50

143. Roughly how many lectures in this course have there been so far ?

144. How many lectures in this course have you missed so far ?

0 1-2 3-4 5-6 7 or more

145. Roughly how many tutorials in this course have there been so far, if any ?

146. How many tutorials in this course have you missed so far ?

0 1 2 3 4 or more

147. Compared to others in your class, how often do you usually contribute to tutorial discussions in this subject ?

much less often less often about average more often much more often

148. Have you ever failed to hand in any work by the assigned deadline ?

Yes No

149. How much have you thought about changing subject ?

1 (never) 2 3 4 5 6 7 (constantly)

150. Do you think you are likely to continue with your present course of university studies to the point of obtaining a degree ?

1 (very unlikely) 2 3 4 5 6 7 (very likely)

151. If you did leave your present course of studies, how likely would you be to study something else at university / college ?

1 (very unlikely) 2 3 4 5 6 7 (very likely)

Thank you for your time: it is much appreciated.

Any questions ? :-

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Appendix 2:

Minitab Data

Descriptive Statistics: Age

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3
Age	196	0	19.980	0.273	3.820	18.000	18.000	19.000	21.000

Variable	Maximum
Age	59.000

Tally for Discrete Variables: Sex, Level of Study

Sex	Count	Level	Count
F	146	1	139
M	50	2	3
N=	196	3	5
		4	49
		N=	196

(Numbers correspond to questions from Questionnaire)

Self Esteem (+) Correlations: 60, 62, 63, 66, 69

	60	62	63	66
62	0.471 0.000			
63	0.487 0.000	0.461 0.000		
66	0.422 0.000	0.287 0.000	0.473 0.000	
69	0.578 0.000	0.426 0.000	0.375 0.000	0.536 0.000

Cell Contents: Pearson correlation
P-Value

Self-Esteem (-) Correlations: 61, 64, 65, 67, 68

	61	64	65	67
64	0.526 0.000			
65	0.687 0.000	0.520 0.000		
67	0.487 0.000	0.476 0.000	0.501 0.000	
68	0.577 0.000	0.645 0.000	0.552 0.000	0.600 0.000

Cell Contents: Pearson correlation
P-Value

Academic Integration (+) Correlations: 71, 73, 75, 77, 80, 82, 86, 88

	71	73	75	77	80	82	86
73	0.287 0.000						
75	0.204 0.004	0.419 0.000					
77	0.184	0.185	0.233				

	0.010	0.010	0.001						
80	0.513	0.267	0.290	0.192					
	0.000	0.000	0.000	0.007					
82	0.521	0.343	0.349	0.189	0.593				
	0.000	0.000	0.000	0.008	0.000				
86	0.180	0.075	0.104	0.172	0.017	0.157			
	0.012	0.296	0.148	0.016	0.813	0.029			
88	0.319	0.085	0.114	0.199	0.321	0.439	0.186		
	0.000	0.238	0.114	0.005	0.000	0.000	0.010		

Cell Contents: Pearson correlation
P-Value

Academic Integration (-) Correlations: 72, 74, 76, 78, 81, 83, 84, 87, 89

	72	74	76	78	81	83	84	87
74	0.316							
	0.000							
76	0.079	0.170						
	0.272	0.018						
78	0.133	0.293	0.205					
	0.064	0.000	0.004					
81	0.288	0.585	0.198	0.210				
	0.000	0.000	0.006	0.003				
83	0.112	0.202	0.031	0.267	0.195			
	0.121	0.005	0.672	0.000	0.007			
84	0.284	0.415	0.179	0.295	0.315	0.251		
	0.000	0.000	0.012	0.000	0.000	0.000		
87	0.222	0.415	0.069	0.217	0.319	0.338	0.259	
	0.002	0.000	0.339	0.002	0.000	0.000	0.000	
89	0.251	0.620	0.121	0.170	0.409	0.141	0.339	0.301
	0.000	0.000	0.093	0.018	0.000	0.049	0.000	0.000

Cell Contents: Pearson correlation
P-Value

Understanding of work-grade link (+) Correlations: 90, 92, 94, 95

	90	92	94
92	-0.148		
	0.039		
94	0.258	-0.043	
	0.000	0.556	
95	0.266	0.052	0.207
	0.000	0.468	0.004

Cell Contents: Pearson correlation
P-Value

Understanding of work-grade link (-) Correlations: 91, 93, 96, 97

	91	93	96
93	0.238		
	0.001		
96	0.196	0.453	
	0.006	0.000	
97	0.177	0.319	0.446
	0.014	0.000	0.000

Cell Contents: Pearson correlation
P-Value

Academic Self Efficacy Correlations: 98, 99, 100, 101, 102

	98	99	100	101
99	0.650			
	0.000			

100	0.534	0.563		
	0.000	0.000		
101	0.469	0.441	0.601	
	0.000	0.000	0.000	
102	0.506	0.512	0.592	0.495
	0.000	0.000	0.000	0.000

Cell Contents: Pearson correlation
P-Value

Social Integration in uni (+) Correlations: 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123

