

## ***Effects of Self-Management Therapy on Entrepreneurial Aptitude of Persons with Post Lingual Hearing Impairment***

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### **Abstract**

*This study investigated effects of self-management therapy on entrepreneurial aptitude of persons with post lingual hearing impairment. The specific objectives of this study are to determine the level at which self-management therapy (SMT) can improve communication skills and thinking skills of Entrepreneurs with Post Lingual Hearing Impairment (EWPLHI). Using pretest-posttest design type of quasi-experimental research, the outcome of interest was measured two times from experimental and control groups. The population of the study is fifteen (15) EWPLHI. The sample size is ten (10). Teacher Made Entrepreneurial Aptitude Test is the instrument used to obtain data in this research. To test hypotheses 1 and 2, at 0.05 level of significance, t-test analysis was employed. The results revealed that SMT changed the entrepreneurial aptitude (communication skills and thinking skills) of EWPLHI to a moderate level. This study recommended that Federal Government should partner with professionals such as Institute of Management Consultants and Institute of Professional Entrepreneurs and Strategic Administrators of Nigeria, to provide trainings, and entrepreneurial guidance and counselling for entrepreneurial development for EWPLHI.*

**Keywords:** entrepreneurial, aptitude, communication, thinking, impairment

## **Introduction**

Entrepreneurial aptitude is solely business expertise or the ground-breaking competency every entrepreneur ought to possess before progressing and flourishing in the art and science of commerce or business. Sharna (2019), Zizile and Chimucheka (2018) and Institute of Management Consultants (IMC)-Nigeria (n. d.) opined that there are major aptitudes entrepreneurs must have to establish, sustain and maintain small and medium entrepreneurial aptitude; these aptitudes are: communication skills, thinking skills and more.

Iornem (n. d.) averred that those other entrepreneurial aptitudes when it comes to managing Small and Medium Enterprises (SMEs) included: decision making, teamwork, work standards, reliability, motivation, adaptability, problem solving and integrity. Zizile and Chimucheka (2018) put emphasis that entrepreneurial aptitudes are proficiencies in ability and know-how. The entrepreneur uses aptitude skill as a basis to improve quality; brand or trademark. Competency skill, is ideally a basis for training and merit. The researchers feel that attitude (belief, affect and behaviour) of graduates with post lingual hearing impairment often have great influence on their entrepreneurial aptitudes. Therefore, the researchers see entrepreneurial aptitude in this study to have the following prototypes: communication skills and thinking skills.

Self-Management Therapy is the process of managing and supervising ones' behaviours by a graduate who is an entrepreneur living with post lingual hearing impairment individually, independently and by self as a businessperson; aimed at improving and achieving the target goal and specific objectives of the set entrepreneurial or business at hand (Gwadabe & Amirah, 2017). Okwudire (2012) affirmed that the assumption of self-management therapy is that entrepreneurs that are graduates with post lingual hearing impairment are rational and can manage and control their behaviours in socially acceptable ways. Okwudire also believed that entrepreneurs that are graduates with post lingual hearing impairment need to be and feel entrepreneurially successful; this can be achieved by applied self-management therapy.

Iornem (n. d.) accentuated that self-management therapy is a formal behaviour or attitude management treatment. The behaviour or attitude which could be identified by the individual entrepreneur with post lingual hearing impairment for change or intervention is identified and treated individually; in some cases, modified to meet any special need that suddenly surfaced. Okwudire (2012) emphasized that a formal behaviour self-management

therapy or treatment may consist of eight (8) stages which may include: Identifying the problem; Redefining the problem; Assessing the baseline rate; Identification of the reinforcer contingency; Beginning the therapy; Observing effects; initiating steps to strengthen generalization beyond the environment; and modifying what can be modified/ending the therapy.

Zizile and Chimucheka (2018) asserted that the essence of self-management therapy for an individual entrepreneur with post lingual hearing impairment is to identify any problem, find ways to manage self, businesses or entrepreneurial aptitudes. It also helps these set of persons to make valuable choices that will help them acquire and exhibit desirable behaviours or attitudes towards other entrepreneur, customers and their businesses (Ibidunni et al., 2021). Iornem (n. d.) averred that with a little effort, undesirable behaviours and attitudes can be totally extinguished by means of self-management therapy.

