

Correlation between familial roles and persistence of female students on distance education programmes in Ghana: Through the lens of an administrator

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Abstract

The contributions of individuals towards a nation's development cannot be underestimated. Nevertheless, research has proven that gender roles could create some setbacks to the extent that some individuals may not be able to reach the optimum in higher education. This correlational study explored whether the interplay of some female gender roles affected persistence as female students juggled with studies. A total of 21 study centres with female enrolment of a 100 and above were purposively selected. Using simple random sampling, a sample of 441 female students were drawn from two distance education institutions in Ghana. The study employed the correlational research design. A questionnaire was used to collect data and analysed using descriptive statistics and Pearson Product Moment Correlation Coefficient. It was revealed that female students had family roles they performed. The study found that there was a positive correlation between persistence and familial roles among the participants. This implied that as the level of familial roles of the respondents increased, their persistence increased as well, thus revealing some level of resilience towards the progression of their education. It was therefore recommended that administrators of distance education institutions equipped female students with the needed knowledge and support to ensure the effective management of their familial roles.

Keywords: Family roles, persistence, female students, distance education programme

Introduction

Studies have continually found that adults in general and females in particular, enter institutions of higher learning to improve on their job skills, for personal enrichment and to fulfil a desire for a lifelong education (Bhalotra & Rawlings, 2011; UNESCO, 2015). Higher education is seen as one of the most effective ways that help to shape economic returns and also determine quality of life especially among females (Gentry, 2014; Demiray, 2014). Despite these benefits, Johnson and Kposowa (2018) and Adu-Yeboah (2011) have argued that societal perception of roles of female and male roles usually affect their participation in formal education.

Traditionally, the socialization of the female in both western and African countries still demands that she takes care of the home and her family and also participates in societal activities (Igarashi & Kumo 2016; Filipponi-Berardinelli, 2013; Kwapong, 2010). In support, Hetzel (2012) also indicated that the gendered nature of women's work makes them fulfil more roles and responsibilities than their male counterparts in most parts of the world. Women are required to carry the main responsibilities of housework and raising children which sometimes affect their ability to successfully achieve their

educational goals (Foster & Offei-Ansah, 2012). Though distance education is generally seen as a mode of study which provides flexible time management possibilities suited for females, most of these females who enrol on higher education programmes through the distance education mode often possess multiple personal and professional life roles which usually impact positively or negatively on their successful persistence (Malinovski, Vasileva-Stojanovska, Jovevski, Vasileva & Trajkovik, 2015; Ross-Gordon, 2011).

Student persistence is considered an important element in open and distance education as it forms the basis of teaching and learning activities (Sauve, 1993; Gokool-Ramdoe, 2009). Thus, effective teaching and learning in distance education institutions can occur only when persistence among students is ensured. Habley, Bloom and Robbins (2012) claimed that persistence is when a student “continues to enrol at the institution after matriculation” (p.4). In other words, it is all the efforts undertaken by an individual student to remain enrolled in an institution until a degree is attained (Hagedorn as cited in Sansone, 2017; Kirkman, 2018). This definition makes persistence more of a student-centred rather than institution-centred term. Students’ persistence for this study focused on actions taken by female students to continue enrolling on a distance education programme. The aim of the study was to find out how family roles affected the persistence of female students as they access higher education through the distance education mode in selected public universities in Ghana.

Purpose of the Study

The purpose of this study was to find out the extent to which family roles correlated with persistence of the female students as they access higher education through distance education programmes. The findings were deemed to create the needed awareness among other female students who encountered these roles and also among administrators of distance education institutions as they formulate policies on the needs of female students. This was important because it is the belief of most managers and practitioners that the nature and flexibility of distance education makes it quite suitable for females with multiplicity of roles. This belief therefore needed to be investigated in the context of distance education programmes in Ghana. It is in the line with the above discussion that the study tried to respond to the following null hypothesis; that there is no statistically significant relationship between family roles and persistence of female students in distance education programmes in Ghana.

