# Cross-cultural difference in academic motivation, academic self-esteem, and upward social mobility within a student cohort

C. Mugabe, P. Brug & J.C. Catling

The relationship between academic motivation, support structures, self-esteem, and social mobility was assessed between three culturally distinct Higher Education student cohorts. Two-hundred-and-sixty-seven students took part in the study: 64 American undergraduates; 100 British undergraduates; and 103 Ugandan undergraduates. Using a number of appropriate, validated questionnaires, intergenerational upward social mobility was found to be academically motivating, both intrinsically and extrinsically. Intergenerational upward mobility was significantly positively correlated with academic self-esteem. Cultural differences were found primarily in intrinsic, extrinsic and intergenerational upward mobility scores, with Ugandan students endorsing these variables significantly more than the American students, and American students endorsing them significantly more than the British students. These findings are discussed in relation to the potential impact on student social mobility both here and abroad.

**Keywords:** Cross-cultural differences; self-esteem; upward social mobility.

### Introduction

ORACE MANN (1848, as cited in Education and Social Inequity, n.d.) is quoted as having said that 'education beyond all other devices of human origin is the great equaliser of the conditions of man, the balance-wheel of the social machinery.' The quote reflects the belief often shared in Western society that education will allow individuals to succeed and change their so-called status as a result of the social mobility that having an education can afford individuals. As such this opportunity is seen as a key motivator for people to stay in school and to go onto higher educational opportunities. While the reward of (upward) social mobility can be seen as more of an extrinsic motivator, it is an important factor in helping to retain students and a source of encouragement from family and friends. In addition, the drive to enter higher education is rooted not solely in the rewards of social (upward) mobility but in the opportunities this mobility may provide in helping one's family or community (Holland & Yousofi, 2014; Taylor & Krahn, 2013). As such the belief in upward social mobility can be viewed cross-culturally, even if the rationale behind it differs from culture to culture. Whether the pursuit of higher education is a means to an end (social mobility) or a means to itself (fulfilling the desire to learn), the motivation behind the pursuit is fundamental for most individuals in order to succeed and complete their higher educational studies.

With regard to higher education, the motivation is often referred to specifically as academic motivation. Based on Hollembeak and Amorose (2005), academic motivation can be defined as the strength and direction of effort towards educational outcomes and is of crucial importance to (academic) performance (Areepattamannil & Freeman 2011; Ratelle et al., 2007). It is possible to analyse motivation by using the self-determination theory (SDT) as per Hollembeak and Amorose's (2005) and Areepattamannil

(2012). Using the SDT, the spectrum of self-determined motivation ranges from intrinsic, where the drive behind involvement is the result of personal satisfaction or internal gratification (Smith, Cumming & Smoll, 2008; Deci & Ryan, 2002) to extrinsic, where the drive behind the involvement is for instrumental reasons, material gains and/or external rewards (Deci & Ryan, 2000). According to Vallerand and Ratelle (2002), intrinsic motivation was considered to be one-dimensional in nature but has since been thought to comprise three facets: motivation to know, to accomplish things, and to experience stimulation (Vallerand et al., 1992). Findings in Western, individualistic cultures (e.g. the US) show intrinsically motivated students do better and have a greater ability to persevere in academia (Ratelle et al., 2007).

With regard to external motivation, it is also not unidimensional. Extrinsically motivation can be defined along four facets: external regulation, introjected regulation, identified regulation, and integrated regulation (Deci & Ryan 2002). Research, primarily of adolescent populations (ages 13–18), has shown that students in non-Western cultures (e.g. India) have higher levels of extrinsic motivation (Areepattamannil, 2012; Areepattamannil, Freeman & Klinger, 2011). Furthermore, Areepattamannil and Freeman (2008) note that extrinsic motivation-external regulation is associated with better academic performance in older adolescents (16 to 19-years-old) whose families came from India. Here, as implied earlier, the need to provide for family and to take advantage of possible family sacrifices serves as a motivation to engage in education as a means to an end. Findings also demonstrate possible cross-cultural differences in the types of motivations that are effective.

Overall academic motivation explains why some students persevere with academic tasks despite the challenges they face and devote their energies to education rather than other activities (Long at el., 2011). The reasons for academic motivation have recently been the subject of thorough investigation. Researchers have concluded that academic motivation is meaningfully correlated with fostering self-worth among students (Areepattamannil & Freeman, 2008), improving school attendance (Wood, Kurtz-Costes & Copping, 2011), promoting desirable behaviours and predicting academic success (Kusurkur et al., 2012) as well as persistence in education (Mellard et al., 2013).

