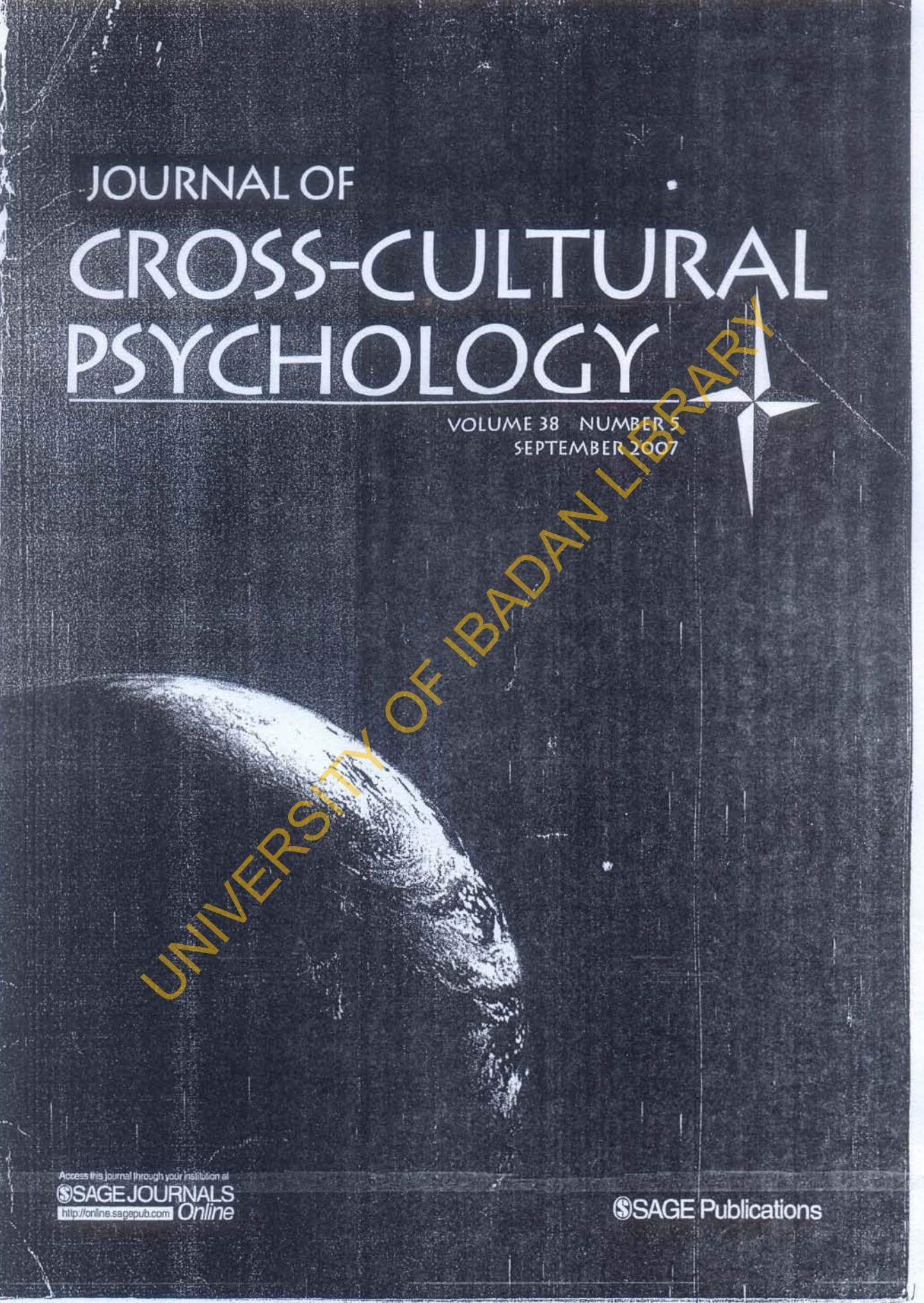


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CULTURAL VALIDATION OF THE MULTIDIMENSIONAL PEER VICTIMIZATION SCALE IN NIGERIAN CHILDREN

