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Research Article

Academic Performance of Mature Age Students in Universities and Associated Factors

MUNUHE, Patrick Karinga[1*], KATHURI, Nephat Justus[2] and NJAGI, Zachary[2]
[1]Master's student Methodist University in Kenya
[2]Professor Methodist University in Kenya

*Corresponding Author
MUNUHE, Patrick Karinga

Abstract: Along with increases in nontraditional student enrollment comes an increasing percentage of working nontraditional college students. Mature-entry students (21 years and above) constitute a notable group within higher education sector. This was a descriptive survey with a purpose to examine the determinants of academic performance of mature age entry students. The study was conducted among mature age entry students at Kenya Methodist University in Kenya. Proportionate stratified sampling was used to select the 87 subjects. A self-administered questionnaire was used to collect data. Data was analyzed using descriptive statistics and chi-square analysis with the help of SPSS. A total of 73 mature age students participated in the study representing a 84% response rate. Majority 47(64%) of the respondents had a GPA between 2.1 and 3.0. Gender (p=0.006), age (p=0.0390 and economic status (p=0.000) were significant. in addition, family commitments (p=0.000), family support (p=0.000), institutional support (p=0.003) and work life balance (p=0.000) were significant. The study concluded that performance is influenced by demographic and social factors. Social factors appeared to have a greater influence than demographic factors. Specifically social factors emerged as barriers to good academic performance. Universities therefore need to tailor programmes to match needs of mature age students.
Keywords: Mature age, Academic performance, University students.

INTRODUCTION

The term 'mature-age' is a term that is used to refer to students who join the university after acquiring other educational qualifications and possibly having settled in their careers (Kenner & Weinerman, 2011). Mature-entry students (21 years and above) constitute a notable group within higher education sector (Swain & Hammond, 2011). There are also a greater proportion of mature-entry students, more students studying part-time and more students studying via distance education programmes (Gill, Hayes & Senior, 2015). While mature-age students share many of the issues and concerns of other first year students, additional factors such as dependents, financial commitments, paid employment, the time since they last used academic skills, lack of familiarity with ICT, the style of assessment, and loneliness and social dislocation on campus contribute to feelings of anxiety and can compromise overall university adjustment and achievement (Dawborn-Gundlach & Margetts, 2018).

Globally, universities are recording a greater mix of students currently more than in the past. Today, more than any other time in history, student demographics of college and university students are experiencing rapid and profound changes (Wyatt, 2011). In 2012, for instance, mature entry students comprised 38 per cent of the undergraduate intake worldwide (Commonwealth Department of Education, Science & Training, 2012). In the US, participation by mature students in higher education has risen with the wider expansion of the sector. Europe has seen similar increases in mature student numbers, such as Italy where those over 22 years of age has increased to 20.6% (O'Carroll, Ennis, Loscher, Ryan & Dixon, 2017). Part-time students account for 31% of higher education students in the UK and 56% of part-time undergraduate students are over the age of 30 on entry (Wood, Colin, Cattell & Chris, 2014). In Canada, 23.3% of undergraduates are 25 years or over (Statistics Canada, 2013). In Ireland, mature students accounted

for 13.6% of full-time undergraduate new entrants in 2009/10 rising to 15% in 2011-12 (HEA, 2012). A third of undergraduate students in New Zealand are over 24 years of age (Ministry of Education, 2013).

Along with increases in nontraditional student enrollment comes an increasing percentage of working nontraditional college students with a multitude of commitments that serve to create barriers to educational success that traditional student learners do not have in a traditional college setting (Rabourn, BrckaLorenz & Shoup, 2018). According to Baxter and Britton (2011), two sources of risk face mature age students; firstly, risks stemming from challenges to established gender roles in the family, which are mediated by the effects of social class; and secondly, risks that accompany the movement away from working class habitus which is an inevitable consequence of being in higher education.

In realization of the unique nature and the requirements of mature age entry students, different universities have developed policies and strategies of addressing their needs (Dill & Henley, 2010). For instance; University of Surrey in the UK runs the Mature Student Society which offers sessions for mature students during the University's induction week, organizes social events in the course of the year and produces an occasional newsletter. The society offers support and facilities, including personal tutors, learning support tutors and pre-entry sessions, study and personal skills sessions. Other universities (Bristol, Leeds, Newcastle and Sheffield) offered special support contacts for mature students' issues such as a mature students' adviser, a mature students' officer or a mature students committee. Some universities offered peer support for mature students through a mentor scheme (O'Shea. & Stone, 2011).