Despite some challenges in studying academic motivation, a pool of recent research supports diverse theoretical perspectives and identifies a range of variables as capable of eliciting and guiding learners' educational efforts and ambitions. These variables are wide ranging and include rewards (Ku, Dittmar & Banerjee, 2012), parents' educational expectations (Tynkkyan, Tolvanen & Salmela-Aro, 2012), autonomy (Wigfield, Cambria & Eccles, 2012), teacher-student positive relationships (Eccles & Roeser, 2009), personalities and teaching strategies (Donche et al., 2013; Dominguez, et al., 2013), which are all wellestablished academic motivators.

Social mobility can also be seen as an academic motivator. Extrinsically, social mobility can provide individuals with material rewards, as people with higher degrees tend to have higher incomes (e.g. Andersson, Nabavi & Wilhelmsson, 2014; Shaw, 2013) and better overall quality of life (Holland & Yousofi, 2014). Intergenerational upward social mobility exists in various cultures (Deary et al., 2005; Johnson et al., 2010), and is of great concern because it results in movers gaining access to a range of benefits including better health conditions, educational opportunities and material possessions. A range of longitudinal studies suggest that education, cognitive ability, childhood social backgrounds and diligence are worldwide predictors of intergenerational upward mobility (Sorjonen et al., 2012; Stumm et al., 2010).

Although education is found to facilitate intergenerational upward social mobility

(Byrom & Lightfood, 2013), there is indication that social class hampers equality of educational opportunity in some societies (Cotes, 2011; Kraus et al., 2012). Whilst upward mobility introduces movers to better cultural capital and social capital, the process of adopting a new social class is challenging because it involves class-based rejection sensitivity and discrimination, given the negative stereotypes that are often attached to movers' original social classes (Rhenschmidt & Mendoza-Denton, 2014). However, academically motivated students from underprivileged families within meritocratic societies or societies where parents are able to pay for university education have the opportunity to achieve upward mobility. This is supported by universities themselves, which in contemporary education systems desire to enrol students from more deprived backgrounds (Hart et al., 2004; Housel & Harvey, 2009).

Recent studies have found that education facilitates intergenerational upward mobility in Uganda (Bailey, Cloete & Pillay, 2012), Britain (Byrom & Lightfoot, 2013) and the US (Shane & Heckhausen, 2013). As such government policies in the US, Britain and Uganda promote widening participation in universities (Hart et al., 2004; Housel & Harvey, 2009; Obwona & Ssewanyana, 2007). Byrom and Lightfoot conducted a qualitative study of university students from working-class backgrounds to examine their experience of academic failure and how failure impacted on their ability to gain intergenerational upward mobility. They found that students desire to attain jobs with better status than those of their parents, and having this desire is widely perceived as equating to social mobility. It follows from these findings that students recognise education as a route to achieving improved lifestyle and eventually intergenerational upward mobility.

Shane and Heckhausen (2013) used a cross-cultural design to investigate the popular meritocratic ideology of Americans. Americans, especially American men

often believe they have a moral obligation to use the resources available to pursue a higher Socioeconomic Status (SES) than that of their parents. After a comparison of mean scores of meritocratic-oriented and luck-oriented casual conceptions about SES, Shane and Heckhausen concluded that American undergraduates significantly endorse a better view of personal SES than their parents. A correlation and multiple regression analysis indicated that students' higher expected SES was strongly predicted by students' endorsement of meritocratic-oriented beliefs. Sanchez et al. (2011) examined qualitative data from American male postgraduates and drew similar conclusions with regards to meritocratic-oriented beliefs Although the American dream might pose psychological difficulties (to males), Shane and Heckhausen's (2013) findings indicate that students strongly believe in intergenerational upward mobility and this elicits goal engagement behaviour fostering pathways that predict future SES achievement. It can be seen from this that the American dream can be a source of academic motivation. However, the research design they used does not provide insight into Americans' endorsement of meritocratic-oriented beliefs. Although Byrom and Lightfoot (2013) and Shane and Heckhausen (2013) found that British and American undergraduates believe in intergenerational upward mobility, they did not test whether such a belief is academically motivating.

