The Relationship between First-year Student Motivation for Learning Physical Fitness Course and Quality Physical Fitness Instructional Service: The Case of Bahir Dar University, Ethiopia

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Abstract: The motivation of students for learning is affected by quality physical fitness instructional service. However, it is not clear how the quality of the physical fitness instructional service predicts a student's motivation to learn physical fitness courses. Besides, the relationships between contextual factors and quality physical fitness instructional service are not explored. This study examines the relationship between quality physical fitness instructional service and the motivation of students to learn physical fitness courses. Moreover, it also examines the extent to which contextual factors predict quality physical fitness instructional service. This study further examines the extent to which quality physical fitness instructional services interact with contextual variables to predict students' motivation for learning physical fitness courses at Bahir Dar University. A cross-sectional research design consisting of 323 samples from the total population of 1860, using systematic random sampling techniques, is used for the study. The average age of the majority of students (n= 216, 66.9%) is 20. The quality of physical fitness instructional service and the motivation of students for learning the course are assessed by using the adapted standard tools, Service Quality Assessment Scale (SQAS), and Exercise Self-Regulation Questionnaire (SRQ-E) respectively. The analysis involves correlation and multiple regression analysis. Based on the data collected and analyzed, the following findings were obtained. The Pearson correlation results indicated that all motivational variables are significantly associated with most quality variables (p<.01). Particularly, intrinsic and introjection motivation is significantly associated with all quality variables (p<.01). In this study, the regression analysis also examined that the contextual variables slightly predicted the quality physical fitness instructional service (p<.05). However, the regression analysis confirmed that the quality physical fitness instructional service and contextual factors, together as predictors, accounted for 22% and 16% of the variance in intrinsic and introjection motivation respectively (p<.05). This means that twenty-two per cent of the variance in internal motivation and sixteen per cent of introjection motivation are accounted for by the predictor quality variables. The implication is that there is a need for an intervention in quality physical fitness service variables to influence student motivation for physical fitness courses.

Keywords: Motivation, Quality, Physical Fitness, and First Year Students,

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Introduction

A physical fitness course has several values for student participants; these include health and fitness-related benefits, social interaction, friendship, and enhanced quality of life (Ballantine & Hammack, 2015; Lucy, 2015; WHO, 2010). Currently, there is a concrete finding that discloses all-rounded benefits for youth who are regularly involved in physical fitness exercise. Conversely, a sedentary lifestyle can expose people to various health complications in later life. Inactivity is a leading cause of high blood pressure, heart disease, osteoporosis, Type II diabetes, breast cancer, and colon cancer (Garrett, Brasure, Schmitz, Schultz, & Huber, 2004). This implies that physical fitness courses can be considered a means to have better mental health, efficient body organs, and productive citizens.

Given the all-rounded values of physical fitness courses (Lee et.al., 2012), it is considered a part of a healthy lifestyle that requires special attention, particularly for the youth (Lucy. 2015; Capranica & Millard-Stafford, 2011). For a physical fitness course to be fruitful and achieve its aims, high-quality physical fitness instructional services are the key to understanding the motivation of students to pursue physical fitness courses and improve their health, social interactions, and intellectual and physical well-being as individuals within society (NASPE, 2012; Strong et.al., 2005).

Recently, the physical fitness instructional services and the motivation of students to learn the course were studied by scholars in the field (Dhurup, 2017; Olusegun, 2017; Perez, et.al., 2017; Justen, 2018; Tsitskari, Tzetzis, & Konsoulas, 2017; Xi, Liu, & Jingjing, 2022). All scholars argue that the student's motivation for learning physical fitness courses is influenced by the quality of physical fitness instructional services. The implication is that understanding quality physical fitness instructional services is related to students' motivation for learning physical fitness courses. However, the literature does not clarify the relationship between students' motivation for physical fitness courses and the quality of fitness instructional service, particularly in the Sub-Saharan context (Zuleica, Jaime, Lidia, & Cristina,

2020; Stephen, 2008). This study tried to address these gaps by examining the relationship between quality physical fitness instructional services and the motivation of students to learn physical fitness. In this sense, it would help to understand the association between the detailed components of quality and motivation variables. This is particularly important for higher education in Ethiopia and beyond. This provides a broader perspective on quality-related issues in higher education.