	103	105	107	109	111	113	115	117	119
105	0.279								
	0.000								
107	0.189	0.161							
	0.008	0.025							
109	0.229	0.615	0.203						
	0.001	0.000	0.004						
111	0.342	0.227	-0.033	0.224					
	0.000	0.001	0.650	0.002					
113	0.315	0.103	0.112	0.178	0.468				
	0.000	0.150	0.121	0.013	0.000				
115	0.418	0.255	0.053	0.301	0.452	0.445			
	0.000	0.000	0.466	0.000	0.000	0.000			
117	0.261	0.164	0.441	0.124	0.199	0.319	0.135		
	0.000	0.022	0.000	0.084	0.005	0.000	0.060		
119	0.426	0.129	0.084	0.219	0.499	0.522	0.400	0.262	
	0.000	0.073	0.241	0.002	0.000	0.000	0.000	0.000	
121	0.322	0.150	0.065	0.223	0.457	0.455	0.307	0.239	0.387
	0.000	0.037	0.363	0.002	0.000	0.000	0.000	0.001	0.000
123	0.021	0.066	0.178	0.147	0.131	0.233	0.011	0.127	0.143
	0.772	0.356	0.013	0.040	0.069	0.001	0.875	0.078	0.047
	121								
123	0.183								
	0.010								

Cell Contents: Pearson correlation
P-Value

Social Integration in uni (-) Correlations: 104, 106, 108, 110, 112, 114, 116, 118, 120, 122

	104	106	108	110	112	114	116	118	120
106	0.280								
	0.000								
108	0.166	0.455							
	0.020	0.000							
110	0.113	0.343	0.365						
	0.116	0.000	0.000						
112	0.293	0.300	0.236	0.113					
	0.000	0.000	0.001	0.115					
114	0.069	0.225	0.474	0.107	0.155				
	0.340	0.002	0.000	0.136	0.030				
116	0.140	0.334	0.399	0.291	0.389	0.256			
	0.052	0.000	0.000	0.000	0.000	0.000			
118	0.093	0.433	0.575	0.261	0.153	0.474	0.281		
	0.199	0.000	0.000	0.000	0.033	0.000	0.000		
120	0.340	0.328	0.287	0.063	0.351	0.156	0.200	0.261	
	0.000	0.000	0.000	0.385	0.000	0.029	0.005	0.000	
122	0.227	0.531	0.612	0.333	0.211	0.389	0.362	0.578	0.226
	0.001	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.002

Cell Contents: Pearson correlation
P-Value

Social Integration Outside Uni (+) Correlations: 124, 126, 128, 130, 132

	124	126	128	130
126	0.032 0.660			
128	0.205 0.004	0.092 0.199		
130	0.177 0.013	0.051 0.478	0.109 0.128	
132	0.150 0.036	0.007 0.919	0.142 0.048	0.118 0.101

Cell Contents: Pearson correlation
P-Value

Social Integration outside uni (-) Correlations: 125, 127, 129, 131, 133

	125	127	129	131
127	0.231 0.001			
129	0.385 0.000	0.186 0.009		
131	0.351 0.000	0.180 0.012	0.541 0.000	
133	0.224 0.002	0.152 0.034	0.336 0.000	0.222 0.002

Cell Contents: Pearson correlation
P-Value

Goal Commitment Correlations: 134, 135, 136

	134	135
135	0.631 0.000	
136	0.540 0.000	0.442 0.000

Cell Contents: Pearson correlation
P-Value

Social Support Correlations: 138, 139, 140, 141, 142

	138	139	140	141
139	0.470 0.000			
140	0.353 0.000	0.593 0.000		
141	0.390 0.000	0.504 0.000	0.512 0.000	
142	0.289 0.000	0.261 0.000	0.415 0.000	0.487 0.000

Cell Contents: Pearson correlation
P-Value

Extraversion Correlations: 1, 6, 11, 16, 21, 26, 27, 31, 35, 36, 43

	1	6	11	16	21	26	27	31	35
6	-0.461 0.000								
11	0.362 0.000	-0.292 0.000							
16	0.432 0.000	-0.357 0.000	0.504 0.000						
21	-0.596 0.000	0.691 0.000	-0.353 0.000	-0.433 0.000					
26	0.288	-0.389	0.264	0.239	-0.385				

Neuroticism Correlations: 4, 9, 14, 19, 24, 29, 34, 39, 45

	4	9	14	19	24	29	34	39
9	-0.317 0.000							
14	0.358 0.000	-0.487 0.000						
19	0.483 0.000	-0.663 0.000	0.583 0.000					
24	-0.511 0.000	0.448 0.000	-0.365 0.000	-0.529 0.000				
29	0.322 0.000	-0.174 0.015	0.360 0.000	0.221 0.002	-0.410 0.000			
34	-0.151 0.035	0.573 0.000	-0.392 0.000	-0.432 0.000	0.398 0.000	-0.194 0.007		
39	0.280 0.000	-0.336 0.000	0.369 0.000	0.445 0.000	-0.415 0.000	0.220 0.002	-0.330 0.000	
45	-0.453 0.000	0.255 0.000	-0.173 0.016	-0.392 0.000	0.403 0.000	-0.175 0.014	0.169 0.018	-0.353 0.000

