This is an electronic reprint of the original article.
This reprint may differ from the original in pagination and typographic detail.

Author(s): Bamgbade, Emmanuel Olusanjo; Saloviita, Timo

Title: School performance of children from monogamous and polygamous families in Nigeria

Year: 2014

Version:

Please cite the original version:

All material supplied via JYX is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of the repository collections is not permitted, except that material may be duplicated by you for your research use or educational purposes in electronic or print form. You must obtain permission for any other use. Electronic or print copies may not be offered, whether for sale or otherwise to anyone who is not an authorised user.
School performance of children from monogamous and polygamous families in Nigeria

Emmanuel Olusanjo Bamgbade and Timo Saloviita
University of Jyväskylä

Emmanuel Olusanjo Bamgbade (Department of Teacher Education, University of Jyväskylä, Finland. E-mail: sanjobamgbade@yahoo.com

Timo Saloviita (Corresponding author), Department of Teacher Education, University of Jyväskylä, P.O. Box 35, 40014 Jyväskylän yliopisto, Finland. GSM: +358 40 8053373. E-mail: timo.saloviita@jyu.fi

Author Biographies

Emmanuel Olusanjo Bamgbade, M.Ed, has studied in the Department of Teacher Education, University of Jyväskylä, Finland. His research interests include early education and family.

Timo Saloviita, PhD is Professor of education at the University of Jyväskylä, Finland. His research interests include inclusive education and parental stress in families of children with disabilities.
Abstract

Scholastic success of Nigerian children coming from polygamous (n = 50) and monogamous families (n=156) was compared. No differences between two groups were observed across background variables of demographics, parental education and occupation, or family support for schooling. There were no differences in the Junior Secondary School Entrance Exam scores between the groups. However, children from polygamous families reported more difficulties in mathematics and English than their counterparts from monogamous families. The findings are discussed in relation to previous research.

Keywords: children, monogamy, polygamy, polygyny, school
School performance of children from monogamous and polygamous families in Nigeria

Introduction

An expanding research base indicates that family structure exerts considerable impact on the mental health of children. An intact family structure which consists of both biological parents has been shown to provide the best prospects for positive outcomes on children (Elbedour, Onwuegbuzie, Caridine, & Abu-Saad, 2002). In contrast, research has revealed that adopted children, children of widowed families, children of divorced parents and children with one stepparent or biological parent exhibit poorer adjustment as measured by several indicators, including conduct disorders, adjustment problems, self-concept or dropping out of school (Elbedour et al., 2002).

Most of the studies on family structure have concentrated on monogamous families, although polygamous structures are also very common worldwide. Gray (1988) identified 1,231 societies worldwide, of which only 186 were fully monogamous, whereas 453 had occasional and 588 more frequent polygamy. Polygamy is reported to be a major institution in Africa and in the Middle East, with an estimation of 40-50% of all married women being in polygamous marriages in these countries (Caldwell & Caldwell, 1993). In Nigeria the figure is reported to be 41% (Cook, 2007). These data indicate that millions of people in the world participate in polygamy.

Polygyny refers to the most common sub-form of polygamous marriage in which a husband has two or more wives. Other forms include polyandry, the marriage of one woman to multiple men, and polygynandry, two or more wives married to two or more husbands. Because the other forms are rare, it is common practice to use the term "polygamy" in place of "polygyny". In this paper, the word "polygamy" will be used in this general way.
Impact of Polygamy on the Well-being of Women

Studies investigating how family members adapt to polygamous family structures have mainly focused on women's health. Shepard (2013) presented a review of 22 relevant studies, both qualitative and quantitative, on this topic. The studies came from 15 countries, mainly in Africa and the Muslim world. On the basis of her review Shepard (2013) concluded that women in polygamous marriages had higher prevalence of somatization and psychiatric disorders, including depression, anxiety, hostility and psychoticism. The studies also reported reduced life and marital satisfaction, more problematic family functioning and lower self-esteem among women in polygamous marriages compared to women in monogamous marriages (Shepard, 2013).

