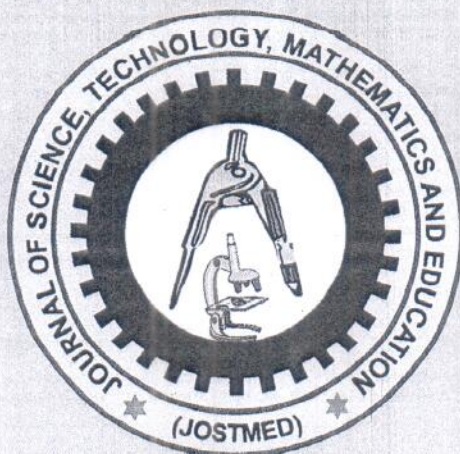


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SOCIO-PERSONAL ADJUSTMENT NEEDS OF FRESH UNDERGRADUATES AS EXPRESSED BY STUDENTS OF UNIVERSITY OF ILORIN

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Abstract

The study investigated the socio-personal needs of fresh undergraduates as expressed by students of university of Ilorin. Descriptive survey was employed for the study. Population consisted of fresh undergraduates in Kwara State. Purposive and simple random techniques were used to select 250 students that took part in the study. Researchers' self-designed instrument titled "Fresh undergraduates Adjustment Needs Questionnaire (FUANQ)" was used to collect data. The instrument was validated, pilot tested and the reliability co-efficient of 0.81 was obtained. One research question and four hypotheses guided the study. Data were analyzed with mean, rank order, t-test and one-way analysis of variance. Hypotheses were tested at 0.05 level of significance. Findings showed that the socio-personal adjustment needs of the fresh undergraduates were: how to overcome academic stress, adjust to new rules and regulations, overcome transport problems, overcome social problems, meet financial needs, solve accommodation problems, among others. Findings also showed that there were no significant differences in the socio-personal needs of the respondents based on gender, age, religion and ethnicity. Based on the findings of the study it was recommended that school counsellors should organize orientation programme earlier for the fresh undergraduates. Parents should also prepare the students well for independent leaving in the universities.

Keywords: socio-personal, adjustment, needs, fresh undergraduates

Introduction

Changing environment can create problems in individuals particularly to the young ones. Children who have been living with their parents many a time find it difficult to cope in a new environment. Schooling is one of the events in the lives of the young ones that can separate them from their home environment. Life in one's home cannot be compared with life in the school. Fresh undergraduates find it difficult to adjust to school environment coupled with new tasking activities going on the universities. Tabitha *et al.* (2012) discovered that majority of the fresh undergraduates who are in transition from home to school found life challenging in the school. The reason for this is not far-fetched. Fresh undergraduates on getting to the university have a lot of issues to battle with, particularly to those who came after the first batch. Challenges facing them range from looking for accommodation, locating lecture halls, rigorous registration process, feeding, attending to classes, coping with lecture method of teaching, among others. Confirming this Peremodé and Ugbomeh (2013) found that the problems facing fresh students are payment of school fees, rigorous screening exercise, registration process, inadequate classrooms and seats, epileptic power supply among others. Sometimes some students do feel like leaving the school due to these problems.

University environment is like no man's land hence students are care free and take responsibility for their actions. Fresh undergraduates meet university environment different from their secondary school environment where there was proper guidance and monitoring. Habibah *et al.* (2010) noted that university is a new environment that triggers different reactions to fresh undergraduates because life in the university is quite challenging. Bullying from the older students contribute to the plight of the fresh undergraduates which sometimes make them to feel inferior among their fellow students.

Adjustment to new ways of doing things in the university is needed by these fresh undergraduates. Adjustment is a coping strategy out of the challenges. It is the way individuals make shift in their way of life so as to accommodate events in new environment for harmonious living. Adeniyi *et al.* (2014) defined adjustment as the ways or methods in which different individuals adapt or become used to a new situation. Ability to easily adjust to new environment and to new order of doing things is an attribute that is needed in an individual to save him or her from the situation of confusion, anxiety and depression. No matter the age, gender, religion and ethnicity of the fresh undergraduates they need to make some socio-personal adjustments in the university for social relationships, academic work and peaceful living, hence their socio-personal needs in the university must be provided by the school counsellors, university authorities, academic and non-academic staff, parents and the stakeholders in education.