Theoretical Framework

The study was premised on the Bean and Metzner’s (1985) student attrition theory. Bean and Metzner (1985) formulated this theory drawing inferences from the organisational turnover and attitude-behaviour interactions theories. It emphasised that student intentions to remain in an institution are identical with workers’ decisions to stay in an employment or a workplace. Bean and Metzner focused on the non-traditional students in developing this theory. These students were defined using some characteristics such as age, gender, residence, and attendance. According to Bean and Metzner (1985), external factors affect non-traditional students who usually have fewer opportunities for social integration into institutions. The researchers found that environmental variables were more important for non-traditional students than academic variables (Bean & Metzner, 1985). Students were most likely to remain enrolled when environmental variables are excellent and academic variables are poor because low scores on the academic variables are usually compensated for by environmental support (Bean & Metzner, 1985). The description

given fits into the characteristics of female students in the distance education programmes at the universities under study. The familial and societal roles these female students performed were considered to form part of their external environment. This meant that if female students faced challenges as they performed their familial and societal roles, it was likely to affect the effort they made towards their academic activities and persistence. The study was therefore conducted with the aim of finding out if any relationship existed between these roles and persistence of female students so as to provide first-hand information to managers and administrators of distance education programmes in Ghana.

Literature Review

Family Roles and Female Students

Traditional gender role demands in both western and Sub-Saharan Africa nations including Ghana, make the maintenance and caring for family members the primary responsibility of females (Mrkic, Johnson & Michael, 2010). In spite of the incremental changes that have occurred in the participation of education in general, females continue to bear most of the responsibilities at home. These roles may include caring for children and other dependent household members, preparing meals and doing other housework (Mrkic et al., 2010). The study by Abuya, Ngware, Mutisya and Nyariro (2017) in Kenya found that school girls faced a myriad of obstacles as they tried to combine school with household chores and looking after younger siblings. Their school attendance was usually affected as they ended up spending more time on activities that were not related to their schoolwork (Abuya et al., 2017). Traditionally, the roles of the female do not change but rather increase as they mature in age. For instance, the women in a qualitative study by McClusky (2017) confirmed that it was customary for women to be accountable for all the family's needs. The mother's duties were made up of a variety of tasks which included childcare, water collection, domestic responsibilities, gathering and cooking food, taking care of the livestock, and making and mending clothing for the family (McClusky, 2017). Though modern societal and occupational trends might have brought some changes with respect to these roles (Igarashi & Kumo, 2016), but as indicated by McClusky (2017) and Kwapong (2010), some role demarcations still persist in most communities globally. For instance, studies by Zhan (2005) and Warmenhoven, Hoebink and Janssens (2018) which compared female's and male's family roles revealed that women generally provided personal care and help in domestic chores and also women were found to spend significantly more time on elderly care than men.

Cultural assumptions about motherhood affect females in the home, in college and at work (Spilovoy, 2013). The societal perception as seen in many western and African cultures is supported by the fact that ideally, women must become mothers (Richko, 2016). Richko further argued that though the demands of contemporary society may affect decisions on motherhood, the desire for bearing and caring for children still remains among many women. The implication is that women, who stayed unmarried or childless, were usually given some derogatory labels. This push some women to go for mothering roles as a way of avoiding demeaning remarks from the public (Richko, 2016). On the contrary, a study conducted by Mason and Goulden among female faculty in a Canadian university reported that most of the participants desired to have fewer number of children or become completely childless (as cited in Snow, 2017). Solomon (2011) further explained that the reason for this finding was the need to delay childcare in order to complete academic commitments and achieve some level of academic success as members of faculty. In support, Fluehr (2013) reiterated that the age of the children is an important

factor to consider as caring for younger children could be more demanding compared with grown-up children. For instance, a study by Home found that student mothers with children under the age of thirteen suffered from increased role strain than those with grown-up children (as cited in Fluehr, 2013). However, mothers unwillingness to give up control in childcare make their involvement with the children quite longer than fathers because most mothers tend to feel more responsible for the child's well-being (Ogletree, 2014).

