The Relationship Among Student-Teacher Interaction and Academic Performance of Students in Congolese Higher Education: The Moderating Role of Marital Status

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Abstract: *The purpose of this research was to develop and validate the moderating effect of marital status on the relationship between student-teacher interaction and academic performance of students at Congolese university using two main studies. The first study was designed to develop the instruments for measuring student-teacher interaction' and their academic performance at the university and to explore the moderating effect of marital status on the relationship between student-teacher interaction and the academic performance of students. For this study, a mixed research method was used. Samples were drawn from one higher education institutions (the University of Kinshasa), using simple random sampling and stratified random sampling techniques based on students' status and sex as strata. For this study, both qualitative and quantitative data were collected. Data for qualitative analysis were gathered from married and unmarried students using interviews and focus group discussion, whereas data for quantitative analysis were gathered from married and unmarried students using questionnaire. The analyses were made using mainly multiple regressions, the statistical testing of the generated hypothesis via t-test statistics and Pearson product moment correlation, multivariate analysis of variance (MANOVA), and simple slope analyses. Furthermore, the demographic variable of participants (sex of students, student status, study level, socio-economic status of the family and major) was another target of the study. 362 students (include married' and unmarried' students) from the university of Kinshasa, took part in the study. The study was guided by the **Bandura's***

social cognitive theory, that determines human behavior and describe the learning theory that analyzes and explains how feelings, thoughts, actions of others, and social experiences actively shape learning processes. The final results revealed that there is a significant correlation between student-teacher interaction and academic performance. In addition, marital status moderated the relationship between student-teacher interaction and academic performance when students are unmarried.The second study was designed to examining the difference of academic performance between married and unmarried students. Qualitative data were collected from 362 students (include married' and unmarried' students) using interview questionnaire. Data were analysed using constant comparative approach (the reported stories that emanated from the conversations with the research participants); the deduced meanings from the interview protocol. The study results indicated that the unmarried students' academic performance was high than their married students' counterpart and in significant way; and the marital status was negatively associated with academic performance of students at the university in DRC. Finally, based on the findings, some practical and theoretical implications and future research directions were forwarded.

KEYS WORDS: Student-Teacher interaction, Academic Performance, Marital status, students, Democratic Republic of Congo

INTRODUCTION

There is a considerable international body of literature exploring the predictors and determinants of undergraduate academic performance (Barrow et al., 2009; Betts & Morell, 1999; Cohn et al., 2004; Smith & Naylor, 2001). Mushtaq et al. (2012), report that academic performance is affected either by social, psychological, economic, environmental and personal factors in which factors strongly influence students' academic success, whether positive or negative, but they vary from one society to another.

According to Brophy, (2001), Psychosocial factors like attitude and social interaction of student-lecturer play a great role in student's academic performance and are essential for the delivery of high quality teaching and learning process.Many studies in educational sector have examined the experiences of undergraduates' students with regard to student-teacher interaction and academic performance. The predictor variables explored encompass a full biopsychosocial spectrum, from familial socio-economic status, to institutional class sizes. One of the most immediately accessible factors for exploration is the marital status.

However, much remains to be learned about the intersection of marital status, student-

teacher interaction as it relates to student's academic performance. Regrettably, these areas have generally been investigated in isolation from one another. For example, Fazal Rahman and al, (2020) addressed the impact of teacher-student interaction on student motivation and achievement, although moderating factors such as marriage is often minimized in this work; although moderating factors such as marriage is often minimized in this work and few cases of these studies and academic reports were directed in Congolese educational sector.

Therefore; in educational sector, more recent research has examined the relationship effect of student-teacher interaction and academic performance in a more general sense, but again, not considering the role of marriage. An effort should be emphases towards this direction to enrich the existence theories on the contingency approach of the moderating role of marital status on the relationship between student-teacher interaction and academic performance of the students and to make a difference of these variables between married and unmarried students at the university.

Problem statement

One of the most pressing issues is the improvement of overwhelming presence of married seemingly unmotivated students which can be proved with many of the behavioral and social problems, less time to be at school and participating in school activities, financial problems, the burden of a family the child custody, and family health preservation. Quite often the married students will become discouraged with the role they must assume as married students.

Thus the student-teacher's interaction should be taken seriously, firstly by the students themselves, secondly by the teacher and the management in the impact on student motivation and academic performance; but more worrying is the fact that most married students, especially married female students, find it more difficult to have close relationships with their professors given their status, this situation leads to a decline in relationships between professors and students and have an effect on their academic performance. Teachers need to seek to know the role of moderating effects of marital status on the student-teacher's interaction to help them recognize the costs of the choices they make and to achieve their academic performance.

