RESEARCH ARTICLE

POPULARITY AND SELF-EFFICACY BELIEF AS CORRELATE OF ACADEMIC ACHIEVEMENT OF IN-SCHOOL ADOLESCENTS IN NIGERIA

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ABSTRACT

This paper explored the relationship among popularity, self-efficacy and academic achievement of in-school adolescents in Nigeria. The study was a correlational study. The sample of the study was 498 hundred senior secondary school students (female students were 300 while male students were 198). The instruments for data collection were questionnaires titled Adolescents’ Popularity Rating Scale (APRS) and Self-efficacy belief rating scale (SERS). In analyzing the data, mean, standard deviation and linear regression analysis were used in answering the research questions while analysis of variance (ANOVA) was used in testing the three research hypotheses stated at 0.05 level of significance. The results of the study indicate that there is low relationship between popularity and academic achievement of in-school adolescents. The relationship between self-efficacy belief and academic achievement is high and positive. Significant relationship exists between in-school adolescents’ self-efficacy and academic achievement. No significant relationship exists between popularity and academic achievement of in-school adolescents. It is recommended that teachers should always make the students believe that they can achieve academically as this will help them since self-efficacy has positive relationship with academic achievement.

INTRODUCTION

Adolescence can be defined biologically as the physical transition marked by the onset of puberty and the ability to think abstractly and multi-dimensionally (Arnett, 2007). This leads to a changing appreciation by peers for academic achievement. In-school adolescents spend an increasing amount of time each day in the company of peers and school mates, especially members of their own age group (Undergraft, 2001). Adolescence can also be defined socially as a period of preparing teenagers for adult roles (Papalia, Olds, Feldman & Kruk, 2007) thereby exposing in-school adolescents to pro-social behaviours that will make them acceptable in the society they found themselves. Adolescence is a transitional stage between the time puberty begins and the time adult status is approached, characterized by dramatic changes in the individual and these changes affects the shaping of goals and goal oriented behaviours (Berk, 2004). In-school adolescents begin to break away from their families, by trying out different roles and situations to figure out their social and academic dependence. Brown (2004) maintained that beyond peers’ function as companions in leisure activities, they serve as sources of instrumental and emotional support, help a child formulate values and beliefs, and oversees a child’s adherence to behavioural norms of the peer culture and broader society. The place of adolescents in this network of relationship influences their further development, as the pressure to be viewed favourably by peers may encourage in-school adolescents to pay more attention to personal hygiene, academic achievement, appearance and capabilities. In this context, adolescence is a period of life when one is no longer a child and not yet an adult, but strives for self-identity, academic achievement and social acceptance. Adolescents develop a self-image based on beliefs about themselves that are both cognitively and socially based (Steinberg, 2011), but other people also form expectations and beliefs about adolescents which have an impact. Adolescence is often referred to as a time of storm and stress brought on largely by raging hormones (Lefton & Brannon, 2003) and for some adolescents; it brings a lot of psychological difficulty. Storm and stress do not give the whole picture of adolescence; however, most adolescents go through this period of multiple changes without significant psychological difficulty (Santrock, 2004). Although spurts of hormones do affect adolescents’ reaction, non biological factors seem to be especially important in moderating the effect of hormones on adolescents’ mood. Carlson and Heth (2010) maintained that adolescence is the time when teens form their personal identities. Egocentrism is being formed by an adolescent who then forms self-consciousness of wanting to feel important in their peer groups and having social acceptance of fitting into the group (Collins, Welsh & Furman, 2009; Steinberg, 2011).

In-school Adolescents and Popularity

Popularity means having a well-established social place among peers who want to be with one, with whom one has a social standing, with whom one can hang out, and who can provide the acceptable companionship one needs (Schwartz, Gorman, Nakamoto & McKay, 2006). Being popular is a primary goal of

