



The role of the family and other external influences on an individual's decision to enrol at University

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### **ABSTRACT**

Early research argued the influences of university enrolment to be complex and diverse (Doles & Digman, 1967), whereas recent findings highlighted single external sources to have a greater influential role (Warmington, 2003). Previous literature identified several primary factors that may determine an individual's continuation in higher education; Gender (Thomas & Webber, 2001), Socio economic background (Wolfgang, 2009), Parental education (Choi et al, 2008), and Aspirations (Berzin, 2010). The aim of the current study was to examine the influences in the decision to enrol at university. 56 first year students from the University of Chester completed the revised SMAU questionnaire (Phinney et al, 2006) online. The current study measured demographic factors of gender, socioeconomic status and previous academic attainment across three primary sources of influence identified from a three-factor solution analysis. Findings from the current study found a significant main effect for the three primary sources of influence. However, no significant main effect was found for gender, socio economic status, and academic achievement, or for an interaction between the variables with the three sources of influence. Implications of these results are discussed.

<b>KEY WORDS:</b>	<b>UNIVERSITY</b>	<b>STUDENT</b>	<b>ENROLMENT</b>	<b>FAMILY</b>	<b>SES</b>
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## **Introduction**

### **Society**

University is currently reinforced by Western society as an essential educational step in a child's life (Wolfgang, 2009). It has become an expectation that young people must complete higher education of degree level to secure them high financial employment (Warmington, 2003). The societal perception that university provides access to both occupational and lifestyle success (Wolfgang, 2009), has significantly increased the demand of students wanting to enrol at university. In 1963 enrolment figures rose from 8% to 50% causing the UK higher education sector to expand (Collier, Gilchrist & Phillips, 2003) and widen participation rates (Feinstein & Vignoles, 2008; Jones & Lau, 2010). Between 2009/10, enrolment figures soared in the UK alone to 2,493,420, highlighting a 4% increase in comparison to previous years (Higher Education Statistics Agency, 2011). It would be too simplistic to assume that a sudden increase in the demand for university placements had occurred spontaneously. An alternative explanation may have been that after the war, the economy struggled and so universities had to widen rates of participation to increase their levels of funding. This would suggest that enrolment figures had increased because university placements had become more widely available and not because of an increase in students' interest to obtain university qualifications. Widening participation remains a government priority today, hoping to improve access into higher education for people of all economic backgrounds (Higher Education Funding Council for England, 2011).

The introduction of maintenance grants and greater access into universities allowed individuals from disadvantaged backgrounds the opportunity to advance their educational attainment at university level (Reay, Davies, David & Ball, 2001). In contrast, university became more of an expectation rather than a demonstration of ability for middle class students (Collier et al, 2003). By 1969 the number of university entrants had risen by 150% (Reay et al, 2001), which implied the availability of funding to be responsible for the increased enrolment figures. Research found that people were more likely to attend university when their finances could be funded without any difficulties (McDonough, 1994). On the other hand, findings have suggested that the academic requirements of students had also been reduced in comparison to previous years, which would have made university access a lot easier for students (UCAS, 2011). Furthermore, there is now greater leniency for those students who fail to achieve their predicted grades and are still offered university placements (UCAS, 2011). It is therefore difficult to justify why there was a significant increase in university enrolment figures. Research has acknowledged the underlying reasons for university enrolment to be complex and diverse (Dole & Digman, 1967; Majoribanks, 2004; Urdan, Solek & Schoenfelder, 2007). The current study will investigate issues such as gender differences, economic background and educational attainment in the influences to enrol at university.

### **Socio Economic Status**

Research has claimed that the decision to enrol at university was largely influenced by the Socio-economic status of an individual (Frymier, Norris, Henning, Henning & West, 2001). University students were predominantly stereotyped to be of middle

class background (Wolfgang, 2009) found to have the highest participation rates in university enrolment across the UK (House of Commons, 2009; Smyth & Hannan, 2007). For children of advantageous backgrounds university had almost become a universal expectation (Wolfgang, 2009). Research found that middle-class children often go further educationally because their families are able to provide greater access to resources and educationally stimulating experiences e.g. museums (Scherger & Savage, 2010) that encouraged educational success (Choi, Kelly Raley, Muller & Reigle-Crumb, 2008). Parental reinforcements of cultural activities demonstrated how some parents had a very structured perception of what they expected from their children educationally, which emphasised how university had become an expectation of middle class families (Van Etten, Pressley, McInerney & Liem, 2008). The methodology however only considered those attitudes of students and not parents. It may have been that the children believed that it was expected of them to enrol at university and so reported university to be a parental expectation. Although without specifically asking the parents of their expectations this conclusion could not be justified. It was further suggested that some middle class children desired the same lifestyle as their parents, and therefore attended university to secure their own lifestyle comforts (Brooks, 2003). These findings supported children to have their own reasons for enrolling at university and that not every child was influenced by the expectations of others. On the other hand, these assumptions were based solely on the attitudes of 15 students. Although the majority of the sixth forms students were of low middle class backgrounds, the specific economic backgrounds of the students involved in the study were not determined. Therefore it may have been that those students were from the minority of deprived backgrounds where educational attitudes were more independent.