Some examples of high-quality studies on this subject include the studies of Al-Krenawi (1998), Al-Krenawi and Graham (2006), Ozkan, Altindag, Oto and Sentunali (2006) and Slonim-Nevo and Al-Krenawi (2006). Al-Krenawi (1998) performed a qualitative study on a 69-member Bedouin-Arab family in Israel. The family included a husband, 8 wives and 60 siblings. The researcher found extensive competition, hostility and jealousy among the wives, lack of communication between the co-wives or the children of different wives and a variety of behavioral and psychosocial problems among family members. Another qualitative study (Slonim-Nevo & Al-Krenawi (2006) involved ten polygamous families residing in a Bedouin-Arab town in Israel. Polygamy was perceived as emotionally painful, particularly for wives. However, the study identified many ways that members of these families adapted and managed conflicts.

Al-Krenawi and Graham (2006) conducted a cross-sectional statistical study, wherein they investigated a sample of 352 Bedouin-Arab women in Israel. One third of the women were in polygamous marriages, and the others were in monogamous marriages. The findings
revealed that women in polygamous marriages exhibited significantly higher psychological
distress and higher levels of phobia, somatization and other psychological problems.
Additionally, these women had lower life satisfaction and more problems in family
functioning and marital relationships. Another strong cross-sectional study was conducted by
Ozkan, Altindag, Oto and Sentunali (2006). They investigated 42 senior wives, 46 junior
wives and 50 monogamous wives in Turkey using structured clinical interviews and
questionnaires. The highest prevalence of somatization disorder was found among
polygamous senior wives.

**Impact of Polygamy on Children**

Research has shown that marital problems between parents may predict poorer social
competence and scholastic achievement (Emery & O'Leary, 1982), lack of security (Davis,
Myers, & Cummings, 1996) and increased misconduct and aggression among children (Katz
& Gottman, 1993). It has been reported that children from polygamous families experience
higher rates of marital conflict, family violence and family disruptions (see Al-Krenawi, 1998;
Elbedour, Bart, & Hektner, 2000). These problems are commonly associated with
maladjustment (Buehler & Gerard, 2002). More specifically, possible risk factors in
polygamous families associated with child-rearing have reported to be increased risk of
marital conflict and family violence (Al-Krenawi, 1998), marital distress due to spousal
conflict and jealousy (Achte & Schakit, 1980; Al-Krenawi & Graham, 2006), absence of the
father due to dissolution when fathers leave their senior wives and their children (Elbedour et
al., 2002), and financial stress (Elbedour et al., 2002).

The existence of more marital conflict in polygamous families may be associated with
elevated maladjustment among children living within this family structure compared to
children within monogamous families. This hypothesis has been supported by a research
review indicating that younger children in polygamous families really display a host of symptoms, such as anxiety, hostility, aggression, somatic problems and difficulties with learning (Elbedour et al., 2002).

**The impact of polygamy on school adjustment.** A few studies have specifically explored the effects of polygamous family structure on the school adjustment of children. Most of these studies have been made on Arab population in Israel (Al-Krenawi, Graham, & Al-Krenawi, 1997; Al-Krenawi, Graham, & Slonim-Nevo, 2002; Al-Krenawi & Lightman, 2000; Al-Krenawi & Slonim-Nevo, 2008; Elbedour, et al., 2000; Elbedour, Onwuegbuzie, & Alatamin, 2003). One study has been made in South Africa (Cherian, 1990). The results of these studies associate several negative outcomes with the polygamous family structure, shortly summarized below.

Al-Krenawi, et al. (1997) examined 25 Bedouin-Arab children in Israel born to senior mothers. They found that these children ranging in age from 6 to 12 had a variety of behavioral problems and below average academic achievement. They scored lower than average in scholastic concentration, school attendance, homework completion, classroom adjustment and motivation.

Al-Krenawi and Lightman (2000) investigated a sample of 146 Bedouin-Arab children from Israel. The children were 8–9 years old and were equally divided from a larger original sample by gender and family type into two groups. One group consisted of 73 children from monogamous families and the other included 73 children from polygamous families with two wives. It was found that the children from polygamous families had lower levels of learning achievement, a lower level of school adjustment, and a higher mean conflict rating than children from monogamous families (Al-Krenawi and Lightman, 2000).