In support of the foregoing discussion, Bosch (2013) conducted a study among postgraduate student mothers in Australia using both quantitative and qualitative techniques for collecting data. The finding showed that the main challenge of the student mothers was lack of support. The participants reported overcoming this difficulty by using time-management skills, partner support, and by sacrificing sleep and recreation time. However, their roles as mothers coupled with the need to create better opportunities for their children, served as a strong motivation for achieving personal goals. Bosch (2013) concluded that undertaking a postgraduate education rewarded the student mothers with a sense of freedom, growth, pride, achievement and developed their professional identities. It can be observed that though Bosch's study focused on postgraduate female students who had experienced a longer period of schooling, the participants reported challenges trying to combine studies and motherhood. The situations raised in the studies discussed above were not different from the roles played by females in most Ghanaian societies. In a related study, Adusah-Karikari (2008) had reiterated that traditionally, gender-role identification and household responsibilities are clearly established and passed down to children in the family. Preparing family meals, maintaining hygiene, caring for family members and a myriad of other chores consume a good part of the day for females globally no matter the level of one's education (Mrkic et al., 2010; Sharma, 2014; Shah, 2015). The implication is that in an attempt to combine studies with domestic responsibilities, female students might find themselves in role strains as each of these responsibilities needs equal attention, time and energy. The current study proposed to find out how family roles affected the persistence of female students irrespective of their social status. This was considered important because a study conducted by Abuya et al. (2017) in Kenya revealed that domestic responsibilities affected girls who were transiting from primary to secondary schools.

Method

Research design

The study employed a correlational research design (Creswell, 2014). This design was deemed appropriate because apart from using it to determine the relationship between the variables under study, the correlation coefficient was also used as a measure of the magnitude of the effect (effect size) as recommended by the American Psychological Association (Field, 2009). In addition, the correlational research design was useful as the study focused on determining the degree of association between two variables which were not manipulated (Creswell, 2014). The correlational research design allowed the researcher to measure the magnitude of the effect between the independent and the dependent variables with the help of the coefficient of determination. The design also permitted the researcher to use questionnaire and data analysis procedures within which description and inferences could be generalised to the population of this study. Using an informed consent, participants were made aware of the purpose of the study,

assured of their confidentiality and anonymity and they were allowed to withdraw from the study at will.

Sample and sampling procedures

The Yamane's formula was used to select a sample of 441 female students from a target population of 7849 from two public universities in Ghana. The female students were then selected through a stratified random sampling from 21 study centres across the country with the help of Kothari's (2013) proportional allocation method. These study centres were purposively selected based on a criterion that they have more than 100 female students registered in them. This criterion was deemed necessary so as to enable the data collected to be subjected to inferential statistics. In addition, simple random sampling technique through the lottery method was used to allow every student within each subgroup to have an equal chance of being selected to form part of the sample (Babbie, 2015).

Data collection and analysis procedures

The questionnaire used for collecting data was structured and consisted of three parts. The first section looked at the demographic data (age, marital status and number of dependants). The second part dealt with the items of family roles while the third session consisted of items on persistence. These variables were measured on a continuous nature. Items on persistence were adapted from Davidson, Hall and Milligan (2009). Out of the 441 questionnaires administered, 377 were validly filled and returned for analysis, indicating an 85% return rate. The data were analysed using means and standard deviation and Pearson Moment Product Correlation Coefficient (Pearson's r). The means of the responses were used to deduce the extent to which the respondents were in agreement with the statements under discussion on a five-point Likert scale (1-strongly disagree to 5-strongly agree). However, to facilitate data analysis, the means of the responses were interpreted as follows: 1.00 - 2.60 (Disagree), 2.61 - 3.40 (Moderately Agree) and 3.41 - 5.00 (Agree). The correlation coefficient with a significance level of 0.01 was used to determine significance of the relationship between independent and the dependent variables statistically and used to make deductions and conclusions. Pearson's product-moment correlation coefficient was computed to determine the relationship between family responsibilities and persistence.