Cell Contents: Pearson correlation
P-Value

Openness Correlations: 5, 10, 15, 20, 25, 30, 40, 41, 44, 47

	5	10	15	20	25	30	40	41	44
10	0.201 0.005								
15	0.370 0.000	0.172 0.017							
20	0.306 0.000	0.140 0.051	0.077 0.283						
25	0.529 0.000	0.254 0.000	0.388 0.000	0.323 0.000					
30	0.146 0.042	0.271 0.000	0.058 0.419	0.291 0.000	0.239 0.001				
40	0.282 0.000	0.202 0.005	0.339 0.000	0.200 0.005	0.305 0.000	0.296 0.000			
41	-0.124 0.085	-0.158 0.027	-0.017 0.810	-0.166 0.021	-0.227 0.001	-0.406 0.000	-0.160 0.026		
44	0.259 0.000	0.144 0.044	0.282 0.000	0.231 0.001	0.250 0.000	0.370 0.000	0.203 0.005	-0.356 0.000	
47	0.198 0.005	0.219 0.002	0.089 0.218	0.168 0.019	0.136 0.058	0.340 0.000	0.108 0.135	-0.326 0.000	0.361 0.000

Cell Contents: Pearson correlation
P-Value

Alcohol Correlations: 56, 57, 58

	56	57
57	0.336 0.000	
58	0.493 0.000	0.525 0.000

Cell Contents: Pearson correlation
P-Value

One-way ANOVA: Extraversion versus Psy Non-Psy

Source	DF	SS	MS	F	P
Psy-1 Non-2	1	4.3	4.3	0.13	0.724
Error	190	6496.1	34.2		
Total	191	6500.4			

S = 5.847 R-Sq = 0.07% R-Sq(adj) = 0.00%

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
1	54	5.963	6.109	(-----*-----)
2	138	5.630	5.743	(-----*-----)

4.80 5.60 6.40 7.20

Pooled StDev = 5.847

One-way ANOVA: Neuroticism versus Psy Non-Psy

Source	DF	SS	MS	F	P
Psy-1 Non-2	1	3.7	3.7	0.10	0.755
Error	191	7311.0	38.3		
Total	192	7314.7			

S = 6.187 R-Sq = 0.05% R-Sq(adj) = 0.00%

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
1	54	4.389	6.089	(-----*-----)
2	139	4.079	6.224	(-----*-----)

3.0 4.0 5.0 6.0

Pooled StDev = 6.187

One-way ANOVA: Openness versus Psy Non-Psy

Source	DF	SS	MS	F	P
Psy-1 Non-2	1	2.9	2.9	0.11	0.743
Error	190	5078.0	26.7		
Total	191	5080.9			

S = 5.170 R-Sq = 0.06% R-Sq(adj) = 0.00%

Level	N	Mean	StDev	Individual 95% CIs For Mean Based on Pooled StDev
1	54	24.222	5.179	(-----*-----)
2	138	23.949	5.166	(-----*-----)

23.10 23.80 24.50 25.20

Pooled StDev = 5.170

One-way ANOVA: Agreeableness versus Psy Non-Psy

Source	DF	SS	MS	F	P
Psy-1 Non-2	1	32.0	32.0	1.34	0.249
Error	191	4578.2	24.0		
Total	192	4610.2			

S = 4.896 R-Sq = 0.70% R-Sq(adj) = 0.18%

Individual 95% CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev
1	54	10.167	4.789
2	139	9.259	4.936

Pooled StDev = 4.896

One-way ANOVA: Conscientiousness versus Psy Non-Psy

Source	DF	SS	MS	F	P
Psy-1 Non-2	1	75.2	75.2	2.20	0.140
Error	189	6475.1	34.3		
Total	190	6550.3			

S = 5.853 R-Sq = 1.15% R-Sq(adj) = 0.63%

Individual 95% CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev
1	54	5.722	5.434
2	137	4.328	6.009

Pooled StDev = 5.853

One-way ANOVA: Changing Subj. versus Psy Non-Psy

Source	DF	SS	MS	F	P
Psy-1 Non-2	1	0.29	0.29	0.10	0.754
Error	191	555.47	2.91		
Total	192	555.75			

S = 1.705 R-Sq = 0.05% R-Sq(adj) = 0.00%

Individual 95% CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev
1	54	2.648	1.568
2	139	2.734	1.755

Pooled StDev = 1.705

One-way ANOVA: Return? versus Psy Non-Psy

Source	DF	SS	MS	F	P
Psy-1 Non-2	1	15.12	15.12	3.50	0.063
Error	189	815.48	4.31		
Total	190	830.60			

S = 2.077 R-Sq = 1.82% R-Sq(adj) = 1.30%

Individual 95% CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev
1	54	4.704	2.177
2	137	5.328	2.037

Pooled StDev = 2.077

One-way ANOVA: Persistence Intention versus Psy Non-Psy

Source	DF	SS	MS	F	P
Psy-1 Non-2	1	9.68	9.68	4.49	0.035
Error	191	411.19	2.15		

Total 192 420.87

S = 1.467 R-Sq = 2.30% R-Sq(adj) = 1.79%

Individual 95% CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev
1	54	6.333	1.360
2	139	5.835	1.506

5.70 6.00 6.30 6.60

Pooled StDev = 1.467

Tukey 95% Simultaneous Confidence Intervals
All Pairwise Comparisons among Levels of Psy-1 Non-2