The current study used a cross-cultural survey design. The focus of the survey was to assess the relationship between academic motivation and belief in intergenerational upward social mobility among first year university students in America, Britain and Uganda. The study also sought to determine if there were cross-cultural differences in the nature of motivations, as noted in some previous research. Thereby, the current study extends earlier research by comparing three different higher educational cultures as it seeks to determine

whether aspirations predict academic motivation among university students.

Two research questions were assessed:

- 1. Is there a relationship between believing in intergenerational upward social mobility intrinsically and extrinsically and first year undergraduates' motivation to better their educational outcomes?
- 2. Are there any cultural differences in students' intrinsic scores, extrinsic scores and in their endorsement of intergenerational upward mobility?

Although no research has solely tested whether the endorsement of intergenerational upward mobility predicts academic motivation, a number of researchers in Britain (Byrom & Lightfoot, 2013) and the US (Shane & Heckhausen, 2013; Rheinschmidt & Mendoza-Denton, 2014) have found indications that believing in intergenerational upward mobility elicits and guides students' education efforts and ambitions. Others found education to be a major predictor of intergenerational upward mobility (Sorjonen et al., 2012; Stumm et al., 2010). Therefore, it was postulated that a belief in intergenerational upward mobility will academically motivate students both intrinsically and extrinsically.

Significant differences between American, British and Ugandan students in their endorsement of intergenerational upward mobility were predicted. Evidence suggests that Americans strongly endorse meritocratic beliefs (Shane & Heckhausen, 2013) and Ugandan students are highly likely to appreciate intergenerational upward mobility because they are in a financially competitive environment of privately run universities (Obwona & Ssewanyana, 2007). Above all, the absence of a state pension in Uganda leaves students with the responsibility of caring for their parents in old age (Kasedde et al., 2014). The reciprocal nature of parent-child care in Uganda elicits the

desire in students to be in a better socioeconomic status than their parents so that they can be financially secure to provide care to their parents.

Significant differences among American, British and Ugandan students' mean scores in both intrinsic and extrinsic academic motivation were predicted based on Vecchione et al.'s (2014) findings. Countries with more male participants were expected to be highly extrinsic while countries with more female participants to be highly intrinsic.

### Method

### Design

A survey design was used to measure key variables including endorsement of intergeneration upward social mobility, academic self-esteem, amotivation, intrinsic and extrinsic academic motivation.

### **Participants**

The general sample was 278 students recruited from several universities in the three nations. American students primarily came from the University of North Carolina, Wilmington, however, invitations to participate were also sent out to two universities in California. In Britain, students from St. Mary's University, Kingston University and the University of Greenwich took part and in Uganda students were recruited from Makerere University and Kampala University. Data from 11 participants was excluded because it did not satisfy the inclusionary criteria. Nine were not citizens of the participating countries and two were second year students. The final sample was 267 first year students of which 142 were men, age ranged between 17 and 34 years (*M*=20.04, *SD*=3.18) and 125 were women, age ranged between 17 and 31 years (M=19.29, SD=2.47). Table 1 shows age of participants by nationality and gender. For ethnic breakdown see Appendix A.

British American Ugandan Gender Ν Μ SD Ν M SD Ν Μ SD Males 3.24 30 18.33 2.25 34 19.70 3.15 78 20.86 **Females** 34 18.21 0.54 66 19.40 2.53 25 20.60 3.21 Overall 64 18.27 1.58 100 19.46 2.74 103 20.80 3.22

Table 1: Participants' descriptive statistics by nationality and gender

Note. N=Number, M=Mean and SD=Standard Deviation

#### Measures

A seven-scale questionnaire (appendix B) with seven demographic questions relevant to each participating country was used. The scales ranked from one to seven, 1=strongly disagree and 7=strongly agree. The original Academic Motivation Scale by Vallerand et al., (1992) was used to measure intrinsic, extrinsic and amotivation, and the word 'college' was changed to 'university' in some statements.

### Intrinsic academic motivation Scale

The intrinsic scale consisted of sixteen items drawing on self-determination theory (Deci & Ryan, 2000). This scale assessed whether students engage in activities because the activities engender learning. One example of a statement to which participates responded by indicating their level of agreement as to why they go to university is 'Because I experience pleasure and satisfaction while learning new things.' Cronbach's alpha value was .906.