To calculate the effect size, the scores on family responsibilities and persistence were obtained as a continuous score and then correlated. According to Field (2009) the correlation coefficient is one of the most useful and appropriate means of calculating for effect sizes of score obtained in a continuous manner using the Pearson's correlation coefficient r , because it falls between the range of 0 (no effect) and 1 (perfect effect). This was considered as a standard way of measuring the magnitude of an observed effect (Field, 2009). The effect size of the variables under study was determined using the square of the correlation coefficient (r^2). It helped to show the magnitude of the effect between the variables under study. Cohen's (1994) standard on interpretation of effect size where, $r = .10$ (small effect), $r = .30$ (medium effect) and $r = .50$ (large effect) was used. An analysis of variance (ANOVA) was further used to confirm the significance of the relationship between the variables.

Findings and Discussions

Profile of Respondents

The age ranges of the participants were found to be as follows; those aged between 18-25 years were 155 (41%); 25-35 years were 193 (51%); 36-45 years were 22 (6%) while participants aged above 46 were 7 (2%). The age range with the highest number of participants was 25-35 (51%). Participants were found to fall within 3 main categories of marital status namely; single 235 (62%), married 138 (37%) divorced and widowed 4 (1%). This implied that the majority of the female students were single. The study further sought to find out if the respondents had dependants they were supporting. It was revealed that 222 (52%) of the respondents had children they were supporting, 141 (32%) and 67 (16%) cared for their parents and siblings respectively. The descriptive analysis of responses of the female students in relation to their family roles is presented in Table 1.

Table 1: Family responsibilities as viewed by female students

Family Responsibilities	Mean	SD
Caring for children.	3.9	1.2
Medical care to elderly	3.9	.99
Cooking for family.	4.2	1.0
Laundering for the family.	3.9	1.2
Less time for husbands.	3.3	1.3
Expecting babies as student	3.7	1.3
Nursing babies as student	3.9	1.2

It can be observed from Table 1 that most of respondents agreed to the issues raised on family roles as portrayed by the mean values of above 3.41. The respondents agreed (Mean=3.9, SD=1.2) that it was the duty of the female to care for children especially when they fall sick. This included taking them to seek medical care, ensuring they were well-fed and medications were properly taken. This could be really stressful when such situations coincided with times when they were supposed to attend to academic duties as well. The participants agreed it was their responsibility to care for the elderly relatives of the family (Mean=3.9, SD=1.2). This was possibly the situation because in most African communities including Ghana, where the existence of homes for old and aged relatives is practically absent, it becomes the duty of close family members to care for their aged relatives. The call for duty, as far as the care of elderly relatives was concerned, usually fell on the females as compared with males in most families even if these females were students as reported in this study. This result concurred with the assertion made by Sha'aban as cited in McClusky (2017) that in most families, females were responsible for taking care of the unemployed, the elderly and the sick.

The study went further to seek the views of respondents on performing domestic roles such as cooking and doing laundry for the family. These roles had mean values of 4.2(SD=1.0) and

3.9(SD=1.2) respectively. This was an indication that the respondents agreed that it was their responsibility to do the cooking and washing for their families. Again, it can be noted from Table 1 that the respondents gave a confirmation to the fact that it was difficult to combine pregnancy and studying through the distance education mode. This was supported by respondents who agreed (Mean=3.7, SD=1.3) to this statement. To find out the situation on the ground as far as nursing babies and being students were concerned, the respondents agreed (Mean=3.9, SD=1.2) that it was a demanding role. This affirmed that family roles could interfere with their persistence. The implication is that combining family roles with being a student on a distance education programme could affect one's level of persistence. These claims supported the assertion made by O'Brien and Hapgood (2012) that mothers' "second shift" could be a cause of fatigue when females take up roles such as childcare, housework and caring for elderly family members. This was further confirmed by a survey conducted in Canada by McMaster professors which reported that there were many instances where unequal sharing of responsibilities between men and women in relation to domestic duties and childcare still occur (Yates, 2014).

The study also assessed the relationship and effect of family roles on persistence of female students on the distance education programmes. In line with this, a null hypothesis was formulated and tested as follows:

Ho₁: There is no statistically significant relationship between family roles and persistence of female students in distance education programmes in Ghana.