Individual confidence level = 95.00%

Psy-1 Non-2 = 1 subtracted from:

Psy-1 Non-2	Lower	Center	Upper
2	-0.963	-0.499	-0.035

-0.70 -0.35 0.00 0.35

One-way ANOVA: Changing Subj. versus Residence

Source	DF	SS	MS	F	P
Residence	5	11.14	2.23	0.77	0.573
Error	189	548.00	2.90		
Total	194	559.15			

S = 1.703 R-Sq = 1.99% R-Sq(adj) = 0.00%

Individual 95% CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev
1	71	2.817	1.667
2	65	2.385	1.636
3	18	2.889	1.605
4	9	2.556	2.128
5	18	3.000	1.910
6	14	3.000	1.754

2.10 2.80 3.50 4.20

Pooled StDev = 1.703

One-way ANOVA: Percieved Likelihood of Degree Completion versus Residence

Source	DF	SS	MS	F	P
Residence	5	31.97	6.39	3.10	0.010
Error	189	389.94	2.06		
Total	194	421.92			

S = 1.436 R-Sq = 7.58% R-Sq(adj) = 5.13%

Individual 95% CIs For Mean Based on Pooled StDev

Level	N	Mean	StDev
1	71	5.606	1.459
2	65	5.969	1.561
3	18	6.167	1.505
4	9	5.778	2.048
5	18	6.889	0.471
6	14	6.643	0.842

4.90 5.60 6.30 7.00

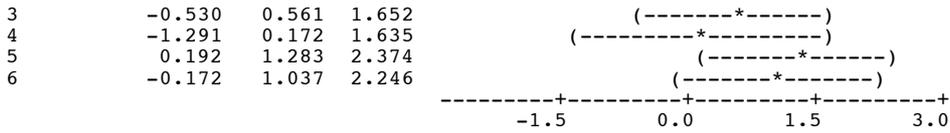
Pooled StDev = 1.436

Tukey 95% Simultaneous Confidence Intervals
All Pairwise Comparisons among Levels of Residence

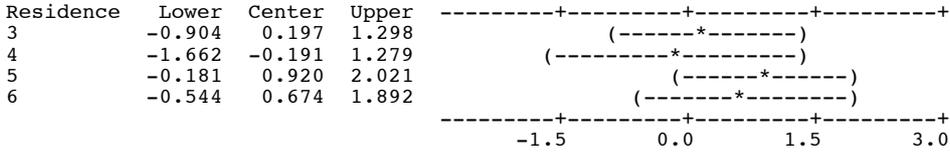
Individual confidence level = 99.55%

Residence = 1 subtracted from:

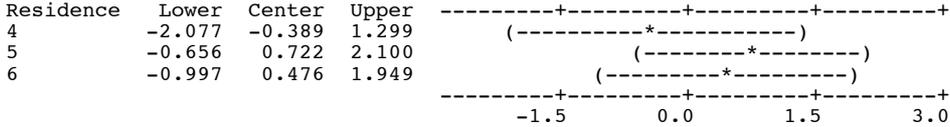
Residence	Lower	Center	Upper
2	-0.346	0.364	1.073



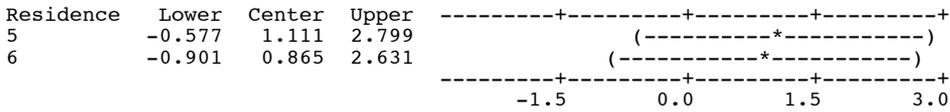
Residence = 2 subtracted from:



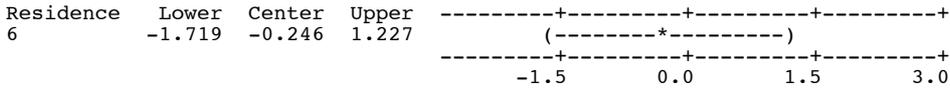
Residence = 3 subtracted from:



Residence = 4 subtracted from:



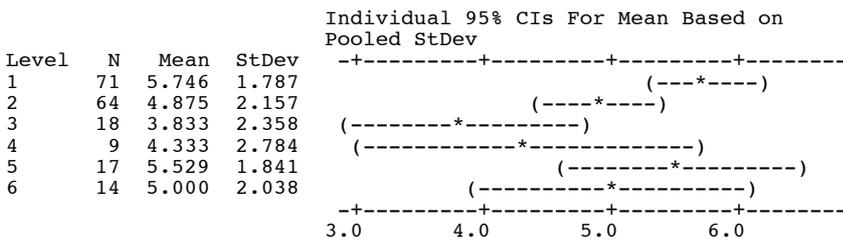
Residence = 5 subtracted from:



One-way ANOVA: Likelihood of returning if leave current course versus Residence

Source	DF	SS	MS	F	P
Residence	5	70.05	14.01	3.35	0.006
Error	187	781.17	4.18		
Total	192	851.22			