In contrast, children from low socio-economic backgrounds were perceived to lack even the academic ability to succeed at university (Crosnoe, Mistry & Elder, 2002), which explained the low enrolment figures of students from low socio-economic backgrounds (Crosnoe et al, 2002; Rowan-Kenyon, Bell & Perna, 2008). This theory could be criticised by the introduction of the National Curriculum (Directgov, 2011), which was implemented to standardise the academic content taught generically to children across all schools in preparation for continuing into higher education. It could therefore be inferred that although access to resources were found to enhance academic performance, it was not essential for securing a position in higher education. As a result, this would question the importance of an advantageous background for children to enrol at university. The National Curriculum however, only applies to those children who attended public schools as private schools could teach from their own curriculum if they wished. It could therefore be suggested that advantageous backgrounds may actually be significant in encouraging a child to enrol at university. In contrast, it was more recently found that social class did not prevent the academic aspirations of low socio-economic families, which was measured through the schools and family environments where the children felt supported (Richgels, 2010). These findings implied socio economic status had little influence in university enrolment. However, it would be interesting to consider whether children had the same views when they felt pressured and had little independence in their decisions, and so would provide a greater comparison of the implied home environments of middle class children.

Research found that parents from disadvantaged backgrounds were less optimistic about their child's educational success (Crosnoe et al, 2002), which contrasted from the encouraging attitudes of middle class families. This suggested that an underlying influence in the decision to enrol at university was associated with the attitudes of parents. However, these findings failed to explain why students from disadvantaged backgrounds still enrolled at university despite negative parental attitudes. When further examined it could be argued that the sample used by Crosnoe et al was unrepresentative of the general population, as the methodology failed to select participants from all areas of the working class and focused specifically on those families that were most impoverished. Other research however, has supported the claim that parents are an important source of influence for university enrolment (Wycoff, 1996) and therefore it is necessary to consider which aspects of parenting provide the strongest level of influence.

### **Parental Education**

Research has claimed parents have the strongest level of influence by setting an example of high educational attainment (Kniveton, 2004; Phinney, Dennis & Osorio, 2006). This view was consistent with recent findings that supported parental education to positively impact on college enrolment (Choi et al, 2008). It was argued that highly educated parents reinforced the positive aspects of university and advertised the advantages of obtaining a university education as they had a better understanding of the educational system (Choi et al, 2008). It could alternatively be argued that parents reinforced the positive aspects of university to encourage later enrolment in higher education and to maintain a high standard of academic achievement within the family. This was also supported if siblings had previously achieved highly in education and so the same level of attainment was expected of the younger children (Urdu, 2007). In further comparison, research previously highlighted that society also reinforced the advantages of university and therefore it has yet to become clear whether parents or society are a greater source of influence in an individual's decision to enrol at university.

Research found that children of non-educated parents were less likely to enrol at university (Phinney et al, 2006) finding only 26% of students from uneducated backgrounds enrolled at degree level (Choi et al, 2008). This implied that students were largely influenced by the academic standards that pre-existed within the family. However, this failed to consider the impact of parental expectations on non-educated families, which was later found to be important regardless of educational attainment (Berzin, 2010). Research found a strong supportive network (Melby, Conger, Fang, Wickrama & Conger, 2008; Wycoff, 1996; Ma & Yeh, 2010) in the home environment was a primary source of influence for both males and females (Strand & Winston, 2008) suggesting greater focus should be applied to parental attitudes.

Research findings have indicated that high parental educational attainment encouraged high academic aspirations in children (Dubow, Boxer & Huesmann, 2009) and further reinforced the child's beliefs in their own aspirations which facilitated higher achievement (Choi et al, 2008). For families of uneducated backgrounds, parents encouraged children's aspirations by discussing the difficulties

that they, as parents, had faced for being uneducated (Phinney et al, 2006). These findings were based on the reports of adults, which provided greater emphasis on the parent's direct attitudes towards education.

### **Parental Attitudes**

So far, research has outlined a diverse range of influences involved in university enrolment. In 2008, Van Etten et al examined the differences across social class in the reasons for university enrolment. It was claimed that lower class students enrolled at university to escape the disadvantages of a low economic lifestyle and to make the family proud. Middle class students were believed to enrol at university because of family pressures and the demand for academic success. Both of these theories differed for children of upper class backgrounds who were believed to enrol at university to prove their own independence.

In contrast, later research found some working class parents made it clear to their children that high educational attainment was an expectation to encourage better chances in life (Wolfgang, 2009). These findings criticised the assumption that only middle class children had high academic achievement expected of them. This further suggested that motivations for attending university cannot be clearly categorised by social class as implied by Van Etten et al's findings. When questioning the methodology of Van Etten et al's research it became apparent that the sample size consisted of only 91 participants, and therefore would be difficult to generalise. The use of group interviews could further be criticised, as participants may have negatively influenced the responses of others as the study failed to control for issues of conformity. Therefore, it could not be concluded whether participant responses were a true reflection of attitudes towards university or were influenced by those of the other participants. Wolfgang's research was further supported as it was found that when parents had high academic expectations of their children they were likely to become more actively involved and encourage academic persistence (Perna & Titus, 2005). This suggested that not all parental expectations negatively influenced attitudes towards university enrolment and were not only applicable to the middle class population. Interestingly, further research found that students would comply with the parental expectations to the extent of allowing parents to select which university they attended (Dalgety & Coll, 2004). These findings were further replicated across other European cultures considering all economic backgrounds (Rowan-Kenyon et al, 2008). It was found that American children did not query whether or not they would attend university, but showed significant interest in the university they would attend in the future (Rowan-Kenyon et al, 2008). However, these findings are difficult to generalise, as parenting styles in the UK may differ to those of American parents (Fulton & Turner, 2008).

Research further found that parents, who encouraged their children academically, also encouraged the child's belief in their own ability to achieve (Spera, Wentzel & Matto, 2009). Conflicting research argued that it is in fact the child's level of academic performance that influences the aspirations of parents. It is believed that this then in turn facilitates the child's performance even further (Weinstein, 2002, cited in Spera et al, 2009). However, it is not possible to conclude which factor had the greater source of influence between the aspirations of parent and child, as it is

difficult to determine the direction of cause and effect. Research also suggested that an authoritative parenting style encouraged the student's belief in their own ability, which suggested parenting style may also influence the child's attitudes towards higher education (Fulton & Turner, 2008). However, this study was only conducted in America, and therefore it cannot be assumed the same parenting styles were implemented within different cultures. Therefore, these findings are difficult to generalise to the parenting styles in the UK.