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many teenagers and adolescents pursue popularity for social security and self-esteem. Steinberg (2002) opined that the effect of popularity can be dramatic on a peer group, and teen’s families. Popularity is of two types, socio-metric popularity and perceived popularity (Cillessen & Rose, 2005). Socio-metric popularity is the act of being well-liked and accepted by others, and socio-metrically popular adolescents display high level of pro-social and cooperative behaviours with low level of aggression. Dodge & Pettit (2003) are of the opinion that socio-metrically popular adolescent are mainly characterized in positive ways, behaves in pro-social ways and excels in academic skills, exhibit low levels of aggression and social withdrawal. Perceived popularity indicates social dominance, influence and prestige in the peer group. Lease, Kennedy and Axelrod (2002) found perceived popular adolescents to demonstrate both positive and negative qualities. They are characterized as cool, powerful, influential, arrogant, manipulative, controlling and aggressive, often engaged in highly visible and prestigious activities, have expensive clothes and are physically attractive. (Rodkin, Farmer, Pearl & Van Acker, 2000). Popularity would also appear likely to be linked to concurrent behavioural markers of development, such as social development, higher level of ego development and skill in forming and maintaining relationship (De Bruyn & Cillessen, 2006). To be popular is a condition of being well-liked by the people, and popularity is a collective perception about a group’s feeling towards an individual. According to Cillessen and Rose (2005), popularity is the act or condition of being well-liked by the people, and it can only be understood in the context of groups of people. Popularity is a primary goal for most adolescents. Adolescents’ popularity is also viewed by Lindenberg (2006) from the perspective of the goal framing theory that, the various goals frames one’s perception and this underlies what they do, how they behave, how people assess the situation and their interactions with people.

In-school Adolescents and self-efficacy belief

Self-efficacy is the beliefs individual have that they can succeed in life situations. These situations can be academic, social, psychological and emotional. For Bandura (1986) who is the originator of self-efficacy theory and supported by Eisenberger (2005) see self-efficacy as individuals’ evaluation of their capability or ability to organize and carry out the courses of action required to reach desired outcomes. This implies that in-school adolescents who are popular are likely to persist and become proficient in acquiring academic achievement. According to Borich (2011), self-efficacy influence individuals’ expectations and behaviour. This could be because individuals apply it to pass judgement over their capability. Bandura (1986) states that individual can pass judgement about self-efficacy through verbal persuasion, which the teacher expresses faith and confidence to students that they can be successful. Borich (2011) in the same view stated that if learners see someone whom they like and admire receive high marks, the learners are more likely to believe that they can equally perform better. If this is so, it can equally be attributed to in-school adolescents who are popular because their peer group tends to admire them and at the same time imitate them. For Rosen, Glennie, Dalton, Lennon and Bozick (2010) self-efficacy has to do with individuals’ convictions that they can successfully carry out behaviours required for desirable outcome. If this is so, popularity has to do with acceptability based on desirable behaviours that can equally lead to acquire academic achievement. Self-efficacy is the belief about personal competence in a particular situation (Woolfolk, 2011). Self-efficacy can also be seen as the perceived awareness of one’s ability to produce the desired results for a particular task. Besides, student’s motivation can be enhanced by evoking the students’ sense of self-efficacy (Zimmerman 2000). This agree with Shunk (1991) which purported that self-efficacy draws on a sense of competence or competency motivation which leads to a non-defensive approach to new learning. The researcher also sees self-efficacy as one of the personal expectancy which can influence behavioural instigation, direction, effort and persistence especially for in-school adolescents. Self-efficacy beliefs constitute a key component in Bandura’s social cognitive theory. The construct signifies a person’s beliefs, concerning his/her ability to successfully perform a given task or behaviour (Nicolaidou & Philippon, 2002). It was found that self-efficacy is a major determinant of the choices that in-school adolescents make, the effort they expand and the perseverance they exert in the face of difficulties, the thought patterns and emotional reactions they experience (Bandura, 1986).

In-school Adolescents and Academic Achievement

Achievement is accomplishing whatever goal one has set for oneself, and it has to do with doing something successfully, typically by effort, courage and skills. Academic achievement of students has been of concern to parents, guardians, students and even the wider society and it is one of the most important goals of the educational process. Bossaert, Doumen, Buyse and Verschueren (2011) see academic achievement as the measure of students learning activities. Academic achievement is a key mechanism through which adolescents learn about their talents, abilities and competencies which is an important part of developing socially. In this study, academic achievement is the level of actual accomplishment or proficiency one has achieved in an academic area (Broussard & Garrison, 2004). Achievement is influenced by opportunities, motivation, education and training. Lansu and Cillessen (2012) argue that the urge to achieve varies from one individual to the other. This desire for a high level of achievement puts a lot of pressure on students, teachers, schools, and in general the education system itself. In fact, it appears as if the whole system of education revolves round the academic achievement of students, though various other outcomes are also expected from the system. Bossaert, Doumen, Buyse & Verschueren, (2011), maintained that academic achievement is an important parameter in measuring students learning outcome in various school discipline.