In yet another study, Al-Krenawi, et al. (2002) investigated 101 children from grade
levels one to eight (equaling the age from 6 to 13 years) in the city of Ramla, located at the center of Israel. All of the 19 participants from polygamous families were children of senior (second) wives from families with no more than two wives. These children from polygamous families reported lower levels of self-esteem and perceived academic achievement in Arabic, English, and mathematics measured by using a 5-point self-evaluation Likert scale.

In a sample of 255 third-grade and 8 years old children from the Negev Bedouin-Arab community in Israel, Elbedour, et al. (2003) reported that children from polygamous families had more attention problems, more school absenteeism and a lower level of academic achievement compared with children from monogamous families. Al-Krenawi and Slonim-Nevo (2008) studied a sample of 352 Bedouin-Arab children between the ages of 13 and 15 from the Negev area in Israel. The results showed that the children from polygamous families reported more mental health and social difficulties as well as poorer school achievement than did their counterparts from monogamous families.

The only study outside of Israel was completed in South Africa (Cherian, 1990). In Transkei, Xhosa law allows a man to have as many wives as he can afford to marry. The main religions of Xhosas are Christianity or traditional religions. Cherian (1990) made a stratified random sample of urban and rural Black Xhosa-speaking children between the ages of 13 and 17. The sample included 114 children coming from polygamous families and 881 children from monogamous families. As a measure of academic achievement, the students' grades in the Standard 7 external examination were used. The examination contained scores from seven academic subjects. The results showed that the mean achievement score of the children from polygamous families was significantly lower than that of the children from monogamous families (Cherian, 1990). Thus, the results were in line with those obtained from Israel.
Early adulthood and adolescence. Research has shown that problems of adaptation may continue into early adulthood. Oyefeso and Adego (1992) studied a sample of 116 Yoruba adolescents in Nigeria with a mean age of 18. The results indicated that the youths from monogamous families experienced better psychological adjustments than did their counterparts raised in polygamous families. However, this difference was observed only among male participants. Additionally, a study of 210 Bedouin-Arab adolescents with a mean age of 16 did not find differences in intelligence (Elbedour et al., 2003) or mental health (Elbedour, Bart, & Hektner, 2007) between children from monogamous or polygamous families. Based on these results, the writers concluded that adolescents were better equipped with resources to cope with family disputes and conflicts than were younger children (Elbedour et al., 2007). In a similar way, Elbedour et al. (2000) did not find any differences between adolescent children from monogamous (n = 140) or polygamous (n= 95) families when they studied their scholastic achievements in the subjects of Arabic, English, Hebrew, or mathematics. The 240 participants they studied came from grade levels 10 through 12 (equaling the age from 15 to 17 years) from Bedouin high schools in the Negev, Israel.

The results give thus far some support to the notion that negative outcomes of the polygamous family background on the well-being and scholastic achievement of children, reported from the first school years, may decline or even disappear in adolescence and early adulthood.

Aims of the Study

Thus far all the comparative studies on the school performance of children from polygamous or monogamous families have come from the Bedouin-Arab population in Israel or from Transkei (Cherian, 1990). The aim of the present study was to extend the research to a new population in order to cross-validate the previous findings. In this exploratory study,
the school performance of junior secondary school children from Nigeria was explored in order to find out whether there were differences based on diverse family structure. Second, as the school performance of children is determined by multiple factors, among which the family structure is but one element, we studied the academic support available for the child at home, the child’s level of academic motivation, and the socioeconomic and educational levels of the parents in both types of families.

**Method**

**Participants**

The data were collected from four junior secondary schools in the municipality of Ibadan North-East local government area in Oyo State Nigeria. Of the 220 children participating in this study 52% were male and 48% female. Their age varied between 12 and 15 with 49% being 12 years of age. Their most common language was Yoruba (83%), followed by Hausa (6%) and Igbo (6%). Almost all children came either from Muslim (56%) or Christian (42%) families. Of the children, 71% came from monogamous and 23% from polygamous families. Additionally, there were 5% coming from single parent families and 2% were orphans. Counted from the intact families with both father and mother, polygamous family structure was noted among 24.3% of the respondents. The educational level of the parents and their occupational status is presented in Table 1.