S = 2.044 R-Sq = 8.23% R-Sq(adj) = 5.78%

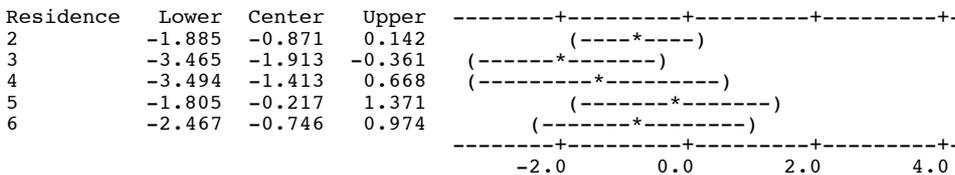


Pooled StDev = 2.044

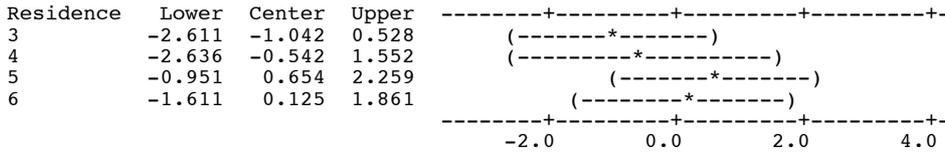
Tukey 95% Simultaneous Confidence Intervals
All Pairwise Comparisons among Levels of Residence

Individual confidence level = 99.55%

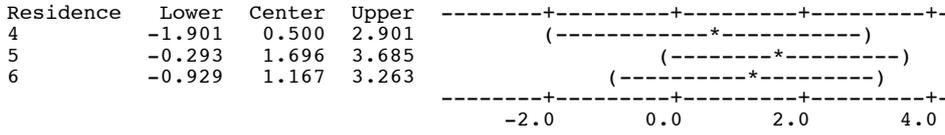
Residence = 1 subtracted from:



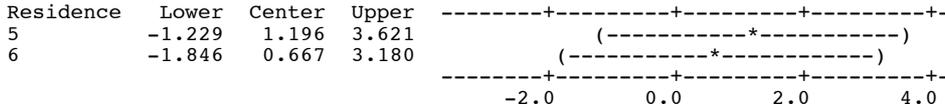
Residence = 2 subtracted from:



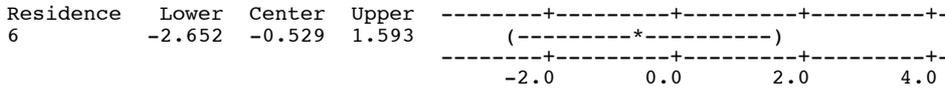
Residence = 3 subtracted from:



Residence = 4 subtracted from:



Residence = 5 subtracted from:



Tabulated statistics: Residence, Level

Rows: Residence	Columns: Level				
	1	2	3	4	All
1	68	0	0	3	71
	95.77	0.00	0.00	4.23	100.00
	49.28	0.00	0.00	6.12	36.41
2	50	0	3	12	65
	76.92	0.00	4.62	18.46	100.00
	36.23	0.00	60.00	24.49	33.33
3	5	1	1	11	18
	27.78	5.56	5.56	61.11	100.00
	3.62	33.33	20.00	22.45	9.23
4	6	1	0	2	9
	66.67	11.11	0.00	22.22	100.00
	4.35	33.33	0.00	4.08	4.62
5	1	1	0	16	18
	5.56	5.56	0.00	88.89	100.00
	0.72	33.33	0.00	32.65	9.23
6	8	0	1	5	14
	57.14	0.00	7.14	35.71	100.00
	5.80	0.00	20.00	10.20	7.18
All	138	3	5	49	195
	70.77	1.54	2.56	25.13	100.00
	100.00	100.00	100.00	100.00	100.00

Cell Contents: Count
 % of Row
 % of Column

Stepwise Regression: Perceived Likelihood of Degree Completion versus Level, Distance, ...

Alpha-to-Enter: 0.15 Alpha-to-Remove: 0.15

Response is Persistence Intention on 19 predictors, with N = 176
N(cases with missing observations) = 19 N(all cases) = 195

Step	1	2	3	4	5	6
Constant	5.356	3.068	2.989	2.742	2.489	2.744
Level	0.367	0.319	0.326	0.374	0.384	0.376
T-Value	4.67	4.15	4.29	4.70	4.84	4.77
P-Value	0.000	0.000	0.000	0.000	0.000	0.000
Goal Commitment		0.183	0.206	0.163	0.180	0.174
T-Value		3.74	4.16	3.01	3.29	3.19
P-Value		0.000	0.000	0.003	0.001	0.002
Extraversion			-0.038	-0.038	-0.035	-0.040
T-Value			-2.29	-2.29	-2.13	-2.41
P-Value			0.023	0.023	0.035	0.017
Decision				0.20	0.23	0.19
T-Value				1.90	2.20	1.72
P-Value				0.059	0.029	0.087
Conscientiousness					-0.029	-0.037
T-Value					-1.66	-2.07
P-Value					0.098	0.040
Student Self-Esteem						0.037
T-Value						1.80
P-Value						0.073
S	1.33	1.28	1.27	1.26	1.25	1.24
R-Sq	11.12	17.77	20.21	21.86	23.11	24.56
R-Sq(adj)	10.61	16.82	18.82	20.03	20.85	21.88
Mallows C-p	19.8	7.5	4.2	2.6	1.9	0.8
Step	7					
Constant	2.641					
Level	0.363					
T-Value	4.61					
P-Value	0.000					
Goal Commitment	0.183					
T-Value	3.37					
P-Value	0.001					
Extraversion	-0.040					
T-Value	-2.38					
P-Value	0.018					
Decision	0.21					
T-Value	1.93					
P-Value	0.056					
Conscientiousness	-0.044					
T-Value	-2.44					
P-Value	0.016					
Student Self-Esteem	0.053					
T-Value	2.38					
P-Value	0.019					
Understanding	-0.051					
T-Value	-1.85					
P-Value	0.066					
S	1.24					
R-Sq	26.07					
R-Sq(adj)	22.99					
Mallows C-p	-0.4					

Stepwise Regression: Likelihood of returning to university/college if leaving current course versus Level, Distance, ...