In the past, a few attempts of inquiry were made regarding the association between students' motivation for physical fitness courses and quality physical fitness instructional service based on the assumption that contextual factors such as gender and age are associated with quality physical fitness services (Nolan, & Molla, 2018). Still, the evidence for this assumption is limited, and most contextual variables are rarely included.

Therefore, the main purpose of this study was to examine the extent to which quality physical fitness instructional services interacted with contextual variables to predict students' motivation for learning physical fitness courses at Bahir Dar University. More specifically, this study intended to answer the following basic research questions:

- Is students' motivation for learning physical fitness courses related to perceptions of quality physical fitness instructional services?
- Do contextual (gender, religion, educational stream, and family location) variables predict quality physical fitness instructional services at Bahir Dar University, Ethiopia?
- Is quality physical fitness instructional service associated with student motivation for learning a physical fitness course after controlling for the variability in contextual factors at Bahir Dar University, Ethiopia? Is the relationship valid across two motivational domains (introjection motivation and internal motivation)?

This information will be important for identifying students' needs about motivation to learn physical fitness courses and quality instruction. This will enable the university as well as the physical education department to have an understanding of the extent to which quality instruction and contextual factors influence students' motivation for learning physical fitness.

Operational definitions

Contextual factors: - variables that affect first-year students at Bahir Dar University; it includes age, gender, religion, educational stream, and residential area;

Motivation: - the derive that motivates the behaviour of first-year students towards learning physical fitness courses; and

Introjection motivation: - a form of motivation resulting from the feeling pressured to perform physical fitness courses from the peer group and society.
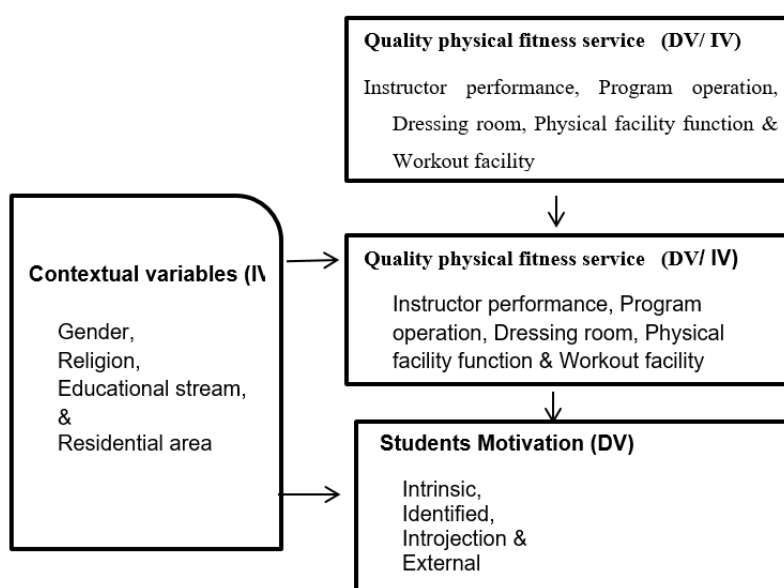
Conceptual model of the study

This study is conducted in line with the Self Determination Theory (SDT) particularly, contextual motivation, to empirically evaluate the motivation of students to learn physical fitness courses. This theory puts the foundation for the contextual nature of motivation in physical fitness courses. From a psychological perspective, contextual motivation refers to one's motives for participating in a more varied set of related activities, such as physical fitness and sports, within a period (Ryan, & Deci, 2002). Consistent with this conceptual definition of motivation, students' motivation is defined as a student's motives for learning physical fitness courses successfully within the context of sports fields or gymnasiums.