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This study attempted cultural validation of the Multidimensional Peer Victimization Scale for use with Nigerian children. In it, 240 primary school pupils in Grades 4 and 5 (131 boys and 109 girls; age 7 to 12) purposively selected from five nursery/primary schools in Ibadan, Nigeria, participated. The Multidimensional Peer Victimization Scale was administered, and analysis yielded Cronbach's alpha of .78 for internal consistency and split-half reliability of .76. Principal component analysis identified four factors with Eigenvalues greater than 1.00, with all items loading above .49. Gender and age effects were not significant on total peer victimization score, although significant gender and age differences were observed on some subscales. The scale correlated significantly with the Buss and Durkee Aggression Scale. Results suggest the Multidimensional Peer Victimization Scale can be used to measure Nigerian children's experience of peer victimization and provide an initial step toward further cross-cultural work on peer victimization.

Keywords: peer victimization; cultural; Nigeria; validation

There is now enough research evidence confirming the incidence and prevalence of peer victimization in various levels of society with particular emphasis on children and adolescents in many countries of the world (Hoover, Oliver, & Thompson, 1993; Juvonen, 2001; Mynard & Joseph, 2000; Slee, 1995). However, peer victimization has not been viewed as a serious problem in Nigeria by either the government or researchers. There is hardly any scientific publication of data-based report on this important subject. The present study was motivated by the need to adopt a culturally relevant scale to measure peer victimization in Nigeria. If this is achieved, we can then move to the next stage of work, which will be an extensive research into the occurrence, prevalence, and direction of peer victimization in Nigeria and probably all of Africa.

Over the years, researchers have attempted to concisely define what peer victimization is. Hawker and Boulton (2000) defined it as the experience among children of being a target of the aggressive behavior of other children who are not siblings and not necessarily age mates. Juvonen (2001), in a more direct approach, defined peer victimization as repeated maltreatment of a peer, where there is an imbalance of power between the perpetrator and the victim. Olweus (1973) also defined peer victimization as repeated negative actions targeted at an individual who has difficulty defending himself or herself. These definitions clearly show that peer victimization involves power relationships as well as physical and psychological intimidation.

Nigeria is the most populous Black country with a population estimate of more than 120 million people in the western part of Africa. It is a multicultural and multilingual federation; there are more than 300 ethnic groups with diverse cultures and ways of life.

However, over the years, these many ethnic groups have been conveniently divided into three major ethnic groups (Yoruba, Hausa, and Igbo) and minority groups.

Politically, the country is divided into six geopolitical zones (South-West, South-East, South-South, North-West, North-East, and North-Central). Three major ethnic groups are relatively prominent in the zones. The cultural differences and orientations of the ethnic groups have been largely suggested to have implications for child-rearing practices, personality formation, and concept of rights and wrongs. The country operates a somewhat unified system of education of 6-3-3-4, but in reality, primary school enrollments and educational practices are not the same across the country. The southern part of the country seems to attach much importance to education, whereas the northern part has been lagging behind in spite of encouragement from the central government.

The Yorubas are found in the South-Western part of Nigeria and part of the South-South. They are well educated and highly educationally inclined, likely due to early contact with the British colonial masters before other ethnic groups. The Igbos are found predominantly in the South-East and South-South. They are educated and highly involved in commerce and are predominantly Christians. The Hausas on the other hand are in the northern part of the country. They are predominantly Muslims (due to proximity to the Arab world), and Western education is not their strong point due probably to a late contact with the British colonial masters. Ethnic, cultural, and religious differences are constant points of frictions in Nigeria, which led to a bloody civil war in 1967 and subsequent regular unrest.

The statistics on the prevalence of peer victimization is frightening enough to bring the issue to the front burner of research and advocacy. Juvonen (2001) reported that peer victimization occurs at every grade level from kindergarten to high school in the United States. According to Juvonen (2001), 20% to 30% of students (more than 10 million students) in America's elementary schools are directly involved in peer victimization. Rigby and Slee (1991) also reported that 1 child in 10 is repeatedly and persistently victimized by peers and many more children are victimized less severely in Australian schools. These patterns indicate similarities in occurrence of peer victimization across cultures; however, there seem to be no official statistics and research reports available on Nigeria and the continent of Africa as a whole.