Significance of the study

The significance of the study is that the research findings can provide insight toward the understandings the moderating role of marital status on student-teacher interaction

and academic performance. This study will make a contribution to the sparse literature base on married students and academic performance in DRC higher education. This study will benefit the students married or non-married because by getting to know the significant relationship of student-teacher interaction and academic performance, they can now plan and expect positive results from their performance.

LITERATURE REVIEW

Theoretical Framework

There are many theories that are used to explain and understand the students-lecturer interaction and the student's academic performance, but this research was drawn for the theory of social cognitive theory of Bandura which is common and well known to explain in the same times the existence and importance of students-lecturers interaction and students' academic performance of different learners in a social environment context.

The social cognitive theory addresses how student develop social, emotional, cognitive, and behavioral capabilities; and how people regulate their own lives; and what motivates them. Bandura's (2012) social cognitive theory explains individual learning, development, acquisition of knowledge, and self-regulated competency within a social context, in which parents, peers, and teachers play a significant role as social models.

SCT focuses on what people learn from observing and interacting with other people. While I do not dispute this, I argue that the element of fulfillment, which the married and unmarried student in this study identified as being important to them, be used to expand Bandura's social cognitive theory.

Student-teacher interaction and Academic Performance

There are many important factors involved in the process of improving student learning. Research indicates that among these, the quality of teacher-student relationships is one of the most important influences on learning achievement (Hattie, 2009). Teacher-student relationships have been shown to correlate with many constructs, such as school adjustment and behaviour outcomes, in particular problem behaviour.

Abari and Adejor (2021) also corroborated that student academic achievement is affected by personal characteristics, study methods, and the relationships established with teachers. S. Leonard et al., (2024), their study concluded that the lecturer-student relationship is significant to qualitative students' academic performance and managerial

realization of school education objectives.

Regarding the relationship and the academic performance of married students in higher education, a number of authors in the recent past have discussed that issues in higher education, we can listed some of them. One study demonstrated a positive influence of marriage on the academic performance of community college students (Yess, 1981). Beard & Beard, (2018), when highlighting about examining marital status and academic performance, their result showed that marriage only affects the academic grade of students. Their personal relationship did not change by marriage.

In addition, some students believe that marriage during academic studies was better to control physical relation with others (Moghimi et al., 2016).The findings of the research of Clark, (2014), highlighted that because of marriage female students face many aspects like educational obligations of studies, shortage of time, limited interaction with family and friends and academic atmosphere. Therefore, pupils face all these factors because of the limited time.

Justin & Haroon, (2019), concluded that anxiety and avoidance negatively affect the relationship of married female students. Noori, & Orfan, (2021), argued that female married students were able to attain the same grades as their male spouses, and in some circumstances, they even outperformed their male colleagues. Petrol, M. B. (2010) reported that marital status is a good predictor of the academic achievement of NCE students.

In contradiction, Beard (2018) where he stated that academic performance negatively linked with marital status and GPA and CGPA did not affect the performance of married female students. Stein (2006), examined the influence of marital status on academic performance; he reported a non-significant influence and concluded that marital status has no significant influence on academic performance.

METHOD

The study one employed a descriptive survey design. We conducted our research on one University of Kinshasa in the Democratic Republic of Congo and we have constituted our working sample with 362 subjects including 177 male subjects and 185 female subjects; have been occasionally delivered to different departments of this University. In this work, the occasional sample was used because in this last method,

the criteria are the accessibility of the subjects.

About Quantitative data, for the student-teacher relationships, we used the instrument modified by Cheryl Dix Modlin (2008); and for the academic performance instrument, we used quantitative research instruments developed by Sansgiry et al., (2006). The format of the questionnaires was in the five-point Likert Scale.The study two used a semi-structured interview. We used an interview guide, which was a list of points to be explored for addressing the research questions of Study two.

The points included the related effect of students' marital status in term of motivation to student-teacher interaction and academic performance, the reason that married student choose to study in higher education institution and identify what support do they get from their partner (husband or wife) that is related in terms of school issues, in particular, student-teacher interaction and academic performance, and students' responses towards the significant difference in term of academic performance between married and unmarried student' at the university.In addition to student pre-and post-interviews, voluntary samples of twelve students (male and female) aged from 19 to 40 from the University of Kinshasa participated in the final group interviews. All were assigned pseudonyms for purposes of analysis.