The self-determination theory of motivation provides some dimensions along with the sports field or gymnasium context. For students, motivation

increases persistence in working with challenging physical fitness courses and has been shown to influence student's performance, interest, and commitment, which commonly contribute to the quality of physical fitness instructional service, in a higher educational context (Knowles, Holton, & Swanson, 2020, Catherine & Ennis, 2017; Thompson, & Clayton, 2004). Examining the relationship among motivation, contextual factors and quality physical fitness instructional service as well as between quality physical fitness instructional service and motivation of students to learn physical fitness courses is critically important to take measures on motivation and physical fitness instructional service quality.

By considering the variety of reasons accounting for motivation, as well as its dimension, the author takes SDT as a base. The theory served as a source of influence to inform the selection of crucial variables for the study. *Fig. 1* presents the components of the conceptual model.

Figure 1: Conceptual Model of the Study

As shown in *Fig. 1*, each element of the model addresses specific aspects of the study. The first component of the model was the contextual factors including age, gender, religion, educational stream, and resident area, dealing with the quality of physical fitness service and motivation variables. The second component of the model was quality physical fitness service variables including instructor performance, their ability to operate fitness programs, the dressing room, physical facility function, and workout facility, dealing with the students' motivation variables, which include intrinsic motivation, identified regulation, introjection motivation, and external motivation.

Methodology

Design

The study employed a descriptive survey design as it was found suitable for its purposes. It allows the scholar to evaluate and compare many different variables at the same time with little or no additional cost (Rakesh and Priya, 2019). This study examined the extent to which quality physical fitness instructional services interact with contextual variables to predict students' motivation for learning physical fitness courses at Bahir Dar University.

Sampling

The participants of this study were freshman students who were registered for the 2021/2022 academic year at Bahir Dar University. Before sampling, the researcher identified the total number of students was 1860 and the number of sections was 32 in the university (using a section list collected from the Registrar's Office). The researcher then divided the whole section into two groups, natural and social science, based on their stream. 15 sections were then randomly selected from the two groups and a total of 323 students were selected as samples of the study using systematic

random sampling techniques. *Table 1* summarizes the demographic characteristics of the research participants.

Table 1: Descriptive Result: Students' Contextual variables *(n=323)*

Contextual variables	Characteristics	frequency	Percentage
Age	18	13	4
	19	79	24.5
	20	216	66.9
	Above 20	15	4.6
	Male	170	52.6
Gender	Female	153	47.4
Religion	Orthodox	165	51.1
	Islam	78	24.1
	Protestant	60	18.6
	Catholic	17	5.3
	Others	3	.9
Stream	Natural science	174	53.9
	Social science	149	46.1
Residential area	Urban	142	44
	Semi-urban	110	34
	Rural area	71	22

Table 1 indicates most of the participants were male students (52.6 %, n = 170), and the rest were female participants (47.4 %, n = 153). Regarding religion, 51.1% (n = 165) and (24.1%, n= 78) of the students were Orthodox Christians and Muslims respectively. In terms of educational stream, (53% (n = 174) of the participants involved in the study were from natural science while the remaining ones (46.1 %, n = 149) were from the social sciences. Concerning the residence area of students before joining the university, most of them (44%, n=142) were from big cities (capital cities of regional states, zones, and city administrations). The remaining (34 %, n=110) and (22 %, n = 71) were from semi-urban (woreda cities) and rural areas respectively.

Data Collection

In this study, the quality of physical fitness instructional service was assessed by adapting the standard tool called the Service Quality Assessment Scale (SQAS) developed by Lam, Zhang, & Jensen, 2005). This model is specifically designed to examine the quality of physical fitness instructional services and has been widely adopted in various quality physical fitness instructional services (Lam, Zhang, & Jensen, 2005). Besides, its all dimensions had satisfactory alpha and composite reliability coefficients, and it's suitable for students and provides easily managed results, as well as dimensionality (Perez, Minguet, & Freire, 2010). Moreover, it has psychometric properties determined by the attributes of psychological characteristics used for the evaluation of the quality fitness instructional service (Knop, Hoecke, Bosscher, V.D., 2004).