Statement of the Problem

There is no doubt that fresh University undergraduates have socio-personal adjustment needs they need to adjust to as first year students on campus. Fresh undergraduates face problems that bother on their social, personal and academic lives which if no solution to the problems is provided might make them to be maladjusted, frustrated, depressed and unproductive in school. These socio-personal problems also affect their health, academics, relationship, among others. University environment and activities going on there are not same to what the fresh undergraduates were familiar with in their secondary school and their families. Hence these socio-personal problems became a threat to their stay in the university. Some fresh students were known to would have abandoned their admission due to these challenges if not for the timely intervention by school counsellors. One of the researchers of this paper narrated how she could have dropped out of the university at first year because of these challenges. Peretomode and Ugbomeh (2013) discovered in research that some of the serious challenges encountered by students include difficulty in payment of school fees, cumbersome screening and registration exercise, erratic power supply, crowded classrooms due to lack of enough classroom, among other challenges.

Among the problems that could generate from challenges in the university is psychological problems. Fresh university students might be bored, distressed and depressed at their first year in school. These might lead to drug addiction, cultism and other social vices. This study therefore is aimed at investigating the socio-personal adjustment needs of the fresh undergraduates in Kwara State as expressed by students of university of university of Ilorin.

Research Question

One research question guided the study

- (i) What are the socio-personal adjustment needs of undergraduates in Kwara State as expressed by students of University of Ilorin?

Research Hypotheses

Four hypotheses were tested in the study:

- Ho₁:** There is no significant difference in the socio-personal adjustment needs of fresh undergraduates as expressed by students of university of Ilorin on the basis of gender.
- Ho₂:** There is no significant difference in the socio-personal adjustment needs of fresh undergraduates as expressed by students of University of Ilorin on the basis of age.
- Ho₃:** There is no significant difference in the socio-personal adjustment needs of fresh undergraduates as expressed by students of University of Ilorin on the basis of religion.

Ho₄: There is no significant difference in the socio-personal adjustment needs of fresh undergraduates as expressed by students of University of Ilorin on the basis of ethnicity.

Methodology

Descriptive survey research design was adopted in the study. The population are the fresh undergraduates in the University of Ilorin while the target population are the fresh students of university of Ilorin numbering about nine thousand students. Purposive and simple random sampling was used to select 250 students that participated in the study. Purposive sampling technique was used to select fresh Undergraduates of university of Ilorin to participate. Simple random sampling was used to select fresh students from ten faculties (25 students from each faculty) and stratified sampling technique was used to classify students into gender, age, religion and ethnicity.

The researchers' designed instrument titled "Fresh Undergraduate Adjustment Needs Questionnaire (FUANQ)" was used to collect data. The questionnaire has two section, A and B. Section A elicited information on demographic information of the respondents and Section B contained items on socio-personal needs of fresh undergraduates. The question was patterned after the Four-point Likert type scale of SA = Strongly agree (4 points), A = Agree (3 points), D = Disagree (2 points) and SD = Strongly disagree (1 point). The instrument was validated by experts in measurement and evaluation. Test re-test was used to establish the reliability coefficient by administering the questionnaire twice to respondents who were not part of the sample at three weeks interval. The two set of scores were analyzed using Pearson's Product Moment Correlation Formula which yielded 0.81 reliability coefficient. The instrument was personally administered by the researchers and collected back. It was scored by finding the mean score of each item thus: $4+3+2+1=10/4=2.50$ which is the bench mark. The decision was that any item whose mean falls below the bench mark is not regarded as the socio-personal adjustment need of the undergraduates. Data was analyzed with mean and rank order (for research question), t-test and Analysis of variance (for hypotheses). Hypotheses were tested at 0.05 level of significance.