### Extrinsic academic motivation scale

This scale consisted of eight items drawing on self-determination theory (Deci & Ryan, 2000). This scale assessed whether students' ability to learn is influenced by rewards or consequences for being engaged. An example of a statement to which participates responded by indicating their level of agreement as to why they go to university is 'In order to obtain a more prestigious job later on.' Cronbach's alpha value was .875.

### Amotivation scale

This was a four-item scale aimed to measure the lack of academic motivation. One example of a statement to which participants responded by indicating their level of agreement as to whether they are less interested in going to university is 'I don't know; I can't understand what I am doing in university.' The lower the score the more a participant is academically motivated. Cronbach's alpha value was .939.

### Intergenerational upward social mobility scale

The intergenerational upward social mobility scale was developed during the current study by Mugabe, Brug and Catling. The scale had seventeen items of which three were reversescored. It encompassed statements featuring education, social class, skills and social capital. Participants chose their level of agreement with each statement. An example of a social class-based statement is 'Moving to an upper social class is possible for anyone who is willing to study hard enough.' Participants also faced skills' related statements such as 'I read hard enough to have a better command of language than my parents.' And social capital related statements including 'I study hard at university to gain access to people of a better social network than my parents.' Factor analysis showed the scale statistically sound. Kaiser Meyer-Olkin (KMO) and Bartlett's test of sphericity was computed to evaluate the observed factor solution and in accordance with the test requirements the KMO value produced was 0.948, which was well above the 0.60 threshold. In addition, the Cronbach's alpha value for the scale was .939.

### Academic self-esteem scale

This was a seven-item scale derived from Harter's (1989) self-concept scale. Three of the items were reverse-scored. The scale assesses students' perception of their own learning ability. Participants ranked perception of their learning via statements including 'I feel I am very good at doing my course-work.' Cronbach's alpha value was .848.

### **Procedure**

In the US and Britain, participants were invited via email with a link to the online survey. In Britain, the survey link was passed on to all first year students at participating institutions. Representatives in Uganda invited a range of students at Makerere University and Kampala University to participate by completing a paper version of the survey. In Uganda, students were given the paper version of the invitation letter and the informed consent forms. All students gave fully informed consent, and at the end participants were given debriefing forms.

### Results

First, the collated data was checked to see whether it satisfied parametric assumptions. The data violated both homogeneity and normal distribution assumptions. The data was positively and negatively skewed on different scales due to outliers, low and extreme scores. Therefore, parametric analysis was not conducted on the data set (see Table 2 for variables' descriptive statistics).

A non-parametric test of correlation, Spearman's *rs*, was used to assess research question one which stated that intergenerational upward mobility, and aspirations are academically motivating. Intergenerational upward mobility was significantly positively correlated with intrinsic motivation (*rs*=.526, *N*=267, *p*<.001). Figure 1 shows participants' average scores reasonably distributed in a linear relationship. Hence, believing in intergenerational upward mobility is intrinsically academically motivating.

Intergenerational upward mobility was significantly positively correlated with extrinsic motivation (rs=.361, N=267, p<.001). Figure 2 shows participants' mean scores scattered but in a linear relationship. Thus, believing in intergenerational upward mobility is extrinsically academically motivating.

A non-parametric Kruskal-Wallis test was conducted to assess whether there are statistically significant cultural variations in variable scores including intrinsic, extrinsic and mobility mean scores. As predicted, significant cultural differences emerged on intrinsic  $X^2(2, N=267)=64.530, p<.001,$  extrinsic  $X^2(2, N=267)=41.842, p<.001$  and intergenerational mobility  $X^2(2, N=267)=184.404, p<.001$  scores. The Mann-Whitney test was conducted to assess where the differences lie at a critical p value= $.05\div3=.0167$ . Table 3 presents Mann-Whitney group comparisons with variables' mean ranks or frequencies of high scores per scale.

Table 3 shows that median differences between countries on intrinsic motivation are all statistically significant, p<.001. Ugandan students significantly embrace intrinsic academic motivation higher than American students who scored significantly higher than the British students Median differences on extrinsic academic scale between American and British students and Ugandan and British students are statistically significant, p < .001, while the difference between Ugandan and American students is non-significant, p>.05. Ugandan and American students score significantly higher on extrinsic motivation than the British students.

Median differences on intergenerational upward mobility score between American and British students, Ugandan and American students, and Ugandan and British students are significantly different, p<.001. As predicted, Ugandan students endorse mobility beliefs significantly higher than American students who score significantly higher than the British students.