In Africa, and specifically in Kenya, universities recognize the different categories of students enrolled. For instance, according to Moi University Students' Guide Book (2011), students are categorized as direct entry from school recruitment, mature- age students, international students, parallel entry/evening studies/self-sponsored students and open and distance learning. It further notes that the mature age students constitute about 10% of all the students mainly from post-experience. Mount Kenya University admits mature age students subject to achievement of a minimum aggregate of C- plus, having at least two years' work experience in the field of study being sort and passing an entrance examination set and administered by the university (Mount Kenya University, 2018).

In Pan African University, a limited number of applicants are granted mature age entry provided that the they are at least 25 years of age, have some appropriate life experience and have finished secondary school education not less than five years prior to application (Pan African University, 2018). Similar requirements are in place in the University of Nairobi, Kenyatta University and Jomo Kenyatta University of Agriculture and Technology. Gudo and Olel (2011) lament that there are no rules issued by the Ministry of Education or Commission for Higher Education governing transferability of courses among universities and rules for exemptions for mature students who have done other courses or acquired work experience equivalent to the knowledge required for submission. Despite acknowledging the presence of mature age students and their unique motivations and circumstances, studies and efforts to address the determinants of the academic performance among the mature age students and how to mainstream them in the university community in Kenya are generally lacking.

Bohl, Haak and Shrestha (2013) indicate that the number of mature age students enrolled in higher education is rising, but retention of these students is a challenge. UniversitiesUK (2019) report that in 2015–16 the non-continuation rate for young students was 6.4% and 11.6% for mature students. Bowl (2010) adds that the mature age student in universities is a frustrated participant in an unresponsive institutional context and questions the tendency to problematize students from non-traditional backgrounds, rather than the educational institutions responsible for their progress. In addition, university guide books do not specify how unique needs and circumstances surrounding the category of students may be identified, examined and addressed. A lot of research has gone into the factors that influence academic performance in general; however, research on the factors affecting academic outcomes among mature age entry students into the universities is scanty. The study sought to examine the determinants of academic performance of mature age entry students with a view of seeking ways of creating an enabling environment for them to achieve their academic goals, as well as, contribute to the country's development.

LITERATURE REVIEW
Theoretical Framework
The study was guided by the Abraham Maslow Needs theory. Abraham Maslow was an American psychologist who proposed a hierarchy of human needs that he believed determined how people are motivated (Dohlman, DiMeglio, Hajj & Laudanski, 2019). According to Güss, Burger, and Dörner (2017), the theory postulates that behaviour is influenced by a person's needs. If one need is not met, a person may do anything to have the need fulfilled. The needs follow a specific order or hierarchy. They begin with physiological needs that include food, air, clothing and shelter (Lester, 2013). After the physiological needs comes the safety needs that include desire for predictable safe environment. Thereafter, the need for love and belonging follows. This includes acceptance, having supportive classmates and having a communicating class system (Taormina & Gao, 2013).

The fourth level is the esteem needs which consist of need to be appreciated, valued, respected, recognized, prestige, status, attention, competence, mastery and freedom. The last need on the hierarchy is the need for self-actualization. It includes desire to achieve one's dreams. The physiological needs have to be fulfilled before the safety and other needs (Dohlman *et al.,* 2019).

Concerning this study, the need theory elaborate on the factors affecting academic performance of mature-age students. According to Gill *et al.,* (2015), the motivation displayed by older learners to engage with a university programme of study has been the focus of a number of studies which have identified the vocational drivers for many mature students, as well as exploring the sense of unfulfilled potential often borne by those who opted to return to education For instance, at physiological level of needs, students concentrate on their academic endeavors only if most of the physiological needs are met. These include having a conducive learning environment, having adequate food for their families and being able to pay for water bills so that the home has water supply, among others.

Safety needs entail that students need to be protected from threats from fellow students and lecturers if they are to perform well academically (Messineo, Allegra & Seta, 2019). Students need to feel loved in whatever situations they may find themselves in. This creates a sense of belonging which in turn gives them the motivation and confidence to work hard regardless of how difficult the courses may be (Wouters, Croiset, Isik & Kusurkar, 2017). Even in situations where students face challenges in a course, they get encouraged by friends, tutors and lecturers. But when they fail in a test or examination, the students do not feel that they belong to the class and become discouraged. In fact, failure culminates in a lower self-esteem and a negative self-concept (Rovers, Japs, Truong & Shah, 2016).