Results

Demographic Data

Table 1: Percentage distribution of the respondents based on gender, age, religion and ethnicity

Variables		Frequency	Percentage
Gender	Male	67	26.8
	Female	183	73.2
	Total	250	100.0
Age	15 – 20 years	140	56.0
	21 – 26 years	66	26.4
	27 years and above	44	17.6
	Total	250	100.0
Religion	African Traditional Religion (ATR)	6	2.4
	Christianity	81	32.4
	Islam	163	65.2
	Total	250	100.0

Ethnicity

Yoruba	99	39.6
Hausa/Fulani	96	38.4
Igbo	55	22.0
Total	250	100.0

Table 1 showed that 67 (26.8%) of the respondents were males, while 183 (73.2%) were females. This means that females participated more in the study. In the age distribution, 15-20 years were 140 (56%), 21-26 were 66 (26.4%) and 27 years and above were 44 (17.6%). This means that respondents who were between 15 to 20 years participated more in the study. Religion showed that ATR were 6 (2.4%), Christianity were 81 (32.4%) and Islam were 163 (65.2%). This means that respondents who were Muslims participated more in the study. In ethnicity section, Yoruba were 99 (39.6%), Hausa/ Fulani were 96 (38.4%) and Igbo were 55 (22%). This means that respondents who were of the Yoruba ethnic group participated more in the study.

Research Question: What are the socio-personal adjustment needs of fresh undergraduates in Kwara State as expressed by students of university of Ilorin?

Table 2: Mean and rank order on the respondents' perception on the socio-personal adjustment needs of undergraduates in Kwara State

Item No.	I express that fresh undergraduates' socio-personal adjustment needs are:	Mean	Rank
2	to overcome academic stress	3.77	1 st
6	adjust to school rules and regulations	3.69	2 nd
7	overcome transportation problems	3.46	3 rd
8	avoid feeling inferior among senior students	3.41	4 th
19	overcome social problems	3.40	5 th
18	communicate well with fellow students	3.39	6 th
15	manage finances	3.39	6 th
10	manage inadequate classroom spaces and seats	3.33	8 th
20	being able to pay school fees	3.23	9 th
12	overcome hash attitude from non -teaching staff	3.16	10 th
3	overcome accommodation problems	3.14	11 th
14	endure epileptic electricity supply	3.11	12 th
16	endure harassment from room- mates	3.06	13 th
11	endure shortage of water supply	3.06	13 th
4	adjust to course requirement	3.00	15 th
9	cope with lecture time table	2.94	16 th
13	overcome social phobia	2.94	16 th
17	avoid harassment from lecturers	2.83	18 th
1	overcome rigorous registration procedures	2.68	19 th
5	accept imposition of textbooks and handouts	2.51	20 th

Table 2 showed the mean and rank order on the respondents' perception on the socio-personal adjustment needs of undergraduates in Kwara State. It could be observed that all the items had mean scores that are above the bench mark of 2.50. This indicates that all the items are socio-personal adjustment needs of the undergraduates.

Hypotheses Testing

Ho₁: There is no significant difference in the socio-personal adjustment needs of fresh undergraduates in Kwara State as expressed by students of University of Ilorin on the basis of gender.

Table 3: Mean, standard deviation and t-test on the socio-personal adjustment needs of fresh undergraduates based on gender.

Gender	N	Mean	SD	df	Cal. t	Crit. t	p-value
Male	67	65.06	1.75	248	1.61	1.96	0.107
Female	183	63.07	8.40				

Table 3 showed that the calculated t. of 1.61 is less than the critical t. of 1.96 and the p-value of .107 is greater than the 0.05 significant level. Since the calculated t. is less than the critical t. and the p-value greater than the 0.05 alpha level, the hypothesis is not rejected. This indicated that gender did not make the respondents differ in their socio-personal adjustment needs. There is no significant difference in the socio-personal adjustment needs of the students based on gender. Meaning both male and female fresh undergraduates have socio-personal adjustment needs.

Ho₂: There is no significant difference in the socio-personal adjustment needs of fresh undergraduates in Kwara State as expressed by students of University of Ilorin on the basis of age.

Table 4: One-way analysis of variance on the socio-personal adjustment needs of fresh undergraduates in Kwara State based on age

Source	Df	Sum of Squares	Mean Square	Cal. f	Crit. f	p-value
Between Groups	2	438.620	219.310	1.42	3.00	0.318
Within Groups	247	11277.837	154.482			
Total	249	11716.457				

Table 4 showed that the calculated F. of 1.42 is less than critical F. of 3.00 and the p-value of .318 is greater than 0.05 alpha level. Hypothesis two is not rejected since calculated value is less than the critical value and p-value is greater than the level of significance. This indicates that the respondents did not differ in their socio-personal adjustment needs due to age.