America Overall Britian Uganda N = 267N = 64N = 103N = 100Scales SD Μ Μ SD Μ SD M SD Intrinsic AM 0.58 6.09 6.10 0.34 5.76 0.70 6.41 0.33 Extrinsic AM 6.54 0.63 6.70 0.34 6.22 0.87 6.74 0.31

0.26

0.33

0.08

4.86

5.45

1.36

0.90

1.14

0.87

6.49

6.04

1.03

0.24

0.75

0.15

5.27

6.14

1.02

Table 2: Study variables' means and standard deviations for the overall and by country

Note: AM=Academic Motivation, UM=Upward Mobility.

5.59

5.84

1.15

0.94

0.90

0.57

Intergenerational UM

Self-esteem

Amotivation

Table 3: Mann-Whitney countries comparison of study variables' median to assess the direction of the differences

		Comparing Compar					Comparing			
Scales	USA	UK	p	Uga	USA	p	Uga	UK	р	
Intrinsic AM	6.1	5.8	***	6.4	6.1	***	6.4	5.8	***	
Extrinsic AM	6.7	6.2	***	6.7	6.7	ns	6.7	6.2	***	
Intergenerational UM	5.3	4.9	*	6.5	5.3	***	6.5	4.9	***	
Self-esteem	6.1	5.5	***	6.2	6.1	ns	6.2	5.5	***	
Amotivation	1.0	1.4	**	1.0	1.0	ns	1.0	1.4	***	

Note: \*p=.012, \*\*\*p=.002, \*\*\*\*p<.001, ns=not significant, USA=United States of America, UK=United Kingdom & Uga=Uganda.

The British students scored significantly higher than American and Ugandan students on the amotivation scale p<.001. This suggests that the British students are significantly less academically motivated than American and Ugandan students whose mean rank difference is statistically non-significant.

Table 3 shows that Ugandan students scored significantly higher than American and the British students on two and five scales respectively. There were non-significant differences between Ugandan and American students on three scales and between American and the British students on two scales.

### Discussion

The primary aim of the current study was to assess whether believing in intergenerational upward social mobility is academically motivating. As predicted, this belief is both intrinsically and extrinsically motivating, hence, upward mobility beliefs positively correlates with self-determination theory (Deci & Ryan, 2008). The findings support recent studies in Britain (Byrom & Lightfoot, 2013) and America (Shane & Heckhausen, 2013), which to some extent indicated that believing in intergenerational upward mobility elicits and guides university students' educational efforts and ambitions because students expect to attain significantly better socioeconomic status (SES) than the SES of their parents.

Also cultural differences in intrinsic, extrinsic and intergenerational upward mobility scores were investigated. As predicted, the statistical analysis demonstrated that Ugandans endorsed those variables significantly more than Americans and Americans endorsed them significantly more than the British.

Figure 1: Participants' average scores across cultures on intrinsic academic motivation scale plotted against their average scores on intergenerational upward social mobility scale

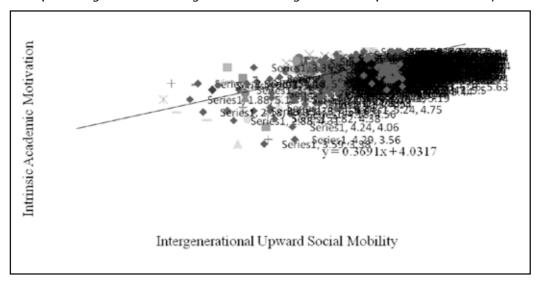
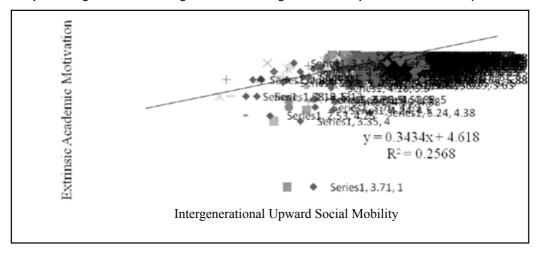


Figure 2: Participants' average scores across cultures on extrinsic academic motivation scale plotted against their average scores on intergenerational upward social mobility scale