The Maslow's theory helps to explain how social needs of mature-age students are met. To achieve the social needs, students work in groups. The need to belong and for appreciation hold the groups together (Guss *et al.,* 2017). Through academic study-groups, students tend to socialize, make friends among the groups and help one another academically. As a result, their need to belong and for appreciation gets fulfilled. Positive comments from lecturers and tutors also boost their self-image and confidence in their academic work and feelings of success build their positive self-esteem (Dohlman *et al.,* 2019). In addition, positive comments on students' work are a source of motivation to better performance in the courses they take. Passing tests and examinations builds confidence in students to the point that they develop hope to attain higher levels of education and self-actualization. But failure in tests and examinations builds low self-esteem and rejection.

Empirical Review

According to a number of authors such as Davies *et al.,* (2002), mature students are a very diverse group, whether in terms of age, previous education, financial circumstances, nationality or family commitments. They may be under graduate or postgraduate, part-time or fulltime, live on or off the campus. Studies have also found prospective and enrolled mature students to be motivated by prospects of career advancement, the desire to improve qualifications, an interest in their chosen subject and the opportunity for personal development or for finding a change of direction in their lives (Davies & Williams, 2001). They may be motivated to prove themselves to others or keen to enrich their understanding of experiences they have gained through working (McCune *et al.,* 2010). Hayden, Jeong & Norton (2016) identified three themes: ambiguity in definition of mature age and academic success, age and academic success, intrinsic factors and extrinsic factors as factors affecting mature age students' academic success.

Research by Schwartz (2013) illustrates that specific factors of age, gender and previous educational experiences influence student performance and satisfaction in school. A possible reason for this is that these factors influence human cognitive behaviour. Key findings of Baba, Aliata and Patrick (2013) study revealed that both age and sex were positively related to the class obtained. Wider *et al.,* (2017) findings show that only gender, ethnicity, and perceived adult status show a significant predictor on academic adjustment. Specifically, female students have higher academic achievement than male students. In Alducin-Ochoa and Vázquez-Martínez (2016) study, no significant differences were found in the variables gender, university admission scores, type of school (private or public) of the study centres attended previous to university admission. Being older, female and more time engaged in self-study activities were also associated with higher GPA among students in a study conducted by Bonsaksen, Brown, Lim and Fong (2017) which examined the influence of demographic variables, education-related factors, and approaches to studying on occupational therapy students' Grade Point Average (GPA).

Dawborn-Gundlach (2018) study sought to understand the impact of social transition on university adjustment for mature-age students enrolled in their first undergraduate course at an Australian university. Results showed that despite initial concerns about the academic demands of tertiary study, the challenges facing mature-age students are in their social transition, including issues of acceptance and interaction, loneliness and isolation and campus friendships. They feel socially disoriented when surrounded by younger students with very different interests and life experiences. A study by Heagney and Benson (2017) study findings showed students' primary supports were

families and friends. Participants all belonged to equity categories as designated by the Australian government, but many did not use institutional supports. Some lacked the confidence to approach staff; others were unaware support services existed or lacked the time to access them. According to the authors, participants' stories demonstrate the complex disadvantages experienced by mature-age students. A similar study by Mallman and Lee (2016) found that mature-age students encounter a university culture dominated by younger students, who draw separating boundaries between the social and the academic and stigmatise older students because of their academic practices.

MATERIALS AND METHODS

The study adopted descriptive survey research design. The study was conducted in Kenya Methodist University (KeMU); a private non-profit making Christian institution and its core business is provision of higher education in Kenya. The study targeted mature age entry students enrolled in Nairobi and Nakuru campuses of KeMU. Proportionate stratified sampling was used to select the 87 subjects. A self-administered questionnaire was used to collect data. Questionnaires were not only economical to use but also allowed respondents enough time to think about answers for questions which required a lot of reflection. A pilot study was carried out using a sample of 10 mature age entry at the Nyeri Campus of KeMU. Data from the questionnaires were analysed using descriptive statistics such as frequencies and percentages and presented using charts, tables and graphs. Chi-square analysis were used to establish associations with the help of SPSS.

RESULTS AND DISCUSSION
Results

A total of 73 mature age students participated in the study representing a 84% response rate. Majority of the students in the sample 45(61.9%) were male and 28(38.1%) were female. Majority (27) of the students 36.9% were aged more than 35 years, 16(22.6%) were aged between 31 and 35 years, 12(16.7%) were aged between 26 and 30 years, 10(13.1%) were aged between 21 and 25 years and only 8(10.7%) were below 20 years. The vast majority 59(81%) of the respondents were married. This was expected as due to the advanced age of the mature students, they are likely to be married. Results in table 1 show that the vast majority 62(85%) were in the blue collar category of jobs. Results also show that the vast majority 71(97%) of the respondents were employed. Majority of the

students (48%) were from average income earners who earned between ksh 500000 to sh 1000000, 28% were high income earners (over sh1000000 p.a) and only 24% of the respondents were low income earners earning less than sh. 500000 p.a.