This model has a 31-item scale with 6 dimensions displaying sound psychometric properties and variance for factor loading and tau coefficients and can be utilized to assess the quality of physical fitness instructional service and related research investigations (Lam et.al., 2005; Audrius, & Lina, 2019).

Adaptation of the tools included clarification, simplification and adjustment of terms or phrases with the higher education setting of the country. For instance, one of those six components, including the *presence of a waiting room for kids and relatives* did not comply with essential issue expectations, at least in the higher education context, so it is not included in the questionnaire. The instrument includes individual student scores on composite measures in 5 dimensions: Instructor performance (9 items), Program operation (7 items), Dressing room (4 items), Physical facility function (5 items), and Workout facility (5 items).

This study also used and adapted the standard tool called Exercise Self-regulation questionnaires (SRQ-E) developed by Ryan and Connell (1989) to evaluate students' motivation for learning physical fitness courses. The instrument included individual student scores on composite measures in 4

dimensions: intrinsic motivation (3 items), identified regulation (6 items), introjection motivation (3), and external regulation (1 item).

Before data collection, a selected research review committee member of the academy checked and approved the research code of conduct of the university. Verbal consent was obtained from the students in their respective sections. After this, the questionnaire survey was distributed to the sample participant students. Almost all of the distributed questionnaires were collected with responses properly filled in.

To understand the reliability of the survey instrument, a pilot study was conducted on 106 first-year students who were not part of the main study. Since a language expert was involved, there were no major corrections of phrases or phrases of the sentences. However, the expected time and the time required to fill out the questionnaire were different. Hence, it helped to know the time required for the actual data collection in advance. Based on the results obtained, the observed values of quality and motivation instruments were approximately equal to 0.70 and 0.89, or the Sig value. < $\alpha = 0.05$, while the test retest's reliability values of the instruments were found to be .70 and .89 respectively. Based on these data, it could be concluded that the instruments were valid and reliable. So, it could be concluded that the first and second tests of the instruments had a high level of consistency in the administration of the tests given.

Data analysis

In this study, correlation analyses, including partial and Pearson correlations were used. With the bi-variate correlations, this study examined the strength and direction of association between the student's motivation to learn physical fitness courses and the quality of physical fitness instruction service provided at Bahir Dar University. The other set used 3-step multiple regressions to assess the relative influence of contextual variables and quality physical fitness service variables on the motivational outcomes, separating the prediction of the contextual variables and the quality physical fitness service variables. In doing so, SPSS version 25 software was used.

Results

Preliminary analysis

To detect the independent influences of each contextual factor and quality physical fitness instructional service variables on the prediction of motivation, the author carried out nine partial correlation analyses. Most contextual factors do not have a significant association with most motivational variables ($p < 0.05$) (*Table 2*). However, the two contextual variables (religion and residential area) have a significant association with external and introjection motivational variables ($p < 0.05$), with r ranging from .11 to .13. Furthermore, with r ranging from .13 to .34, four quality variables (instructor performance, dressing room, physical facility, and workout facility) have significant associations with at least two motivation variables ($p < 0.01$).

**Table 2: Summary of partial correlation for scores of students' contextual factors and quality instructional service as a function of motivation (n=32*3)*

Variable	Internal motivation	Identified regulation	Introjection motivation	External motivation
GN	.023	.108	-.066	-.099
RL	-.028	-.019	-.025	.131*
ED	.004	.050	.028	.013
RA	-.085	.033	.111*	-.049
IP	.348***	.295***	.132*	.036
PO	.045	.081	-.013	-.020
DR	.159**	.103	.163**	.036
PF	-.086	-.018	.153**	.267***
WF	-.086	-.018	.153**	.267***

*Note: GN= gender, RL= religion, ED= educational stream, RA= residence area, IP= instructor performance, PO= program operations, DR= dressing rooms, PF= Physical Facility function, WF= Workout facility, * $p < 0.05$, **$p < 0.01$ and ***$p < 0.001$(2-tailed)*

According to *Table 2*, the two contextual variables (residence area and religion) have a significant association with introjection and the external motivational variable ($p < 0.05$), with r ranging from 11 to .13. This implies

that the religion and residential area of Sample Students before joining the University are related to external and introjection motivation variables. Furthermore, with r ranging from 13 to .34, four quality variables have significant associations with at least two motivation variables (p < 0.01). This suggested that instructor performance, dressing room, physical facility, and workout facility variables are associated with motivation variables.

