

## EFFECTS OF PSYCHO-SOCIAL THERAPIES ON THE SELF-EFFICACY OF DEAF AND HARD OF HEARING IN-SCHOOL ADOLESCENTS IN LAGOS STATE

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### ABSTRACT

*This study examined the effects of psycho-social therapies on self-efficacy of deaf and hard-of-hearing adolescents in Lagos State, Nigeria. The study employed quasi-experimental pretest post-tests control group research design. Simple random and purposive sampling techniques were used to select schools and 45 deaf and hard-of-hearing adolescents that exhibited poor self-efficacy. Four hypotheses were formulated and tested at 0.05 level of significance. The instruments used for data collection were Generalised Self-efficacy Scales and Parenting Style Scale. Data collected were analysed using mean, standard deviation and analysis of covariance. According to the findings, the experimental groups who received cognitive and social learning therapies demonstrated enhanced self-efficacy in contrast to their counterparts in the control group. The social learning therapy had a more significant effect on the self-efficacy of teenagers who are deaf or hard-of-hearing. In addition, the study found that there was no notable disparity in the average self-efficacy scores of deaf and hard-of-hearing adolescents after the trial, regardless of their gender, socioeconomic level, or parenting style. It was recommended that cognitive behaviour and social learning therapies should be employed to manage some psycho-social problems that adolescents exhibit whether because of their peculiarities or pressure of the stage of development.*

**Keywords:** *Adolescents, Deaf and Hard-of-hearing, Cognitive behavior therapy, Social learning therapy*

### INTRODUCTION

Life achievement is dependent on several factors within and outside an individual's sociological environment. Most importantly, the social and psychological environments take prominent roles in the development and personality formation at childhood and adolescent stages. The adolescent stage is adjudged as the most turbulent stage in the developmental process of a man. Whatever happens at this time coupled with childhood experiences may make or mar the future of a growing adult. In the same way, adolescents that are deaf and hard of hearing undergo the same developmental milestone though, sometimes may experience delay because of some physiological conditions that may impede the developmental process. Nevertheless, deaf and hard of hearing adolescents experience similar physio-psychological processes like any other person.

Deafness and hardness of hearing are terms used to describe varying degrees of impaired auditory functions. They refer to conditions where an individual's ability to hear sounds diminished, either partially or completely. These conditions can affect one or both ears and can have a significant impact on an individual's communication, social interactions, and overall quality of life. The impact of deafness on the wellbeing of the affected and how to mitigate it has been a subject of investigation by researchers as literature have revealed that deafness constitutes major problems to social and psychological dispositions of the affected. For instance, deafness impedes communication and limits rate of engagement in both homes and society (Adeniyi & Olufemi-Adeniyi, 2023), distort personality by negatively influencing psychological and social dispositions of young adults with deafness (Adeniyi, et al., 2021; Alramamneh, et al., 2020), constitutes mental health problem (Adeniyi et al, 2021), decrease academic achievement and problem of school

adjustment (Adeniyi & Kuku, 2016) and negative self-esteem which may play significant role in the self-efficacy and concept of person with hearing impairment.

Self-efficacy plays major role in life's achievement and aspiration of young adults as it discourages achievement of certain life milestone. Self-efficacy refers to an individual's belief in his or her capacity to execute behaviours necessary to produce specific performance attainments (Bandura, 1997). This is reflected in the ability to exert control over one's own motivation, behaviour and social environment. The self-efficacy of deaf and hard of hearing learners refers to their belief in their ability to successfully perform tasks and achieve goals despite their hearing challenges. It plays a crucial role in their academic, social, and emotional development, influencing their motivation and overall well-being. Bandura (1997) posited that there are major four sources of information that can influence self-efficacy in man. These are: prior experience in mastering a task, judgment of others' capabilities in mastering a task, feedback from others relating to ability of mastering a task and somatic information from physical and emotion reaction to perform a task. It must be noted that the buildup of confidence starting from childhood is critical for later life perceived capability of performing and being successful in any given task.