## **School**

It is also important to consider sources of influences that may occur outside of the home environment including peers and learning within an academic surrounding. It was argued that school achievement significantly contributed to the decision to attend university (Bornholt et al, 2004). It was also found that students' academic performance significantly improved when encouragement was received from peers during coursework and other tasks (Choi et al, 2008). Furthermore, when children's classmates had high academic aspirations they were likely to enhance their own aspirations also (Berzin, 2010). This supported that classmates and peers have a positive influence on encouraging university enrolment. Research also found males were significantly influenced academically by their peers, whereas females were more focused on their ability to succeed (Thomas & Webber, 2001). This highlighted that some gender differences did exist between the motivations of males and females to continue in higher education. Using the findings from Thomas and Webber (2001) it is possible to criticise those findings of Berzin (2010), as the ratio of female to males participants was not determined and therefore results may have been influenced by gender being a moderator variable. This suggested that males and females would have been influenced differently, and therefore if the ratio of male to female participants were not equal, the findings cannot be justified.

An alternative perception claimed that the level of encouragement reinforced within the school would also influence an individual's attitudes towards university enrolment (Thomas & Webber, 2001). It was argued that children who performed highly were likely to be placed in higher academic classes where university was more likely to be reinforced (Choi et al, 2008). It was found that schools now reinforce university as the only means for securing a successful career as most occupations require a degree (Wolfgang, 2009), reinforcing the perception that university could secure a strong career. Therefore, academic experiences may also have some level of influence on an individual's decision to enrol at university.

So far, research has failed to acknowledge the role of the individual in his or her own decisions to continue in higher education. It is not possible to assume that individuals have no contribution towards their own academic attainment, as previous research has already identified that when an individual has belief in their own aspirations they are likely to achieve highly (Fulton & Turner, 2008). It is therefore important to consider whether individuals attend university for their own reasons rather than for the expectations of others.

Recent research was consistent in supporting high aspirations to reinforce high achievement (Liu, Cheng, Chen & Wu, 2009). However, these findings were from

eastern cultures where academic success is largely reinforced, and therefore the findings cannot be generalised to western societies where academic success may be promoted differently (Vansteenkiste, Zhou, Lens & Soenens, 2005). Research focusing specifically on the attitudes of 16-18 year olds (Ou & Reynolds, 2008) found those who had high aspirations and were also high achievers, supporting Lui et al's findings (2009; Collier et al, 2003; Ou & Reynolds, 2008). Academic aspirations have also been argued to be the strongest predictor of educational success (Beal & Crockett, 2010). However, the data was collected qualitatively and therefore the same outcomes may not have been replicated if a quantitative measure was used, where a level of significance could be clearly determined.

It was further identified that females often have higher academic aspirations than males (Berzin, 2010; Mello, 2008), which may explain why applicant rates for universities are significantly higher for females than males (UCAS, 2011). In contrast, it could also be suggested that females may possess certain personality qualities that encourage high attainment and aspirations. Research found that students who had a strong sense of responsibility were most academically successful (Wycoff, 1996). It was further found that students who had strong positive self-regard and high levels of self-esteem were more ambitious and therefore had greater aspirations (Judge, Bono, Erez & Locke, 2005). These findings were supported by reliable methods including the self-concordance model and the Core self-esteem model, which had previously supported self-esteem to be linked with high performance and aspirations (cited in Judge et al, 2005).

## **Individual**

Research identified individuals to influence their own decisions of university enrolment (Brooks, 2003). However, little research has acknowledged the considerable diversity of individual motivations in university enrolment. Research found people were specifically influenced by the perception that university was an opportunity to better lifestyle (Collier et al, 2003), obtain higher work positions (Bornholt, Gientzotis & Cooney, 2004), and to improve career prospects (Hockings, Cooke & Bowl, 2007; Joyce & Cowman, 2007). An alternative motivation was found that students enrolled at university to prove their own ability to succeed (Phinney et al, 2006) or to avoid facing the same lifestyle disadvantages as their parents (Wolfgang, 2009) and help protect (Crosnoe et al, 2002) and secure their family financially (Phinney et al, 2006). However, it cannot be assumed that individual motivations were not influenced by external sources such as the home environment or attitudes of others. Nalkur (2009) conducted a study on homeless children and former homeless children. It was found that former homeless children showed attitudes towards education that reflected those of children that are more privileged rather than those from a homeless background. It would be expected that attitudes would resemble those of the homeless children. However as attitudes were different, this suggested that individual motivations were influenced by external sources. In further evaluation, it is not possible to ignore the role of individual differences, which may also have explained the differences in attitudes towards education.



It could therefore be concluded that actually people are influenced primarily by combination of influences rather than specific sources to enrol at university (Strand & Winston, 2008). These findings further supported the earlier claims of Dole and Digman (1967) that motivations for university enrolment were complex and diverse.

### **Main Predictions**

The aim of the current study is to investigate the numerous factors influencing the decision to enrol at university as discussed by the literature reviewed. The hypothesis for the current study suggested motivations for university enrolment would differ across gender, economic background and level of academic achievement. It is predicted that the primary source of influence will be the parental attitudes towards education and the level of encouragement received from parents towards the decision to continue into higher education (Choi et al, 2008).