Results of correlation analysis between student motivation and quality instruction

Pearson correlation analysis was used to assess the extent of relationships that existed between motivation for physical fitness courses and quality physical fitness service variables for the entire sample group. *Table 3* presents the summary of the correlation analysis results.

Table 3: Summary Pearson correlation between motivation and quality instructional variables (n= 323)

variables	IP	PO	DR	PFF	WF
Intrinsic motivation	.391**	.261**	.267**	.123*	.140*
Identified regulation	.365**	.268**	.193**	.156**	.076
Introjection motivation	.205**	.186**	.297**	.296**	.201**
External motivation	.147**	.066	.039	.232**	-.119*

*Note: IP=instructor performances, PO =Program operation, DR = dressing rooms, PFF= Physical facility function, WF=workout facilities, * p < 0.05, and **p < 0.01(2-tailed).*

Table 3 shows that intrinsic and introjection motivation of students is significantly associated with all five quality physical fitness instructional service variables (p<, .01, p< .05). Moreover, identified regulation is also significantly associated with four quality physical fitness instructional service variables (p<, .01). This implies that there is a positive and strong relationship between motivation and quality variables. At r =.391, the correlation coefficient between internal motivation of students to learn the course under discussion and instructor performance, was the highest among the others. Similarly, when

compared to other motivation and quality variables, the correlation coefficient between the introjection motivation and physical facility function, was the highest, with r =.296. The correlation between external motivation and physical facility function, was negative, and significant, with r = -.11.

Regression models and summary of results

Multiple regression analyses were also conducted to examine the relationship between four contextual variables as predictors and each of the five domains of quality variables as outcomes. *Table 4* presents the summary results of the multiple regression analysis models.

Table 4. Summary of regression models predicting five components of quality instruction *(n= 323)*

DV	IV	B	SE	t value	P	B	F value	R²
IP	GN	-.143	.107	-1.333	.183	-.076		
	RL	.015	.055	.282	.778	.016		
	ED	.093	.107	.876	.382	.049	.607	.008
	RA	.020	.068	.299	.766	.017		
PO	GN	-.023	.100	-.231	.817	-.013		
	RL	.020	.051	.394	.694	.022		
	ED	-.087	.099	-.880	.379	-.050	.267	.003
	RA	.020	.063	.314	.754	.018		
DR	GN	-.353	.113	-3.120	.002	-.175**		
	RL	-.015	.058	-.252	.801	-.014		
	ED	-.060	.112	-.533	.594	-.030	2.788*	.034
	RA	.022	.071	.312	.755	.017		
PF	GN	-.102	.093	-1.101	.271	-.062		
	RL	.061	.047	1.282	.201	.072		
	ED	.014	.092	.156	.876	.009	1.283	.016
	RA	.100	.059	1.700	.090	.095		
WF	GN	-.278	.096	-2.893	.004	-.162**		
	RL	.033	.049	.678	.498	.038		
	ED	.005	.096	.957	.957	.003	2.140*	.026
	RA	.009	.061	.887	.887	.008		

*Note: DV= dependent variables, IV- independent variables, GN= gender, RL= religions, ED= Educational Stream, RA=Residential area, IP= instructor performance, PO= program operations, DR= dressing rooms, PF= Physical Facility function, WF= Workout facility, * p < 0.05* (2-tailed).*

As shown in *Table 4,* the four contextual variables predicted the dependent variable, quality physical fitness service, only marginally ($.026 \leq R^2 \geq .034$). These R-squared values are minimal but also still have statistically significant predictors in outcome variables ($p < .05$).

