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Original Research Article

Influence of Family Structure and Parental Occupation on Examination Stress of Secondary School Students in Oroke High School Akungba -Akoko, Ondo State, South Western Nigeria

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Abstract

Background: Parents do experience stress from their family structure and occupation, and these stress can be transferred to their children. Since the stress imposed by the different occupations and the different family structures are different, the stress transferred to the children will depend on the occupation and family structure of their parents. *Objective*: This study was therefore designed to understand the influence of the stress incurred by parents from their family structure and occupation on the academic/examination stress of their children in Oroke High School Akungba -Akoko, Ondo State, SW Nigeria. *Method*: The population of the study comprises all the students of Oroke High School, Akungba Akoko (650) out of which a sample of 313 that satisfied our criteria was selected, using purposive sampling technique. Digital sphygmomanometer was used to measure the actual blood pressure readings of the respondents twice, with at least thirty minutes interval in sitting positions. The mean reading was used. The measurements were carried out three times during the study: two weeks after resumption for the second term of the 2017/2018 academic year, two weeks before the second term examination and four weeks after exam. Results: Students were grouped according to their family structure and also according to the occupation of their fathers or their mothers. The study finds that the systolic blood pressure generally increases as students go from the beginning of the term to two weeks before the terminal examination and decreases after the exam for the different types of family structure and occupation of their fathers or their mothers when the academic stress is removed. Conclusion and recommendation: Under whatever stress that parents may be, it is recommended that they should make the home environment congenial and stress less for study so that the children can go to school the next day with little or no transferred stress.

Keywords: Examination stress, transferred stress, parental occupation, Family background.

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Introduction

Marriage in Nigeria is patrilineal [1] and there are three major types of family structure, each of these major families is included in a bigger family called extended family. We have the polygamous family, monogamous family and single parent family. The polygamous household involves one male, two or more females and their children. The monogamous household involves only one male, one female and their children. The single parent household includes only one male or one female taking care of the children after the marriage has broken down or only an unmarried male or female taking care of the child or children gotten out of wedlock. In Nigeria, the grand-parents of the husband

always help in the taking care of such children. It is noted that these children raised apart from one or more biological parents experience disadvantages in more ways than the ones in the traditional two parent households [2].

The cost of raising a child is quite enormous, common among which is the cost of feeding, clothing, housing, medical care and education to mention a few and this can bring stress on some parents [3-5]. The time that parents devote to caring for their children also represents another enormous investment in child rearing [3]. Recent trends in family structure and in women's employment may put these investments to risk.

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In Nigeria, the number of single parent household constituted by divorced singles, unmarried singles and singles caused by communal clashes, insurgency and terrorism is fast rising [6]. About one million women in Nigeria were either divorced or separated in 2006 and 1.7 million were widowed [7]. The number will be more now.

However, a recent Harvard study on single parents revealed that the most prominent factor preventing many children from upward mobility is living with a single parent [8]. It is also noted that children living with single mothers are more likely to live in poverty more than children living with both married parents [9], and children living with divorced parents were more likely to live in a household below the poverty level compared with other children [10]. The rise in single-parent households therefore means that fewer families can rely on the services of two adults to provide the child care.

In addition, women's increasing labour force attachment and the trend towards dual career households are imposing further constraints that may reduce the time that parents devote to child care [3], and this make the long hours that parents spend away from home unproductive to child rearing and parenting.

The parental occupations in Nigeria used for this study are: Farming, Teaching, Civil service, Trading and Pastoring. The level of education of the individual determines the type of the occupation he/she is involved in. The educated people are mostly involved in civil service job, pastoral work and teaching while most of the uneducated people are involved in farming and trading.

Many of the parents are involved in different forms of business like: lumberjack, motor mechanics, tailoring, mason, and electrical work. Since the number of students under each specific business unit was statistically very small and the different businesses have different stresses, all the students under the various businesses cannot be lumped together, and business was therefore deleted from this report. Similarly all other occupations where the number of students was not statistically significant were also removed from the report.