The consequences of peer victimization are dire, with detrimental effect on the psychological well-being of children. For instance, studies among African American and Latin American children have shown that being victims of peer victimization puts children at risk to develop academic, social, and psychological adjustment problems (Hanish & Guerra, 2000; Olweus, 1994; Wentzel & Asher, 1995). Research has also shown that peer victimization is not gender exclusive; both males and females have reported one form of peer victimization or another. Crick and Grotpeter (1995) reported that direct victimization is more likely to be experienced by boys, whereas indirect victimization is more likely to be experienced by girls. Mynard and Joseph (2000) found gender differences on three of the subscales, whereas no difference was found on the verbal victimization subscale.

Mynard and Joseph (2000) reported age differences in the experience of peer victimization. They found that there were no significant age differences in the overall experience of peer victimization; however, significant age differences were observed on the subscale measuring attack on property. We therefore investigate whether age is implicated in peer victimization among children in Nigeria. The results may have implications for future research on peer victimization in Nigeria.

One major concern in the study of peer victimization is how to measure the construct of peer victimization reliably and validly to reflect all the domains identified in the literature, broadly categorized into direct and indirect peer victimization. This gap was, however, filled by Mynard and Joseph (2000) through the development of the Multidimensional Peer Victimization Scale. This is a 16-item self-report scale fashioned in Likert format with three levels of response options (*not at all, once, and more than once*).

However, Mynard and Joseph (2000) did not report on the adequacy of the scale in measuring peer victimization across cultures. Although the scale has been used in different countries, nobody has reported on cross-cultural comparisons of the scale's psychometric properties. The focus of this present study is to validate the Multidimensional Peer Victimization Scale (Mynard & Joseph, 2000) using a Nigeria population to ascertain whether the scale would yield the same factors in this culture. The study also investigates the psychometric properties of the measure in this culture so as to compare them to the original properties that were established. Furthermore, the study is to find out whether gender and age would have significant effects on peer victimization in Nigeria comparable to what Mynard and Joseph (2000) reported in England.

METHOD

PARTICIPANTS

In all, 240 pupils (131 boys and 109 girls) with age range of 7 to 12 years ($M = 8.90$, $SD = .94$) were selected from primary school Grade 4 pupils in five nursery/primary schools in Ibadan, Nigeria. The pupils with the assistance of their respective teachers (who made sure the pupils understood and followed the instructions) completed the Mynard and Joseph (2000) Multidimensional Peer Victimization Scale. The study included both males and females to allow for gender comparisons in self-reports of peer victimization. Of the participants, 211 (87.9%) were from the Yoruba ethnic group, 22 (9.2%) from the Igbo ethnic group, 4 (1.7%) from the Hausa ethnic group, and 3 (1.3%) from other ethnic minority groups. The tilt toward the Yoruba ethnic group is informed by the fact that the setting of the study was Ibadan, which is a predominantly Yoruba-speaking city. However, the study was conducted in English because that is the official language for schools in the country.

MEASURES

The Multidimensional Peer Victimization Scale. The scale was developed and validated by Mynard and Joseph (2000). This is a 16-item Likert scale with three levels of response options (*not at all, once, and more than once*). Item 3 ("called me names") was slightly modified ("abused and called me bad/ugly names") to be culturally relevant, whereas the remaining items in the scale were retained. The minimum score attainable was 0, and the highest was 32; the higher the score, the more the participants would have experienced peer victimization. According to Mynard and Joseph, the scale yielded four factors, which were labeled as *Physical Victimization, Social Manipulation, Verbal Victimization, and Attack on Property*. All four factors were found to be intercorrelated. As for internal consistencies, Physical Victimization yielded Cronbach's $\alpha = .85$, Verbal Victimization

yielded $\alpha = .75$, with Social Manipulation and Attack on Property yielding $\alpha = .77$ and $\alpha = .73$, respectively.

