

Original Research Article

The mediating role of demographic characteristics on the role of academic middle managers in curriculum change in private higher education in Botswana

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Abstract

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This study examined the influence of demographic or biographic characteristics on the role of Academic Middle Managers (AMMs) in the planning and implementation of curriculum change in private higher education (PHE) in Botswana. Past and current studies on the influence of biographic characteristics show conflicting findings on how biographic characteristics affect a manager's role during the period of change. Such studies show that one group of authorities argues that biographic characteristics have no influence on AMM role during a change process while another group also argues that they have a significant influence on AMM role. The study employed a quantitative approach that used a structured questionnaire for data collection. Collected data was analysed using SPSS version 21. Results of the study showed that overall, biographic characteristics which include level of education, years of experience and gender have an influence on the way AMMs enact their roles during the planning and implementation of curriculum change while age and size of the department have no influence.

Keywords: Academic middle manager, Age, Curriculum change, Demographic characteristics, Department size, Experience, Educational level, Gender, Role

INTRODUCTION

The role of AMMs is viewed as critical to the success of curriculum change in Higher Education (HE). This role however is moderated by a number of variables among which are biographical characteristics which include level of education, age, gender, years of experience and size of department (Deem, 2003a, 2003b; Smith, 2005). This study examined how each of these biographical characteristics affected the way AMMs performed their roles during curriculum change in PHE.

Literature shows that the role of the middle manager in curriculum change can be moderated by the following personal or demographic variables: age, gender, educational level, years of experience, and department size. Personal or biographic factors play an important role in how individuals interpret and participate in change

(Mason et al., 2013; Otanga and Mange, 2014). Previous studies by a number of authorities reveal that factors that include age, gender, educational level, years of experience, and department size may have some bearing on individual perception and participation in a change process (Capella et al., 2009; Smith, 2005; Mason et al., 2013). The above is supported by other studies which have also linked age, gender and experience to curriculum adoption (Mason et al., 2013; Otanga and Mange, 2014).

Educational level

The level of a manager's education has overall been

viewed as contributory to the way managers perceive and participate in a change process. The above has been viewed as so because the level of education reflects an individual's cognitive ability and skills to effectively lead a change process (Otanga and Mange, 2014). According to Wieserema and Bantel (1992) in Mayer et al. (2011) high educational levels are associated with high capacity for information processing and ability to discriminate among a variety of alternative change choices by managers. Dollinger (1984) in Mayer et al. (2011) also argued that highly educated individuals are more likely to engage in boundary spanning change activities, tolerate ambiguity and show ability for integrative complexity during the period of change. In their study on the influence of educational qualifications, Salleh, Yaakub and Dzulkifli (2011) found that a person who possesses high levels of education and skill tends to succeed because of high levels of job knowledge (unique skills, intelligence and work methods) than a person with less or without. Kimberley and Evanisko (1981) as cited in Mayer et al. (2011) also argued that high levels of education have consistently been associated with receptivity to innovation and change and that managers with high levels of education are more aware of and more receptive to the need for change than managers of less education. In a study by Adu, Akinloye and Olaoye (2014), it was also found that there was a significant difference in managerial efficiency between managers with basic background in education and those with postgraduate degrees.

The above arguments on the influence of educational levels on AMM role in curriculum change are also confirmed by Anderson (1977) in Salleh et al., (2011) who argued that skills and practices are learned and developed through education and training as well as through experience. Also in a study on socio-cognitive factors that mediate the relationship between work and job performance, Dokko, Wilk and Rothbard (2009) found that there is a positive effective of prior related task knowledge and performance. Mullins (1992) cited in Salleh et al (2011) also argued that educational levels through training is a factor that mediates performance.

Mullins (1992) as cited in Salleh et al., (2011) went further to argue that training and education enhance the competitiveness and skill sets of managers and also instills necessary attitudinal and mindset changes of the managers to ensure effective and efficient delivery of outputs during a change process. Education and training are in this case viewed as a means of transforming and upgrading employees and managers skills for the purpose of maintaining as well as improving their capacity and capability to deliver change. Also in their study on the effect of level of education on a manager's participation in a change process, Bendixen-Noe (1994) and also Handy (1989) found that the level of education was instrumental in how managers perceive and get

involved in change.