Deaf and hard of hearing people struggle with self-efficacy for many reasons. This includes medical issues caused by auditory apparatus malfunction and life adventures. Social attrition between deaf and hearing people results from communication issues. Lack of verbal communication leads to social isolation in family and communities (Adeniyi & Kuku, 2018). Deaf and hard of hearing people, especially adolescents, sometimes misunderstand themselves due to social isolation. Deaf/hard-of-hearing people may have low self-efficacy due to their self-perception and reduced communicative ability (Hammad & Awed, 2022). Self-criticism affects deaf and hard of hearing people in all socioeconomic settings. Several studies have shown that thinking style influences deaf and hard of hearing self-efficacy (Cheng, 2019). Literature also links thinking style to self-efficacy (Hamid et al., 2021; Sagone & De Caroli, 2013). This implies that self-perception affects self-efficacy.

In addition to psychological and social factors, biological and contextual factors can affect self-efficacy. Some research revealed no significant association between gender and self-efficacy-based work competence (Greenfield, 1997; Nasr & Asghar, 2011). Others say gender affects man's self-efficacy. Simonneaux, et al. (2005) discovered that men students preferred sciences to females. In parallel research, Adigun and Nzima (2021) found that gender, onset of deafness, and academic self-efficacy predicted deaf learners' biology attitudes. These studies controversially showed self-efficacy's power in daily life.

Among the different contextual variables, research has shown that socio-economic status has influence on students' physical, cognitive and socio-emotional development (Bradley & Corwyn, 2002). Socio-economic status can be seen as individuals' ranking on a hierarchy reflecting their access to or control over valued economic, cultural and social resources necessary for success (Early et al., 2020; Kim, 2019; Kim et al., 2019; Sirin, 2005). Parents' high level of education, influence and status may inform their ability and interest in the education of their wards (Tam, et al., 2022). For example, parents who are highly educated and who enjoy higher occupational status comprise role models with status, power and prestige, so their children may desire to emulate them (Bandura, 1997). The status, influence and occupation may positively influence the self-efficacy of learners from such homes.

Furthermore, the influence of home in the upbringing of a child cannot be overemphasised. Home constitutes the first socialization arena for any child and go long way to determine the personality of such individual. In a study conducted by Turner et al (2009) to explore the relationship between parenting styles, self-efficacy, achievement motivation and academic performance in undergraduate students using 264 college students revealed that perceived authoritative parenting styles significantly related to college students' academic performance. Also, Tam, et al.,



(2012) investigated parenting styles and self-efficacy of adolescents reported correlation between parenting style and self-efficacy of adolescents' students in Malaysia.

Self-efficacy, an individual's belief in his or her ability to execute behaviors necessary to produce specific performance and attainments, may be negatively influenced by psychosocial and personal factors facing deaf and hard of hearing later in life, preventing life goals from being achieved. Thus, proper psychotherapy to create confidence and a positive attitude in deaf adolescents is needed before they form permanent personalities. Several psychotherapies have helped manage harmful behaviors in self and society. Cognitive behavior and social learning therapies are examples. Cognitive behaviour therapy (CBT) helps people with psychological issues recognize and alter harmful thought patterns that affect their behaviour and emotions (Hofmann et al., 2012). This psychotherapy combines cognitive and behavioral therapies to discover and change dysfunctional thinking, emotional, and behavioral patterns. CBT aims to change automatic negative beliefs that can cause emotional trauma, sadness, and anxiety, which are harmful to health and well-being in people facing life obstacles. According to research and clinical practice, CBT is a successful psychotherapy.