-----------------------------

Insert Table 1 here

-----------------------------

The most common occupational skill level was number 2, which corresponded to occupations needing at most secondary education and a relatively low level of occupational skills equaling a trained working class position.
Sample and Data Collection

The schools were selected on the basis of their quick accessibility for the researcher and their similarity with each other. The four schools were all state-owned secondary schools regulated by the Ministry of Education. They had similar characteristics in terms of population, curriculum and school facilities. Two classes were randomly selected in each school, and all the pupils in those classes were surveyed. The total number of participants was 220 without any losses in participation.

Before data collection began in these schools, a letter of permission request was sent to the Director of School Department, Ministry of Education, Oyo State for necessary approval, after which it was forwarded to the Honourable Commissioner for Education for final approval. After final approval was granted by the Commissioner, a letter from the Ministry of Education to the School Principals introducing the researcher was issued to authorize the commencement of the data collection process performed in April, 2012. Parental permission for the data collection was not required by the school officials and accordingly not requested.

Throughout the data collection process, the researcher was assigned to a teacher in each school who led him to the classes, helped to distribute the questionnaires to the pupils, and assisted in coordinating the data gathering process. Thereafter, to complete the data collection exercise, the school Principals gave permission to access the sampled pupils' files in order to gather information on their scores in the junior secondary school entrance examination.

Environment

Children in Nigeria are expected to begin their primary school at the age of six and finish at twelve. At the end of primary six, which is the final class in primary school, the
pupils sit for the annual Common Entrance Examination, which is a prerequisite for entry into the junior secondary school. According to the data supplied by UNICEF (2007), 40 per cent of Nigerian children aged 6-11 do not attend any primary school. Additionally, many do not complete the primary school. According to current data, 30% of pupils drop out of primary school and only 54% transit to Junior Secondary Schools. The low completion rate has been attributed to child labour, economic hardships of the families and early marriage for girls (UNESCO, 2007).

Variables

**Dependent variables.** Three measures of academic performance as a dependent variable were used. In the questionnaire the school performance was measured by asking whether the participant had difficulties in understanding 1) mathematics or 2) English. The response alternatives were ‘every day’, ‘several times a week’, ‘once a week’, ‘once a month’, and ‘never’. The scoring varied from never = 0 to every day = 5. For further analysis the sum scale was constructed from these two items by adding the responses together.

A third measure on academic performance was the junior secondary school entrance examination score. At the end of primary six, which is the final class in primary school, the pupils sit for the annual Common Entrance Examination, which is a prerequisite for entry into the junior secondary school. From the schools' files we obtained the Junior Secondary School Entrance Examination scores of each participant. Possible scores varied on the scale from 0 to 100 per cent. In this study the participants' mean score was 50.6 with SD = 8.0. The Examination mainly consisted of questions in the subjects of Mathematics and English Language based on the primary school syllabus. These questions were meant to assess the numeracy and literacy capabilities of the pupils to cope with the academic demands of Junior Secondary School.
Main independent variable. The family structure was the main independent variable of the study. The family structure was inquired about by asking "how many wives does your father have?" with subsequent alternatives of 'one' or 'more than one'.

Other independent variables. The children from monogamous and polygamous families were compared across several other variables in order to find out whether there were any other important differences between them. The questionnaire contained, first, some demographic information about the student, such as gender, birth year, religion, and language of the respondent.

Socioeconomic background. The socioeconomic background of the child was inquired by asking the educational level and occupation of the parents. Enquiry into the father's and mother's level of education was made by asking in separate questions whether the parent had attended 1) primary school, 2) secondary school, 3) vocational or technical school, or 4) higher institution like university, polytechnic, colleges of education or other similar institution. The replies were coded from 1 to 4 accordingly. Fathers' and mothers' educational level was classified according to the United Nations International Standard Classification of Education (ISCED) (Unesco, 1997) It was coded from 0 to 6 higher numbers indicating higher levels of education. Occupation was classified in accordance with the International Standard Classification of Occupations or ISCO-08 (ILO, 2008). A sum scale of fathers’ and mothers’ scores on both dimensions was constructed by summing up their scores to “Education of parents” and “Occupation of parents”.