# Relationship between upward social mobility and other variables

Intergenerational upward mobility was significantly positively correlated with academic self-esteem. This suggests that mobility beliefs promote academic confidence and positively correlate with expectancy value theory (Wigfield, 1994) and social motivation theory (Furrer & Skinner, 2003). Therefore, this newfound academic motivation vari-

able should persuade university lecturers to encourage students to optimistically engage in their learning by associating their inner aspirations with their belief in upward mobility. This in return will gradually reduce the widespread class-based discriminations in universities (Rubin, 2012), hence leading to an improved perception of underprivileged students by the privileged. Furthermore, within and between social classes upward mobility will be facilitated

as well as governments' desire to promote widening participation programmes. However, Platt (2011) argues that success in university may not be the passport to prosperity and higher social class because the complex experiences of disadvantaged students are usually overlooked. Systematic discrimination in the US (Sanchez et al., 2011), Britain (Byrom & Lightfoot, 2013) and Uganda (Asiimwe, Agaba & Nampewo, 2012) are vehicles for perpetuating poverty and impeding upward mobility among disadvantaged students. This suggests that underprivileged groups may struggle to position themselves academically and socially, especially in cultures where resources are unequally distributed.

### **Cultural differences**

Ugandan and American students significantly endorse intrinsic and extrinsic motivation more than the British students. However. Ugandan students do not significantly positively associate intrinsic and extrinsic academic motivation like the American and the British students, whose data shows significant positive correlations between those key variables. These findings support Trumbull and Rothstein-Fisch (2011) whose study highlights significant cultural differences in achievement motivation. Despite the differences, the positive correlation between intrinsic and extrinsic motivation across cultures may suggest that intrinsic and extrinsic facets of academic motivation are not opposite but along a continuum, and that success in university education requires self-commitment and external compliance.

Statistically significant cultural differences in participants' endorsement of intrinsic and extrinsic motivation scores were predicted based on Vecchione et al.'s (2014) findings. It was predicted that countries with more female participants will endorsed intrinsic beliefs significantly more than countries with more males, which were predicted to endorse extrinsic beliefs significantly more. However, the hypothesis was rejected. Uganda with more males (*N*=78) than females (*N*=25) significantly

endorsed intrinsic motivation more highly than Britain with more females (N=66) than males (N=34). And America with fewer males (N=30) significantly endorsed extrinsic motivation higher than Britain with more males (N=34) than America (see Table 1). These results suggest that Vecchione et al.'s findings on gender difference in intrinsic and extrinsic motivation are inconclusive.

In respect to the relationship between cultural differences in mobility beliefs, as was predicted, Ugandan students endorsed mobility beliefs significantly higher than the American and the British students. American students endorsed mobility beliefs significantly higher than the British students. The explanation for the American students high score is that American students habitually endorse meritocratic beliefs (Shane & Heckhausen, 2013) and Kraus and Tan (2015) found that American students especially the underprivileged enormously overestimate their social mobility beliefs.

As predicted, Uganda's financially competitive environment of privately run universities and Ugandan students' desire to provide care for their elderly parents may well move them to endorse upward mobility beliefs significantly higher than other cultures. Other factors that contributed to Ugandans' exceptional performance on the mobility scale are related to age and gender. The Ugandan sample was older and with more mature students (M=20.80, SD=3.22) than in the US (M=18.27, SD=1.58) and Britain (M=19.46, SD=2.74). Older students are likely to appreciate upward social mobility because of its extrinsic nature which is more relevant to them than to younger students (Lepper, Corpus & Iyengar, 2005). This is reinforced by Kraus and Tan (2015) who found that the self-relevance of social class mobility increases overestimation of class mobility beliefs for individuals and groups.

There is no doubt that gender contributed to the Ugandans' high performance on upward mobility scale. There were more males (N=78) than females (N=25) in the Uganda sample. In many cultures including America (Sanchez et al., 2011) and Uganda (Otiso,

2006), men's sense of masculinity is tied to their ability to attain intergenerational upward social mobility, and many associate successes with 'being a man'. Otiso (2006) indicates that Ugandans heap praise on sons who attain better SES than that of their parents. These attitudes influenced Ugandan males' performance, leading to heightened scores on the mobility scale; however they may also promote negative perception of daughters in families.