Okwudire (2012) maintained that the advantages of self-management therapy are in the fact that, first, it frees the supervisor to work with other entrepreneurs that are graduates with post lingual hearing impairment, because such entrepreneurs control their behaviours or attitude. Next, is that it teaches decision-making and independence; and lastly, self-management therapy does not require constant supervision from anybody or supervisor.

Persons with post lingual hearing impairment, in this work, are graduates or ex-secondary school students, otherwise known as former secondary school students. Graduates with post lingual hearing impairment are learners who had finished senior secondary school education but are living with hearing impairment after language had been acquired (developed). Vandeh (2016) averred that post lingual hearing impairment is hearing impairment that is incurred after language had been developed or after language had been acquired. It is also referred to as adventitious hearing impairment. The time of onset of this hearing impairment determines these developments. Jikukka (2021) accentuated that some common characteristics that go with this condition are: odd voice, abnormal speech, articulation and language disorders. Babudoh (2008) and Vandeh (2016) accentuated that those persons with post lingual hearing impairment speak at high pitch, odd voice, jumbled vocal sound and the like; which are often not too good for an entrepreneur. It is as a result of the issues highlighted above that the researchers find it necessary to investigate effects of self-management therapy on entrepreneurial aptitude of persons with post lingual hearing impairment.

This study is hinged on the theory of entrepreneurship, namely the entrepreneurial value creation theory propounded by Joseph Alois Schumpeter in 1934. The theory states that intention by an individual or combined intentions with other entrepreneurs is distinct and separate from entrepreneurial opportunity, and that intention determines the adaptability of the individual(s) involved. The theory is related to this study because it advocates **the** art and science of creating intentions of entrepreneurs and sustaining entrepreneurial values; that a person with post lingual hearing impairment in an environment keeps adjusting until he/she is experienced in an entrepreneurial opportunity and obtains business satisfaction or attains work satisfaction (Mishra, & Zachary, 2014; Cal, 2022); this is the theory of entrepreneurial aptitude.

Jurmang et al. (2012) lamented the negative attitude of regular persons in many societies towards entrepreneurs that are graduates with post lingual hearing impairment. Jurmang et al. further averred that those negative attitudes often hinder and prevent entrepreneurs that are graduates with post lingual hearing impairment from participating in entrepreneurial activities and other related engagements; thereby, preventing this set of entrepreneurs (graduates with post lingual hearing impairment) from experiences that would have added and strengthen the entrepreneurial aptitude of these graduates with post lingual hearing impairment. UNESCO (2003) said that proper handling of attitudinal barriers are often the most important tasks to be handled, amongst the barriers towards entrepreneurial aptitudes, and to ensure effective participation and inclusion of graduates with post lingual hearing impairment into entrepreneurial activities. Dan (2022) grieved that negative attitude are stereotyping and often meted to graduates that are entrepreneurs with post lingual hearing impairment.

From the researchers' experiences, graduates that are entrepreneurs with post lingual hearing impairment are habitually seen as profoundly dependent, weak, and full of issues. This stimulates the segregation and exclusion of such graduates/entrepreneurs with post lingual hearing impairment from many entrepreneurial activities, thereby denying them the needed entrepreneurial experiences and entrepreneurial aptitudes. Jurmang et al. (2012) and Dan (2022) opined that an example of an attitudinal barrier is in holding to the belief that persons with post lingual hearing impairment are beggars, carrying out entrepreneurial activities. Therefore, this typecast belief is habitually seen in the attitudes of other entrepreneurs, business administrators and managers; this over and over again makes these graduates that are entrepreneurs with post lingual hearing impairment feel unwelcome, it creates barrier towards their doing legitimate businesses or to obtain

services from other entrepreneurs or government and in the end, prevent these entrepreneurs with post lingual hearing impairment from gaining entrepreneurial aptitudes and capacities (Kasztelnik, 2021).