Academic supports. Several items measured the availability of academic aid facilities as supports for the child. It was asked whether the child 1) had a computer at home, 2) private teacher for mathematics or 3) English at home. These items had response alternatives yes (1) or no (0). Additionally it was asked whether the child had 4) a provision of necessary
textbooks in mathematics and English, 5) academic tutoring assistance in mathematics from parents or siblings, 6) communication in English at home, 7) parents or siblings assisting in English. These items had response alternatives of ‘never’, ‘rarely’, ‘sometimes’, ‘often’, and ‘always’ scored from 1 to 5. A sum score of academic supports was constructed by summing up the scores from all seven items.

**Academic motivation.** The students' motivation and activity levels were assessed by the following questions: "Have you used a computer?" (yes = 1, no = 0), "Do you like mathematics?" (yes/no), "How often do you study mathematics?" (scale 1–5) and "How often do you study English" (scale 1–5). A sum score of academic motivation was constructed by summing up the scores from these four items.

**Design and Data Analysis**

The monogamous or polygamous family structure of the child was used as an independent variable to study the school performance of the child in relation to three dependent measures: 1) entrance examination score, 2) difficulties in mathematics and 3) difficulties in English.

The children from monogamous or polygamous families were compared with each other across some background variables in order to find out possible differences. All these comparisons were made using independent-samples t-test or $\chi^2$ as statistics. If differences were observed, their extent was estimated using Cohen's $d$ as a measure of effect size (Cohen, 1988). Phi was used for similar purpose for nominal variables. The data were analyzed using IBM SPSS Statistics Version 20.

-------------------------------

Insert Table 2 here

-------------------------------
Results

No differences were observed in the Junior Secondary School Entrance Exam scores between children coming from monogamous (n = 156) or polygamous (n = 50) families, as seen in Table 2. However, children from polygamous families reported more difficulties in understanding mathematics and English than children from monogamous families (Table 2).

Secondly we compared the children coming from monogamous and polygamous families across some background variables. Table 3 shows the results from some nominal variables and Table 4 from interval variables. Only two differences in background variables were observed. First, polygamous families were more often Muslim by religion (78%) than were monogamous families (49.7%). Secondly, children from polygamous families reported studying mathematics less frequently than did children from monogamous families. No differences were observed in the amount of family support provided by different types of families, nor in their socioeconomic background.

Discussion

The scholastic achievement of children from monogamous and polygamous families in Nigeria was compared. The results give limited support to the view that better scholastic achievement is associated with monogamous family structure in contrast to polygamous structure. The children from monogamous and polygamous families did not differ from each other in Junior High School Entrance Examination scores. However, children from polygamous families reported more difficulties in mathematics and English than their
We found no differences between children form polygamous or monogamous families across any background variable studied except the religion and the frequency in the study of mathematics. The most important variables used in the comparison were the educational level and occupation of the parents, and various forms of scholastic support available in the family. These variables are among the most significant factors predicting children's scholastic achievement (McLoyd, 1998; Mohan & Gulati, 1986). Thus, the results suggest that the differences in scholastic achievement, measured as reported difficulties in mathematics and English, may be attributed to the polygamous family structure. Previous studies have indicated some mediating family-related factors through which this association might be understood. These factors have included negative family relations between wives (Al-Krenawi et al., 1997), jealousy, conflict, tension, emotional stress, insecurity and anxiety (Achté & Schakit, 1980). Increased behavior problems (Elbedour et al., 2002) and reduced emotional satisfaction and psychological security among the children in these families have also been identified as contributing factors (Cherian, 1990, 1993, 1994). However, a few studies performed with older children or adolescent participants have not found similar problems or have not found them to the same extent (Elbedour et al., 2000; Elbedour et al., 2007; Oyefeso & Adego, 2006). This may indicate that the observed negative effects are not lasting.