In conclusion, the main findings from the current study are that intergenerational upward social mobility is academically motivating, and that this belief is both

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Areepattamannil, S., Freeman, J.G. & Klinger, D.A. (2011). Intrinsic motivation, extrinsic motivation, and academic achievement among Indian adolescents in Canada and India. Social *Psychology of Education*, 14, 427–439. doi:10.1007/s11218-011-9155-1 intrinsically and extrinsically motivating. Intergenerational upward mobility is significantly positively correlated with academic self-esteem. Cultural differences are found in intrinsic, extrinsic and intergenerational upward mobility scores, with Ugandan students endorsing those variables significantly more than the American students and American students endorsed them significantly more than the British students. These findings have obvious direct implications for the support of social mobility within the H.E. sector both here in Britain and overseas.

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## Appendix A

Table 1A: Participant demographic makeup by ethnicity in the America sample

Ethnicity	Number	Mean	Standard Percentage	Deviation
White (Non-Hispanic)	39	18.36	1.98	60.94%
African American	10	18.10	0.57	15.62%
Asian American	11	18.09	0.54	17.19%
Hispanic	04	18.25	0.50	06.25%
Total	64			100.00%

Table 1B: Participant demographic makeup by ethnicity in the UK sample

Ethnicity	Number	Mean	Standard Deviation	Percentage
White British	65	19.58	2.89	65.00%
Black Caribbean	09	19.78	2.22	09.00%
Black African	04	18.75	0.96	04.00%
Mixed Race	12	19.83	3.59	12.00%
Indian	08	18.25	0.46	08.00%
Chinese	02	18.00	1.41	02.00%
Total	100			100.00%

Table 1C: Participant demographic makeup by ethnicity in the Uganda sample

Tribes	Number	Mean	Standard Deviation	Percentage
Banyankole	32	20.56	3.15	31.07%
Baganda	52	21.28	3.69	50.49%
Basoga	15	19.73	1.10	14.56%
Batoro	04	20.25	1.25	03.88%
Total	103			100.00

# Appendix B

This section aims to find your reasons for going to university: Please read the following statements and indicate your degree of agreement or disagreement by circling the number that corresponds with your opinion. Please be as honest as you can. Please respond to each statement by using the following code: 1=strongly disagree, 2=moderately disagree, 3=slightly disagree, 4=neutral, 5=slightly agree, 6=moderately agree and 7=strongly agree.

### WHY DO YOU GO TO UNIVERSITY?

1. Because I experience pleasure and satisfaction while learning new things.	1	2	3	4	5	6	7
2. For the intense feelings I experience when I am communicating my own ideas to others.	1	2	3	4	5	6	7
3. For the pleasure I experience while surpassing myself in my studies.	1	2	3	4	5	6	7
4. To prove to myself that I am capable of completing my university degree.	1	2	3	4	5	6	7
5. For the pleasure I experience when I discover new things never seen before.	1	2	3	4	5	6	7
6. For the pleasure that I experience when I read interesting authors.	1	2	3	4	5	6	7
7. For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments.	1	2	3	4	5	6	7
8. Because of the fact that when I succeed in university I feel important.	1	2	3	4	5	6	7
9. For the pleasure that I experience in broadening my knowledge about subjects which appeal to me.	1	2	3	4	5	6	7
10. For the pleasure that I experience when I feel completely absorbed by what certain authors have written.	1	2	3	4	5	6	7
11. For the satisfaction I feel when I am in the process of accomplishing difficult academic activities.	1	2	3	4	5	6	7
12. To show myself that I am an intelligent person.	1	2	3	4	5	6	7
13. Because my studies allow me to continue to learn about many things that interest me.	1	2	3	4	5	6	7
14. For the 'high' feeling that I experience while reading about various interesting subjects.	1	2	3	4	5	6	7
15. Because university allows me to experience a personal satisfaction in my quest for excellence in my studies.	1	2	3	4	5	6	7
16. Because I want to show myself that I can succeed in my studies.	1	2	3	4	5	6	7

This section also aims to find your other reasons for going to university: Please read the following statements and indicate your degree of agreement or disagreement by circling the number that corresponds with your opinion. Please be as honest as you can. Please respond to each statement by using the following code: 1=strongly disagree, 2=moderately disagree, 3=slightly disagree, 4=neutral, 5=slightly agree, 6=moderately agree and 7=strongly agree.