Schneider and Evers (2009) reported that one of the barriers to graduates that are entrepreneurs with post lingual hearing impairment is in communication skills: lack of interpreters, tele-type, signs and printed materials, to enable them work independently. McCall (2003) added that institutional barriers are often created when there is no legal framework for disability inclusion or when existing laws and regulations are poorly enforced. Okwudire (2012) averred that those institutional barriers are difficult to identify because they are often entrenched within social and cultural norms. Example of institutional barriers in the self-management's setting includes a self-management that does not adhere to the self-management's policy of identifying and responding to graduates that are entrepreneurs with post lingual hearing impairment's diverse needs; this hinders this set of entrepreneurs from gaining sound entrepreneurial aptitudes.

Dan (2022) lamented that lack of access to loans or finances by graduates that are entrepreneurs with post lingual hearing impairment constitutes inaccessibility to small and medium enterprises which are world's contemporary issues that must not be joked with or taken for granted. Jurmang et al. (2012) lamented that graduates that are entrepreneurs with post lingual hearing impairment are faced with severe deprivation, marginalization, exclusion, discrimination, frustration, segregation and negative attitude from the larger society. Jurmang et al. further estimated that graduates that are entrepreneurs with post lingual hearing impairment are part of the majority of the poorest of the poor; the largest number are unemployed and without any business or entrepreneurial opportunity.

Questions that could be asked are: can Self-Management therapy be used to: 1) change the emotions of entrepreneurs with post lingual hearing impairment to emotions of peace and calmness? 2) improve the attitude of fear of humiliation experienced by graduates that are entrepreneurs with post lingual hearing impairment? The aim of this investigation is to investigate effects of self-management therapy on entrepreneurial aptitude of persons with post lingual hearing impairment. The specific objectives of this study are to:

- i. Examine the extent to which Self-Management Therapy can be used to change communication skills of entrepreneurs with post lingual hearing impairment.
- ii. Determine the extent to which Self-Management Therapy can be used to enhance the thinking skills of male and female entrepreneurs with post lingual hearing impairment before and after intervention.

### Research questions

1. To what extent can Self-Management Therapy be used to change communication skills of entrepreneurs with post lingual hearing impairment?
2. To what extent does self-management therapy enhance the thinking skills of male and female entrepreneurs with post lingual hearing impairment before and after intervention?

### Hypotheses

The following hypotheses are formulated and tested at 0.05 level of significance:

**Ho1:** There is no significant difference between the communication skills of entrepreneurs with post lingual hearing impairment exposed to Self-Management Therapy and those not exposed after intervention.

**Ho2:** There is no significant difference between the thinking skills of male and female entrepreneurs with post lingual hearing impairment exposed to Self-Management Therapy and those not exposed after intervention.

### Methodology

The study is experimental research. The researchers adopted the non-equivalent quasi experimental research design. The choice of this design is due to the fact that the nature of the study requires determining the effect of treatment (Self-Management Therapy) on Entrepreneurial Aptitude of Persons with Post Lingual Hearing Impairment. This design also provides opportunity for the researchers to determine how the independent variable interact to influence the dependent variable as well as permit the manipulation and checking of more variables simultaneously. Awotunde and Ugodulunwa (2004) further averred that quasi experimental design is utilize where it is not possible to carry out a random assignment of subjects to groups. The non-equivalent control group design can be illustrated as shown below:

<b>Groups</b>	<b>Pre-test</b>	<b>Treatment</b>	<b>Post-test</b>
Experimental	O <sub>1</sub>	X	O <sub>2</sub>
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Control	O <sub>3</sub>	—	O <sub>4</sub>

O<sub>1</sub> = Pre-test for Experimental Group  
O<sub>2</sub> = Post-test for Experimental Group  
— = Absence of Treatment

X = Treatment  
O<sub>3</sub> = Pre-test for Control Group  
O<sub>4</sub> = Post-test for Control Group

Longpoe (2018) affirmed that quasi experimental design has two groups which are not composed on the basis of randomization but on the bias of using intact classes (groups); the researchers randomly used one group of samples as the experimental group and another group as the control group. Awotunde and Ugodulunwa (2004) professed that lack of randomization in selection in this design introduces selection bias (as a source of internal validity) into any study in which it is used. The independent variable in this study is Self-Management Therapy and the dependent variable is Entrepreneurial Aptitude of Persons with Post Lingual Hearing Impairment.