Other studies however showed that educational levels do not contribute to the way people perceive and participate in a change process. In a study also conducted by Awofala, Ola-Oluwa and Fatade (2012), it was discovered that academic qualifications have no influence on how teachers perceive a new curriculum after a change. Awofala et al., (2012) also showed from his study on the role of biographical characteristics of managers that academic qualifications have no influence on how managers perceive a new curriculum after a change effort. The above was also supported by Kurga (2014) in his study of the influence of gender, age and level of training that level of education has no significant influence on how people perceive a change process.

Years of experience

The above point is also echoed by House (2003) and also Brown (2003) and implies that the ability to plan and implement curriculum change is not a function of how long an individual has taught or managed since a good teacher according to West (2000), not minding how long he/she has taught/managed has will always do a good job. On the other hand, other authorities also argue that experience has a significant role to play in how people perceive and get involved in the process of change. The pro-experience authorities argue that experienced teachers and managers operate from a deeper and more sophisticated knowledge base than the less experienced ones (Feldman; 2006; Fullan, 2003; Sergiovanni, 2002). To support the above argument, Fullan (2003) provides seven types of knowledge which give experienced people advantage over the less experienced with respect to involvement in the process of change and these are content knowledge, pedagogical content knowledge, general pedagogical knowledge, curriculum knowledge, knowledge of educational context, knowledge of learners and their personal characteristics, and Knowledge of educational aims, values, their philosophical and historical backgrounds.

In a study by Adu, Akinloye and Olaoye (2014) on whether there was any significant difference between managers of different work experience, results showed that there was a significant difference in managerial efficiency between managers with more experience when compared to those with less experience. In another study by West (2000) on factors affecting the implementation of curriculum change in Business Education, the findings showed that there was a strong positive correlation between years of teaching experience and teacher to plan and implement curriculum and curriculum change. In a study also carried out by Okolo (2001), findings showed that there was a significant influence of experience on managers' performance. Research by Eyike (2001) also

showed that managers with more years of experience and better training were more effective in their management roles than those with less experience and training. Amanchi (1998) cited in Ibukun and Oyenole (2011) argued that higher levels of experience empower and motivate managers. The above is corroborated by Ibukun et al (2012) who in their study on the influence of experience on leadership effectiveness found that more experienced managers perform better than less experienced managers. Ibukun, Oyenole and Abe (2011) also corroborated the above with their study on the influence of experience on the performance with the findings showing that experience significantly influences leadership effectiveness and that more experienced leaders perform better than less experienced ones. Mason, Aihara-Sasaki and Grace (2013) and Otanga and Mange (2014) also confirm the above assertion.

Age

Age has also been viewed as one of the biographical factors that exert an influence on the middle manager's perception and involvement in a change process despite the fact that there has been a lot of contestation on its influence (Ibukun et al., 2011). A study carried out by Ibukun et al. (2011) found that age has a significant influence on leadership effectiveness especially during the process of change when they intimated that age significantly influences leadership effectiveness during a change process. Mason et al. (2013) also linked age of managers to successful leadership of the change process. According to Otanga and Mange (2014) also, an individual's age has an influence on strategic decision making perspectives and choices. In their research also on the influence of demographic variables on manager performance, Hitt and Tyler (1991) in Otanga and Mange (2014) found that a manager's age has an influence on their strategic evaluation of choices. On the other hand, Kurga (2014) in his study found that age has no influence on how managers perceive and participate in a change process. The above was also confirmed by another study by Glasscock (1991) whose findings showed that age did not have an influence on how managers lead a change process such as curriculum change.

Gender

There are also mixed reactions to whether gender has an influence on how managers that include middle managers lead the process of change in higher education (Ibukun et al, 2011). While other authorities feel gender has no influence, others view gender as one of the key influences of middle manager role in the change process (Smith, 2005). In a study conducted by Awofala et al

(2012) on how male and female managers perceive change, results showed that there is no gender difference between how male and female managers perceive and participate in a change process. In their study on gender influences on leadership, Hemphill, Griffiths and Fredrickson (1992) found that men and women managers perform equally and these findings were also confirmed by other findings by Barter (2001). Kurga (2014) in his study further confirmed the above findings by his study which found that gender has no influence on managers' and teachers' perception towards change. Ibukun et al (2011) in their study on the impact of gender on management performance during the period of change also found that there was no significant difference in management performance between men and women.