The Buss and Durkee Aggression Scale (Buss & Durkee, 1975). This is a 15-item scale measuring aggression with true scored as 2 and false scored as 1 in response options. Items 2, 4, 5, 8, 12, and 13 were reversed because the statements are worded in an opposite direction to the remaining statements in the scale. Buss and Durkee (1975) reported internal consistency of $\alpha = .67$, whereas the present study yielded $\alpha = .56$ in Nigerian children. Males and females had means of 8.58 ($SD = 1.67$) and 8.13 ($SD = 1.33$), respectively. The four factors reported by Mynard and Joseph (2000) contain behaviors and statements considered to be aggressive in nature. For example, physical victimization, verbal victimization, and attack on property are said to be aggressive behaviors in the literature.

PROCEDURE

Letters were written to the authorities of the five schools requesting permission to use the schools and their pupils as participants in this study while at the same time requesting the consent of participants through parents/guardians. With approval given, administration of questionnaires took place in the various classrooms during regular school hours. Respective class teachers helped with the administration and explained the instructions to the pupils as the need arose. Of a total of 250 questionnaires given out, only 240 could be used in the final analysis as 10 were discarded on account of defacement and inadequate information.

RESULTS

The Multidimensional Peer Victimization Scale yielded a Cronbach's alpha coefficient of .78 and a split-half reliability of .76. The 16 items on the scale were subjected to a principal component analysis (PCA) with a varimax rotation and Kaiser normalization procedure. We used PCA rather than a confirmatory factor analysis because this study is an initial endeavor in the measurement of peer victimization in Nigeria. The results at a glance revealed four factors, but a closer look at the result showed that the first factor is the largest, accounting for the largest percentage of variance at 23.44% (see Table 1). Eigenvalues for the four factors ranged from 3.75 to 1.06. The cumulative percentage variance for all the factors was 46.60% (see Table 2).

Items 2, 4, 5, 7, 9, and 11 loaded on Factor 1 (Provocative Victimization), contributing 23.44%; Items 3, 8, 12, and 16 loaded on Factor 2 (Confrontational Attack), contributing 9.33%; Items 6, 10, and 14 loaded on Factor 3 (Social Manipulation), contributing 7.20%; and Items 1, 13, and 15 loaded on Factor 4 (Physical Victimization), with 6.62% contribution.

Comparing the factor loadings in this Nigerian study with those of the original factor analysis by Mynard and Joseph (2000) in England, we found that some of the items did not load together in the same way, though there are significant agreements to a large extent. In the present study, two of the factors that emerged were renamed following the pattern of loadings observed. Factors named *Provocative Victimization* and *Confrontational Victimization* replaced the factors named *Verbal Victimization* and *Attack on Property* as originally reported by Mynard and Joseph. In the original scale, Items 1, 5, 9, and 13 loaded on Physical Victimization; Items 2, 6, 10, and 14 loaded on Social Manipulation;

TABLE 1
Varimax-Rotated Factor Loadings (Component Matrix) for the 16 Items

Item	Peer Victimization Item	Factor 1	Factor 2	Factor 3	Factor 4
2	Tried to get me into trouble with my friends	0.56 ^a	0.08	0.43	0.06
4	Took something of mine without permission	0.58 ^a	0.31	-0.16	0.05
5	Kicked me	0.53 ^a	0.19	0.03	0.47
7	Made fun of me because of my appearance	0.57 ^a	0.03	0.10	0.08
9	Hurt me physically in some way	0.53 ^a	0.17	0.02	0.33
11	Made fun of me for some reasons	0.55 ^a	0.13	0.32	0.12
3	Abused and called me bad/ugly names	0.13	0.62 ^a	0.04	0.22
8	Tried to break something of mine	0.01	0.62 ^a	0.17	0.16
12	Stole something from me	0.12	0.64 ^a	0.03	0.13
16	Deliberately damaged some property of mine	0.21	0.55 ^a	0.23	0.02
6	Tried to make my friends turn against me	0.19	0.36	0.52 ^a	-0.17
10	Refused to talk to me	0.09	0.04	0.68 ^a	0.16
14	Made other people not to talk to me	0.09	0.04	0.68 ^a	0.16
1	Punched me	0.27	0.07	0.07	0.53 ^a
13	Beat me up	0.04	0.17	0.03	0.74 ^a
15	Swore at me	0.02	0.16	0.29	0.65 ^a
	Eigenvalue	3.75	1.49	1.15	1.06
	Percentage of variance	23.44	9.33	7.20	6.62
	Cumulative percentage	23.44	32.78	39.99	46.60

a. Indicates items loading above .49.