Relationship among popularity, self-efficacy and academic achievement of in-school adolescents

A learner can benefit from an academic process based on what the learner exhibit after the learning process. Crow and Crow (1969) defined academic achievement as the extent to which a learner is profiting from instructions in a given area of learning, that is, achievement is reflected by the extent to which skill or knowledge has been imparted to him. No two individual are exactly alike or the same in overall personality, academic achievement and characteristics, (Tomporowski, Davis, Miller & Naglieri, 2008), and with this assertion, no two individual has equal potentials as far as learning is concerned and this makes the learners to exist in different classes of achievement level. Pandey (2008) defined academic achievement as the performance of the students in the subjects they study in the school. It is directly related to students
growth and development of knowledge in educational situation where teaching and learning takes place. Academic achievement has become an index of child's future in the competitive world. Nowadays children are becoming more career minded and in order to develop an identity in the society, they are becoming more and more concerned about their ability academic achievement. Studies on academic achievement revealed that academic achievement relates positively and negatively with both types of popularity. The relationship between academic achievement and socio-metric popularity was positive, well-liked adolescents’ perform better than adolescent that are low in acceptance (Wentzel, 2005). The relationship between academic achievement and perceived popularity is mixed; some studies found that perceived popular adolescents’ perform well in school (La Fontana & Cillessen, 2002; Rose, Swenson, & Walter, 2004), while other studies found that perceived popular adolescents’ perform poorly in school (Hopmeyer Gorman, Kim & Schimmelbusch, 2002). Study on self-efficacy also revealed that self-efficacy highly predicats students’ academic achievement and positive relationship exists between self-efficacy belief and academic achievement. In the current study, adolescents’ popularity (socio-metric popularity and perceived popularity) and self-efficacy will be studied to see how it relates to academic achievement of students in senior secondary schools. In a study conducted in Netherland, Northwestern Europe by Meijis, Cillessen, Scholte, Segers & Spijkerman (2010), using 512, 14 years old and 15 years old adolescents in vocational school and college preparatory school, perceived popularity was significantly related to social intelligence but not to academic achievement in both contexts. Peer socio-metric measure and a self-report measure were used for popularity while social intelligence was measured using Tromso social intelligence scale. Socio-metric popularity was predicted by an interaction between academic achievement and social intelligence, further qualified by school context.

In a related study conducted in the Southeastern United States by McElhaney, Antonishak and Allen (2008) using 164 adolescents who were interviewed at age 13 and again at age 14, as well as their same-sex close friends. Observation and self-report measure were also used to gather data from the respondents (modified version of a subscale from the adolescent self-perception profile, scored on a four point scale). Their findings showed that adolescents who felt positive about their own social standing fared better in the academic achievement. Their findings also revealed that during adolescence, when it becomes increasingly possible for teens to choose their own social niches, it is possible to be socially successful without being broadly popular. Adeyero and Torubeli (2008) conducted a study to investigate self-efficacy, self-concept and peer-influence as correlates of academic performance among adolescents in transition. The research adopted a descriptive survey research design. Three hundred (300) Senior Secondary School one (SS1) from sex secondary schools in Yenagoa metropolis of Bayelsa state, Nigeria constituted the sample the study. Three instruments were used to collect data – students’ self-efficacy questionnaire (SSEQ) self-concept inventory and Peer influence questionnaire (PIQ). Analysis of the data through stepwise multiple regression procedure revealed that, among the three variable (self-concept, self-efficacy and peer influence), self-efficacy has the highest predicative effect on academic achievement. The study is of great importance to the present study, owing to the fact that, it revealed self-efficacy as a strong determinant of academic achievement.