Ho₃: There is no significant difference in the socio-personal adjustment needs of fresh undergraduates in Kwara State as expressed by students of University of Ilorin on the basis of religion

Table 5: One-way analysis of variance on the socio-personal adjustment needs of fresh undergraduates in Kwara State based on religion

Source	df	Sum of Squares	Mean Square	Cal. f	Crit. f	p-value
Between Groups	2	133.061	66.530	1.18	3.00	0.307
Within Groups	247	11583.396	55.958			
Total	249	11716.457				

Table 5 showed that the calculated value of 1.18 is less than the critical value of 3.00 and the p-value of .307 is greater than the 0.05 level of significance. Since the calculated F-value is less than the critical F-value and p-value is greater than alpha level, the hypothesis is not rejected, indicating no significant difference in the socio-personal adjustment needs of the fresh undergraduates based on religion. Meaning that Christians, Muslims and Traditional religionists fresh students have socio-personal adjustment needs did not make the respondents differ in their socio-personal adjustment needs.

Ho₄: There is no significant difference in the socio-personal adjustment needs of fresh undergraduates in Kwara State as expressed by students of University of Ilorin on the basis of ethnicity

Table 6: One-way analysis of variance on the socio-personal adjustment needs of fresh undergraduates in Kwara State based on ethnicity

Source	Df	Sum of Squares	Mean Square	Cal. f	Crit. f	p-value
Between Groups	2	244.596	122.298	2.20	3.00	0.113
Within Groups	247	11471.861	55.420			
Total	249	11716.457				

Table 6 showed that the calculated f-value is less than the critical f-value and the p-value is greater than the 0.05 significant level. Since the calculated f-value is less than the critical f-value and p-value greater than the alpha value, hypothesis four is not rejected. Therefore, ethnicity did not make the respondents differ in their socio-personal adjustment needs.

Discussion of Findings

The finding in research question one showed that the socio-personal adjustment needs of the of the fresh undergraduates in Kwara State as expressed by students of University of Ilorin are: how to: manage academic stress, adjust to school rules and regulations, overcome transportation problems, avoid inferiority complex among fellow students, overcome social problems, manage finances, overcome stress in rigorous registration and payment processes, learn in crowded lecture halls, adjust to constant power outage, among other socio-personal adjustment needs. The finding was in tandem with Thurber (2012) who stressed that while some students find it adventurous to be in the university, some find it distressing and prodigious. Supporting this finding Lloyd and Turale (2011) noted that students face financial difficulties in the University. Fresh undergraduates also face challenges in the university such as having to cope with new lecturers and friends from different backgrounds, new academic and social environment among others. Similarly, Crede and Niechorster (2012) articulated that these challenges demand four-dimensional adjustment needs which include social adjustment, academic adjustment, personal and emotional adjustment and institutional adjustment.

The finding in hypothesis one showed that there is no significant difference in the socio-personal needs of the fresh undergraduates on the basis of gender. This means that the undergraduates did not differ in their socio-personal needs due to gender. The finding might be so probably because challenges in the University for fresh undergraduates do not respect gender. All fresh students pass same rigorous registration and accommodation process, including other challenges. In tandem with this finding are Adeniyi, Adediran and Okewole, (2014) who found no significant relationship between sex and academic adjustment of fresh undergraduates. The finding was also supported by earlier finding by (Martha, 2003) that male and female fresh students face similar adjustment problems during their transition to higher education. However, the finding of Enoch and Roland (2006) contradicted the finding by discovering that male students adjust better in the university environment than female students. However, similar study of Mazumder (2014) discovered that female students are more motivated than the male students.

The finding in hypothesis two showed that there is no significant difference in the socio-personal adjustment needs of the undergraduates as expressed by the students of University of Ilorin on the basis of age. This means that ages of the students did not make them have

differing socio-personal adjustment needs. The finding might be so because in university admission, it is assumed that all students admitted are matured, therefore concession is not given to any student because of his or her age in registration process, accommodation and in other matters. However, this finding negates Agubosi *et al.* (2021) who discovered in research titled motivational needs of secondary school students in Ogun State that the students differed in their motivational needs on the basis of age.