In this study, a 3-step hierarchical regression was used. This was shown in the process of adding or removing predictor variables from the regression model in three steps. As a result, the contextual variable and the motivation variables entered the model in the first step, and then the quality variables and the motivation variables entered the model in the second step. In the third step, both the contextual and quality physical fitness instructional service variables are entered to predict the dependent variable, motivation, in the model. *Table 5* presents the summary of the regression analysis for the four dependent variables.

Table 5: Summary of Regression Models Predicting the Internal Motivation for the Total Sample (n = 323)

DP	IV	B	SE	t-value	P	B	F value	R²
Step 1	GN	-.113	.114	-.989	.324	-.055		
	RL,	-.033	.058	-.560	.576	-.031		
Internal	ED	-.003	.114	-.023	.982	-.001		
motivation	RA	-.095	.072	-1.323	.187	-.073		
							2.039	.031
Step 2	IP	.411	.062	6.616	.000	.382***		
	PO	.059	.069	.850	.396	.051		
Internal	DR	.169	.059	2.862	.004	.168**		
motivation	PF	-.122	.072	-1.696	.091	-.099		
	WF⁵	.154	.072	2.145	.033	.130*	17.19**	.21
Step 3	GN	.043	.106	.408	.684	.021		
	RL	-.026	.053	-.494	.622	-.025		
Internal	ED	.008	.103	.074	.941	.004		
motivation	RA	-.099	.065	-.1.508	.133	-.076		
	IP	.412	.063	6.572	.000	.384***		
	PO	.056	.070	.797	.426	.048		
	DR	.171	.060	2.858	.005	.170**		
	PF	-.111	.073	-1.528	.128	-.090	9.79*	.22
	WF	.155	.073	2.138	.033	.131*		

*Note: DV=dependent variables, IV= independent variables, GN= gender, RL= religion, ED= educational stream, RA= residence area, IP= instructor performance, PO= program operations, DR= dressing rooms, PF= Physical Facility function, WF= Workout facility, * p < 0.05, **p < 0.01 and ***p < 0.001(2-tailed)*

According to *Table 5*, in Step 1, independently, none of the contextual variables predicted the dependent variable. In Step 2, the three quality variables predicted the dependent variable independently (R² = 0.21). This R-squared value indicates relationships and has statistically significant predictors (p < 0.01). In Step 3, the contextual variable, together with the quality variables, relatively better predicted the dependent variable, internal motivation (R²=.22, which means 22% explained variance). This implies that twenty-two per cent of the variance in internal motivation is accounted for by the predictor quality variables (instructor performance, dressing room, and workout facility).

 In this case, the moderate standardized coefficient (=.38) specifies that a one-unit increase in an instructor's performance corresponds to an average increase of 0.38 units of intrinsic motivation. Looking at the scores of beta values for the different predictors (see *Table 5*), the instructor's performance was found to be the strongest predictor of the intrinsic motivation of students to learn physical fitness courses (.382 to .384). Next, another 3-step multiple regression analysis was shown to examine the relationship between student contextual variables, quality variables, and introjection motivation. *Table 6* presents the summary of the regression results.

Table 6: Summary of Regression Models Predicting the Introjection Motivation for the Total Sample (n = 323)

DV	IV	B	SE	t-value	P	B	F value	R²
Step 1	GN	-.352	.155	-2.266	.024	-.127*		
	RL	-.019	.079	-.237	.812	-.013		
introjection motivation	ED	.062	.155	.401	.689	.022	2.457*	.037
	RA	.221	.098	2.254	.025	.125*		
Step 2	IP	.222	.088	2.511	.013	.151*		
	PO	-.038	.099	-.390	.697	-.024		
introjection motivation	DR	.260	.084	3.103	.002	.189**		
	PF	.294	.102	2.869	.004	.174**		
	WF	.118	.102	1.158	.248	.073		
							11.09*	.14
Step 3	GN	-.174	.150	-1.165	.245	-.063		
	RL	-.033	.075	-.436	.663	-.023		
introjection motivation	ED	.071	.146	.491	.624	.026		
	RA	.183	.093	1.980	.049	.103*		
	IP	.209	.089	2.359	.019	.143*		
	PO	-.022	.099	-.226	.822	-.014		
	DR	.246	.084	2.918	.004	.179**		
	PF	.281	.103	2.733	.007	.167**	6.873*	.16
	WF	.109	.103	1.060	.290	.067		