The principles of cognitive behavior therapy are: Psychological problems are based in part on faulty or unhelpful ways of thinking and learned patterns of unhelpful behavior. People with psychological problems can learn better ways to cope with them, relieving their symptoms and improving their lives. Literature reports CBT efficacy. Hanana, et al. (2022) found that cognitive behavior therapy improved depression, anxiety, and social dysfunction in Palestinian medical students during the COVID-19 pandemic. A related study by Eneogu, et al. (2023) found that cognitive behavior therapy (CBT) reduces academic stress in rural community secondary school economics students using randomized controlled trials. Ugwuanyi, et al. (2020) found that CBT reduced maladaptive conduct in higher education students better than other counselling methods. CBT for some psychopathologies involves identifying challenging situations or conditions, becoming aware of your thoughts, emotions, and beliefs about them, identifying negative or erroneous thinking, and reshaping it.

In contrast, social learning therapy is a behavior therapy that teaches by watching and copying others. This notion originated from Albert Bandura's social learning theory. A significant "role model" shows the client desired behavior in a supportive atmosphere in this therapy. Social learning therapy aims to minimize aggression, promote positive family transformation, boost family unity, promote empathy, support healthy relationships, and improve problem-solving. Literature describes social learning therapy's effects. Nwolisa, et al. (2013) examined how cognitive behavior and social learning therapy managed violence in Lagos State senior secondary school students. Cognitive behavior and social learning therapy lowered participant hostility. In another comparable study, Weiss et al. (1998) found that modeling promoted self-efficacy in children with water phobia and improved swimming skills. Law and Hall (2009) discovered that modeling sub-factors in group and individual events improved self-efficacy in rookie sports participants. Lee et al. (2021) examined how role models affect teenagers' athletes' self-efficacy and flow state. It found a direct influence.

The efficacies of both cognitive and social learning therapies on some psychological constructs of participants with and without disabilities worth investigation. In a bid to ameliorate negative self-efficacy of deaf and hard-of hearing adolescents, this study investigated effects of cognitive behaviour and social learning therapies on the self-efficacy of deaf and hard-of-hearing adolescents in Lagos State

## Hypotheses

These hypotheses were tested at 0.05 level of significance.

1. There is no significant difference in the post–test scores of self-efficacy among participants in the three experimental groups (Cognitive Behaviour and Social Learning therapies and Control).
2. There is no significant difference in post-test mean score of self-efficacy among deaf and hard-of-hearing adolescents as a result of the experimental conditions due to gender.
3. There is no significant difference in the post-test mean score on self-efficacy among deaf and hard-of-hearing adolescents due to parental socio-economic status.
4. Post-test mean scores on self-efficacy will not significantly differ among deaf and hard-of-hearing adolescents exposed to experimental conditions due to parenting style.

## METHODOLOGY

This study adopted quasi experimental, pre and post-tests control group research design. The population of the study was all deaf and hard of hearing from state inclusive Secondary Schools. The instruments for this study were: General Self-efficacy Scale by Schwarzer and Jerusalem [(1995) adapted], Generalised self-efficacy scale adapted from AbdulGafoor and Ashraf Academic Self-efficacy scale (2006) and parenting style scale developed by the researchers. Their reliability indexes are 0.80, 0.79 and 0.70 respectively. Simple random sampling technique was used to select three schools. The participants were selected using simple random and purposive sampling technique. The sample comprised of 45 adolescents who scored below 29 mean score of General Self-efficacy Scale by Schwarzer and Jerusalem (1995). 23 male and 22 female deaf and hard of hearing adolescents were selected after we have administered the General Self-efficacy Scale on them in the selected inclusive schools.

The three schools selected through simple random sampling were randomised in to two treatment and one control groups through hat and draw method. The groups were labeled A, B and C. The group A was treated with cognitive behaviour therapy; B was administered with social learning therapy while C was given general social etiquette talk. At pre-treatment stage we administered Self-efficacy Scale adapted from AbdulGafoor and Ashraf Academic Self-efficacy scale (2006) and parenting style scale. The scores for the three groups were collected and collated. Thereafter, treatment on cognitive and social learning therapies with the placebo group lasted 7 weeks. Then, the Self-efficacy scale and parenting scale were then administered again on the three groups and scores were collected and collated. The data collected was analysed using mean, standard deviation and Analysis of Covariance. The hypotheses were tested at 0.05 level of significance.