Table 1 Demographic Characteristics of Mature Age students

Demographic	Category	N	%
Gender	Male	45	61.9
	Female	28	38.1
Age (years)	<21	8	10.7
	21-25	10	13.1
	26-30	12	16.7
	31-35	16	22.6
	>35	27	36.9
Marital status	Single	12	16
	Married	59	81
	Divorced/Separated	2	3
Occupation	High (White collar)	62	85
	Medium (Blue Collar)	13	18
	Low (Peasants)	8	11
Employment	Employed	71	97
	Self-employed	8	11
	Unemployed	4	5
Economic status	High	18	24
	Medium	35	48
	Low	20	28

Majority of the respondents indicated that their family supported them in the course they were undertaking (M=1.33, SD=0.440). Majority also indicated that they were able to operate a computer without any problem (M=2.64, SD=0.899). Majority of the respondents in the study disagreed that their lifestyle interfered with their studies (M=4.30, SD=1.065). Majority agreed that they were unable balance demands of studies and career/ personal commitments (M=1.58, SD=0.404). Majority also agreed that their current engagements reduce the amount of time they had for their studies and hence adversely affected their performance (M=1.72, SD=0.888). Majority agreed that their career offers me opportunity to practice what I am learning at the university (M=2.39, SD=1.114). Majority disagreed that they received full support at their place of work for their studies (M=3.89, SD=1.020). Majority disagreed that they had to take time off to attend to religious commitments (M=4.4, SD=0.606). Majority also disagreed that they received financial support in my course (M=4.1, SD=0.701). Majority also disagreed that the university supported mature age students to fit in (M=4.60, SD=1.030).

Table 2 Social Factors affecting Mature age Students

	N	Min	Max	Mean	SD
My family supports me in the course I am undertaking	73	1	3	1.33	0.440
I am able to operate a computer without any problems	73	1	5	2.64	0.899
I am unable balance demands of studies and career/ personal commitments	73	1	5	1.58	0.404
My current engagements reduce the amount of time I have for my studies and hence adversely affect my performance	73	1	5	1.72	0.888
My lifestyle interferes with my academic studies	73	1	5	4.30	1.065
My career offers me opportunity to practice what I am learning at the university	73	1	5	2.39	1.114
I have full support at my place of work for my studies	66	1	5	3.89	1.020
I have to take time off to attend to religious commitments	73	3	5	4.4	0.606
I receive financial support in my course	73	2	5	4.1	0.701
The university supports mature age students to fit in	70	1	5	4.60	1.030

Findings in Figure 1 show that majority 47(64%) of the respondents had a GPA between 2.1 and 3.0. This shows that majority of respondents in the study could be categorized as having a fair or average performance.
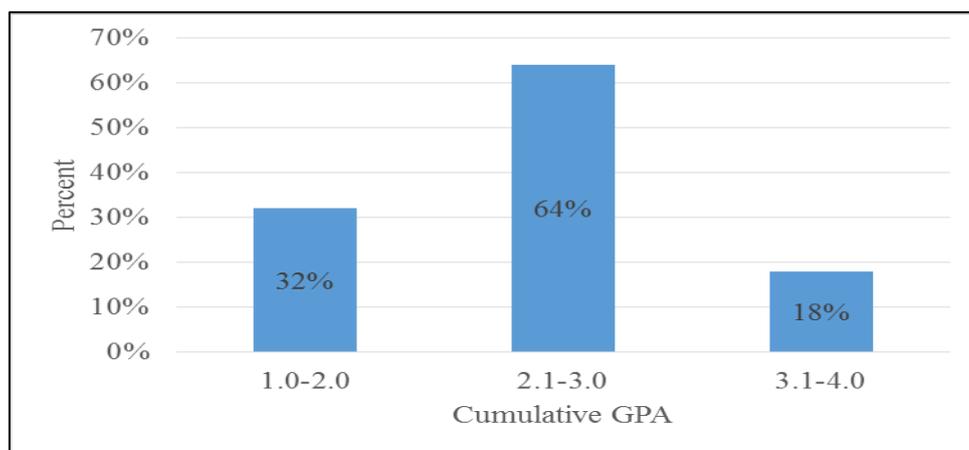

Figure 1 Mature Age Students' academic performance

Chi-square tests were used to test associations between demographic characteristics and academic performance of respondents. Findings in Table 3 show that gender (p=0.006), age (p=0.0390 and economic status (p=0.000) were significant. The findings show that men were more likely to perform better than women, young students (<40) were more likely to perform better than their older counterparts and mature age students with a low economic status were more likely to perform better.