In addition, the following factors are predicted to be the most predominant sources of influence in an individual's decision to enrol at university;

- Family expectations (Wolfgang, 2009)
- Parental attitudes towards academic achievement (Perna & Titus, 2005).
- Socioeconomic background (Brookes, 2003)

### **Method**

#### **Participants**

Participants were first year undergraduate students at the University of Chester, located in the North West of England. Two major cohorts in over 400 students at the University (Psychology & Social Communications and Counselling) were approached anonymously via an email distributed to their university email accounts. Of those approached only 56 students chose to proceed with their participation via the online questionnaire, which supported Denscombe's (2009) findings that students are likely to provide a low response rate to online questionnaires. Nulty (2008) suggested this was because students are under less pressure to complete questionnaires online as opposed to being asked directly with a written copy. Only first year undergraduate students were recruited for participation in the study as it was thought they would provide the most accurate responses with recently enrolling at the university and therefore would be more honest in disclosing their reasons for attending university.

Both male and female students aged 17 years or more were recruited for the study despite respondents being predominantly female (N=46, 82%, 4% did not indicate their gender). It is thought that the low number of male respondents may have been because the data collection took place at the start of the academic year as noted by Witt, Donnellan and Orlando (2009), who found males were more likely to participate in research later in the academic year in comparison to girls who were more likely to participate at the start of the year. Furthermore it may also have been that more females enrolled at the University of Chester than males in September 2010 (Females N=3502; Males N=1673), and so more females were available. To

correctly establish the level of socio economic status of participants, each participant was required to select the occupation of each parent from a short list provided as well as indicate whether this was full-time (Mother 57%, Father 94%) or part-time employment. Parental occupations were categorised using the 'The National Statistics Socio-economic Classification' (Office for National Statistics, 2010). Participants were also asked to record their highest grade achieved at A level to allow an understanding of participants academic achievement (A=26%, B=47%, C=21%, D=4%, E=2%). Participation in the study was not compulsory, although completion of the questionnaire was implied as informed consent.

## **Measures**

The standardised quantitative revised Student Motivation for Attending University scale (SMAU) (Phinney, Dennis & Osorio, 2006) was used within the current study to measure the primary motivations of students attending university. The original SMAU scale, designed for Canadian students by Cote and Levine (1997), addressed five potential motivational sources for student's university enrolment; career-materialism, personal-intellectual, humanitarian, expectation driven and default. The subscale of career-materialism suggested university enrolment to be about the prosperity of gaining money and success. Personal-intellect categorised motivations through advanced personal learning. The humanitarian subscale accounted for those participants who were motivated by the desire to help other people. Expectation driven motivations suggested people enrolled at university because of family pressures and expectations to do so, and the default subscale suggested people enrolled at university because of limited alternative options. In response to focus group discussions and successful pilot studies conducted by the original authors, the expectation driven subscale was extended in the revised SMAU scale to include an additional two items; 'not letting one's parents down' and 'feeling one owed it to one's parents to do well'. A further three subscales were also added to the revised SMAU scale; Helping the family, which focused on the students desire to help the family financially, encouragement, and proving one-self, which accounted for those individuals who attended university to demonstrate the ability to achieve highly. The revised SMAU scale used within the current study consisted of 32 statements of which participants were required to rate how applicable each statement was to their own motivations of attending university using a likert scale of one (Strongly disagree) to five (Strongly Agree). Participants also required access to the internet and a computer to be able to proceed with the study and completion of the online questionnaire.

## **Procedure**

Once permission was obtained from the module leaders, an email was distributed to over 400 first year undergraduate students from two main cohorts at the university (Psychology and Social Communications and Counselling) via their student email accounts. The email provided an http link, which when selected, displayed an information sheet outlining the aim of the study and what would be required of participants if they wished to proceed to the online questionnaire. The information sheet also gave clear indication to participants that they had the right to withdraw their data from the study at any time prior to submission of the data, at which point they were no longer able to have their data withdrawn from the study because of anonymity. Participants were also made aware that completion of the questionnaire

would imply that the participant's full consent had been given. By publishing the questionnaire online, participants were allowed to complete the questionnaire in their own time to reduce feelings of pressure and demand on participants and to encourage more honest responses to the questions provided. Results were then collated for analysis.

### **Design and Analysis**

The current study used an independent measures design. The dependent variable was the level of influence each of the variables had on the individual's decision to enrol at university. There were three independent variables; gender with two levels; male and female, participants highest A level grade which had five levels; A, B, C, D and E, and socioeconomic status which had three levels; low medium and high. The data accumulated from participants was stored in a password-protected computer system at the University of Chester, and was further analysed using PASW Version 17.0.

A seven-factor solution analysis was conducted to see if the current findings replicated the same primary motivations for students as was found previously with the revised SMAU scale (Phinney, Dennis & Osorio, 2006). In accordance with the previous factor analyses, the extraction method selected was principle components and the Eigen values were set to greater than 1. A further three factor solution analysis was performed to focus specifically on the more predominant sources of motivation found within the current study. The three primary sources of influence for university enrolment were then used to analyse the independent variables using analysis of variance, to determine whether an interaction of main effects occurred amongst the variables.

A Two-way Analysis of Variance (ANOVA) (2x3) was conducted to identify whether a main effect or interaction had occurred between gender and the primary motivational factors for university enrolment. A further two separate three-way ANOVA's were also conducted (3x3). The first of these was to establish whether a main effect or interaction had occurred between socioeconomic status and the reasons for university enrolment identified from the factor analysis. The second was performed to recognise establish whether a main effect or interaction had occurred between participants highest A level grade (categorised A, B, C and below) and student motivational factors for university enrolment. The level of statistical significance was set at  $p < 0.05$  and was maintained throughout analysis.