Those engaged in civil service job work between the hours of 8am and 4pm from Monday to Friday, while those in teaching job work between 8am and 3pm, giving opportunity of free time in which to rest or do something else for the rest of the day.

The stresses imposed by the different occupations are different and the transfer of stress from different occupations to children will therefore be different.

Some of the occupations are very stressful especially those requiring manual work as seen in farming in Nigeria where work is done manually, using the local implements. It is noted that "parents' work experiences indirectly influence children's behavior through their parenting" [11].

It is noted that the work parents do, can impair the developing bond between parents and the young children especially when the parents work long hours away from home or do evening and night shifts. Their work-stress depends on the type work they do and the stress that they bring home from their working places can detract their parenting skills, undermine the atmosphere in the home, and thereby transfer stress into the life of the children [12].

Parenting refers to a spectrum of actions that include: (a) ensuring that the child has necessary nourishment prior to attending school, and (b) helping them with home works [13], the action which declines as they grow older [14, 13]. Parenting styles can be described as the strategies parents use to interact with their children and influence their physical, emotional, social and intellectual development [15]. The styles are authoritative, authoritarian, and permissive, and are based on levels of warmth and control used by the parent in disciplining the child.

It is found that children and adolescents of permissive parents perform equally or better in several youth outcomes than adolescents who describe their parents as authoritative [16-18]. Variations in family characteristics, such as household income, family processes, and family structure have been reported to affect the development of psychological problems later on in adolescents. It is found that lower family income [19], polygamy [20], lower socio-economic class [21, 22], divorce and separation [23] correlate with psychological problems in children and adolescents.

It is suggested that children in single-parent families constitute a vulnerable group [24] and the children who live in a shared arrangement between their mother and father in a joint physical custody, also pose a stressful situation for the children as they are expected to adapt to two family environments [25].

Living arrangements after parental break-up is associated with stress in pre-adolescence [26]. Children living with a single parent appeared to be a particularly vulnerable group, which is in line with the findings from other studies [27, 28]. In addition to reduced economic resources available [29]. Children in this family type often suffer stress from a reduced contact to the non-custodial parent, while children in joint physical custody showed a lower stress level than children living with a single parent [30].

Parenting stress is a normal part of the parenting experience. It arises when parenting demand exceed the expected and actual resources available to the parents that permit them to succeed in the parent role [31]. It also refers to a condition or feeling experienced when a parent perceives that the demands associated with parenting exceed the personal and social resources available to meet those demands [32].

Parents of children with disabilities often experience a higher level of stress than parents of children without disabilities, regardless of categories of disabilities [33].

Stress can be transferred by seeing another person under stress even when one is not involved in it. Seeing and putting one in that position is enough to activate the stress hormone cortisol in the body [34].

Parenting stress is both an antecedent and a consequence of child behavior problems. Simultaneously, child behavior problems are an antecedent and consequence of parenting stress. These variables appear to have a mutually escalating, or deescalating effect on each other over time [35]. Both work stress and home stress increases parent-adolescent tension [36]. However, it was found that single mothers raising adolescents were less likely to transmit anxious feelings to their adolescent offspring if they spent more time alone [37]. Working fewer hours may give mothers more time and energy to manage their own emotions and the emotional undercurrents in their families, with subsequent benefits for their own interactions with offspring and their husbands [36]. Stress can be manifested in people with obsessive compulsive disorder (OCD) because the person will become so obsessed with the tradition that he will not be at rest until he had carried out the routine. Sress transfer could be done through parents' and teachers' expectations which could load the students even before getting to school [38]. This will add to the academic load the students experience in the school. Meanwhile, students whose parents' education is at literate level have academic stress that is higher than their counterparts [39]. Stress as overload provides a simple and appealing narrative for performance impairment [40].

OBJECTIVE

This study was therefore designed to understand the influence of family structure and parental occupation on the academic/examination stress of secondary school students in Oroke High School Akungba -Akoko, Ondo State, SW Nigeria.