The present study sought to find out, if there is any relationship between self-efficacy and academic achievement, and whether self-efficacy predicts academic achievement. Onyilo and Onyilo (2010) conducted a study on academic achievement and self-concept of secondary school students using 400 respondents (200 males and 200 females) randomly selected from Gwagwalada area council of Abuja, to avoid gender bias. The study aims at finding the relationship between the academic achievement and self-concept among male and female students in secondary schools using Adolescent Personal Data Inventory (APDI) to measure self-concept and students’ Junior Secondary School Certificate Examination (JSSCE) scores in integrated science and social studies to measure their academic achievement. The findings showed that academic achievement and self-concept were gender sensitive, resulting from the fact that male students had greater time to play outside school, while female students were always engaged in domestic work.

**Theoretical Framework**

Kelman propounded this theory in the year 1958. The emphasis is that social influence is the social act of influencing behaviours, emotions, attitudes or opinions in others, and this takes many forms and can be seen in conformity, socialization and peer pressure. Kelman identified three broad varieties of social influence which are compliance, identification and internalization. Compliance is the act of responding favourably to an explicit or implicit request offered by others. Identification is the changing of attitudes or behaviours due to influence of someone that is liked. Internalization is the process of acceptance of a set of norms established by people or groups which are influential to the individual. Adolescents strive to be popular in the group they find themselves and they accept the influence because the context of the influence accepted is intrinsically rewarding, that is, act of being popular. It is congruent with the individuals value system, and according to Kelman, the “reward” of internalization is “the content of new behaviour”. Conformity is a type of social influence involving a change in behaviour in order to fit in with a group and it is the most common and pervasive form of social influence. Social psychology research in conformity tends to distinguish between two varieties: informational conformity and normative conformity (compliance) (Cialdini, 2001). In the case of popularity, a person is convinced to do something which they might not want to do, but which they perceived as “necessary” to keep a positive relationship with other people, such as their friends, this is mostly found in adolescents in their bid to become popular among their peers.

Conformity from peer pressure generally results from identification within the group members, or from compliance of some members to appease others, and this is a determining factor in adolescents’ popularity as they try to be in right standing with their peers. This theory is related to the present study as in-school adolescents most times conform to pressure in other to be popular and to keep a positive relationship with their school mates. According to Bandura (1986) self-efficacy theory is the belief that one has the power to produce a good result in a given task or activities related to that competency as well as the expectation that one can master a situation, and produce a positive outcome. According to Bandura, 1986 self-efficacy theory stresses that those who believe that they have the capabilities to be successful make greater and lengthier attempts to achieve stated goals or objectives. Bandura’s self-efficacy theory distinguishes between outcome expectancy and efficacy expectation (Gibson and
This study seeks to: Ascertain the relationship between in-school adolescents’ popularity and academic achievement and ascertain the relationship between self-efficacy belief and academic achievement.

Research Questions

The following research questions were posed to guide this study:

1. What is the relationship between popularity and academic achievement of in-school adolescents?
2. What is the relationship between self-efficacy belief and academic achievement of in-school adolescents?

Research Hypotheses

The following null hypotheses were formulated to guide this study, and they will be tested at 0.05 level of significance.

H0: There is no significant relationship between in-school adolescents’ popularity and academic achievement.

H0: There is no significant relationship between in-school adolescents’ self-efficacy belief and academic achievement.

Research Method

The study used correlational research design. A correlational study investigates mutual relationships as it exists between two or more variables and the degree of the relationship that exists between the variables (Nworgu, 2006). The use of this research design is considered appropriate because it will help to establish the relationship among adolescents’ popularity, self-efficacy and academic achievement. This study was carried out in Enugu state, which is located in the southeast of Nigeria. The Education Zone used is made up of three local government areas with forty five (45) public senior secondary schools. The choice of this Education Zone in Nigeria for this study is necessary because students view social aspect of the school as most important and desirable than the primary goal of going to school which is learning. The population for the study consists of all the SS 11 students in public senior secondary schools in Obollo-Afor education zone of Enugu State. The total population is 4,997 SS 11 from the three local government areas in the zone. These adolescents are within the same age brackets and have spent substantial part of their time in the school. They are also exposed to a stable peer group.