Note: DV=dependent variables, IV= independent variables, GN= gender, RL= religion, ED= educational stream, RA= residence area, IP= instructor performance, PO= program operations, DR= dressing rooms, PF= Physical Facility function, WF= Workout facility, * p < 0.05, **p < 0.01 and ***p < 0.001(2-tailed)

As shown in *Table 6*, two contextual variables, Gender and Residential area, independently predicted the dependent variable, introjection motivation (R^2 = 0.37), in Step 1. This R-squared value is moderate and statistically significant. In step 2, the three quality variables as independent variables modestly predicted the dependent variable, introjection motivation. In step 3, the contextual variable together with the selected quality variables normally predicted the dependent variable, introjection motivation ((R^2 = 0.16). The dressing room situation was found to be the better predictor of students' introjection motivation for the physical fitness course (β =.18) (Table 6). It was discovered that the dressing room environment was a better predictor of students' introjection motivation for physical fitness courses (.17 to .18).

Discussion

This study examined the relationship between the perception of quality physical fitness instructional service and the motivation of students to learn physical fitness courses. Moreover, it examines how important contextual factors are to predict quality physical fitness instructional service. It further examined the extent to which quality physical fitness instructional services interacted with contextual variables to predict students' motivation for learning physical fitness courses.

According to the correlational results, sample students' motivation had a strong and significant positive association with their perception of most quality physical fitness instructional service variables. This aligned with the outcomes reported in the literature in this field. The quality of physical fitness services would improve as the motivation for physical fitness courses increased (Darren, and Kamal, 2011; Olusegun, 2017; Perez, et al., 2017; Justen, 2018; Xi, Liu, & Jingjing, 2022). This consistency of results might be related to the similarity of perception, age, sex, health status, and self-efficacy of physical fitness participants (Adrian et al., 2012). This implies that there is a strong and direct relationship between quality physical fitness service perception and motivation for physical fitness courses among people with similar social contexts.

As the regression results confirmed, contextual variables slightly predicted the quality of physical fitness instructional service. In terms of gender, there was a statistically significant difference in perception of two quality variables, dressing room and workout facility, between male and female sample students. It was consistent with the outcomes reported in the literature in this field. Quality physical fitness service perception significantly varies across gender (Jairo, Jorge & Pablo, 2020; Manuel, Geronimo, Pablo, & Moisés, 2020; Afthinos, Theodorakis, & Nassis, 2005). In contrast, it was inconsistent with the findings of some research (Aslan, & Koçak, 2011). This difference might be related to experience, interaction, capability, and motivational differences among the fitness participants (Jairo, Jorge & Pablo, 2020). However, further investigation is needed across individuals with different academic, social, and physical fitness, motives, and life experiences. Furthermore, students' religion, their educational streams, and residential area before joining the University, did not make a statistically significant difference in their perception of quality physical fitness service. There are no studies conducted in this context so far. Hence, further investigation is needed across different contexts.

The regression results also confirmed that neither the student's religion nor the educational streams were significantly associated with both internal and introjection motivation for physical fitness courses. Similar findings were also reported in previous studies. The motivation of students for physical fitness courses and related activities is not associated with a specific religion (Fatima, Sultan, &, Nighat, (2020) or particular educational streams (Maria, Marios & Stiliani 2003). This implies that religion and educational stream contexts could not predict the motivation of students for physical fitness courses.