### **Results**

The data was examined to ascertain the primary sources of influence in the decision to enrol at university. These were determined using a three-factor solution analysis. A seven-factor solution analysis was also performed to allow comparison of primary influences identified by the revised SMAU scale, and those drawn from the current study. The results then examined whether sources of influence in university enrolment differed across gender, socioeconomic background and the levels of

academic achievement. Repeated measures of analysis of variance were used to analyse the data.

Table 1 below is a replication of the seven-factor solution analysis previously used to identify the seven primary influences in the decision to enrol at university. The extraction method used was principle components and the Eigen values were set to greater than 1. In similarity with previous research, only those factor loadings greater than 0.4 were interpreted

**Table 1: Seven-Factor Solution Analysis:**

Item	Factor loadings from seven factor solution analysis						
	Expectations	Prove Worth	Career/ Personal	Encouragment	Help family	Humanitarian	Default
I came to University not to disappoint parents family	<b>.905</b>						
I came to University because there were pressures from my friends for me to do so	<b>.892</b>						
I came to University as I would let my parents family down if I did not succeed	<b>.876</b>						
I came to University as I had no choice	<b>.875</b>						
I came to University to contribute to the improvement of the human condition	<b>.461</b>			-.310	.422		-.460
I came to University to prove to others that I can succeed in higher education		<b>.851</b>					
I came to University to prove wrong those who expected me to fail		<b>.805</b>					
I came to University to prove wrong to those who thought I was not University Material		<b>.783</b>					
I came to University because there was someone who believed I could succeed		<b>.641</b>					.485
I came to University because someone I admired and respected encouraged me to	.351	<b>.522</b>	.473				.309
I came to University to improve my intellectual capacity			<b>.842</b>				
I came to University to develop myself personally			<b>.833</b>				
I came to University as it gives me the opportunity to study and learn			<b>.692</b>				
I came to University to achieve personal success		.414	<b>.665</b>				
I often ask myself why I am in university	.434		<b>-.601</b>				
I do not get anything out of my courses	.300		<b>-.528</b>				
I came to University as I was encouraged to do so by a mentor or role model	.380	.407	<b>.449</b>				.432
I came to University to help people who are less fortunate				<b>-.799</b>			
I came to University as it is expected of me to get a degree	.359			<b>.747</b>			
I came to University as I owe it to my parents family to do well in higher education	.405			<b>.703</b>			
I came to University to contribute to the welfare of others				<b>-.700</b>			
I came to University because there were pressures from my parents family for me to do so	.498			<b>.699</b>			
I came to University to get an education to help my parents family financially				-.341	<b>.772</b>		
I came to University as it would allow me to help my parents family financially					<b>.698</b>		
I came to University to understand the complexities of the modern world	-.328	.331	.365		<b>.627</b>		
I came to University to understand the complexities of life			.466	.409	<b>.488</b>		
I came to University to help me earn more money							<b>.779</b>
I came to University as there are few other options	.565		-.319				<b>.612</b>
I came to University to obtain the finer things in life		.498	.344				<b>.609</b>
I came to University to achieve a position of higher status in society			.510	.408			<b>.514</b>
I came to University as it was better than the alternatives		.405					<b>.441</b>
I came to University to make meaningful changes to the system					.479		<b>-.536</b>
I came to University to get into an interesting and satisfying career				-.317	.318	.400	<b>.477</b>

Note. Factor loadings in bold (> 0.40)

The cumulative variance explained by these seven factors after rotation was 47.83% which was lower than the 57.51% found previously in the research by Phinney et al (2006). The findings from the current factor loadings failed to replicate those of the previous study, identifying 'Expectations' and 'Proving worth' as the primary sources of influence in comparison to the 'career' and 'Humanitarian' factors that were previously found. In the previous study by Phinney et al (2006) the primary loading factor accounted for 24.6% of the cumulative variance, with following factors variance explaining a percentage less than half of the primary factor (10.7%, 5.19 %, 5.06%, 4.42%, 3.95%, & 3.51%). In contrast the current findings identified similarities in the variances of the first four factor loadings with minimal differences separating each of them 13.37%, 12.46%, 12.15%, 11.55%. This suggests that whereas previously one primary source of influence was identified it appears from the current findings that there may be numerous sources of influence.

Table 2 below considered a three-factor solution analysis, to determine whether the differences between the three primary sources of influences were more distinctive than identified from the seven-factor solution. The extraction method used was principle components and the Eigen values were set to greater than 1. Only those factor loadings greater than 0.4 were interpreted.

**Table 2: Three-Factor Solution Analysis:**

Item	Factor loadings from three factor solution analysis		
	Expectations	Individual	Achievement
I came to University as I had no choice	<b>.858</b>		
I came to University as I would let my parents family down if I did not succeed	<b>.854</b>		
I came to University not to disappoint parents family	<b>.807</b>		
I came to University because there were pressures from my parents family for me to do so	<b>.786</b>		
I came to University because there were pressures from my friends for me to do so	<b>.738</b>		
I came to University as I owe it to my parents family to do well in higher education	<b>.723</b>		.318
I came to University as it is expected of me to get a degree	<b>.699</b>		
I came to University as there are few other options	<b>.548</b>		-.315
I came to University to help people who are less fortunate	<b>-.541</b>		
I came to University to contribute to the welfare of others	<b>-.512</b>		
I came to University because there was someone who believed I could succeed		<b>.837</b>	
I came to University to prove to others that I can succeed in higher education		<b>.835</b>	
I came to University to prove wrong those who expected me to fail		<b>.702</b>	
I came to University to obtain the finer things in life		<b>.672</b>	.311
I came to University because someone I admired and respected encouraged me to	.477	<b>.606</b>	.350
I came to University to contribute to the improvement of the human condition		<b>-.589</b>	
I came to University as I was encouraged to do so by a mentor or role model	.523	<b>.562</b>	
I came to University to make meaningful changes to the system	-.374	<b>-.554</b>	
I came to University to prove wrong to those who thought I was not University Material		<b>.551</b>	
I came to University to help me earn more money		<b>.428</b>	
I came to University as it was better than the alternatives	.376	<b>.412</b>	
I came to University as it would allow me to help my parents family financially		-.396	<b>.342</b>
I came to University to develop myself personally	.303		<b>.827</b>
I came to University to improve my intellectual capacity			<b>.784</b>
I came to University to understand the complexities of life			<b>.733</b>
I came to University to understand the complexities of the modern world			<b>.725</b>
I often ask myself why I am in university	.412		<b>-.689</b>
I came to University as it gives me the opportunity to study and learn			<b>.624</b>
I came to University to achieve a position of higher status in society	.365		<b>.615</b>
I came to University to achieve personal success		.405	<b>.506</b>
I do not get anything out of my courses			<b>-.439</b>
I came to University to get an education to help my parents family financially			<b>.354</b>
I came to University to get into an interesting and satisfying career			