## RESULTS

Research Hypothesis 1: There is no significant difference in the post–test scores of self-efficacy among participants in the three experimental groups (Cognitive Behaviour and Social Learning therapies and Control).

Table 1  
Pre- and Post-Test Descriptive Analysis of Self-efficacy Scores

Experimental Group	N	Pretest Score		Posttest Score		Mean Difference
		Mean	Std. Deviation	Mean	Std. Deviation	
Cognitive Behaviour Therapy	15	79.60	9.37	59.73	10.71	-19.87
Social Learning therapy	15	103.93	9.18	71.27	9.01	-32.67
Control Group	15	90.07	8.98	89.27	6.02	-0.80
Total	45	91.20	13.49	73.42	15.00	-17.78

The result of the descriptive statistics in Table 1 shows that at pretest, pretest mean score were 79.6, 103.93 and 91.20 for cognitive behaviour therapy, social learning therapy and control group respectively. At post-test, the mean score values reduced to 59.73, 71.27 and 89.27 for cognitive behaviour therapy, social learning therapy and control group respectively. This shows that the group with social learning theory had the highest reduction of -32.67 followed by the cognitive behaviour therapy with -19.87 and the control group with -0.8. Further analysis was computed using the Analysis of Covariance to determine if there existing significant difference in the mean score on self-efficacy across the group. The result of the analysis is displayed in Table 2.

Table 2  
ANCOVA Result

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	7647.863	3	2549.288	46.513	.000
Intercept	261.053	1	261.053	4.763	.035
Covariate	1001.686	1	1001.686	18.276	.000
Group	6044.391	2	3022.196	55.142	.000
Error	2247.114	41	54.808		
Total	252482.000	45			
Corrected Total	9894.978	44			

A F-calculated value of 55.142 was gotten as the difference in the post-test mean score on self-efficacy as a result of exposing the participants to different experimental treatment. The value was observed to be greater than the critical value of 2.84 given degrees of freedom 2 and 41 at 0.05 level of significance. As a result, the null hypothesis was rejected and it was concluded that there was significant difference in the post-test scores in self-efficacy among participants in the three experimental groups (Cognitive Behaviour Therapy and Social Learning therapy and Control). To determine the group with the difference, a multiple comparison was done between groups using least square method, the result of the analysis is presented in Table 3.

Table 3  
Multiple Comparison Analysis

(I) Experimental Group	(J) Experimental Group	Mean Difference (I-J)	Sig. <sup>b</sup>
Cognitive Behaviour Therapy	Social Learning therapy	1.415	.729
	Control Group	-23.964*	.000
Social Learning therapy	Cognitive Behaviour Therapy	-1.415	.729
	Control Group	-25.379*	.000
Control Group	Cognitive Behaviour Therapy	23.964*	.000
	Social Learning therapy	25.379*	.000

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

The figures in Table 3 shows a significant difference between cognitive behaviour therapy and control group ( $t = -23.964$ ;  $p < 0.05$ ); and social learning therapy and control group ( $t = -25.379$ ;  $p < 0.05$ ).





Research Hypothesis Two: There is no significant difference in post-test mean score of self-efficacy among adolescents with hearing impairment as a result of the experimental conditions due to gender.

Table 4  
Pre- and Post-Test Descriptive Analysis of self-efficacy Scores due to Gender

Experimental Group	Gender	N	Pretest Score		Posttest Score		Mean Difference
			Mean	Std. Deviation	Mean	Std. Deviation	
Cognitive Behaviour Therapy	Male	7	80.43	9.66	55.71	8.46	-24.71
	Female	8	78.88	9.72	63.25	11.73	-15.63
	Total	15	79.60	9.37	59.73	10.71	-19.87
Social Learning therapy	Male	9	105.67	7.94	72.56	9.25	-33.11
	Female	6	101.33	11.02	69.33	9.11	-32.00
	Total	15	103.93	9.18	71.27	9.01	-32.67
Control Group	Male	7	91.57	6.08	91.14	4.30	-0.43
	Female	8	88.75	11.20	87.63	7.07	-1.13
	Total	15	90.07	8.98	89.27	6.02	-0.80
Total	Male	23	93.70	13.21	73.09	15.99	-20.61
	Female	22	88.59	13.58	73.77	14.26	-14.82
	Total	45	91.20	13.49	73.42	15.00	-17.78