### WHY DO YOU GO TO UNIVERSITY?

1.	Because with only with a high school or A level certificate, I would not find a high-paying job later on.	1	2	3	4	5	6	7
2.	Because I think that university education will help me better prepare for the career I have chosen.	1	2	3	4	5	6	7
3.	In order to obtain a more prestigious job later on.	1	2	3	4	5	6	7
4.	Because eventually it will enable me to enter the job market in a field that I like.	1	2	3	4	5	6	7
5.	Because I want to have 'the good life' later on.	1	2	3	4	5	6	7
6.	In order to have a better salary later on.	1	2	3	4	5	6	7
7.	Because this will help me make a better choice regarding my career orientation.	1	2	3	4	5	6	7
8.	Because I believe that a few additional years of education will improve my competence as a worker.	1	2	3	4	5	6	7

This section aims to find out whether your interest in going to university is reducing: Please read the following statements and indicate your degree of agreement or disagreement by circling the number that corresponds with your opinion. Please be as honest as you can. Please respond to each statement by using the following code: 1=strongly disagree, 2=moderately disagree, 3=slightly disagree, 4=neutral, 5=slightly agree, 6=moderately agree and 7=strongly agree.

### WHY DO YOU GO TO UNIVERSITY?

Honestly, I don't know; I really feel that I am wasting my time in university.	1	2	3	4	5	6	7
2. I can't see why I go to university and frankly, I couldn't care less.	1	2	3	4	5	6	7
3. I once had good reasons for going to university; however, now I wonder whether I should continue.	1	2	3	4	5	6	7
4. I don't know; I can't understand what I am doing in university.	1	2	3	4	5	6	7

This section aims to show how you feel about each statement: Please read the following statements and indicate your degree of agreement or disagreement by circling the number that corresponds with your opinion. Please be as honest as you can. Please respond to each statement by using the following code: 1=strongly disagree, 2=moderately disagree, 3=slightly disagree, 4=neutral, 5=slightly agree, 6=moderately agree and 7=strongly agree.

### HOW DO YOU FEEL ABOUT EACH OF THE FOLLOWWING?

Moving to an upper social class is possible for anyone who is willing to study hard enough.	1	2	3	4	5	6	7
2. I know many people who are not educated but in better social classes than their parents.	1	2	3	4	5	6	7
3. I study hard at university to get a job of a better status than the jobs of my parents.	1	2	3	4	5	6	7
4. I study hard at university to become a more recognised person in my society than my parents.	1	2	3	4	5	6	7
5. I study hard enough at university to get a better social class than my parents.	1	2	3	4	5	6	7
6. I study hard at university to gain access to people of a better social network than my parents	1	2	3	4	5	6	7
7. I study hard to get better a degree than that of my mother and my father.	1	2	3	4	5	6	7
8. Getting education does not open up opportunity for me to raise my social status.	1	2	3	4	5	6	7
9. I study hard at school to be financially secured than my parents.	1	2	3	4	5	6	7
10. I study hard at university to become a more confident speaker than my parents.	1	2	3	4	5	6	7
11. Studying hard is a route to a social status better than my parents'.	1	2	3	4	5	6	7
12. I read hard enough to have a better command of language than my parents.	1	2	3	4	5	6	7
13. I do not think studying hard will help me to get a job of better status than that of my parents.	1	2	3	4	5	6	7
14. I study hard at school to become better skilled than my parents.	1	2	3	4	5	6	7
15. Studying hard will never help me to be better skilled than my parents.	1	2	3	4	5	6	7
16. Students who take studying seriously can easily move up from one social status to another.	1	2	3	4	5	6	7
17. Education will help me to become richer than my parents.	1	2	3	4	5	6	7

This section aims to examine your feelings towards your course: Please read the following statements and indicate your degree of agreement or disagreement by circling the number that reflects your opinion. Please be as honest as you can. Please respond to each statement by using the following code: 1=strongly disagree, 2=moderately disagree, 3=slightly disagree, 4=neutral, 5=slightly agree, 6=moderately agree and 7=strongly agree.

### HOW DO YOU FEEL ABOUT YOUR PERFORMANCE?

1.	When at university, I generally have difficulty with coursework such as tests and essays.	1	2	3	4	5	6	7
2.	My lecture attendance at the university is high.	1	2	3	4	5	6	7
3.	I am generally always able to remember the things taught to me at university.	1	2	3	4	5	6	7
4.	When at the university I often struggle to answer questions during class.	1	2	3	4	5	6	7
5.	In general, I can complete my coursework quickly.	1	2	3	4	5	6	7
6.	When at university, I am concerned that I am not as intelligent as the other students.	1	2	3	4	5	6	7
7.	I feel I am very good at doing my coursework.	1	2	3	4	5	6	7

### THANK YOU