The population of this research is fifteen (15) persons with post lingual hearing impairment in the study area. This population is found to be suitable for this study because it depicts the same characteristics (persons with post lingual hearing impairment) to be used in this study. Teacher Made Entrepreneurial Aptitude Test is the instrument used to collect data.

The sample size of this study comprised of ten (10) persons with post lingual hearing impairment and without any additional disability or impairment. The said ten (10) persons with post lingual hearing impairment were given the instrument (Teacher Made Entrepreneurial Aptitude Test) to respond to. The simple frequency count, mean score and percentage were used to answer the two research questions, while t-test analysis was used to test hypotheses 1 and 2, at 0.05 level of significance.

The instrument is basically divided into Sections A and B. Section A was for bio-data of the respondents and Section B has twenty (20) items through which the respondents responded to. Respondents were asked to tick (✓) items from the options that best expressed their minds. The scale used for scoring each of the items on entrepreneurial aptitude was the five points Likert Scale rated: Strongly Agreed (SA: 5 points), Agreed (A: 4 points), Undecided (U: 3 points), Disagreed (D: 2 points) and Strongly Disagreed (SD: 1 point). Two experts, one from the field of Test and Measurement, and the second from Business Management, all from the University of Jos, were used to establish the validity of the instrument. This was to ensure that the contents of the instrument are applicable and effective for use with the sample, and these experts judged and guided the researchers in making revision of the items for content validity. The items on the instrument were judged for the instrument's comprehensiveness, adequacy and relevance by the two experts. The two research questions were answered using simple means, frequencies, percentages, and standard deviation. The two hypotheses were tested using t-test analysis.

## Presentation of results

**Research questions one:** To what extent can Self-Management Therapy be used to change communication skills of entrepreneurs with post lingual hearing impairment?

**Table 1:** Extent to which Self-Management Therapy can be used to change communication skills of entrepreneurs with post lingual hearing impairment

Groups	n	Pretest		Posttest		Mean Difference	Pretest Mean Difference	Posttest Mean Difference
		Mean	SD	Mean	SD			
Experimental	5	4.90	1.34	25.60	1.71	20.70	0.00	13.80
Control	5	4.90	0.82	11.80	1.64	6.90		

**Note:** 0- 13.9 = Low Extent; 14- 20 = Moderate Extent, 21- 30 = High Extent.

Table 1 shows the extent to which Self-Management Therapy changed the communication skills of entrepreneurs with post lingual hearing impairment. Experimental group had pretest mean scores of  $4.90 \pm 1.34$  and control group had a pretest mean scores of  $4.90 \pm 0.82$  with pretest mean score difference of 0.00, which is low extent. After intervention, experimental group had posttest mean scores of  $25.60 \pm 1.71$  and control groups had a posttest mean scores of  $11.80 \pm 1.64$  with posttest mean score difference of 13.80, which is moderate extent in favour of experimental group. This implies that Self-Management Therapy improves communication skills (entrepreneurial aptitudes) of entrepreneurs with post lingual hearing impairment to a moderate extent.

**Ho1:** There is no significant difference between the communication skills of entrepreneurs with post lingual hearing impairment exposed to Self-Management Therapy and those not exposed after intervention.