It was found that no differences were observed in the academic support that was provided by different families, either monogamous or polygamous. This may be explained by the similarity of the socioeconomic background of these families in terms of parental education and occupation. Because in previous studies the above family background variables have remained largely unnoticed, the present findings need further confirmation.
Limitations of the present study include the possible reliability problems of the entrance examination scores. The distribution of examination scores was not fully normal but contained a peak in the minimum score that was accepted in the entrance examination. The skewness of the distribution was $=-.167$ and the kurtosis $=-.842$. The latter value indicates that the observations were not clustered around the center of the distribution. The deviation of the distribution from the normal curve lowers the reliability of the scores as indicators of scholastic achievement. A second limitation of the present study is the use of only two other measures for educational success, both based on self-evaluation. Because of this restriction the present study should be understood as an exploratory attempt to expand the research on a new population, the African polygamous families, thus far infrequently studied. Other limitations of this study include the lack of control over the variables associated with the school environment itself, and the limited age-span of the children studied.

Future studies should provide stronger and more varied measures on scholastic achievement. The results of Elbedour et al. (2000) indicated that the negative association between polygamy and scholastic school achievement could be non-existent or could disappear with the passage of time. Therefore, future studies should also concentrate on children in different age groups while controlling for the most important family background variables known to be associated with educational success. An essential feature would be to include in future studies measures on emotional well-being of the child. Future studies should also consider the number of siblings and wives and the birth order of the children. Additionally, school success should be studied in relation to selected marital and family adjustment variables.
Conclusion

The results of the present study give some support to earlier findings on the lower scholastic success of children in polygamous families compared to that of children in monogamous families. Especially, the study expands the findings obtained in Israel and Transkei to a new population. Despite the partly negative findings of polygamous family background on school success, the study found no differences in the academic support provided by different family types.

The findings from this study are limited in terms of a scarce number of variables assessing the school success. However, the findings are strengthened by the large and representative sample from which they were derived. In addition, several important background variables possibly affecting the scholastic success of the children were controlled. Based on the current state of research, it is recommended that professionals, practitioners and policy-makers are made aware of the possible risk factors for children with polygamous family backgrounds. On the basis of the literature review, these risks seem to be most prominent during the early school years while they may diminish or even disappear later.

References


UNICEF (2007). Primary school years. Retrieved from:

### Table 1

**Educational and occupational level of the parents**

<table>
<thead>
<tr>
<th>Level</th>
<th>Fathers %</th>
<th>Mothers %</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>211</td>
<td>215</td>
</tr>
<tr>
<td>Educational classification (Unesco, 1997)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Secondary</td>
<td>70</td>
<td>82</td>
</tr>
<tr>
<td>Tertiary</td>
<td>27</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>101</td>
</tr>
<tr>
<td>Occupational classification (ILO, 2008)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 simple and routine manual tasks</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>2 manual dexterity and academic skills needed</td>
<td>65</td>
<td>83</td>
</tr>
<tr>
<td>3 extensive body of knowledge needed</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>4 complex knowledge and specialty needed</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>99</td>
</tr>
</tbody>
</table>
Table 2

**Responses of the Participants in Questions “I have Difficulties in Understanding Mathematics” and “I have Difficulties in Understanding English” from 1 (Always) to 5 (Never) and Their Scores in Junior High School Entrance Examination**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Polygamy</th>
<th>Monogamy</th>
<th>t-value</th>
<th>df</th>
<th>Sig.</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 50</td>
<td>n = 156</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.26</td>
<td>0.94</td>
<td>1.78</td>
<td>0.92</td>
<td>3.22</td>
<td>0.52</td>
</tr>
<tr>
<td>English</td>
<td>2.06</td>
<td>0.94</td>
<td>1.74</td>
<td>0.95</td>
<td>2.10</td>
<td>0.34</td>
</tr>
<tr>
<td>Examination</td>
<td>50.76</td>
<td>8.12</td>
<td>50.68</td>
<td>7.97</td>
<td>-0.62</td>
<td>0.01</td>
</tr>
</tbody>
</table>
Table 3