Other studies also had different findings on the influence of gender in management performance. A study by Adu, Akinloye and Olaoye (2014) found that there is a significant difference between the managerial efficiency of male and female managers. The study by Wiles, Hare, Grobman and Hiries (1996) found that men perform slightly better than women in their management of change especially with regards to ensuring more participation by subordinates. The above findings were also corroborated by another study by Adigwu (2004) where findings also showed that men were slightly above women in management performance. In a study by the Institute of Leadership and Management (2011), results showed that 85% of female managers showed less confidence especially in situations where the managers perceived male managers to be better qualified to handle certain managerial matters. A study on gender differences on performance of managers by Kellerman and Rhode (2006) also showed that because male AMMs use more of masculine leadership styles, they are more effective in pushing forward their agendas than female AMMs who are more feminine in their approach.

Eagly (2003) in his study also found that female AMMs tend to have a low belief of their abilities than male AMMs during periods of change. In the same study it was further found that male AMMs tended to use equality with male counterparts as a demonstration of their opinion of while on the other hand male AMMs tended to demonstrate a high opinion of themselves by arguing that they are not equal but better than their female counterparts in terms of performance. This shows that male AMMs rate themselves higher while female AMMs use others as bench mark of their abilities which is a show of lack of confidence. That male managers are more confident than female managers during times of change is also confirmed by more studies. In a study by Bengtsson, Persson and Willenhag (2005), it was found that male managers are characterized by being more confident than female managers. This according to Schumann (2011) was because female managers judge themselves more harshly and are more apologetic than male

Table 1. Gender differences of managers

Female Managers	Male Managers
Less effective in competitive environments	More overconfident
Generally more risk-averse	More optimistic
Generally prefer to take risks in social situations rather than professional and other situations	React by action
Have higher social sensitivity	Are less people-based
React by feeling	Direct/command

managers in situations where they feel they have caused harm to others by their actions. Table 4 gives a summary of some of the gender differences between male and female managers especially when leading change (Charness and Greezy, 2012; Eckel and Grossman, 2008). (Table 1)

A study by Lighthall et al. (2012) also showed that since female AMMs are more risk averse than their counterparts, when confronted with uncertainty, show fear while male managers show anger (Grossman & Wood, 1993). The consequences of fear are diminished risk-taking behaviour while that of anger is increase in risk-taking behaviour (Lerner and Keltner, 2001; Lighthall et al., 2012). The above may also be the reason why other studies have also shown that 70% of female managers are afraid to be in a losing situation where they may have to show risk-taking behaviour no matter how minor (Ferah-Duda, de Gennaro and Schubert, 2006; Croson and Gneezy, 2009).

Other studies though show that the leadership styles of female managers give them advantage over their male counterparts. In their study on women and leadership, McKinsey and Company (2009) found that female managers' leadership style that is people-based, role modeling and that shows clear expectations and rewards helps them in getting the confidence and trust of their subordinates, which is very critical during periods of change. Folkman (2012) in his study also found that female managers are more competent than male managers in practicing self-development, using transformational and collaborative leadership style as well as in driving results. The above gender differences in the management of change are also further confirmed. A study on gender differences on leadership by Trinidad and Normore (2005) found that female AMMs tend to use transformative (motivating others by transforming their self-interest into goals of the team), empowering and collaborative leadership styles during a change process while male leaders tend to be directive and authoritarian. By using interactive team approach leadership styles that encourage participation, sharing of power and authority, female managers are viewed as being more effective in leading change than their male counterparts (Rosener, 1990; Bass, Avolio and Atwater, 1996). Literature shows that these characteristics of female managers help them

to more effectively and successfully drive change in organization than their male counterparts.

Department size

Studies show that there is a significant positive association between the size of a department, information sharing and goal clarity (Nasser et al. (2011). According to Young (2007), AMMs in larger departments tend to place importance on leading and managing people while AMMs in small departments place importance on actually doing academic work. According to Deem (2003a, 2003b), the size of a department influences how middle managers enact their role in curriculum change. A large department according to Capella et al. (2009) creates a burdensome workload for the AMM and in the end limits the chances of the AMM providing subordinates with the much needed professional support especially for effective involvement in a change process.

Capella et al. (2009) further argue that large department sizes also limit the ability of the AMM to introduce more creative ways of leading curriculum change and thereby affecting the planning and implementation of curriculum change. Council for Higher Education (CHE) (2009) is also of the view that department size is a problem to AMM role in curriculum change due to challenges of managing resources in such a large department. Wiersema and Bantel (1992) as cited in Mayer et al (2011) in their study on the influence of institutional and department size on manager role in change, found that an increase in size adds complexity with its attendant increases in structural elaboration and formalized systems for planning, control and resource allocation.