**Table 2:** T-test analysis of posttest communication skills mean score of entrepreneurs with post lingual hearing impairment exposed to self-management therapy and those not

Groups	n	$\bar{x}$	SD	df	t-value	p-value
Experimental	5	25.60	1.71	8	13.011	0.00
Control	5	11.80	1.64			

Table 2 shows the t-test analysis of posttest communication skills mean score of entrepreneurs with post lingual hearing impairment exposed to Self-Management Therapy



and those not exposed. Experimental group had a posttest mean score of 25.60 and a standard deviation of 1.71 while control group had a posttest mean score of 11.80 and a standard deviation of 1.64, with t-value of 13.011 and a p-value of 0.00. Since the p-value is less than 0.05, therefore, there is a significant difference between the communication skills of entrepreneurs with post lingual hearing impairment exposed to Self-Management Therapy and those not exposed after intervention. This means that the researchers rejected the null hypothesis and accepted the alternative hypothesis.

**Research question two:** To what extent does self-management therapy enhance the thinking skills of male and female entrepreneurs with post lingual hearing impairment before and after intervention?

**Table 3:** Extent to which Self-Management Therapy enhances the thinking skills of male and female entrepreneurs with post lingual hearing impairment

Groups	n	Pretest		Posttest		Mean Difference	Pretest Mean Difference	Posttest Mean Difference
		Mean	SD	Mean	SD			
Male	3	4.75	1.06	25.50	2.29	20.75	0.25	0.25
Female	2	5.00	1.73	25.75	1.06	20.75		

Table 3 shows the extent to which Self-Management Therapy enhances the thinking skills of male and female entrepreneurs with post lingual hearing impairment. In experimental group, male had pretest mean scores of  $4.75 \pm 1.06$  and females had a pretest mean scores of  $5.00 \pm 1.73$  with pretest mean score difference of 0.25, which is low extent. After intervention, males had posttest mean scores of  $25.50 \pm 2.29$  and females had a post-test mean scores of  $25.75 \pm 1.06$  with posttest mean score difference of 0.25, which is a low difference. This implies that Self-Management Therapy does not improve male and female entrepreneurs with post lingual hearing impairment differently.

**Ho2:** There is no significant difference between the thinking skills of entrepreneurs with post lingual hearing impairment exposed to Self-Management Therapy and those not exposed after intervention.

**Table 4:** T-test analysis of posttest thinking skills mean scores of entrepreneurs exposed to self-management therapy and those not exposed

<b>Groups</b>	<b>n</b>	<b><math>\bar{x}</math></b>	<b>SD</b>	<b>df</b>	<b>t-value</b>	<b>p-value</b>
Experimental	5	16.40	1.14	8	13.011	0.00
Control	5	7.20	1.09			

Table 4 shows the t-test analysis of posttest thinking skills mean score of entrepreneurs with post lingual hearing impairment exposed to self-management therapy and those not exposed. Experimental group had a posttest mean score of 16.40 and a standard deviation of 1.14 while control group had a posttest mean score of 7.20 and a standard deviation of 1.09, with t-value of 13.011 and a p-value of 0.00. Since the p-value is less than 0.05, therefore, there is a significant difference between the thinking skills mean scores of entrepreneurs with post lingual hearing impairment exposed to self-management therapy and those not exposed after intervention. This means that the researchers rejected the null hypothesis and accepted the alternative hypothesis.

### **Discussion of the findings**

The findings of this study revealed that self-management therapy has the capacity to change communication skills as well as thinking skills (Entrepreneurial Aptitude) of entrepreneurs with post lingual hearing impairment to an extent. Similarly, the t-test analysis of post-test of communication skills as well as thinking skills mean scores of entrepreneurs with post lingual hearing impairment exposed to self-management therapy and those not exposed to, revealed that the p-value of both were less than 0.05, therefore, there was a significant difference between the communication skills as well as thinking skills (Entrepreneurial Aptitude) of entrepreneurs with post lingual hearing impairment exposed to self-management therapy and those not exposed after intervention.

### **Conclusion**

This study has corroborated that self-management therapy enhances entrepreneurs with post lingual hearing impairments' entrepreneurial aptitude. Though, the change is to a moderate extent, it is a worthwhile change.