MATERIALS AND METHOD

Quasi experimental research design was used for this study. The population of the study comprises all students of Oroke grammar school Akungba Akoko. A

sample of (650) respondents was selected using stratified sampling technique. Students have been distributed into different classes in the school before the study and effort was made not to disrupt the natural distribution. Opportunistic sampling technique was used to select all available and willing respondents into the study.

In carrying out this research, two instruments were used. The first instrument, sought information on the bio-data of the respondents, it is a self-constructed, structured, and closed ended questionnaire designed and built around the research questions, while the second instrument is digital sphygmomanometer, used to monitor and record the actual systolic blood pressure (SBP) and diastolic blood pressure (DBP) readings of the respondents.

The readings were taken twice on each occasion with at least thirty minutes interval in sitting position. This was done three times during the study: two weeks into the second term of 2017/2018 academic session when students newly resumed from the New Year holidays and two weeks before the second term examination when all the respondents were seriously preparing for the second term examination, while the third and last administration was carried out two weeks after the resumption for the third term from a two week holidays.

The first instrument was validated by three experts in health education and the reliability was determined using test re-test method. A coefficient of 0.95 was obtained and this was considered adequate for the study. The second instrument was calibrated and found to be good enough for the study.

Data was analyzed with descriptive and inferential statistics to answer questions and test the hypotheses raised for the research. The analysis was done with the use of Statistical Package for Social Sciences (SPSS) version 20, graph and correlation statistics at 0.05 level of significance.

In order to remove the influence of religion and extraneous work from the data, all the students used for this study belonged to the same religion and did not do physical work during the holidays and at home after the school period, making their blood pressure at the beginning of term to be the sum of the normal blood pressure plus the additional blood pressure due to the transferred stress from parents. Since the number of Christian students in the school was much more than the number of students in each of the other religions [41], the students in the Christian religion were used for this study. During the term, academic/exam stress will further raise the blood pressure of the group above that at the beginning of the term, the data of SBP at the beginning of the school term is therefore lower than the SBP two weeks to the terminal examination.

The students used for this study came from a diverse family background: monogamy, polygamy and single parent family. Also their parents' occupation varied and could be: farming, teaching, civil service, business of various types, pastoral work and tailoring.

In order to remove the influence of gender of the family background on the effect of examination stress, the whole data was separated into two groups of male and female students. Each of these groups was again divided into three sub-groups of Monogamy, Polygamy and Single-parent family background.

Similarly, in order to find the influence of the occupation of parents on the examination stress, the following occupations were considered for re-grouping each of the male and female groups under their fathers' occupation of: farming, teaching, civil service, and pastoral work and also under their mothers' occupation of: trading, teaching and civil service.

The detail of the method of collection of data and of sampling for this work is already given in the previous paper [42].

STATISTICAL ANALYSIS

Stress can raise the blood pressure of a subject [43, 42]., not necessarily above the normal pressure, and causing the mean blood pressure of a stressed group to be raised. The analysis of this work therefore considers the mean blood pressure of a group when it is stressed by the transferred stress from parents and by the academic/exam work of students, to be able to find the effect of examination stress on mean blood pressure of the group. The groups considered in this analysis are groups of males and females in the different family structures and groups of the male and female students according to their fathers' and mothers' occupation. The data were arranged in groups according to the family structure of the students and according to their fathers' and mothers' occupation, .to assess the mean blood pressure of each group at the beginning of the term and at 2 weeks to the terminal examination. Statistical software SSPS version 20.0 was used to calculate the mean and the standard deviation of the systolic blood pressure of each group when they resumed studies at the beginning of the second term, two weeks to the second term examination and at 4 weeks after the terminal examination.

RESULTS

Table 1.0 shows the family structure, mean age and the mean systolic blood pressure (SBP): (P1) at the beginning of term, (P2) at two weeks to the terminal exam and (P3) at 4 weeks after the terminal exam of the second term of the 2017/2018 school year for the male and female groups of students in the different family structures.

It may be seen from Table 1.0 that the male students of Oroke high school, Akungba Akoko who are from polygamous homes show a higher level of mean SBP (100.95mmHg) at the beginning of the term than the SBP of 99.35mmHg or of 97.90 mmHg of male students who are from the monogamous or single parent homes.