Alpha-to-Enter: 0.15 Alpha-to-Remove: 0.15

Response is Return? on 19 predictors, with N = 175
N(cases with missing observations) = 20 N(all cases) = 195

Step	1	2	3	4	5	6
Constant	5.6564	4.8897	4.2061	2.7195	2.5345	0.7212
Level	-0.29	-0.29	-0.30	-0.32	-0.34	-0.38
T-Value	-2.39	-2.43	-2.48	-2.65	-2.84	-3.18
P-Value	0.018	0.016	0.014	0.009	0.005	0.002
Out Social Int.		0.096	0.091	0.093	0.103	0.075
T-Value		2.23	2.12	2.19	2.43	1.67
P-Value		0.027	0.036	0.030	0.016	0.096
Distance			0.33	0.33	0.35	0.41
T-Value			2.05	2.10	2.23	2.55
P-Value			0.042	0.037	0.027	0.012
Openness				0.062	0.071	0.071
T-Value				2.10	2.38	2.39
P-Value				0.037	0.019	0.018
Understanding					-0.071	-0.083
T-Value					-1.73	-2.02
P-Value					0.085	0.045
Goal Commitment						0.157
T-Value						1.89
P-Value						0.061
S	2.07	2.05	2.03	2.01	1.99	1.98
R-Sq	3.20	5.91	8.17	10.50	12.05	13.88
R-Sq(adj)	2.64	4.82	6.56	8.39	9.45	10.80
Mallows C-p	15.2	11.9	9.6	7.1	6.1	4.6

Step	7	8	9
Constant	0.4952	0.5741	0.5929
Level	-0.37	-0.38	-0.39
T-Value	-3.12	-3.21	-3.27
P-Value	0.002	0.002	0.001
Out Social Int.	0.075	0.038	
T-Value	1.68	0.74	
P-Value	0.096	0.459	
Distance	0.39	0.41	0.42
T-Value	2.48	2.59	2.71
P-Value	0.014	0.011	0.007
Openness	0.079	0.078	0.076
T-Value	2.65	2.61	2.58
P-Value	0.009	0.010	0.011
Understanding	-0.081	-0.092	-0.092
T-Value	-1.96	-2.20	-2.22
P-Value	0.051	0.029	0.028
Goal Commitment	0.179	0.184	0.203
T-Value	2.14	2.21	2.57
P-Value	0.034	0.029	0.011
Extraversion	-0.045	-0.064	-0.069
T-Value	-1.67	-2.17	-2.39
P-Value	0.096	0.031	0.018
Uni Social Int.		0.032	0.039
T-Value		1.52	2.15
P-Value		0.130	0.033
S	1.97	1.96	1.96
R-Sq	15.30	16.46	16.19
R-Sq(adj)	11.75	12.44	12.67
Mallows C-p	3.9	3.6	2.2

Stepwise Regression: Changing Subj. versus Level, Distance, ...

Alpha-to-Enter: 0.15 Alpha-to-Remove: 0.15

Response is Changing Subj. on 19 predictors, with N = 176
N(cases with missing observations) = 19 N(all cases) = 195

Step	1	2	3	4	5	6
Constant	3.012	4.320	3.586	3.805	4.214	3.795
Academic Integration	-0.092	-0.065	-0.069	-0.064	-0.061	-0.062
T-Value	-5.30	-3.42	-3.61	-3.39	-3.23	-3.28
P-Value	0.000	0.001	0.000	0.001	0.001	0.001
Decision		-0.38	-0.35	-0.28	-0.33	-0.33
T-Value		-2.93	-2.72	-2.08	-2.41	-2.39
P-Value		0.004	0.007	0.039	0.017	0.018
Distance			0.29	0.31	0.30	0.25
T-Value			2.32	2.48	2.47	1.96
P-Value			0.022	0.014	0.014	0.051
Out Social Int.				-0.067	-0.063	-0.066
T-Value				-1.89	-1.76	-1.84
P-Value				0.060	0.080	0.067
Level					-0.141	-0.141
T-Value					-1.49	-1.49
P-Value					0.139	0.137
City/Town						0.36
T-Value						1.46
P-Value						0.147
S	1.62	1.59	1.57	1.56	1.55	1.55
R-Sq	13.88	17.94	20.43	22.06	23.06	24.02
R-Sq(adj)	13.38	17.00	19.04	20.24	20.80	21.32
Mallows C-p	11.8	5.1	1.8	0.4	0.2	0.2
Step	7					
Constant	3.595					
Academic Integration	-0.059					
T-Value	-3.14					
P-Value	0.002					
Decision	-0.31					
T-Value	-2.29					
P-Value	0.023					
Distance	0.23					
T-Value	1.83					
P-Value	0.070					
Out Social Int.	-0.061					
T-Value	-1.71					
P-Value	0.089					
Level	-0.146					
T-Value	-1.55					
P-Value	0.123					
City/Town	0.37					
T-Value	1.52					
P-Value	0.131					
Neuroticism	0.030					
T-Value	1.49					
P-Value	0.138					
S	1.54					
R-Sq	25.01					
R-Sq(adj)	21.88					
Mallows C-p	0.1					