TABLE 2
Summary of *t*-Test Results Comparing the Sexes per Item

	Male	Female	<i>t</i>	<i>p</i>
1. Punched me	1.35	1.15	1.98	<.05
2. Tried to get me into trouble with my friends	0.68	0.92	-2.17	<.05
3. Abused and called me bad/ugly names	1.31	1.39	-0.66	
4. Took something of mine without permission	1.26	1.40	1.07	
5. Kicked me	1.40	1.16	2.27	<.05
6. Tried to make my friends turn against me	0.66	0.98	-3.01	<.05
7. Made fun of me because of my appearance	0.78	0.84	0.49	
8. Tried to break something of mine	0.87	0.73	1.22	
9. Hurt me physically in some way	1.15	1.13	0.16	
10. Refused to talk to me	0.99	0.97	0.11	
11. Made fun of me for some reasons	1.09	0.88	1.86	
12. Stole something from me	1.01	1.06	-0.40	
13. Beat me up	1.12	0.94	1.62	
14. Made other people not to talk to me	0.71	0.84	-1.19	
15. Swore at me	0.97	0.81	1.46	
16. Deliberately damaged some property of mine	0.88	0.78	0.84	

NOTE: *df* = 238 for all *t* tests.

Items 3, 7, 11, and 15 loaded on Verbal Victimization; and Items 4, 8, 12, and 16 loaded on Attack on Property. On the other hand, in the present study, Items 2, 4, 5, 7, 9, and 11 loaded on Provocative Victimization; Items 3, 8, 12, and 16 loaded on Confrontational Victimization; Items 6, 10, and 14 loaded on Social Manipulation; and Items 1, 13, and 15 loaded on

Physical Victimization. The observed difference in the original scale and the present endeavor may be due to cultural and value differences in the two cultures considered.

A concurrent validity test with the Buss and Durkee (1975) Aggression Scale yielded a correlation of .54, meaning that the Nigerian concept of peer victimization has a significant relationship with that of aggression. This result is also consistent with that reported in the literature.

GENDER DIFFERENCES IN PEER VICTIMIZATION

Results reveal that there is no gender difference in the overall experience of peer victimization, $t(238) = .60, p > .05$. Boys have a mean of 16.21 ($SD = 6.85$), whereas girls have a mean of 15.70 ($SD = 6.36$). The same pattern of insignificant gender difference was found for Provocative Victimization, $t(238) = .74, p > .05$; Confrontational Victimization, $t(238) = .39, p > .05$; and Social Manipulation, $t(238) = -1.85, p > .05$. However, a significant gender difference was found on Physical Victimization, $t(238) = 2.38, p < .05$, effect size $r = .15$. The following means and standard deviations were found for males and females on the factors: On Provocative Victimization, males have a mean of 6.35 ($SD = 3.13$); females, on the other hand, have a mean of 6.06 ($SD = 3.00$). On Confrontational Victimization, males have a mean of 4.07 ($SD = 2.47$), with females having a mean of 3.95 ($SD = 2.14$). Social Manipulation yielded a mean of 2.35 ($SD = 1.86$) for males, whereas the mean for females was 2.80 ($SD = 1.87$). On Physical Victimization, males have a mean of 3.44 ($SD = 1.88$), whereas females have a mean of 2.89 ($SD = 1.72$). These factors can be considered as subscales to assess individual differences in self-reports of specific facets of peer victimization without the fear of bias by others.

As shown in Table 2, a series of *t*-test analyses also reveal that there are no gender differences on 12 of 16 items. Significant sex differences were observed on four items: Item 1 (punching), Item 2 (getting me into trouble), Item 5 (kicking), and Item 6 (making friends turning against me) (see Table 2 for specific item wordings) with effect size *r*s of .13, .15, .15, and .19, respectively.