To determine the relationship, the scores on family roles and persistence were both computed individually and a continuous score was obtained for each of the variables. The Pearson's *r* indicated the relationship between the independent and the dependent variable, while the results from the report on ANOVA further established the strength of the significance of the relationship between the variables under study upon which conclusions were made. The result obtained from the correlation is as presented in Table 2.

Table 2: Correlation between family responsibilities and persistence of female students in distance education

		Family Responsibilities	Persistence
Family Responsibilities	Pearson Correlation	1	.177**
	Sig. (2-tailed)		.01
	N	377	377
Persistence	Pearson Correlation	.177**	1
	Sig. (2-tailed)	.01	
	N	377	377

** . Correlation is significant at the 0.01 level (2-tailed).

As seen from Table 2, there was a significant but weak positive correlation between family responsibilities and persistence, $r = .177$, $n = 377$, $p = .01$. Figure 1 further shows a scatterplot that summarized the result indicating a weak and positive correlation between family responsibilities

and persistence of female students on distance education programmes as most of the data points clustered around the mean.

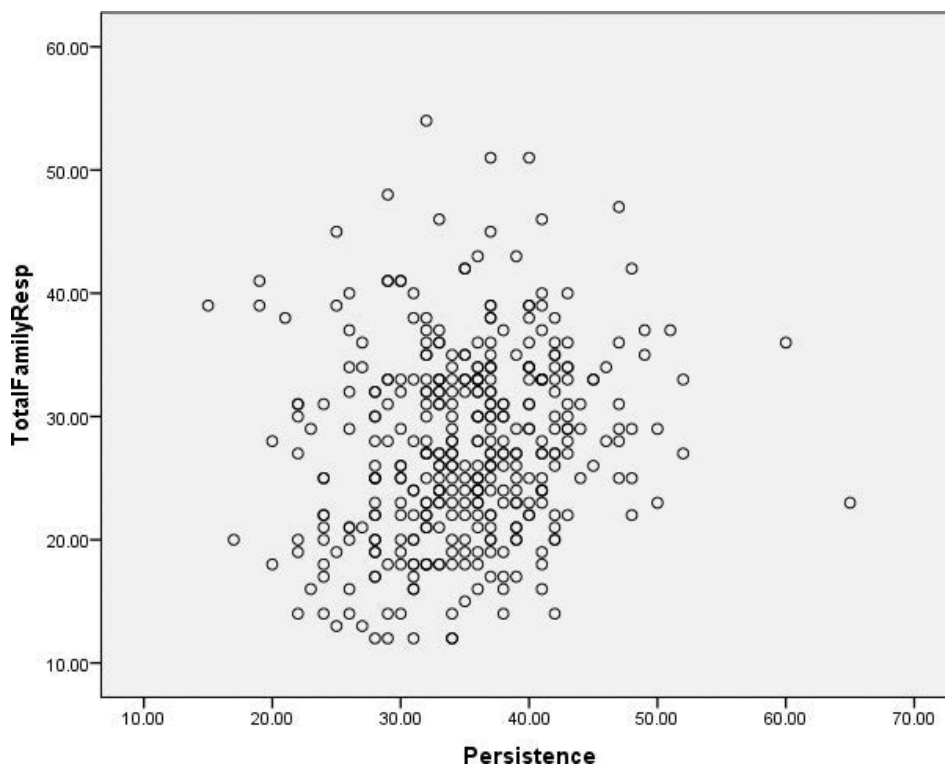


Figure 1: Relationship between family responsibilities and persistence of female students.

This meant that an increase in family responsibilities resulted in increased persistence of female students as well. This meant that the participants were somehow challenged with family roles but they made efforts to persist as students of distance education. This might be resulting from the existing structures which seemed to be tailored in a one size fits all manner. There was no flexibility in the choice of number of course loads one can conveniently study within a semester. Female students therefore struggled to fit in the existing structures which was not too suitable for them with respect to the other roles they performed as mothers or caretakers. This finding was in agreement with the study conducted by Abuya et al. (2017) in Kenya who found that females faced a lot of obstacles as they try to combine school with household chores and caring for younger siblings. They were usually overwhelmed with domestic and family demands (Eboiyehi, Fayomi & Eboiyehi, 2016). But in contrast with the findings of Abuya et al. (2017), which indicated that attendance to school was negatively affected by family responsibilities, the participants of this study showed some persistence towards their education.