Analysis in Table 4 shows that at pre-test, male participants had mean scores of 80.43, 105.67 and 91.57 as self-efficacy scores for cognitive behaviour therapy, social learning theory and control group respectively. Their female counterpart at pre-test had 78.88 for cognitive behaviour therapy, 101.33 for social learning theory and 88.75 for control group.

The mean post-test scores of male participants were 55.71, 72.56 and 91.14 for cognitive behaviour therapy, social learning theory and control group respectively. Their female counterpart had mean post-test value of 63.25 for cognitive behaviour therapy, 69.33 for social learning theory and 87.63 for control group.

The mean difference shows that male and female participants in the social learning therapy had the highest reduction of 33.11 and 32 respectively. In order to determine if the difference were significant, an Analysis of Covariance was computed and the result is presented in Table 5.

Table 5  
ANCOVA Result on Self-efficacy due to Gender

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	7927.188	6	1321.198	25.514	.000
Intercept	244.767	1	244.767	4.727	.036
Covariate	985.426	1	985.426	19.030	.000
Group	6120.183	2	3060.091	59.093	.000
Gender	35.710	1	35.710	.690	.411
Group * Gender	240.741	2	120.371	2.324	.112

Error	1967.790	38	51.784
Total	252482.000	45	
Corrected Total	9894.978	44	

The study in Table 5 reveals that the F-calculated value of 0.112 represents the difference in the mean score of aggressiveness among teenagers with hearing impairment after the experiment, based on gender and the experimental settings. At a significance level of 0.05, the observed value was found to be lower than the critical value of 2.84, with 2 and 38 degrees of freedom. Hence, the null hypothesis was confirmed. The findings indicate that there is no statistically significant variation in the average self-efficacy scores among teenagers with hearing impairment based on gender, regardless of the experimental settings.

Research Hypothesis Three: There is no significant difference in the post-test mean score on self-efficacy among adolescents with hearing impairment due to parental socio-economic status.

Table 6  
 Pre- and Post-Test Descriptive Analysis of self-efficacy Scores due to Parental Socio-Economic Status

Experimental Group	Socio-Economic Status	N	Pretest Score		Posttest Score		Mean Difference
			Mean	Std. Dev.	Mean	Std. Dev.	
Cognitive Behaviour Therapy	Low	2	63.00	0.00	49.50	13.44	-13.50
	Mild	4	89.75	2.63	66.50	10.97	-23.25
	High	9	78.78	5.47	59.00	9.12	-19.78
	Total	15	79.60	9.37	59.73	10.71	-19.87
Social Learning therapy	Low	6	107.33	5.39	72.50	7.42	-34.83
	Mild	8	100.88	11.17	70.50	10.99	-30.38
	High	1	108.00		70.00		-38.00
	Total	15	103.93	9.18	71.27	9.01	-32.67
Control Group	Low	8	87.75	11.18	87.63	7.07	-0.13
	Mild	7	92.71	5.19	91.14	4.30	-1.57
	Total	15	90.07	8.98	89.27	6.02	-0.80
Total	Low	16	92.00	16.85	77.19	14.93	-14.81
	Mild	19	95.53	9.05	77.26	13.94	-18.26
	High	10	81.70	10.58	60.10	9.28	-21.60
	Total	45	91.20	13.49	73.42	15.00	-17.78

Analysis from Table 6 shows that participants in the social learning therapy had the highest mean reduction of -34.83, -30.38 and -38 for Low, Mild and High socio-economic status respectively. A further computer was done to determine whether the differences in the mean score on self-efficacy based on socio-economic status was significant. The result of the computation is presented in Table 7.