AGE DIFFERENCES IN PEER VICTIMIZATION

Participants were divided into two age groups; those younger than 9 years made up the first group and those older than 9 years made up the second group. A *t* test revealed no significant difference between the two age groups, $t(238) = 1.74, p > .05$. Age 9 was used as the cutoff point because of the current observed trend in Nigeria that pupils (especially those in private schools) now leave primary schools for secondary schools about this age.

Results of *t* tests on the factors show that older pupils report experiencing significantly more peer victimization than younger pupils on Provocative Victimization, $t(238) = 1.98, p < .05$, effect size $r = .13$. However, we found no age difference between the younger and older groups in Confrontational Victimization, $t(238) = .96, p > .05$; Social Manipulation, $t(238) = .82, p > .05$; and Physical Victimization, $t(238) = .67, p > .05$.

DISCUSSION

The main aim of this study was to conduct a revalidation of the Multidimensional Peer Victimization Scale, originally developed by Mynard and Joseph (2000) in England, using

a Nigerian population. Specifically, we assessed the suitability of using the scale with nursery/primary school children in Ibadan, Nigeria.

Interestingly, the analysis yielded four components of peer victimization, similar to what was originally reported by Mynard and Joseph (2000), with slight difference. Thus, the finding strengthened the position that the various components are separable factors and not single dimensions as suggested by some previous authors (e.g., Campbell, Sapochnik, & Muncer, 1997). The factor loadings show that Provocative Victimization was heavily loaded, thereby accounting for the largest percentage of variance in the result, whereas the other three factors accounted for less variance. Factor 1, which contains items that are considered to constitute provocative victimization and physical assault, make up more of what is considered peer victimization. This result suggests that the measure is measuring a similar construct of peer victimization in the Nigerian and U.K. samples. This position is strengthened by the fact that no deliberate attempt was made to analyze the data along the four given factors, but the findings revealed the emergence of four factors similar to what was found in the U.K. sample.

In general terms, there was no gender difference in the experience of peer victimization among children. No gender difference was found on Provocative Victimization, Confrontational Victimization, and Social Manipulation, whereas a significant gender difference was found on Physical Victimization, with boys experiencing more victimization than girls. The effect size r was very modest. This result is not in total agreement with that of Mynard and Joseph (2000), who reported gender differences on three of the four factors. This suggests a form of cultural difference in gender values and orientations. The Nigerian culture is paternalistic in nature; girls are socialized to be tender, sensitive, and less tolerant to physical exertion and harm, and this could account for the observed difference. Further research is needed to investigate sources of gender differences in the experience of peer victimization in England and Nigeria.

Age was found not to have any significant effect on overall experiences of peer victimization, meaning that children of various ages experience peer victimization with the same intensity. However, a significant effect of age was observed on Provocative Victimization, although the effect size r is rather small.

Observation of gender differences on each of the 16 items reveals that there are gender differences on Items 1, 2, 5, and 6 (Items 2 and 5 measure Provocative Victimization, Item 1 measures Physical Victimization, and Item 6 measures Social Manipulation), whereas the other 12 items show no difference. The effect size r of the significant items was very small. Even though peer victimization is experienced by both genders, there could be differences on a few items constituting peer victimization. Gender may moderate how strongly a person feels about a particular victimizing behavior.

This study has demonstrated an initial step for adopting a culturally reliable and valid scale of peer victimization in Nigeria. The results of the present study suggest that the Multidimensional Peer Victimization Scale is tapping a similar construct both in the United Kingdom and Nigeria with a four-factor structure. Future work would benefit from confirmatory factor analysis following the present exploratory analysis (PCA).

The present study leaves certain questions for further investigation. For instance, the sample was not large and diverse enough to be representative of the whole country. We collected data in Ibadan, a city predominantly populated by the Yoruba-speaking people. We therefore suggest that future research on peer victimization in Nigeria cover the six geopolitical zones with a large enough sample to account for all ethnic groups in the country. The present psychometric study is a step toward an accurate assessment of peer victimization in Nigeria and of comparing the experience reported by children across cultures.

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