In their study on the influence of institutional and department size on the role of managers in the management of change in organizations and departments, Tushman and Romanelli (1985) as cited in Otanga and Mange (2014) found that large sizes create progressively stronger resistance to fundamental change as information may not get to all department or institutional members on time and with the same intent or meaning. This leads to some members feeling left out or

ignore thereby fueling feelings and attitudes of resistance. According to The Organization for Economic Co-operation and Development (OECD) (2010) as a result of problems of large departments, many institutions and departments have shifted to highly decentralized systems of management to ensure more ownership of activities and therefore have a high level of accountability across the institutions and departments. This paradigm shift allows for more effective coordination by AMMs through appropriate facilities and platforms for discussion, a situation which is critical for productive work in departments (OECD, 2010).

METHODOLOGY

The study used a quantitative approach that employed a structured questionnaire for data collection from a sample of 162 AMMs out of a total of 280 AMMs in five private higher education institutions (PHEIs). The sample constituted 57.9% of the population and such a number is large enough to assure validity of results (Yates et al., 2008; Yount, 2006). Stratified random sampling was used to select the 162 AMMs. The questionnaire was subjected to pilot testing for internal consistency and content validity. Using the Cronbach alpha test, results showed an internal consistency of $\alpha = .79$ and hence the questionnaire was deemed reliable enough for the study. With regards to content validity, the questionnaire was subjected to expert opinion and comments from the experts were incorporated into the final instrument. AMMs that were included in the study were the Deans of faculty, Assistant deans of faculty, Heads of Department, Assistant Heads of Department and Module Leaders. All the PHEIs have head offices located in Gaborone and that is where around 90% of the AMMs are located. The other 10% of AMMs are located in the satellite campuses of these institutions in smaller towns in Botswana. 162 questionnaires were administered to the AMMs and a total of 104 questionnaires were returned making a return rate of 54% which is acceptable according to Fan and Yan (2010) and also Millar and Dillman (2011) who assert that depending on how rigorous and long the surveys are, the acceptable response rate ranges from as low as 10% to as high as 65%. SPSS version 21 was used for data analysis.

RESULTS

The data analysis section presents the inferential statistics testing hypothesis for the demographic data of the AMM and the other constructs to establish whether demographic variables had an influence on effective planning and implementation of curriculum change by AMMs in PHEIs in Botswana. The following demographic

characteristics were investigated: age group, gender, educational level, years of experience, and number of staff in the department (department size).

Demographic factor 1: Age group

One-Way ANOVA was used to examine whether age group had an influence on AMM role in curriculum change in PHEIs. The independent test had five different age-groups. The dependent variable was planning and implementing curriculum change which was calculated and transformed by adding the entire indicators to form one construct. Before using One-Way ANOVA, a test of Homogeneity of Variance and test of Normality were conducted. An alpha significance level of 0.05 was used in the analysis. The test of Homogeneity of variance was not significant on differences between the five variances as Levene = $P > 0.05$. The results showed that data for the independent variables was normally distributed. Hypothesis was then stated and tested as follows:

H_0 : There is no significant statistical difference between means of all age groups of AMMs in the planning and implementation of curriculum of change in PHEIs that is ($\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$ where $\mu_1, \mu_2, \mu_3, \mu_4$ and μ_5 are mean scores of the five age – groups)

H_1 : At least one mean of all the age groups of AMMs is significantly different from others in the effective planning and implementation of curriculum of change in PHEIs. (Table 2)

The results in Table 3 showed that the tests were not statistically significant i.e., $F(4,94) = 0.421, P > 0.05$. These results showed that age-group did not significantly influence AMM role in the planning and implementation of curriculum change in PHEIs, hence the null hypothesis was accepted leading to the conclusion that age group has no significant influence in AMM role in the planning and implementation of curriculum change in PHEIs.