The sample for the study comprised of 498 SS 11 students from the senior secondary schools in Obollo-Afor education zone, and this amounts to 10% of the entire population. The rationale for selecting 10% of the population is in line with Nwana’s (1992) assertion that: “if the population of a study is in a few hundreds, a 40% or more samples will do; if many hundreds, a 20% sample will do; if a few thousands, a 10% sample will do and if several thousands, a 5% sample will do”. Stratified proportionate sampling technique was used to draw 10% from each of the local government areas that make up the zone. With this stratified technique, 498 samples were drawn. The instrument is in three parts; part A of the instrument contains the personal data of the respondents including age, gender and class in school. Part B is Adolescents’ Popularity Rating Scale (APRS) developed by the researcher. The instrument has two clusters and these include; Cluster A: socio-metric popularity consisting of 10 item statements and Cluster B: perceived popularity consisting of 10 item statements. Clusters A and B was used to elicit information on in-school adolescents’ socio-metric popularity and perceived
popularity, and the instrument was scored on a four point rating scale which ranges from strongly agree (4) to strongly disagree (1). Part C is Self-efficacy belief rating scale (SERS), with twenty items designed to assess the students’ self-efficacy. The items were scored on a four point rating scale that ranges from strongly agreed (4) to strongly disagreed (1). The result obtained by the respondents at the end of the session (comprising first, second and third term) was used as a measure of their academic achievement. The researchers administered the instrument with the aid of two research assistants so as to ensure that the entire questionnaire administered and completed were collected on the spot. The respondents were given instruction on how to answer the questions on the questionnaire immediately after its distribution. Also the researchers solicited for the assistance of the principals in ensuring that the end of session result of the sampled students was released in all the sampled schools. Mean, Standard Deviation and Simple Linear Regression Analysis were used to answer research questions while Analysis of Covariance (ANOVA) was used to test the research hypotheses at 0.05 level of significance.

RESULTS AND DISCUSSIONS

The result in Table 1 above shows the mean and standard deviation score of 2.64 and 0.33 for socio-metric popularity, and 2.80 and 0.35 for perceived popularity respectively. The mean score of the two types of popularity is 2.72. The table shows mean and standard deviation of 55.21 and 14.66 for academic achievement of in-school adolescents respectively. The table also revealed that the relationship between popularity and academic achievement of in-school adolescent is very low, with a regression value of 0.096. This goes to show that the relationship between popularity (Socio-metric and perceived popularity) and academic achievement of in-school adolescents is very low.

The coefficient of determination (R^2) is equal to 0.009, and this result indicates that only 0.9% of students’ popularity (Socio-metric and perceived) predicated their academic achievement. The result in table 2 above shows the mean and standard deviation score of in-school adolescents’ self-efficacy as 2.79 and 0.33 respectively. The table shows mean and standard deviation score of their academic achievement as 55.21 and 14.66 respectively. The table reveals that the relationship between in-school adolescents’ self-efficacy and academic achievement is high with correlation coefficient of 0.86. Also, the Coefficient of determination R^2 is equal to 0.73, and this revealed that 73% of in-school adolescents’ self-efficacy predicated their academic achievement.

The result from Table 3 indicates that the significance for two-tailed test .160 is greater than the probability level (0.05), hence the stated null hypothesis is not rejected. This means that popularity (socio-metric or perceived popularity) of in-school adolescents has no significant relationship with academic achievement. The result in table 4 above shows that the significant level of two-tailed test .002 is less than the probability level 0.05; hence the stated null hypothesis is rejected. This shows that significant relationship exist between in-school adolescents’ self-efficacy and academic achievement. The results of the study showed that there is low relationship between popularity and academic achievement of in-school adolescents. The finding is in accordance with Mejis, Cillessen, Scholte, Segers and Spijkerman (2010), who asserted that popularity does not relate to academic achievement either in vocational school or college preparatory school. The current study further revealed that both socio-metric popularity and perceived popularity have very low relationship with academic achievement.