Appendix 3:

Original Questionnaire With Asterisks(*) Next To Deleted and

Unused Questions

Maxi Questionnaire

*Questions not included in analysis

**Questions removed from subscale calculations due to insufficient correlation with other questions in subscale

Name: _____

Matriculation Number: _____

Age: _____ Sex: Male/Female

What subjects are you studying this year?

Subject 1: _____

Subject 2: _____

Subject 3: _____

(personality section not in this version. See appendix 1, Q's 1-48)

However, personality question that was removed was:

I see myself as someone who...

46) '...is very religious'

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Agree				

*49) Is this the first time you have studied at university? (i.e. not repeating a year or studying a 2nd degree) yes/no

50) Where do you currently stay?:

1	2	3	4	5
Halls of residence	at home with family	in a flat with friends from home	alone	other
		(please specify)		

52) Before starting university, where did you live?

1	2	3	4
Within the Glasgow area	1-2 hrs away	2-5 hrs away	5+ hrs away

53) Which of these choices best describes where you lived before starting university:

1	2
city / city suburbs	small town / rural area

*54) 'I felt happy and comfortable with my social life in my home town/city'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

*55) 'I was looking forward to starting university studies'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

56) On how many nights per week do you consume alcohol, on average?

Less than once per week 1-2 3-4 5-6 7

(If you do not drink alcohol, please ignore the following question)

57) On a typical drinking night, how many units of alcohol would you consume on average?
(1 unit is equivalent to a small glass of wine, half a pint of beer, or 1 measure of spirits)

1-2 3-4 5-6 7-8 9-10 11-12 13+

Please indicate the extent to which you agree or disagree with the following statements:

58) 'I feel that my most enjoyable social experiences usually involve alcohol consumption'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

59) 'I feel I made a well informed decision when choosing my university course'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

Instructions: Below is a list of statements dealing with your general feelings about being a student. If you strongly agree, select **SA**. If you agree with the statement, select **A**. If you disagree, select **D**. If you strongly disagree, select **SD**.

60	As a student, I am satisfied with myself.	SA	A	D	SD
61	Sometimes at university I think I am no good at all.	SA	A	D	SD
62	I feel that as a student I have a number of good qualities.	SA	A	D	SD
63	I am able to do things as well as most other students.	SA	A	D	SD
64	As a student I feel I do not have much to be proud of.	SA	A	D	SD
65	I certainly feel useless at times in university.	SA	A	D	SD

66	At university I feel that I'm a person of worth, at least on an equal plane with other students.	SA	A	D	SD
67	I wish I could have more respect for myself as a student	SA	A	D	SD
68	I am inclined to feel that I am a failure as a student.	SA	A	D	SD
69	I take a positive attitude toward myself as a student	SA	A	D	SD

*70) Which of your subjects would you most like to continue with to third year/ honours?

Please indicate your agreement or disagreement with the following statements with regard to the subject you would most like to continue with to third year/ honours:

71) 'I enjoy studying this subject'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

72) 'I find this subject boring'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

73) 'What I am studying is useful'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

74) 'I feel that I am progressing poorly with my studies so far'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

75) 'My current university studies are leading to the career I want'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

**76) 'Getting a good degree is not important to me'

1	2	3	4	5
---	---	---	---	---

Disagree Strongly Disagree NeutralAgree Agree Strongly

**77)getting good grades is important to me'

1 2 3 4 5
Disagree Disagree NeutralAgree Agree Strongly
Strongly

**78)'The methods of studying this course are not as I expected them to be (lectures, tutorials, labs etc)'

1 2 3 4 5
Disagree Disagree NeutralAgree Agree Strongly
Strongly

*79)If the methods of studying are not as you expected, please specify any differences and difficulties, if you have time.

80)'This course involves types of work that I like to do. E.g. problem solving, showing skill in essay writing'

1 2 3 4 5
Disagree Disagree NeutralAgree Agree Strongly
Strongly

81)'I do not think that I have adjusted well to the working environment within the university'

1 2 3 4 5
Disagree Disagree NeutralAgree Agree Strongly
Strongly

82)'I like the kinds of study and work that this course requires of me'

1 2 3 4 5
Disagree Disagree NeutralAgree Agree Strongly
Strongly

83)'There are learning methods that I think would help me understand my studies better, but which are not used'

1 2 3 4 5
Disagree Disagree NeutralAgree Agree Strongly
Strongly

84)'This course demands kinds of study and work that I have trouble with'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

*85) If so, please state what you have difficulty with, if you have time

**86) 'I am good at taking notes in lectures'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

87) 'I am not learning as much as I would like to in this course'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

88) 'I feel that I sufficiently understand the material in this course'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