Table 3 Association of Demographic Characteristics and Academic Performance of Mature Age Students

Variable	Category	x^2	df	p	v
Gender	Male	14.409	4	0.006***	0.444
	Female				
Age	Young	8.370	3	0.039***	0.339
	Old				
Marital status	Married	7.163	2	0.028	
	Not married				
Occupation	High	5.964	2	0.051	
	Medium				
	Low				
Employment	Employed	4.890	2	0.087	
	Unemployed				
Economic status	High	16.473	2	0.000***	0.492
	Medium				
	Low				

***Significant at 95% CI

Chi-square tests were also used to test associations between social factors and academic performance of respondents. Family commitments (p=0.000), family support (p=0.000), institutional

support (p=0.003) and work life balance (p=0.000) were significant. Family commitments and work life balance and institutional support were barriers while family support was an enabling factor for academic performance.

Table 4 Association of Social Factors and Academic Performance of Mature Age Students

Variable	x^2	df	p	v
Family Commitments	19.242	3	0.000***	0.536
Family support	36.748	2	0.000***	0.710
Employers support	8.299	4	0.081	
Institutional support	11.545	2	0.003***	0.398
Work-Life Balance	20.284	2	0.000***	0.538

***Significant at 95% CI

DISCUSSION

The study found that gender (p=0.006), age (p=0.0390 and economic status (p=0.000) were significant. The findings show that men young (<40) men of a low economic status were more likely to perform better. This therefore shows that demographic characteristics of mature age students were important to their performance. This is consistent with findings of a study by Schwartz (2013) which illustrated that specific factors of age and gender influenced student performance and satisfaction in school. Baba *et al.,* (2013) study also revealed that both age and sex were positively related to the class obtained. However, the findings contradict Wider *et al.,* (2017) who found that female students had higher academic achievement than male students The findings also contradict findings of Alducin-Ochoa and Vázquez-Martínez (2016) study where no significant differences were found in the variables gender, university admission scores, type of school of the study centers attended previous to university admission. It is also in disagreement with findings of Bonsaksen *et al.,* (2017) where being older, female and more time engaged in self-study activities were also associated with higher GPA.

The study also found that family commitments (p=0.000), family support (p=0.000), institutional support (p=0.003) and work life balance (p=0.000) were significant. Specifically, family commitments and work life balance and institutional support were barriers while family support was an enabling factor for academic performance. This is consistent with findings of Baxter and Britton (2011) that mature age students are faced risks stemming from challenges to established gender roles in the family, which are mediated by the effects of social class and risks that accompany the movement away from working class habitus which is an inevitable consequence of being in higher education. Mallman and Lee (2016) also found that mature-age students encounter a university culture dominated by younger students, who draw separating boundaries between the social and the academic and stigmatise older students because of their academic practices. The findings are in tandem with findings of Dawborn-Gundlach (2018) who showed that despite initial concerns about the academic demands of tertiary study, the challenges facing mature-age students are in their

social transition, including issues of acceptance and interaction, loneliness and isolation and campus friendships. They feel socially disoriented when surrounded by younger students with very different interests and life experiences. A study by Heagney and Benson (2017) also showed students' primary supports were families and friends.

CONCLUSION

The study concludes that academic performance of mature age students is average. Performance is influenced by demographic and social factors. Men young (<40) men of a low economic status were more likely to perform better. Mature age students with few family commitments, work life balance, institutional support and family support are also likely to perform better. Social factors appear to have a greater influence than demographic factors. Specifically social factors emerged as barriers to good academic performance. Universities therefore need to tailor programmes to match needs of mature age students. The universities should develop academic programmes that help reduce conflicts that mature age students' encounter with their jobs and family commitments. This would involve revising the academic calendar for this category of students and also intensify weekend and evening classes where possible. The reported study was not without limitations. The study was conducted in only one out of all the universities in Kenya. This may reduce the scope of generalization of the findings to all the universities and mature age entry students in the country. Secondly, responses were obtained mainly from the mature age students and comparisons with the regular students were not made. This may limit the ability to compare the conditions viz a viz the academic performance of the mature age students against those of the regular students in the Kenyan Universities.

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