Demographic factor 2: Gender

Data collected on the independent variable of gender and the dependent variable planning and implementation of curriculum change was assessed for normality before the parametric independent t-test was conducted (Table 4). Shapiro-Wilk table showed that data collected from female AMMs was not normally distributed for $P = 0.000$ and Male data was normally distributed ($P > .05$). Owing to these discrepancies The Mann Whitney test was used to test the Hypothesis. The Mann Whitney test is non-parametric test which overcomes the underlying assumption of normality in parametric tests. It is used to test whether two independent samples of observations

Table 2. Test of Normality-Age versus Planning and Implementation of Curriculum Change

	Age (in years):	Shapiro-Wilk		
		Statistic	df	Sig.
Planning and implementing curriculum change	25 – 30	.873	6	.239
	31 - 35	.873	23	.007
	36 – 40	.881	23	.011
	41- 50	.947	30	.142
	More than 50	.946	17	.391

Table 3. ANOVA of age groups versus Planning and Implementation of Curriculum Change

Anova					
Planning and Implementation of Curriculum Change					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	500.966	4	125.242	.982	.421
Within Groups	11987.943	94	127.531		
Total	12488.909	98			

Table 4. Test of Normality

	Gender:	Shapiro-Wilk		
		statistic	df	sig.
planning curriculum change	male	.975	53	.332
	female	.813	36	.000

are drawn from the same or identical distributions. (Table 4)

H_0 : There is no significant difference between the medians of male and female AMMs with regards to their effectiveness in planning and implementing curriculum change i.e., $M_1 = M_2$ or $M_1 - M_2 = 0$, where M_1 represents the mean for male and M_2 represents the mean for females.

H_1 : At least one median of all male AMMs is significantly different from the means of female AMMs with regards to their effectiveness in the planning and implementation of curriculum of change in PHEIs.

Analysis of results in Table 5 revealed that the test results were statistically significant ($P < .05$) thus the null hypothesis that there was no difference between gender in the planning and implementation of curriculum change was rejected and it was concluded that the planning and implementation of curriculum change does differ between

male and female AMMs in the PHEIs. The hypothesis that gender has a significant influence on the planning and implementation of curriculum change by AMMs was therefore retained. The Mann-Whitney U test (Table 4) was used to test and prove normality of the above data.

Demographic factor 3: Education level

H_0 : There is no significant statistical difference between means of all education levels in effective planning and implementation of curriculum of change in PHEIs, that is, ($\mu_1 = \mu_2 = \mu_3 = \mu_4$ where μ_1, μ_2, μ_3 and μ_4 are mean scores of the four education levels)

H_1 : At least one mean of all the educational levels of AMMs is significantly different from others in the effective planning and implementation of curriculum of change in PHEIs.

Table 5. Mann-Whitney U test

Test Statistics^a	
	Planning and Implementation of Curriculum Change
Mann-Whitney U	590.000
Wilcoxon W	2021.000
Z	-3.049
Asymp. Sig. (2-tailed)	.002

a. Grouping Variable: Gender:

Table 6. ANOVA: Educational Level versus Planning and Implementation of Curriculum Change

ANOVA					
Planning and Implementation of Curriculum Change					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	936.507	2	468.254	3.795	.026
Within Groups	11350.819	92	123.378		
Total	12287.326	94			

Table 7. Post HOC Analysis

Planning and implementation of curriculum change			
Tukey HSD			
Highest Level of Education:	N	Subset for alpha = 0.05	
		1	2
Master's Degree	73	47.8767	
Bachelor's Degree	14	48.4286	
Doctoral Degree	8		59.2500
Sig.		.990	1.000

Findings in Table 6 showed that the results were statistically significant, i.e., $F(2,92 > 3.795) = 0.026$, $P < .05$ hence null hypothesis was rejected. There was thus a difference in the planning and implementation of curriculum change between the different education levels. Post HOC analysis using Turkey procedures was also used to determine which pairs of the three group means differed.

The results given in Table 7 showed that Doctoral degree scored significantly higher (59.2500) on the mean scores than the masters and Bachelor degree holders. Thus higher level of education may be having significant influence on AMM role in the planning and implementation of curriculum change.

Demographic factor 4: Work experience

Hypotheses tested on the demographic characteristic of work experience were as follows:

H_0 : There is no significant statistical difference between means of the number of years of work experience of AMMs in the effective planning and implementation of curriculum of change in PHEIs, that is, $(\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5)$ where $\mu_1, \mu_2, \mu_3, \mu_4,$ and μ_5 are mean scores of the five categories of the number of years of work experience)

H_1 : At least one mean of the number of the number of years of work experience of AMMs is significantly different from others in the effective planning and implementation of curriculum of change in PHEIs.