RESULTS

Results of the study one

Table 1 Descriptive Statistics and Correlations

	Mean	SD	1	2	3
S-TI	1.85	0.774	1		
STAT	0.36	0.629	-0.668***	1	
AP	1.98	0.993	0.718**	-0.078***	1

*** p<0.01 ** p<0.05

Table 1 shows that academic performance with (M=1.98) correlates negatively with students status (r=−0.078; p<0.01). In addition, positive significant correlation is found between academic performance with student-teacher interaction (r=.718; p<0.05). We conclude that student-teacher interaction was positively correlated with academic performance, and the academic performance is better when the student is unmarried; the research hypothesis was approved by results.

Multiple regressions were conducted to test the mediated moderation model, and the results are shown in Table 2. A mediated moderation model is a conditional model to test the moderation and mediation effects simultaneously. This model can test the interaction effect of the independent variable and moderator on the dependent variable through the mediator (Hayes et al. 2017; Muller and al.2005).

Table 2 multiple regression analyses

predictors	Equation 1 (Criterion= Academic performance)		Equation 2 (Criterion= Academic performance)	
	B	SE	B	SE
S-TI	.388**	.059	.461***	.063
STAT	.276***	.107	.367***	.121
S-TI * STAT			.025***	.047
R2	.004		.001	
F	1.461***		.289***	

** p<.01 *** p<.001

We first examine the moderating effect of marital status on student-teacher interaction and academic performance. As shown in Eq.1 in Table 2, we found that there was significantly positive (B=0.05, p<.001) interaction between marital status and student-teacher interaction on academic performance. The results showed that marital status moderated the relationship between student-teacher interaction and academic performance.

Moderating effect of marital status
The present study used a mediated moderation model to test the relations among student-teacher interaction and academic performance. Results revealed that marital status moderated the predicted effect of student-teacher interaction on academic performance.
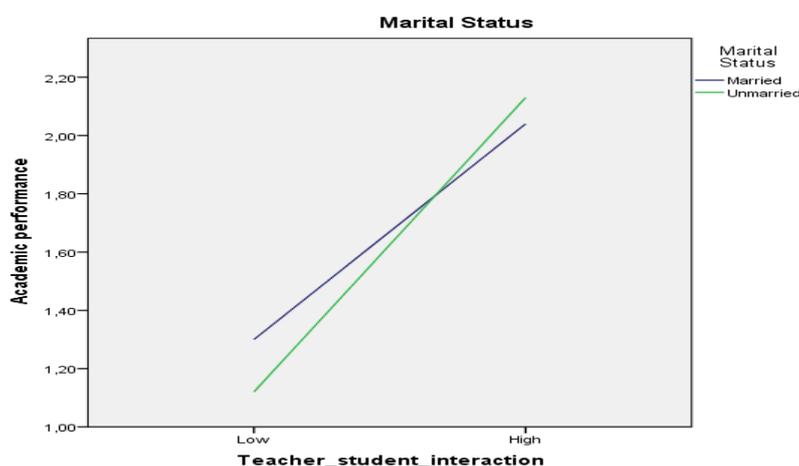
Figure 1. Moderation effects of marital status on student-teacher interaction and academic performance.

As depicted in Figure 1, to further understand this relationship, we plotted the link between student-teacher interaction and academic performance at high (+1 SD) and low (-1 SD) values of students marital status. The plotted interaction showed that for students of different marital status, the more positive the student-teacher interaction, the better the academic performance. Specifically, there was a stronger positive correlation between student-teacher interaction and academic performance when the students' marital status was unmarried (B =.46, p<.001) compared to married students (B =.36, p<.001).

RESULTS OF THE STUDY TWO

Twelve participants took part in the interview. Six participants (three female and three male) reported they are married and six participants (three female and three male) claimed they are single.

Four married students (two males and two female) mentioned that marital status has an effect on student-teacher interaction, They affirmed that being married, and they have a good relationship with their teachers, and agree that the relationship with their teachers positively affects their academic performance by the fact that their teachers know them better and this motivates them to improve their academic performance.