Table 7

ANCOVA Result of Self-efficacy based on Experimental Conditions and Socio-Economic Status					
Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	7684.921 <sup>a</sup>	8	960.615	15.648	.000
Intercept	192.495	1	192.495	3.136	.085
Covariate	579.675	1	579.675	9.442	.004
Group	4724.387	2	2362.194	38.478	.000
SES	36.369	2	18.185	.296	.745
Group * SES	12.123	3	4.041	.066	.978
Error	2210.057	36	61.390		
Total	252482.000	45			
Corrected Total	9894.978	44			

A F-calculated value of 0.98 was computed as the difference in the post-test mean score on self-efficacy among adolescents with hearing impairment due to parental socio-economic status. The value was observed to be less than the critical value of 2.84 given 3 and 36 degrees of freedom at 0.05 level of significance. Consequently, the null hypothesis was not rejected. It was concluded that there is no significant difference in the post-test mean score on self-efficacy among adolescents with hearing impairment due to parental socio-economic status.

Research Hypothesis Four: Post-test mean scores on self-efficacy will not significantly differ among adolescents with hearing impairment exposed to experimental conditions due to parenting style.

Table 8

Pre- and Post-Test Descriptive Analysis of Self-efficacy Scores due to Parenting Style

Experimental Group	Parenting Style	N	Pretest Score		Posttest Score		Mean Difference
			Mean	Std. Dev.	Mean	Std. Dev.	
Cognitive Behaviour Therapy	Authoritative	10	81.40	6.80	60.10	10.30	-21.30
	Authoritarian	5	76.00	13.38	59.00	12.71	-17.00
	Total	15	79.60	9.37	59.73	10.71	-19.87
Social Learning therapy	Authoritative	8	105.75	8.76	70.38	9.29	-35.38
	Authoritarian	3	105.00	8.00	68.67	1.53	-36.33
	Permissive	4	99.50	11.62	75.00	12.19	-24.50
	Total	15	103.93	9.18	71.27	9.01	-32.67
Control Group	Authoritative	6	88.83	8.77	89.17	4.58	0.33
	Authoritarian	4	89.00	7.53	87.50	6.45	-1.50
	Permissive	5	92.40	11.55	90.80	7.95	-1.60
	Total	15	90.07	8.98	89.27	6.02	-0.80
Total	Authoritative	24	91.38	13.23	70.79	14.50	-20.58
	Authoritarian	12	87.58	15.38	70.92	15.38	-16.67
	Permissive	9	95.56	11.46	83.78	12.52	-11.78
	Total	45	91.20	13.49	73.42	15.00	-17.78



Figures from Table 8 shows that participants in the social learning therapy had the highest mean reduction of -35.38, 36.33 and 24.5 for authoritative, authoritarian and permissive parenting styles respectively. A further computation was done to determine whether the differences in the mean score on self-efficacy due to parenting styles was significant. The result of the analysis is presented in Table 9.

Table 9  
ANCOVA Result of Self-efficacy due to Parenting Styles

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	7881.646	8	985.206	17.616	.000
Intercept	171.850	1	171.850	3.073	.088
Covariate	1124.743	1	1124.743	20.111	.000
Group	4954.642	2	2477.321	44.297	.000
PS	131.076	2	65.538	1.172	.321
Group * PS	127.114	3	42.371	.758	.525
Error	2013.332	36	55.926		
Total	252482.000	45			
Corrected Total	9894.978	44			

It could be observed that a F-calculated value of 0.525 was gotten as the post-test mean scores on self-efficacy among adolescents with hearing impairment exposed to experimental conditions due to parenting style. The value was found to be less than the critical value of 2.84 given 3 and 36 degrees of freedom at 0.05 level of significance. As a result, the null hypothesis was upheld and it was concluded that post-test mean scores on self-efficacy among deaf and hard of hearing adolescents do not significantly differ as a result of parenting style after exposing them to experimental conditions.