Table 8. ANOVA: Work Experience versus Planning and Implementation of Curriculum Change

ANOVA					
Planning and implementation of curriculum change					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1101.611	4	275.403	4.817	.001
Within Groups	5431.779	95	57.177		
Total	6533.390	99			

Table 9. Turkey HSD Test

Planning and implem of curr change			
Turkey HSD			
Work Experience(in years	N	Subset for alpha = 0.05	
		1	2
Less than 5	14	25.7143	
11 – 15	12	28.3333	
5 - 10	36	29.6111	29.6111
16 - 20	18	32.1667	32.1667
More than 20 years	20		36.2000
Sig.		.096	.085

Means for groups in homogeneous subsets are displayed.

Table 10. ANOVA and POST HOC tests: Staff in Department versus Planning and Implementation of Curriculum Change

ANOVA					
PLANNING CURRICULUM CHANGE					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	573.283	4	143.321	1.121	.351
Within Groups	11887.217	93	127.820		
Total	12460.500	97			

planning curriculum change			
Turkey HSD			
Number of staff Members	N	Subset for alpha = 0.05	
		1	
More than 25 staff members	19	45.7368	
21 - 25	17	47.4118	
16 -20	9	52.4444	
11- 15	23	47.0870	
At most 10	30	51.2333	
Sig.		.430	

ANOVA test (Table 8) showed that the analysis was not statistically significant, i.e., $F(4,95 > 4.817) = 0.001$, $P < .05$, thus the null hypothesis was rejected, owing to this it was concluded that the difference in effective planning and implementation of curriculum change was attributed to the number of years of experience of AMMs. The Turkey HSD test results on Table 9 showed that years of experience significantly influenced how AMMs planned and implemented curriculum change as the number of years work increased the mean scores also overall increased.

Demographic factor 5: Number of staff in the department (size of department)

H_0 : There is no significant statistical difference between means of the number of staff in departments in PHEIs in the effective planning and implementation of curriculum of change, that is, $(\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5)$ where $\mu_1, \mu_2, \mu_3, \mu_4,$ and μ_5 are mean scores of the five categories of number of staff in departments)

H_1 : At least one mean of the number of staff in the departments is significantly different from others in the effective planning and implementation of curriculum of change in PHEIs.

Table 10 showed that the calculated $F(4,93 > 1.121) = .351$ i.e., $p > 0.05$ and this showed that the result was not statistically significant and therefore the null hypothesis was retained. It was concluded that the number of staff in departments (size of departments) in PHEIs did not have a significant influence in the effective planning and implementation of curriculum change by AMMs. The Turkey HSD table also shows that overall the number of staff in the department has no significant effect on how AMMs plan and implement curriculum change.

DISCUSSION OF RESULTS

The study undertook to establish whether biographic characteristics had an influence on how AMMs performed their role in the planning and implementation of curriculum change in PHEIs. This was in line with the research question in chapter one. Results of the study showed that biographic characteristics had an influence on how AMMs performed their role in the planning and implementation of curriculum change in PHEIs. These results confirmed studies by a number of authorities who found that biographic factors such as age, gender, educational levels, years of experience and size of the department managed by an AMM influenced in their own unique ways, how individual AMMs interpreted and participated in a change process (Mason et al., 2013; Otanga and Mange, 2014). A number of previous studies

revealed that the above biographic factors especially years of work experience, gender and educational levels had a significant bearing on an individual's perception and participation in change (Capella et al., 2009; Deem, 2003a, 2003b; Smith, 2005).

The influence of educational level on AMM role in curriculum change

It was established in the study that educational levels had an influence on the way AMMs performed their duties in the planning and implementation of curriculum change in PHEIs. Results showed that AMMs were of the view that having higher academic and professional qualifications helped in ensuring that the AMMs had adequate knowledge of their curriculum area and with this adequate knowledge in a curriculum area, the AMMs were in a position to effectively plan and implement curriculum changes in their areas of specialization. In the context of the current research, it had been shown that AMMs with PhD qualifications tended to perform better than those with lower qualifications when it came to the planning and implementation of curriculum change. These results therefore showed that there was a strong appreciation by AMMs in PHEIs of the fact that it was important to be adequately schooled in one's area of specialization because a strong understanding of the content of one's area of specialization was important in helping AMMs to more effectively understand and implement curriculum change in their curricula areas of specialization.