The mean SBP for all the groups increased from the beginning of the term to a higher value at two weeks before examination. It moved from 100.95 mmHg to 109.00 mmHg for the male students from polygamous homes, from 99.35 mmHg to 109.58 mmHg for the male students from the monogamous homes and from 97.90 mmHg to 107.80mmHg for the male students from the single parents' homes.

The female students showed a similar pattern of SBP variation between the beginning of the term and two weeks to the terminal exam. It moved from 100.07 mmHg to 109.42 mmHg for the students from polygamous homes, from 103.70 mmHg to 111.52 mmHg for the female students from monogamous homes and from 103.12 mmHg to 111.62 mmHg for the female from single parents' homes.

Four weeks after the exam, it was observed that the mean systolic blood pressure normally dropped, from 109.00 mmHg to 100.00 mmHg for the male students from the polygamous homes, from 109.58 mmHg to 100.04 mmHg for the male students from monogamous homes and 107.80 mmHg to 94.70 mmHg for the male students from single parents' homes. Similarly four weeks after exam, the mean SBP of female students dropped from 109.42 mmHg to 100.32 mmHg for the students from the polygamous homes, from 111.52 mmHg to 102.18 mmHg for the female students from monogamous homes and from 111.62 mmHg to 100.31 for the female students from the single parents' homes.

Table-1.0: Family structure, students' mean age, students' mean SBP: P1 at the beginning of term, P2 at two weeks to terminal exam and P3 at 4 weeks after the terminal exam of the second term of the 2017/2018 school year for the male and female students.

re	MALE STUDENTS					FEMALE STUDENTS					
ctn		e.	Mean SBP±SD (mmHg)					Mean SBP±SD (mmHg)			
structure			P1	P2	P3		ည့	P1	P2	P3	
	No of Students	ı age	Beginnin	2wks	4wks	of idents	ı age	Beginnin	2wks	4wks	
Family	of ude	Mean (yrs)	g of term	to	after	of ide	Mean (yrs)	g of term	to	after	
Fa	No Stu	ık) M		exam	exam	No Stu	Z Z		exam	exam	
Poly –	24	13.79	100.95	109.00	100.00	40	13.77	100.07	109.42	100.32	
gamy		±1.41	±11.21	±10.75	± 12.69		±2.04	±11.89	± 9.58	± 9.59	
Mono-	106	13.88	99.35	109.58	$100.04 \pm$	117	13.24	103.70	111.52	102.18	
gamy		± 2.02	±13.14	±11.53	11.44		±1.3	±11.32	± 14.24	± 10.40	
Single	10	12.80	97.90	107.80	94.70 ±	16	12.68	103.12	111.62	100.31	
parent		± 1.22	±7.53	±8.05	12.58		±2.49	±13.81	± 14.30	±8.83	

SBP = Systolic Blood Pressure, SD = Standard Deviation

Table 2.0 shows the types of fathers' occupation, the number of students having fathers with the same type of occupation, the mean systolic blood pressure (SBP) of each respective groups of male and female students: P1 at the beginning of term, P2 at two weeks to terminal exam and P3 at 4 weeks after the terminal exam of the second term of the 2017/2018 school year. Generally, the mean SBP of each group increased from the beginning of the term to a higher value towards the terminal exam and decreased after it, for both the male and female groups.

Table 2.0 shows that at two weeks before exam, the respective mean SBP of the male and female groups of students whose fathers were teachers or civil servants are higher than the SBP of students whose fathers were pastors or farmers.