But, in the other side, two married students (one male and one female) mentioned that

marital status does not have an effect on student-teacher interaction; they affirmed that being married, they have a reserved relationship with their teachers, these relationships are purely academic order. Two male and three female married students affirmed that **the marital status affect negatively their academic performance** for example, married couples may not only have to focus on their own daily schedules but their spouses' schedule as well. Married couples also have to navigate marital roles, which may be difficult while also in college. For example, deciding who completes which house chores or who pays the bills may distract from academic performance. This finding concurs with Stein (2006) results when he examined the influence of marital status on academic performance; he reported a non-significant influence and concluded that marital status has no significant influence on academic performance

About their reasons to choose the higher education, **married and unmarried students in higher education need higher education for different reasons**. These reasons are individualized because they completed the interview protocol individually. Though, their reasons vary but the reasons for higher education according to the married and unmarried students (sampled participants) are peculiar and common to the following. **For common reasons**, firstly, they need higher education to become better mothers and fathers. They are of the opinion that higher education will broaden their knowledge on how to manage their homes and perhaps affect their children and neighbors positively. Secondly, some married and unmarried students need or chose to study at higher education for the singular purpose of higher education qualification. These qualifications are needed at their place of work for promotion and continuous relevancy at their place of work.

This opinion of theirs could be linked to the general believe that promotion at place work comes with additional remuneration via increase in salaries and fringe benefits. **For particular reasons**, we note that some married female students need higher education to avoid to be considered as an illiterate as their husband have always painted her.

For challenges, according to the sampled participants include financial problem, educational background of husband or parents; psychosocial factors (attitude and student-teacher interaction problem); problem of combining motherhood and education, combining school and work, distance of their home to university, time to do school activities etc.

DISCUSSION

The discussion was made in three main categories depend on the major findings. Firstly, it was made about the results obtained with regard to the relationship between all the variables; and the evidence from the results in table 1 revealed that students have positive relationship with their teacher at the university, that relationships influence positively their academic performance; and conflict between teacher and student was to found to correlate positively with school avoidance and negatively with school liking, and also with academic performance. The results of this study corroborate the study of other studies on student-teacher interaction and academic performance such as that of Göktaş and Kaya (2023) averred that the interaction between students and professors should be warm and cordial for smooth information transfer and effective student performance. Hascher and Waber (2021) also supported that because instructor-student relationships are essential to one's social and emotional development, they have the potential to influence how a student succeeds in school.

Secondly, discussions were also made with regard to the findings about the moderating effect of marriage on the relationship between student-teacher interaction and academic performance of students at the university. The results of the study concluded that marital status moderated the total effect of the relationship between student-teacher interaction and academic performance when the students are unmarried. This finding is in accordance with the results of Beard & Beard, (2018), when highlighting about examining marital status and academic performance. Their result showed that marriage only affects the academic grade of students. Their personal relationship did not change by marriage.

Finally, discussion was made about the differences in the academic performance between married and unmarried students at the university. The finding indicates that single students perform better than their married counterpart. The results revealed that the academic performance of the married students is at low level because of the burden they have in their family and because of they encountered difficulties in balancing school works and their family obligation.

This finding concurs with Ehab Darwiesh and al, (2021), when they concluded that marriage does not affect academic performance. Factors that contribute to having a worsened academic performance were having children and having a monthly income of 3000 SR or less. Factors contributing to a better academic performance were a high level of family life satisfaction and the positive, supportive attitude of the wife. The

result corroborate with Beard (2018) where he stated that academic performance negatively linked with marital status and GPA.

In counterpart, the results of Justin and Haroon (2019), were inconsistent with the result of present research, they finding confirmed relationship among marital status and educational performances. Igra Afzal and all, (2022) assert also that their results found that relationship exists between academic performance and marital status: (Alpha 0.002 < 0.05).

CONCLUSION

Based on the findings of this study, it was concluded that: there was a stronger positive correlation between student-teacher interaction and academic performance when the students' marital status was unmarried compared to married students; unmarried students perform better than their married counterpart.

The following recommendations were made: Adequate attention should be given by lecturers/ teachers to address marital status differences in academic performance in terms of giving assignments, group work, responsibilities and any other academic activities in the Colleges.

The university's management should give incentives such as prompt promotion and trophies to lecturers who promote high relationships with married students in schools. This will encourage them to keep such practice and will also encourage married students to have an esteemed sense of belonging that will make them at peace with their studies in school.

In order to assist married and unmarried students that have deficient academic performance, teachers and counselors should know the different study habit patterns and how to integrate them into their teaching so that the diverse study skills in the class will be taken proper care of and the students should be given the opportunity to perform maximally

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