Literature on the role of AMM in HEIs also confirmed that differences in educational levels tended to lead to differences in performances by AMMs. In their study on the effect of levels of education on AMM role during a change process, Wiersema and Bantel (1992) as cited in Mayer et al. (2011) found that higher educational levels were associated with high capacity for information processing and ability to discriminate among a variety of alternative change choices by managers. Dollinger (1984) in Mayer et al. (2011) in their study also found that highly educated individuals were more likely to engage in boundary spanning change activities, tolerate ambiguity and show ability for integrative complexity during a period of change.

In their earlier studies on the effect of levels of education on manager participation in a change process, Mason et al., (2013) and also Otanga and Mange (2014). These studies therefore confirmed that AMMs in PHEIs who possessed higher educational levels such as master's and doctoral degrees performed better than those with lower educational levels in the planning and implementation of curriculum change.

The influence of years of experience on AMM role in curriculum change

Results of this study showed that the number of years of work experience had a significant effect on the ability of AMMs to effectively plan and implement curriculum change in PHEIs. Both quantitative and qualitative results confirmed the fact that years of experience were important in helping AMMs effectively plan and implement curriculum change. This is in line with the old saying that indicates that experience is the best teacher. The above findings also confirm earlier findings in different studies and literature about the role of experience in a change process. Previous studies on the influence of experience on a manager's role found that experience had a significant influence on how managers perceived and participated in a change process such as curriculum change. Feldman (2006), Fullan, 2003, Hudson (2006), and also Sergiovanni (2002) showed that experienced teachers and managers operated from a deeper and more sophisticated knowledge base than the less experienced ones and hence tended to manage change better.

Fullan (2003) went further to support the influence of experience on AMM role in curriculum change by providing seven types of knowledge (see chapter two page 96) which gave experienced managers advantage over the less experienced ones in the planning and implementation of curriculum change. The seven types of knowledge alluded to above by Fullan (2003) included content knowledge, pedagogical content knowledge, general pedagogical knowledge, curriculum knowledge, knowledge of educational context, knowledge of learners and their contexts, and knowledge of educational aims, values, their philosophical and historical backgrounds. With these seven types of knowledge, Fullan (2003) demonstrated that years of experience in working with different curricula helped AMMs in perfecting their ability to plan and implement curriculum change.

In his study on factors affecting the implementation of curriculum change in Business Education, West (2000) also found that there was a strong positive correlation between years of experience and ability to plan and implement curriculum change. Studies conducted by Eyike and Ibukun, Oyenole and Abe (2011) also showed that more experienced leaders perform better than less experienced ones. Mason et al (2013) as well as Otanga and Mange (2014) also confirmed the above findings in their own studies on the positive influence of years of experience on how a managers plan and implement a change process.

Other studies by House (2003) and Brown (2003) on the role of experience on a manager's performance found that the ability by a manager to plan and implement a change process was not influenced by a manager's years of experience.

The influence of age on AMM role in curriculum change

It is indicated in the study that age had no significant influence on how AMMs planned and implemented curriculum change in PHEIs. Both quantitative and qualitative results confirmed the above results that indicated that age had no influence on the way AMMs planned and implemented curriculum change in PHEIs. Results showed that both younger and older AMMs can equally plan and implement curriculum change given the right conditions to do so. The fact that age had no influence in the way people who include AMMs manage change was also corroborated by studies (Ibukun et al., 2011). In his study on whether age influenced the way a manager performs his/her duties in HE, Kurga (2014) found that age had no influence at all. Glasscock (1991) also conducted a study on the role of age on leadership effectiveness among managers in HEIs and found that age did not contribute to how managers led the process of change HE.

Other studies however showed that age had a direct influence on how managers perceived and participated in a change process. According to Hitt and Tyler (1991) as cited in Otanga and Mange (2014), an individual's age had an influence on strategic decision making perspectives and choices during a change process. In their research on the influence of demographic variables on manager performance, Hitt and Tyler (1991) also found that a manager's age had an influence on their strategic evaluation of choices especially during a change process. The same research further showed that as people get older, they become less flexible, more rigid and more resistant to change than younger managers who tend to be more risk-oriented in their change decisions thus disputing the fact that the older a managers became, the better he/she became in the planning and implementation of curriculum change.