Note. Factor loadings in bold (>0.40)

The cumulative variance explained by these three factors after rotation was 45.37%. The expectations factor loading still remained the primary source of influence in university enrolment after the three-factor solution analysis. Questions within the loading related to family pressures, and expectations of others, which explained 17.61% of the cumulative variance. 14.8% of the variance was explained by the 'individual' factor loading which included previous items from the career and humanitarian factor loadings. These questions suggested that individuals were influenced to enrol at university by their own ambitions to succeed. The final factor loading accumulated questions relating to achieving a higher status, obtain an interesting career, and improving intellectual capacity. These suggested individuals were influenced to enrol at university by the desire to develop a better understanding of the world and improve intellectual abilities. Although identified as the weakest of the three factor loadings, there was only a variance difference of 4.65% between expectations and achievement 12.96%, which implied that there were little differences in the influences of the three factors.

The three primary influences of expectations, individual motivations and achievement were then further analysed across gender, socio economic status and highest level of academic attainment using repeated measures analysis of variance to determine any significant differences between the motivations for individuals to enrol at university.

Table 3 below showed the descriptive statistics for sources of influence in university enrolment decisions between males and females. The table displayed the means and standard errors for each variable.

**Table 3: Descriptive Statistics and Means for Gender**

Sources of Influence in University Enrolment	Gender		Mean
	Male	Female	
Expectations	3.34 (0.41)	3.51 (0.72)	3.49 (0.68)
Achievement	2.43 (0.41)	2.66 (0.48)	2.65 (0.48)
Individual	2.65 (0.45)	2.94 (0.57)	2.89 (0.56)
Mean	2.81 (0.15)	3.05 (0.66)	

The repeated measure ANOVA revealed a clear significant main effect for university factors  $F(2,100)=25.06$ ,  $p<0.001$ , with more people choosing expectations (Mean = 3.49, SE= 0.68) as the primary influence for attending university than individual (Mean= 2.89, SE 0.56) or Achievement (Mean= 2.65, SE 0.48). However, despite the influences of expectations being considerably higher than the other two factors,

only a small effect size was found (0.33). In addition no main effect was revealed for gender  $F(1, 50)=2.02$ ,  $p=0.16$  which suggested there to be no significant differences in the motivation of males and females to enrol at university. There was also no main effect found for an interaction between gender and the influences to attend university  $F(2,100)=0.11$ ,  $p=0.90$ . Table 4 below displayed the descriptive statistics for influences in university enrolment decisions across three levels of socioeconomic status. Both the means and standard errors were presented for each variable.

**Table 4: Descriptive Statistics and Means for Socioeconomic Status**

Sources of Influence in University Enrolment	Socio Economic Status			Mean
	First Class Occupation	Second Class Occupation	Third Class Occupation	
Expectations	3.58 (0.55)	3.31 (0.79)	3.68 (0.46)	3.47 (0.66)
Individual	2.62 (0.56)	2.70 (0.47)	2.9 (0.39)	2.68 (0.51)
Achievement	2.92 (0.48)	2.94 (0.67)	2.94 (0.31)	2.91 (0.55)
Mean	3.04 (0.88)	2.97 (0.93)	3.18 (0.22)	

The repeated measures ANOVA revealed a significant main effect for the three factors identified to influence the decision to enrol at university  $F(2,100) =21.84$ ,  $p<0.001$ . It was found that the influence of expectations remained the strongest source of influence across all social classes (Mean= 3.47, SE 0.66), suggesting that regardless of economic background most individuals were influenced to enrol at university through the pressures of others to attend. The individual source of influence was found to have the least influence in university enrolment decisions (Mean= 2.68, SE 0.51) despite being identified as the second most predominant source of influence by the three step solution analysis. However despite these findings, the effect size was still found to be below average (0.44). In contrast no main effect was found for socio economic background  $F(2, 50)=0.40$ ,  $p=0.67$ , or for an interaction between socio economic status and influences in university enrolment decisions  $F(4,100)=1.06$ ,  $p=0.38$ . This suggested that there were no differences in the influences to attend university across different economic backgrounds.

Table 5 below displayed the descriptive statistics for the influences in university enrolment decisions and the highest grade achieved during A Level across three levels. Both the means and standard errors were presented for each variable.