Four weeks after the exam, it was observed that the mean systolic blood pressure generally dropped,

from 109.23 mmHg to 97.17 mmHg for the male students whose fathers were farmers, from 110.0 mmHg to 96.60 mmHg for the male students whose fathers were teachers, from 113.55 mmHg to 103.33 mmHg for the male students whose fathers were civil servants, and from 101.09 mmHg to 91.00 mmHg for the male students whose fathers were pastors. Similarly, four weeks after exam, the mean SBP of female students generally dropped, from 106.92 mmHg to 102.50 mmHg for the students whose fathers were farmers, from 109.73 mmHg to 106.30 mmHg for the female students whose fathers were teachers, and from 110.76 mmHg to 103.32 mmHg for the female students whose fathers were civil servants and from 109.60 to 102.40 for the female students whose fathers were pastors. It may be seen from the table that at two weeks to the terminal exam, the SBP of the female students whose fathers were farmers was much lower than the SBP of female students whose fathers were teachers, civil servants or pastors.

Table-2.0: Father's occupation, students' mean age, students' mean SBP: P1 at the beginning of term, P2 at two weeks to terminal exam and P3 at 4 weeks after the terminal exam of the second term of the 2017/2018 school year, for the male and female students.

year, for the male and remain students.											
	MALE STUDENTS					FEMALE STUDENTS					
g	, No) je	Mean SBP±SD (mmHg)			No		Mean SBP±SD (mmHg)			
tion			P1	P2	P3		age	P1	P2	P3	
ır's Ipai	ınts	age	Beginnin	2wks to	4wks	ınts	-	Beginning	2wks	4wks	
Father's Occupai	Students'	ean rs)	g of term	exam	after	Students'	Mean (yrs)	of term	to	after	
Fa	St	Mean (yrs)			exam	Stı	\(\frac{\z}{2}\)		exam	exam	
Farming	17	13.23	101.76	109.23	97.17	14	13.21	103.57	106.92	102.50	
		±2.16	±8.81	±9.78	± 11.58		±2.29	±9.69	±11.25	± 8.02	
Teaching	16	13.33	98.20	110.0	96.60 ±	23	12.65	102.60	109.73	106.30	
		±1.95	±21.48	±18.54	18.85		±1.46	±10.81	±22.89	±9.34	
Civil	18	13.77	103.27	113.55	103.33	25	13.60	103.84	110.76	103.32	
Service		±1.86	±7.66	±6.69	± 7.43		±0.97	±14.67	±23.39	±10.41	
Pastoral	11	12.81	93.18	101.09	91.00 ±	10	14.80	100.90	109.60	102.40	
work		±1.47	±9.58	±6.42	10.16		±2.48	±7.85	±10.11	±9.99	

SBP = Systolic Blood Pressure, SD = Standard Deviation

Table 3.0 shows the same arrangements for the respective groups of male and female students whose

mothers were respectively, traders, teachers or civil servants.

The table also reveals a general increase in the mean SBP of both male and female students from its value at the beginning of term to a higher value at two weeks before examination, but at four weeks after the exam when the academic pressure was removed, the mean SBP dropped for each group. It may be seen in the table that at the beginning of term, at 2 weeks to the exam and at four weeks after the exam, the mean SBP of the male students whose mothers are teachers is more than the mean SBP of the other groups of students

whose parents are traders or civil servants. The male students whose mothers were teachers had the highest mean SBP of 102.53 mmHg at the beginning of term, of 111.69mmHg at 2 weeks to exam and of 104.76 mmHg at 4 weeks after exam. On the other hand, the female students whose mothers were teachers had lowest mean SBP of 100.92mmHg at the beginning of term and of 107.23 mmHg at 2 weeks to exam, but the highest mean SBP of 103.92 mmHg at four weeks after the exam among the female groups.

Table-3.0: Mother's occupation, students' mean age, mean SBP: P1 at the beginning of term, P2 at two weeks to terminal exam and P3 at 4 weeks after the exam of the second term of the 2017/2018 school year, for the male and female students.