The influence of gender on AMM role in curriculum change

It was established in the study that gender had a significant effect on the planning and implementation of curriculum change by AMM in PHEIs. Descriptive statistics results confirmed the above results. This means that the way the planning and implementation of curriculum change was done differed between male and female AMMs in PHEIs. When one also looked at the situation in PHEIs in Botswana, it was observed from demographic data results of this study that there were more male than female AMMs in PHEIs which could be a pointer to the thinking that top management in these institutions may be holding the assumption that male AMMs performed better in leading change in higher

education when compared to female AMMs. That male AMMs performed better than female AMMs in the management of change seemed to be corroborated by previous studies conducted by a number of authorities. A study by Wiles, Hare, Grobman and Hiries (1996) found that men performed slightly better than women in their management of change especially with regards to ensuring more participation of subordinates. Adigwu (2004) confirmed the above findings by his study which showed that men were slightly above women in the management of performance during a change process.

Other studies though showed that the leadership style of female managers gave them advantage over their male counterparts during a period of change. In their study on women and leadership, McKinsey and Company (2009) found that female managers' leadership style was people-based, included role modeling and that showed clear expectations and rewards and also helped them in getting the confidence and trust of their subordinates, which was very critical during periods of change. Folkman (2012) in his study also found that female managers were more competent than male managers in practicing self-development, using transformational and collaborative leadership style as well as in driving results. A study on gender differences on leadership by Trinidad and Normore (2005) also found that female AMMs tended to use transformative (motivating others by transforming their self-interest into goals of the team), empowering and collaborative leadership styles during a change process while male leaders tended to be directive and authoritarian. By using interactive team approach leadership styles that encourage participation, sharing of power and authority, female managers were viewed as being more effective in leading change than their male counterparts (Rosener, 1990; Bass, Avolio and Atwater, 1996).

Still other studies however showed that there were no gender differences in the way male and female AMMs participated in a change process. This argument explained the position of AMMs who indicated that gender had no effect on the way AMMs planned and implemented curriculum change. In their studies of gender influences on the leadership of a change process, Hamphill, Griffiths and Fredrickson (1992) found that men and women perform equally. These findings were also confirmed by Barter (2001) and also by Kurga (2014) who found that gender had no influence on teachers' and managers' perception of and participation in a change process. In their study also on how male and female managers perceive and participate in a change process, Awofala et al (2012) also found that there was no difference between how male and female managers perceived and participated in a change process.

The influence of size of department on AMM role in curriculum change

Size of department in this study is measured by the number of staff in the department. Results of this study showed that the size of the department had no effect on how AMMs planned and implemented curriculum change in PHEIs. The above could be so because biographic results on the size of departments showed that departments in PHEIs were small, that is, had few members mostly around 10 and hence could not pose management problems to AMMs during the planning and implementation of curriculum change. Previous studies also confirm this argument. In their study on the influence of the size of a department on how managers enacted their role in curriculum change, Deem (2003) found that there was no influence.

Other studies show that the size of the department had an effect on the way AMMs planned and implemented change in HE. A large department according to Capella et al (2009) created a burdensome workload for the AMM and in the end limited the chances of the AMM providing subordinates with the much needed professional support especially for effective involvement in a change process. Capella et al (2009) further argued that large department sizes limited the ability of AMMs to introduce more creative ways of leading curriculum change due to high supervision loads thereby affecting the planning and implementation of curriculum change. CHE (2009) and also OECD (2010) also argued that department size was a problem to AMM role in the management of change due to challenges of managing many resources (human and material). In their study on the influence of institutional and department size on a manager's role in the management of change, Wiersema and Bantel (1992) as cited in Mayer et al (2011) also found that an increase in the size of departments added complexity with its attendant increases in structural elaboration and formalized systems for planning, control and resource allocation. Another study conducted by Tushman and Romanelli (1985) as cited in Otanga and Mange (2014) found that large department sizes created progressively stronger resistance to fundamental change as information may fail to get to all department members on time and with the same intent or meaning causing other members to feel ignored or isolated from the communication web and eventually causing such department members to have a negative attitude and resistance towards the change.

CONCLUSION

Results of the study showed that demographic characteristics play a crucial role on how academic

middle managers enact their role in curriculum change. From the above results it is concluded from the results that demographic characteristics that include gender, age, years of experience and educational level and an impact on how academic middle managers perform their role in curriculum change in private higher education institutions. On the other hand, it is also concluded that demographic characteristics that include department size and age did not have a significant influence on how academic middle managers plan and implement curriculum change in private higher education institutions.

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