### **Recommendation**

Based on the findings of the study, it is recommended that the Federal Government of Nigeria should partner with nongovernmental organizations such as Institute of Management Consultants and Institute of Professional Entrepreneurs and Strategic

Administrators of Nigeria (IPESA) to provide trainings, entrepreneurial guidance and counselling for entrepreneurial development for EWPLHI.

## References

- Awotunde, P. O. & Ugodulunwa, C. A. (2004). *Research Methods in Education*. Jos: Fab Anieh (Nig.) Ltd.
- Babudoh, G. B. (2008). *Rudiments of Audiology*. Jos: Department of Special Education and Rehabilitation Sciences, University of Jos.
- Cal, K. (2022). *Theory of Work Adjustment in Psychology*. Retrieved on the 6<sup>th</sup> October, 2022 from <https://study.com/academy/lesson/theory-of-work-adjustment-in-psychology-definition-principles-examples.html>
- Dan, M. M. (2022). Monograph on new realism. Jos: Plateau State Polytechnique.
- Gwadabe, U. M. & Amirah, N. A. (2017). Entrepreneurial Competencies: SMEs Performance Factor in the Challenging Nigerian Economy. *Academic Journal of Economic Studies*, 3(4), 56 – 61.
- Ibidunni, A., Ogundana, O. & Okonkwo, A. (2021). Entrepreneurial Competencies and the Performance of Informal SMEs: the contingent role of business environment. *Journal of African business*, 22(1).
- Institute of Management Consultants (IMC)-Nigeria (n. d.). *Syndicate discussion answers*. Kaduna: The Institute of Management Consultants.
- Iornem, D. (n. d.). *The Role of Institute of Management Consultants and International Council of Management Consulting Institutes in fostering Professionalism*. Kaduna: The Institute of Management Consultants.
- Jikukka, L. J. (2021). *Monograph on Voice, Speech and Language Disorders*. Department of Special Education and Rehabilitation Sciences, University of Jos, Jos Nigeria.
- Jurmang, I. J., Jatau, N. M. & Jikukka, L. J. (2012). *Inclusive Education in Nigeria: The Jos Otana Model*. Jos: Otana Hearing and Edu-Health Services.
- Kasztelnik, K. (2021). Innovative strategies for social-economic development financial strategies in the development country. *Business, Economics*. [https://doi.org/10.21272/sec.5\(1\).44-65](https://doi.org/10.21272/sec.5(1).44-65).
- Longpoe, P. K. (2018). Influence of reciprocal teaching method (RTM) on reading comprehension skills of students with reading difficulties in Jos metropolis, Plateau State. *The Exceptional Child*, 19(1), 40 - 51.
- McCall, S. (2003). Reaching the unreached through inclusive education. *The Educator*, 16(1), (June).
- Mishra, C. S. & Zachary, R. K. (2014). Theory of entrepreneurial competence. Retrieved on 25/11/2022 from [https://link.springer.com/chapter/10.1057/9781137371461\\_5](https://link.springer.com/chapter/10.1057/9781137371461_5)

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Okwudire, A. N. (2012). *Helping Children with Behaviour Problems: A Practical Guide*. Jos: Fab Anieh Nigerian Ltd.

Sharna, K. (2019). Importance of social skills for students. Retrieved from <https://www.theasianschool.net/blog/importance-of-social-skills-for-students/>

Schneider, E. & Evers, T. (2009). Linguistic intervention techniques for at-risk English language learners. *Foreign Language Annals*, 42(1), 55-76. Retrieved on 7th November, 2020 from <http://dx.doi.org/10.1111/j.1944-9720.2009.01008.x>

UNESCO (2003). Overcoming exclusion through inclusive approaches in education. A challenge and a vision conceptual paper. Retrieved from <http://www.unesco.org/education/inclusive>

Vandeh, C. M. (2016). *Concise Text in Audiology*. Katsina-Ala: ANITA Computers and publishers.

Zizile, T. & Chimucheka, T. (2018). The importance of women entrepreneurial competencies on the performance of women entrepreneurs in South Africa. *Journal of Applied Business Research*, 34(2), 223 -236.