## DISCUSSION OF FINDINGS

The study's results revealed that the experimental groups, which were subjected to cognitive and social learning therapies, exhibited enhanced self-efficacy in comparison to their counterparts in the placebo group. This finding suggests that the interventions demonstrated efficacy and had the potential to assist individuals with low self-efficacy when implemented appropriately. The present study's findings corroborate the research conducted by Hanna et al. (2022), which examined the impact of a cognitive behavior therapy intervention on the mental well-being of medical students in Palestine amidst the Covid-19 pandemic. The study revealed significant enhancements in depression, anxiety, and social functioning.

Also, in the same vein, Eneogu, et al., (2023) investigated the efficacy of cognitive behaviour therapy on academic stress among rural community secondary school economics students using randomized controlled evaluation reported that CBT has a significant effect on the management of academic stress among rural community secondary schools economics students. From the findings of these different researcher and the outcomes, one cannot but admit that cognitive behaviour therapy is highly efficient in managing some psychological issues.

Also, the experimental condition proved that social learning therapy has great impact on the self-efficacy of deaf and hard-of-hearing adolescents compared with control group and even demonstrated more capacity to help in developing high self-efficacy. This outcome is line with

some studies that have reported the exploit of modeling (social learning therapy) in shaping the self-efficacy of participants in their various experimental groups. For instance, Lee et al., (2021) investigated the effect of modeling on self-efficacy and the flow state of adolescents' athletes through role models reported direct effect on the participants' self-efficacy. In essence, because behaviour is a learn construct according to Albert Bandura, likewise, some psychological constructs can also be shaped through social learning activities.

The study further revealed no significant difference in post-test mean score of self-efficacy of deaf and hard-of hearing adolescents as a result of the experimental conditions due to gender. The implication is that both male and female deaf and hard-of-hearing adolescents react the same way after being exposed to both therapies. It can then be inferred that the participants are being influenced by the same condition. This finding contradicted the research conducted by Adigun and Nzima (2021), which found a substantial correlation between gender and self-efficacy. Their study examined the impact of gender, the beginning of deafness, and academic self-efficacy on learners' academic performance. This finding provides further opportunities for further exploration into the controversial topic of gender and self-efficacy.

Also, the socioeconomic status did not play any significant impact of the self-efficacy of deaf and hard of hearing adolescents exposed to experimental condition. It can then be inferred that socioeconomic status might not be main factor why most deaf adolescents have poor self-efficacy. The basic reason might be the major obstacle of language barrier occasioned by deafness that limits their interaction and communication. The outcome of this study was contrary to the research findings of some authors who have reported the effects of socioeconomic factors on self-efficacy of adolescents and adult learners (Tan, et al., 2022; Bandura, 1997).

Again, the study revealed that post-test mean scores on self-efficacy among deaf and hard of hearing adolescents did not significantly differ as a result of parenting style after exposing them to experimental conditions. The implication of this is that parenting style does not significantly affect the self-efficacy of deaf and hard of hearing adolescents after the two groups have been exposed to CBT and SLT. This outcome might point to the fact that the issue of deafness might have overwhelmingly contributed to the problem of self-efficacy of learners who are deaf or hard of hearing in the locations where the experiment were carried out.

### **Conclusion**

This study is on the effects of cognitive behaviour and social learning therapies on the self-efficacy of deaf and hard of hearing adolescents in Lagos State, Nigeria. The study adopted pre and post-test quasi experimental research design. The results revealed that the two therapies (CBT and SLT) were significantly efficacious. However, social learning therapies proved more efficacious in improving self-efficacy of deaf and hard of hearing adolescents in Lagos State. The study further revealed that gender, socioeconomic status and parenting style did not have significant effects on self-efficacy of deaf and hard of hearing adolescent exposed to experimental conditions.

### **Recommendations**

Cognitive behaviour and social learning therapies should be employed to manage some psycho-social problems that adolescents exhibit whether because of their peculiarities or pressure of the stage of development. However, social learning therapy which involve modeling good life style will be more beneficial to deaf and hard-of-hearing adolescents.

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