	MALE STUDENTS					FEMALE STUDENTS					
_	0		Mean SBP±SD (mmHg)			0		Mean SBP±SD (mmHg)			
s's ioi	No No	e,	P1	P2	P3	No No	ge	P1	P2	P3	
Mother's Occupation	Students	ı age	Beginnin	2wks	4wks	Students	ಡ	Beginning	2wkstto	4wks	
lot Scu	nd	Mean (yrs)	g of term	to	after	pn	Mean (yrs)	of term	exam	after	
Σŏ	Stı	Š Z		exam	exam	St	Z S			exam	
Trading	69	13.63±	101.28	109.36	101.04	118	13.55	103.27	110.75	102.82	
		1.92	±11.20	±16.11	± 12.13		±1.77	±13.35	± 13.30	± 8.83	
Teaching	13	14.07	102.53	111.69	104.76	13	12.23	100.92	107.23	103.92	
		±2.90	±14.52	±15.70	± 16.30		±2.91	±16.61	±28.91	±13.53	
Civil	12	12.41	89.09	101.66	90.66	11	12.63	104.45	119.90	100.27	
Service		±1.72	±13.33	±11.98	±11.26		±1.56	±10.20	±27.55	±7.15	

SBP = Systolic Blood Pressure, SD = Standard Deviation

DISCUSSION

At the beginning of the term, only the sum of the normal SBP of the students and the SBP arising from the stress due to family structure transferred from parents to children were in existence. The stress due to the family structure could be due to the hardship the parents experience in their family plus the stress due to the expectation of parents on their children. During the term, the SBP arising from the academic/exam stress was added to the existing one.

Table 1.0 confirms that the mean systolic blood pressure at two weeks to the examination is generally higher than its value at the beginning of term for all the categories of family structures for both male and female students for, at that time, the stress on the students is increased by both the academic/exam stress and the transferred stress from the parents. One expects that as long as the students stay with their parents, they will continue to receive transferred stress from them.

The results of this study displayed in Table 1.0 agrees with Jayanthi *et al.*, who observed that stress transfer could be done through the expectation of the parents and teachers on the students and this could load the students with stress even before getting to school [38]. This stress will add to the academic load the students experience in the school.

The first mean SBP (P1) in the table is due to the normal blood pressure of the students plus the

transferred stress from parents while the second mean SBP (P2) in the table is due to the increase in blood pressure contributed by the transferred stress from the teachers and from the parents and this brought about the increase in the systolic blood pressure across board above the mean SBP (P1). At four weeks after the exam, when the exam stress transferred from the teachers and parents were removed the SBP became lowered. After the exam, the expectation of the parents and teachers is relaxed.

In table 1.0 at two weeks to the terminal examination, it may be seen that the male students from the monogamous homes had the highest mean SBP, closely followed by those from the polygamous homes while those from single parent homes were the most relaxed. This may suggest that the male students from single parent homes are freer than those from monogamous and polygamous homes. It may also be suggested that the students from the monogamous and polygamous homes are more ambitious and more purposeful than the students from the single parent homes, making them to stress themselves more. Edward in an earlier study noted that the children living with single mothers are more likely to live in poverty more than the children living with both married parents [9]. The children living with both parents in polygamous and monogamous homes are more likely to be more focused in their academics than those from single parents who suffer from poverty and hopelessness. Single parents may not give enough attention to their

children because most of the times they are in search of the means of livelihood. US census Bureau, also observed that children living with divorced parents were more likely to live in a household below the poverty level compared with other children [10].

Still on table 1.0, the female students from polygamous homes had the highest change in SBP at two weeks before examination, but when the academic stress was removed after the terminal exam, the female students from the polygamous and monogamous homes had low values of SBP while those from the single parents' homes had a much lower SBP. It may be concluded from this that the female students from the single and monogamous parent homes are much allowed to rest and relax after the terminal examination than students from the other family structures. This may be due to the fact that the single parent will now have time to pay more attention to the source of their income, thus allowing the children more time to relax and transferred stress from parents to be reduced.

It may be seen in Table 2.0 that at two weeks before exam, the respective mean SBP of the male and female groups of students whose fathers were teachers or civil servants are higher than the mean SBP of students whose fathers were pastors or farmers. This may be due to the fact that the male students whose fathers are teachers or civil servants take their education more seriously or are recipients of larger doses of transferred stress than those whose fathers are farmers or pastors. The table also shows that at two weeks before exam, the female students whose fathers are pastors, civil servants or teachers received higher doses of transferred stress than those whose fathers are farmers. This may agree with the position of Jayanthi et al., who observed that stress could be transferred through the parents' and teachers' expectation and this could load the students even before getting to school [38].