89) 'I have been achieving poor marks so far, by my standards'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

90) 'If I wanted to increase my grades I'm confident I know how to do this'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

**91) 'When I get a good mark, I don't know why'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

**92) 'When I don't put much effort into a bit of coursework, I always get a poor mark'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

93) 'Making extra effort has little effect on my marks'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

94) 'I know just what to do to get a good mark, but sometimes I don't make the effort'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

95) 'My marks are what I deserve for the quality of work I do'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

96) 'When my work receives a low grade, I don't know what I've done differently compared to other pieces of coursework that received a higher grade'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

97) 'I don't know what the people who grade my assignments are looking for'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

How confident are you that you will be able to:

98) Study effectively on your own in independent private study

1	2	3	4	5
Not at all				Very confident
confident				

99) Manage your workload to meet course deadlines

1	2	3	4	5
Not at all				Very confident
confident				

100) Attain good grades in your work

1	2	3	4	5
Not at all				Very confident
confident				

101) Understand the material outlined and discussed with you by lecturers

1	2	3	4	5
---	---	---	---	---

Not at all
confident

Very confident

102) Produce your best work in coursework assignments

1	2	3	4	5
Not at all				Very confident
confident				

Please indicate the extent to which you agree or disagree with the following statements:

103) 'I feel comfortable being a student at this university'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

**104) 'I would rather not get to know staff at this university'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

105) 'I would like to get to know other students at this university'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

106) 'I do not feel like a part of this university. To me it is just a source of qualifications.'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

**107) 'I think that getting to know university staff is useful to me'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

108) 'I sometimes feel alienated by the social environment at university'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

109) 'I think that getting to know other students is useful to me'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

**110) 'Student life does not fit well with my preferred kinds of socialising' (e.g. pubbing and clubbing, sports, dinner parties, etc)

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

111) 'I feel that the kind of conversation I like to have goes down well with other students'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

112) 'I feel that the kind of conversation I like to have is poorly received by university staff'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

113) 'I think I know how to make friends with other students'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

114) 'I do not know how to talk to other students'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

115) 'I enjoy the social activities other students propose'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

116) 'I do not enjoy the kind of conversation I find myself having with other students'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

**117) 'The kind of conversation I find myself having with university staff is enjoyable'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

118) 'I am disappointed with the number of friends I have made at university'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

119) 'I feel I am able to get the kind of conversations I like at university'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

120) 'I feel unable to ask staff questions when I need to or want to'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

121) 'I feel that I fit in with other students in my class'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

122) 'I feel like I do not fit in with other students in the university'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

**123) 'I have no problem collaborating on the group course work required of me'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

124) 'I do not feel comfortable with being a student in Britain today'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

125) 'Having attended this university will fit with the kind of person I want to be in the future'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

**126) 'I do not care about getting on with people outside the university'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree

Strongly

Strongly

**127) 'When I am around non-students outside the university, I do not feel embarrassed to be a student'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

128) 'Being a student will cause me problems in getting on with people outside the university (e.g. family, friends, employers)'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

129) 'Being a student makes me feel better about myself than if I was doing something different'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

**130) 'I feel uncomfortable telling others that I attend this university'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

131) 'Attending university makes me fit better into life outside of university'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

132) 'I feel that people outside of university fail to give me the recognition and respect I expect from them'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

133) 'Being at this university is impressive to others'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

134) 'Successful completion of my present course of studies is very important to me'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

135) 'I am highly committed to obtaining a good degree'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

136) 'Obtaining a degree is an important part of my overall career plan'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

137) 'I am glad to be a student at this university and would dislike it if I had to transfer to another institution'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

138) 'If I feel very ill at university, I'm confident that someone I know will look after me (e.g. friends, flatmate, family etc)'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

139) 'I currently have access to at least one person with whom I feel very comfortable'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

140) 'If I have an academic crisis at university, I have at least one person with whom I can helpfully discuss it (e.g. friends, family, university staff)'

1	2	3	4	5
Disagree	Disagree	Neutral	Agree	Agree
Strongly				Strongly

141) If you felt the need for some company, how easy would it be for you could get in touch with a good friend and meet?

1	2	3	4	5
very hard				very easy

142) Roughly how many people within the university do you know well enough to ask for a small favour (e.g. borrow notes, find out lecture times, sign your petition)?

0	1-2	3-5	6-10	11-20	21-50	>50
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*143) How many lectures in this course have you missed so far?

0 1-2 3-4 5-6 7+

*144)Roughly how many lectures in this course have there been so far? _____

*145)How many tutorials in this course have you missed so far?

0 1 2 3 4+

*146)Roughly how many tutorials in this course have there been so far? _____

*147)Compared to others in your class, how often do you usually contribute to tutorial discussions in this subject?

1	2	3	4	5
much less often	less often	about average	more often often	much more

*148)Have you ever failed to hand in any work by the assigned deadline? yes/no

149)How much have you thought about changing subject?

1(never) 2 3 4 5 6 7(constantly)

150)Do you think you are likely to continue with your present course of university studies to the point of obtaining a degree?

1	2	3	4	5	6	7
Definitely won't						Definitely will

151)If you did leave your present course of studies, how likely would you be to study something else at university/college?

1	2	3	4	5	6	7
very unlikely						very likely