*Comparison of children from polygamous and monogamous families across some selected nominal level variables*

<table>
<thead>
<tr>
<th></th>
<th>Monogamy (n = 156)</th>
<th>Polygamy (n = 50)</th>
<th>$X^2$</th>
<th>df</th>
<th>Sig.</th>
<th>Phi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (male)</td>
<td>52.6%</td>
<td>44.0%</td>
<td>1.11</td>
<td>1</td>
<td>.292</td>
<td></td>
</tr>
<tr>
<td>Religion (Muslim)</td>
<td>49.7%</td>
<td>78.0%</td>
<td>12.34</td>
<td>1</td>
<td>.000</td>
<td>.245</td>
</tr>
<tr>
<td>Academic supports at home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer at home</td>
<td>17.9%</td>
<td>24.0%</td>
<td>.886</td>
<td>1</td>
<td>.347</td>
<td></td>
</tr>
<tr>
<td>Math teacher at home</td>
<td>29.0%</td>
<td>24.0%</td>
<td>.477</td>
<td>1</td>
<td>.490</td>
<td></td>
</tr>
<tr>
<td>English teacher at home</td>
<td>26.9%</td>
<td>22.0%</td>
<td>.480</td>
<td>1</td>
<td>.488</td>
<td></td>
</tr>
<tr>
<td>Academic motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Like mathematics</td>
<td>85.2%</td>
<td>88.0%</td>
<td>.251</td>
<td>1</td>
<td>.616</td>
<td></td>
</tr>
<tr>
<td>Used computer</td>
<td>29.5%</td>
<td>34.0%</td>
<td>.363</td>
<td>1</td>
<td>.547</td>
<td></td>
</tr>
</tbody>
</table>
Table 4

*Comparison of children from polygamous and monogamous families across some selected scale level variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Monogamy</th>
<th>Polygamy</th>
<th>t-value</th>
<th>df</th>
<th>Sig.</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 156</td>
<td>n = 50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Demographic variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>12.9</td>
<td>13.0</td>
<td>-1.10</td>
<td>69.8</td>
<td>.331</td>
<td></td>
</tr>
<tr>
<td>Education of parents</td>
<td>7.5</td>
<td>7.5</td>
<td>.172</td>
<td>204</td>
<td>.864</td>
<td></td>
</tr>
<tr>
<td>Occupation of parents</td>
<td>4.3</td>
<td>4.5</td>
<td>-1.11</td>
<td>202</td>
<td>.256</td>
<td></td>
</tr>
<tr>
<td>Academic supports at home (sum)</td>
<td>14.5</td>
<td>14.0</td>
<td>.732</td>
<td>203</td>
<td>.465</td>
<td></td>
</tr>
<tr>
<td>help at home in math</td>
<td>3.2</td>
<td>3.2</td>
<td>-.190</td>
<td>204</td>
<td>.849</td>
<td></td>
</tr>
<tr>
<td>help at home in English</td>
<td>3.2</td>
<td>3.0</td>
<td>1.14</td>
<td>96.5</td>
<td>.256</td>
<td></td>
</tr>
<tr>
<td>English spoken at home</td>
<td>3.1</td>
<td>3.0</td>
<td>.524</td>
<td>204</td>
<td>.601</td>
<td></td>
</tr>
<tr>
<td>Textbooks at home</td>
<td>4.2</td>
<td>4.1</td>
<td>1.02</td>
<td>204</td>
<td>.310</td>
<td></td>
</tr>
<tr>
<td>Academic motivation (sum)</td>
<td>7.7</td>
<td>7.4</td>
<td>.732</td>
<td>203</td>
<td>.465</td>
<td></td>
</tr>
<tr>
<td>Study math</td>
<td>3.2</td>
<td>3.0</td>
<td>2.35</td>
<td>89.0</td>
<td>.021</td>
<td>0.37</td>
</tr>
<tr>
<td>Study English</td>
<td>3.3</td>
<td>3.2</td>
<td>.202</td>
<td>68.6</td>
<td>.841</td>
<td></td>
</tr>
</tbody>
</table>