| Table 1 | Mean, Standard Deviation and Regression Analysis Table showing the Relationship between Popularity (Socio-metric and Perceived) and Academic Achievement of In-school Adolescents |
| Variables | X | SD | N | r | R^2 |
| Popularity | Socio-metric Popularity | 2.64 | .33 | 498 |
| | Perceived Popularity | 2.80 | .35 | 498 |
| Academic Achievement | 55.21 | 14.66 | 498 |

| Table 2 | Mean, Standard Deviation and Regression Analysis Table showing the Relationship between Self-efficacy belief and Academic Achievement of In-school Adolescents |
| Variables | X | SD | N | r | R^2 |
| Self-efficacy | 2.79 | .33 | 498 |
| Academic Achievement | 55.21 | 14.66 | 498 |

| Table 3 | Analysis of Variance (ANOVA) Table showing Relationship between Popularity (Socio-metric and Perceived) and Academic Achievement of In-school Adolescents |
| Model | Sum of Squares | df | Mean Square | F | Sig.(2-tailed) | Probability level | Decision |
| Regression | 788.803 | 2 | 394.402 |
| Residual | 84960.997 | 495 | 214.008 | 1.843 | .160 | 0.05 | N. S |
| Total | 85749.800 | 497 |

| Table 4 | Analysis of Variance (ANOVA) Table showing Relationship between Self-efficacy belief and Academic Achievement of In-school Adolescents |
| Model | Sum of Squares | df | Mean Square | F | Sig.(2-tailed) | Probability level | Decision |
| Regression | .376 | 2 | .376 |
| Residual | 85749.424 | 495 | 167.008 | 0.043 | .002 | 0.05 | S |
| Total | 85749.800 | 497 |

S means Significant

N S means Not Significant
This result also agrees with De Bruyn and Cillessen (2006) assertion that popular girls and boys do not show high academic achievement. Furthermore, analysis of variance shows no significant relationship between in-school adolescents’ popularity and academic achievement. From the result, only 0.9% of in-school adolescents’ popularity predicated their academic achievement. The result is at variance with Wentzel and Caldwell (1997) who found that there are links between peer acceptance and academic performance, with the conclusion that peer acceptance is seen as a stronger predictor of academic performance. The results of the study revealed that the relationship between in-school adolescents’ self-efficacy and academic achievement is high. The result also revealed that 73% of in-school adolescents’ self-efficacy belief predicated their academic achievement. This is in agreement with Adeyero and Torubeli (2008) who found that self-efficacy has the highest predicative effect on academic achievement, thereby projecting self-efficacy as a strong determinant of academic achievement. Analysis of Variance shows significant relationship between in-school adolescents’ self-efficacy belief and academic achievement. This agrees with Borich (2011) that self-efficacy influences individuals’ expectation and behaviour. This significant relationship also agrees with Zimmerman (2000) who maintained that student’s motivation can be enhanced by evoking the student’s sense of self-efficacy belief.

Summary of Major Findings

The major findings of this study include:

1. There is low relationship between popularity and academic achievement of in-school adolescents.
2. The relationship between in-school adolescents’ self-efficacy and academic achievement is high.
3. Significant relationship does not exist between popularity (socio-metric and perceived popularity) and academic achievement of in-school adolescents.
4. Significant relationship exists between in-school adolescents’ self-efficacy and academic achievement.

CONCLUSIONS

Popularity refers to how adolescent’s functions in a peer group and in-school adolescents’ popularity will be associated with their belief in themselves and their ability. Achievement is being able to excel in one’s endeavours in life and academic achievement has to do with excelling in school work. Bearing in mind that school is a social institution for learning and character molding, the goal and motive of building such institution should be borne in mind as adolescents pass through it. There is low relationship between popularity and academic achievement of in-school adolescents, but positive and high relationships exist between self-efficacy belief and academic achievement. There is significant relationship between adolescents’ self-efficacy belief and academic achievement, but no significant relationship was found between popularity and academic achievement of in-school adolescents.

Recommendations

The following recommendations were made based on the findings of the study.

1. Since only 0.9% of in-school adolescent socio-metric popularity account for academic achievement and 0.1% of in-school adolescent perceived popularity account for academic achievement it then goes to show that school administrators and teachers should engage students effectively to work more on their academics.
2. Teachers should always make the students believe that they can achieve academically as this will help them since self-efficacy has positive relationship with academic achievement.
3. Students should learn to be persistence especially in their school work as this will help them strengthen their self-efficacy belief.

References