**Table 5: Descriptive Statistics and Means for Highest Grade Achieved:**

Sources of Influence in University Enrolment	Highest grade achieved at A Level			
	A	B	C or below	Mean
Expectations	3.67 (0.59)	3.36 (0.77)	3.59 (0.54)	3.50 (0.67)
Individual	2.85 (0.63)	2.64 (0.45)	2.78 (0.43)	2.73 (0.49)
Achievement	2.80 (0.29)	3.06 (0.65)	2.86 (0.62)	2.94 (0.57)
Mean	3.11 (0.13)	3.02 (0.10)	3.08 (0.13)	

The repeated measures ANOVA revealed a significant main effect for academic achievement  $F(2,84)=34.13$ ,  $p<0.001$ , finding regardless of academic attainment, expectations remained a consistent primary source of influence (Mean=3.50, SE 0.67) above individual (Mean= 2.73, SE 0.49) and achievement (Mean=2.94, SE 0.57). These findings suggested that students were primarily influenced by the decision to enrol at university by the pressures and expectations of other rather than ambitions for own success. Although the expectations factor was found to be significantly greater than the other two factors, only a small effect size was found (0.45). In contrast there was no main effect found between the three factors and the grade achieved at A level  $F(2,42)=0.14$ ,  $p=0.87$ . This suggested that the grades achieved at A level had little effect on the influences in the university enrolment decision. Furthermore no main effect was found for an interaction between influences to attend university and the grade achieved at A level, which supported the previous suggestions  $F(4,84)=1.99$ ,  $p=0.10$ .

## Discussion

The aim of the current study was to explore the numerous factors influencing the decision to enrol at university. The study examined demographic factors of gender, economic background and academic achievement, thought to be the underlying influences in the decision to attend higher education (Berzin, 2010; Dubow et al, 2009; Wolfgang, 2009). Previous literature inferred that children from low income, uneducated backgrounds were less likely to continue in education (Crosnoe, Mistry, & Elder, 2002). With the government currently widening rates of participation and enhancing the availability of funding, it was necessary to investigate whether findings of previous literature would be replicated in today's society.



Results from the current study revealed a significant main effect for the three primary influences in university enrolment; expectations, individual and achievement. Results identified expectations to have the most predominant source of influence suggesting student's enrolled at university through pressures and expectations of others. This supported the hypothesis that parental attitudes towards higher education would be the most predominant source of influence. The second primary source of influence elevated the role of the individual in achieving their ambitions for success. Although found to be the least influential of the three factors, the achievement factor indicated that people were influenced to enrol at university by their desire to achieve higher status and obtain an interesting career. In contrast, no significant main effect was found for gender, socio economic status, academic achievement, or for an interaction between the variables and the three sources of influence. These findings suggested that there were no differences between the motivations to enrol at university between males and females, social economic status or previous academic attainment, which failed to support the main hypothesis of the study.

Although a significant main effect was identified for the three sources of influence, the findings from the current study failed to replicate those previously found by Phinney et al (2006); suggesting motivations for university enrolment had changed since 2006. Phinney et al (2006) found the improvement of career prospects and humanitarian factors to be the primary influences for university enrolment, whereas now within the current sample, it would appear that family expectations were most predominant. A possible explanation may be that societal perceptions of university have changed and that families are now more supportive of children's decision to continue in higher education. This would support the claim that university enrolment has become an expectation of society (Warmington, 2003), and that children may feel pressured into enrolment to avoid disappointing family expectations (Urduan et al, 2007). In similarity the current study did identify the improvement of career prospects to be a primary motivation, which would suggest that some motivational sources have remained consistent between the findings.

It is not possible to conclude that differences within the findings are entirely a result of societal changes. It is important to acknowledge that the Phinney et al (2006) study was only conducted in America, and although both countries are European it cannot be assumed that motivations for university enrolment would be the same. It may have been that motivations were always different between American and British societies, and therefore it would be difficult to draw comparisons between the two studies without replicating the research in an American society. Furthermore Phinney et al's (2006) research focused on the motivations of ethnic minorities and therefore findings may differ between ethnicities and not western societies.

Research previously argued clear differences were apparent between the motivations for university enrolment and socioeconomic background (Van Etten et al, 2008). However limitations within the methodology highlighted the research had failed to control for issues of conformity and so questioned the reliability of its findings. Although some research supported the claims of Van Etten et al (2006) that university was a middle class expectation (Smyth & Hannan, 2007), later research

found university was also reinforced amongst working class families to encourage better life chances for their children (Wolfgang, 2009). This suggested that the enrolment in higher education had become an expectation of children regardless of economic background. The recent introduction of government financial support for students may explain why the current study found expectations to be a consistent primary motivation for university enrolment across socio economic status. An explanation may be that lower class families no longer perceive financial difficulties as an obstacle preventing university enrolment, and therefore encourage their children to continue in education. This would support the literature that suggested people were more likely to attend university when their finances could be funded without any difficulties (Kirby & Gardner, 2010; McDonough, 1994), and further supported the recent increase in the enrolment of students from lower class backgrounds (Higher Education Statistics Agency, 2011). For middle class families, findings from the current study supported literature that found university enrolment still remained an expectation (Pressley et al, 2008). However, the perception that upper class family's enrolled at university to prove their independence was not supported (Van Etten et al, 2008).

Early research in the area of social psychology highlighted how people often conform to the attitudes of the majority, regardless of what they believed was right (Asch, 1956 cited in Tesser, Campbell & Mickler, 1983). This would support Berzin's (2010) findings that individual's enrolled at university because they were influenced by the decisions and aspirations of people around them. From a broader perspective it could be implied that conformity also exists within society, suggesting individuals are influenced by not only their families but also the standards and expectations of an individualistic and westernised culture. This could potentially explain why university is now reinforced as an essential educational step for all children rather than those of advantageous backgrounds (Wolfgang, 2009). Findings from the current study also supported previous literature that suggested people enrolled at university to obtain greater career prospects (Hockings et al, 2007) and to secure their own lifestyle comforts (Brookes, 2003), as the achievement factor was also recognised as a primary source of influence. A limitation of the current study however, was that the methodology did not allow specific motivations to be identified. It may have been that within the current study middle class children enrolled at university to support their families financially and lower class children desired a higher status. However, the current findings only outlined general sources of motivation and so specific motivations and reasons for enrolling at university could not be identified.