To calculate for the magnitude of the effect of family responsibility on persistence, the r^2 was used and this gave an effect size of .03. An effect size of .03 was an indication that family responsibilities had a small but significant effect on persistence of female students on distance education programmes as confirmed in the ANOVA results presented in Table 3.

Table 3: ANOVA test on family responsibilities and persistence

Source	Sum of Squares	df	Mean Square	F	Sig.
Model	533.425	1	533.425	12.107	.01
Residual	16522.406	375	44.060		
Total	17055.830	376			

NOTE: $p < 0.01$

From Table 3, $F(1, 376) = 12.107$ was significant at $p < .01$. This meant that family roles were positively related to persistence of female students. Therefore, the null hypothesis that stated that *there is no statistically significant relationship between family roles and persistence of female students in distance education programmes in Ghana* was rejected. The implication of this finding was that despite the fact that there was some increase in the level of family roles female students performed, their persistence increased as well as depicted in Figure 2.



Figure 2: Female student with a baby at a face-to-face session.

As seen in Figure 2, the female student has developed some resistance towards managing their roles as homemakers by carrying part of their responsibilities from home to the college. In other words, they tried to make the best out of both situations (home and college). This finding was in contrast with Bean and Metzner's (1985) view that unfavourable environmental or home conditions were likely to affect the persistence of the non-traditional students negatively. It however confirmed the assertion made by Parker (2015) that many women have now decided to choose the joy and fulfilment that comes with a successful career and might put in all the necessary efforts to fulfil their academic goals. It can be deduced from the above discussion that most female students were determined to enjoy a better and fulfilling career and distance education provides the channel for their aims to be achieved as opined by Marsman (2014) and Kwapong (2010).

The findings on family responsibilities were also in tandem with assertion made by Richko (2016) that despite the demands of contemporary society, the desire for bearing and caring for children still remains among many women. Majority of the respondents in the study confirmed they had roles to play in the caring and maintenance of children. Although many of the female students involved in the study were single, after attaining the traditional marital age (Sweetman, 2003), there were indications that they were involved in other forms of caregiving activities (Ogletree, 2014). In summary, it was found that the female students performed familial roles as expected of them. It was further confirmed that female students seemed challenged as they combined studies and the family roles. However, despite this challenge, the female students appeared determined to persist on their course of study as confirmed by the results of the study.

Conclusions and Recommendations

Based on the findings of the study, it can be concluded that female students performed various roles in the family as expected of them. These included giving care, maintaining their homes, and expecting and nursing babies. The study found that though female students experienced some level of difficulty in performing these family responsibilities, their persistence was not affected negatively. Rather, the increased family responsibilities equally generated increased persistence among the female students which seemed to go against the usual norm as found by other researchers (Bean & Metzner, 1985; Abuya et al., 2017). This therefore implied a wake up call for the introduction of new policies by administrators and managers of distance education institutions especially in Ghana to help deal with this phenomenon so as to further improve the persistence of female students. It was therefore recommended that:

1. Administrators of distance education institutions could put in place necessary structures to help female students get supported enough to manage family roles and their persistence effectively as students on distance education programmes.
2. Administrators could be guided with the findings of the study to give practical information to female students on how to deal effectively with these equally important roles of being students and managing the family.

Limitations

The results of this study reflected the responses of female students enrolled in distance education with a face-to-face option and their responses may differ from students in other types of programmes such as online programmes. In addition, family roles as perceived by participants in this research

setting might be different in other settings, therefore generalization must be done with circumspection. The presence of a lot of unmarried female students in this study might have had some influence on the results of this study. This calls for a further study to focus on only female students with spouses and families. With a significance level of $p > .01$, and only 3.1% variance explained was an indication there were other unobserved factors affecting persistence of female students in distance education programmes in the selected institutions in Ghana.

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