Four weeks after the terminal examination, the mean SBP for the male students in the respective groups of fathers' occupation except for those whose fathers are civil servants are lower than the mean SBP in the corresponding groups of female students. This may be due to the fact that the male students are more relaxed and freer at home after their terminal exam than their female counterparts. In the geographical area where this study was carried out, females are more involved in housekeeping activities than their male counterparts as household activities are strongly classified as traditional female roles. In fact, Thebaud, Kornrich and Ruppanner noted that women are generally deemed more responsible for housework across a variety of work- family arrangements than their male counterparts [44].

In Tanzania, the roles of men and women are classified based on the local cultural context. While

men are traditionally the bread winners, women are responsible for most domestic chores [45]. Because of low socioeconomic wellbeing status across most families, women in Nigeria are now becoming more and more involved in regular employment, while still maintaining their traditional role of performing housework [46].

Table 3.0 revealed that male students whose mothers were teachers had the highest mean SBP at the beginning of the term, two weeks before the terminal exam and at four weeks after the terminal examination among the male respondents. This may be due to the higher expectation that mothers who are teachers have on their male children. On the other hand, female students whose mothers were teachers had the lowest mean SBP at the beginning of the term and at two weeks to the terminal examination. This result is directly opposite to that of their male counterpart and may be explained with the view of Dos Santos, Da Silva and Ribeiro, who reported that the cardiovascular protection observed in females has been attributed to the beneficial effects of estrogen on endothelial function. Besides estrogen, sex hormones are able to modulate blood pressure by acting on important systems as cardiovascular, renal, and neural. They can have complimentary or antagonistic actions. For example, testosterone can raise blood pressure by stimulating the renin-angiotensin-aldosterone system, whereas estrogen alone or in combined with progesterone has been associated with decreased blood pressure [47]. Similarly, Wenner and Stachenfeld concluded that ovarian hormone exposure is the important underlying factor contributing to differences in blood pressure and water regulation between women and men, and within women throughout the lifespan [48].

Female students, whose mothers were teachers had the highest mean SBP four weeks after the examination, followed by the female students whose mothers were traders. This may be due to the fact that teachers are more likely to engage their daughters with assignments that will result in stress, while the traders may engage their daughters in their trade, equally resulting in a degree of stress on their daughters, leading to a raised SBP. Those female students whose mothers were civil servants had the lowest mean SBP four weeks after examination. This may be because their mothers left them unengaged.at home during the holidays, thus reducing the stress transferred on them. Prabu in his study observed that for students whose parents' education is at literate level, their academic stress is higher than that of their counterpart [39]. Similarly, Jayanthi et al., observed that stress transferred could be done through parents' and teachers' expectations which could load the students even before getting to school [38].

CONCLUSION

This study adds to the body of knowledge concerning students' examination stress by considering the influence of family structure and parental occupation on it. The study finds that the systolic blood pressure increases as students go from the beginning of the term to two weeks before the terminal examination and depends on the gender, family structure and the type of father's or mother's occupation of the student. The results show that the increase in the SBP is generally lower for females than for males. The gender differences may be associated with the hormonal differences in males and females.

RECOMMENDATION

Parents should recognize their children's academic interest and ability, and have a realistic expectation on them. They should encourage them in their educational endeavor and not impose extra stress on them due to the nature of their occupation or family structure. They should also make the home environment congenial and stress less for study so that the children can have a pleasurable learning environment on their next day in the school.

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ETHICAL CONSIDERATION

Informed consent of each subject, ethical and official approval from the local research ethics committee of the Department of Human Kinetics and Health Education, Faculty of Education, Adekunle Ajasin University Akungba Akoko, Ondo State was obtained for the study and the investigation was performed in accordance with the principles outlined in the declaration of Helsinki [49].

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