Previously no research was found that looked specifically at the motivations of males and females in university enrolment, which emphasised the demand for gender to be considered within the current study. Research previously found males were generally more influenced by their peers in academic attainment, whereas females were more academically driven and so were more independent (Thomas & Webber, 2001). Findings from the current study supported that males were more influenced by the decisions of others, finding expectations to be the main motivational source in university enrolment. An explanation may be that males remain perceived as the main income provider and therefore it is essential to secure high financial employment associated with university attainment (Warmington, 2003). In contrast this perception is out dated as society today perceives males and females as equals

with females also developing successful careers. Therefore, equality within society is more realistically likely to explain why no differences were found between the motivations of males and females in university enrolment (Dolan, 2004; French, & Sheridan, 2009). However, these assumptions failed to explain why enrolment figures remain significantly lower for males than females (UCAS, 2011). It was recently found that males were more likely to conform to masculine norms including decreasing academic effort, which may explain why enrolment figures are lower for males (Kahn, Brett, & Holmes, 2011).

The individual factor was also found to be a predominant influence in university enrolment across gender, which supported the literature that suggested females were driven by their own desire to succeed (Berzin, 2010; Mello, 2008). Similarly, males were also found to rate individual ambitions as a source of motivation, which may infer that males have developed stronger beliefs in their own ambitions to achieve and strive for success. In contrast, it is important to note that the sample from the current study were primarily females and although no differences were determined, it cannot be assumed that the same findings would have been replicated if the gender ratio would have been equal.

Research recognised females to have higher academic aspirations than males (Berzin, 2010), which supported the individual source of influence identified in the current research. Additional research found females from low economic backgrounds to enrol at university to achieve higher status (Hockings et al, 2007), which supported the achievement factor as a primary influence. These findings highlight how motivations in university enrolment may crossover and so it cannot be assumed that people would be influenced entirely by one motivational source to enrol at university. This assumption reduces the complexity of the decision making process, and supported the research that influences in university enrolment were complex and diverse (Dole & Digman, 1967).

The current study found people were motivated to attend university by expectations, regardless of previous academic attainment. This supported the literature that found people were more likely to attend university when they were encouraged and university was reinforced (Dubow et al, 2009). An explanation may be that no differences were found because there has been a general increase in the aspirations of pupils regardless of previous academic attainment. Although most literature findings emphasised the relationship between high aspirations and high achievement (Collier, 2003), it cannot be assumed that low achievers do not believe that they too are able to succeed academically. Research has already acknowledged that high grades are no longer as important in university enrolment and therefore it is not only highly academic pupils that enrol (UCAS, 2011). In further evaluation, the current study only considered the academic attainment of participants at college level and therefore failed to consider whether the reinforcement of university had been consistent from a young age or if engagement levels had decreased. It may have been that expectations were a greater motivation for individuals that encouragement was consistent, whereas other individuals receiving little encouragement may have been more motivated by their own ambitions. A longitudinal design would allow the academic attainment of participants to be recorded over a lifetime. However a

longitudinal design could not account for the variations in sources of influence, and therefore a reliable measure would need to be implemented that could record changes in influential sources.

A limitation of the current research was that it failed to consider an interaction between all variables. The results could not determine whether influences were similar between uneducated middle class females and educated working class males, which ignored that numerous motivations likely to influence an individual's enrolment decision. This was not considered as it was outside the scope for this study. However it would be beneficial for future research to examine whether these similarities between variables existed, as it would provide insight into the complexities of the motivational sources involved in higher education enrolment decisions. An advantage on the other hand was the current study replicated the use of a reliable measure that had previously identified influential sources in the university enrolment decision. On a further note the questions considered numerous sources of influence to allow accuracy and variability in participant's responses. In further evaluation it was important to acknowledge that the results from the current study were based on the responses of only 56 first year students collected from one university in the UK and therefore findings are difficult to generalise to the entire population. If the current study were to be replicated for future research it would be more beneficial to use a qualitative methodology as well as quantitative, to allow a triangulation of methodologies. By conducting interviews rather than questionnaires, participants are given the freedom to provide detailed responses which would allow a more holistic perception in understanding the challenges individual's face in making the decision to enrol at university. It would also be interesting to investigate whether influences change longitudinally or if the same sources of influences are consistent over time.

Universities could use the findings from the current study to redirect the focus of advertisements when encouraging potential students to enrol at university. As findings have identified expectations and individual as the two primary sources of influences it would be beneficial for higher education organisations to appeal to both families and the aspirations of students as individuals, as it was found that most children are likely to comply if university is an expectation. Furthermore schools should also reinforce aspirations in their pupils at all ages. By targeting aspirations early and discussing with children what they would like to do and encourage the children to strive for success, this would reduce children feeling pressured and further prepare them for the demands of higher education.

Findings from the current study have concluded that finances are no longer considered an obstacle preventing the enrolment in higher education. However with the current government intentions to raise student tuition fees (BBC News, 2010), there should be concern that student's from non-advantageous backgrounds may be re-faced with financial difficulties preventing university enrolment. As a result it could be suggested that university would yet again become an option for only those children of high economic backgrounds and the government's attempts to widen rates of participation would be reversed.

## Conclusion

Findings from the current research revealed no differences in the sources of motivations across gender, economic background and previous academic attainment. Although only a small sample size was used the research has nonetheless provided insight into the changing sources of influences in individual's decision for university enrolment. The role of the family has been clearly identified as a primary influential source in the continuation of higher education. It would be beneficial for higher education organisations to appeal to both parents and students to encourage further enrolment as most children are likely to comply if university is an expectation.

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