Further finding in hypotheses three showed that there is no significant difference in the socio-personal adjustment needs of the undergraduates as expressed by students of University of Ilorin on the basis of religion. This indicates that religion of the respondents did not make them differ in their socio-personal adjustment needs. The finding might be so because, though they belong to different religious group, they still have to face same challenges as fresh students in the university. The finding is supported by Lloyd and Turale (2011) who asserted that students face financial difficulties in the university. The financial difficulty is no respecter religious belief; hence, Muslims, Christians and traditional religionists do have financial difficulties in the University.

Findings in hypothesis four showed that there is no significant difference in the socio-personal adjustment needs of the undergraduates based on ethnicity. The finding might be so because despite one's ethnicity, activities going on in the university are same to all the students, so also the challenges. This finding is corroborated by (McDermott & Pettijohn, 2011) who argued that first year university students face high rate of psychological indisposition. This psychological indisposition might have been caused by the challenges they are facing as first year university students. This psychological indisposition does not respect ethnicity, hence no matter one's ethnic group he or she is faced with the socio-personal challenges.

Conclusion

This study investigated the socio-personal adjustment needs of fresh undergraduates in Kwara State as expressed by students of University of Ilorin. The study discovered that the socio-personal adjustment of fresh undergraduates in Kwara as expressed by students of University of Ilorin are how to: adjust to academic stress, obey school rules and regulations, overcome transportation problems, avoid feeling inferior among senior students, manage financial problems, cope with inadequate classrooms and seats, cope with rigorous registration and accommodation process, among others. The finding also discovered that gender, age, religion and ethnicity did not make the respondents to differ in their expression of socio-personal adjustment needs of the fresh undergraduates.

Recommendations

Based on the findings of the research the researchers made these following recommendations:

- (i) Various faculties and departments in the universities should organize orientation programmes early for the first-year students to educate them on how to manage the challenges they are likely to face as fresh students.
- (ii) School counsellors should always look out for fresh students who are having challenges in adjusting to new activities in the university.
- (iii) Level advisers for fresh students should help students who are having problems in registration, getting accommodation and other issues.
- (iv) Parents and guardians should educate their children on the fact that university environment and activities going there are not the same as what is obtainable in the home, so that they will prepare their minds to face some challenges.
- (v) Stake holders in education should provide the need support to the fresh students in the University in order to alleviate their problems.

References

- Adeniyi. W. O., Adediran, V. O., & Okewole, J. O. (2014). Personality types, demographic variables and academic adjustment of fresh undergraduates of Obafemi Awolowo University, Ile-Ife, Nigeria. *Journal of Educational and Social Research*, 4(6), 493-501.
- Agubosi. L. A., Adebeeinu, O., Fashina, A. Y., & Abonyi, E. S. (2021). Motivational needs of secondary school students in Ogun State, Nigeria. *Malaysian Online Journal of Psychology and Counselling*, 8 (2), 54-65.
- Crede, G. L., & Niehorster, C. M. (2012). *A barrier of mistrust: How stereotypes affect cross-race mentoring*. In J. Aronson (Ed). *Improving academic achievement: Impact of psychological factors in education* (pp. 305-331). Oxford, England: Academic Press.
- Habibah, M., Noordin, K., & Mahyuddin, R. (2010). Fluid intelligence, crystallised intelligence and the openness/intellect factor. *Journal of Research in Personality*, 34, 198-207.
- Llyod, T., & Turale, S. (2011). A study of school adjustment of rural adolescents. *Md.Psych, Rev.*, 66 (2), 93 - 96.
- McDermott, A. M., & Pettijohn, F. B. (2011). *The American Community college*. San Francisco C.A: Jossey- Bass.
- Peretomode, S. L., & Ugboemeh, F. (2013). Self-efficacy beliefs, motivation, race and gender in middle school science. *Journal of Women and Minorities in Science and Engineering*, 7, 271-285.
- Tabitha, A., Elishiba, B. A., & Samuel, B. A. (2012). Adjustment therapy interventions. *Current Opinion in Psychology*, 30, 300-305.
- Thurber, G. (2012). *People types and tiger stripes*. Gainesville, FL: Center for applications of Psychological Type.