Furthermore, once quality physical fitness instructional service scores are included in each regression model, none of the contextual measures have a strong relationship with intrinsic or introjection motivation. This study highlights that quality physical fitness instructional service is the main dimension that determines the variability in intrinsic and introjection

motivational outcomes, particularly instructor performance (.382 to .384) and dressing room (.17 to .18). This finding is consistent with research conducted elsewhere, which has shown that quality physical fitness instructional service in higher education is largely linked with student motivation (Olusegun, 2017; Wiseman, & Hunt, 2001). The motivation of students in higher education is a contagious phenomenon between students and instructors. While motivated learners are interested in physical fitness courses, make efforts to succeed, and continue to exercise, instructors are inspired to help students' participation, devote more time to instructional activity, and ensure quality physical fitness courses as well as mastery of understanding, abilities, and desired attitudes (Schunk, Pintrich, and Meece, 2008).

As suggested, the quality physical fitness instructional service components and the two motivational measures had a high positive correlation with one another. Both the correlation and regression analysis results confirm a somewhat moderate association. Beyond this, another key outcome from the regression analysis results was that the quality of physical fitness instructional service and contextual factors, together as predictors, accounted for 22% and 16% of the variance in intrinsic and introjection motivation, respectively. There are no studies conducted on this situation so far. However, few correlational studies underlined the closed association between the motivation of students for physical fitness courses, contextual factors, and quality physical fitness instructional service (Olusegun, 2017; Manuela, Ana, & José, 2011). This indicates that the influences of contextual factors and quality physical fitness instructional service on motivation were not known. Hence, further investigation is needed across various contexts.

Conclusions

Quality physical fitness instructional service is the major factor in the influence of student's motivation for physical fitness courses. In line with this, it is essential to recognize the extent to which quality physical fitness service predicts students' motivation for physical fitness courses is

important to design well-specific interventions to influence the motivation of students as well as their instructor and to keep the quality of instruction in higher education. Hence, this study aimed to examine students' motivation for physical fitness courses and perceptions of quality physical fitness services. Moreover, this study determined the extent of contextual variables to predict quality physical fitness service. This study investigated the extent to which quality physical fitness service predicts students' motivation for physical fitness courses.

This study explored the predictability of student motivation for physical fitness courses from contextual variables and quality physical fitness instructional service. Based on the results of the present study, the following conclusions are drawn. Students' motivation for physical fitness courses is strongly and directly associated with instructor performance, dressing room, physical facility functions and workout facilities. Moreover, there was no significant association between contextual variables such as religion, educational stream, and residential area of students and quality physical fitness service. Moreover, contextual variables, particularly religion and the educational stream of students were not associated with the intrinsic and introjection motivation of students for physical fitness courses. In this study, the regression analysis results confirmed that students' motivation for physical fitness courses was moderately predicted by quality physical fitness services. It accounted for up to 22% of the variance in motivation for physical fitness courses. A one-unit increase in an instructor's performance corresponds to an average increase of 0.38 units of intrinsic motivation for a physical fitness course.

Recommendations

The results of the present study have important implications. This study is an important step toward understanding how some contextual variables of students and quality physical fitness service are related to students' motivation for physical fitness courses. The author believes that the existing motivation of students for physical fitness courses and quality physical

fitness services is an important concern for higher education. Research findings point to a need for an intervention on quality physical fitness service variables to influence student motivation for physical fitness courses. This study was conducted at a specific university with 323 students. Hence, to generalize and confirm the findings, it is essential to conduct similar studies and expand the range of generalizations. Furthermore, motivating students for physical fitness courses is not an end in itself; thus, investigating student motivation from the instructors' perspective is an important factor and it requires special attention.

Study Limitation

One of the limitations of this study was the inclusion of students in a single university. The author believes that the results of the study might be different had it been applied to some other university in the country with well-established sports infrastructure and included more contextual variables (for example, region, language, disability and ethnicity) in the regression equations. Hence, it is proposed that a similar study be conducted at other universities as well as extend the inclusion of some other contextual factors in future studies. Another limitation of the study is the focus on broad conceptualizations of quality physical fitness courses, considering the physical fitness workouts. This fails to capture the theoretical part of the physical fitness course. Future research may be needed to explore other indices of quality physical fitness courses in the higher education setting.

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