

## Educating Hearing Impaired Students for Financial Literacy: Perspectives of Trained Teachers

**Muhammad Ajmal Khan**

PhD Scholar at Institute of Special Education, University of the Punjab, Lahore,  
ajmalkhan.ise.pk@gmail.com

**Dr. Hina Fazil**

Assistant Professor at Institute of Special Education, University of the Punjab, Lahore,  
hinafazil.dse@pu.edu.pk

**Nagina Khan**

MPhil Scholar (Special Education) at Institute of Southern Punjab, Multan,  
naginakhan.researcher@gmail.com

### Abstract:

Education, rehabilitation and empowerment of hearing-impaired students is the need of hour to ensure their financial inclusion and economic sustainability. The study seeks to figure out the opinions of the teachers of hearing-impaired students about the need of incorporation and integration of concepts of financial literacy in the curriculum of students with hearing impairment. The study employed quantitative approach of research, using a survey method for data collection and statistical analysis for the interpretation of results. A self-developed questionnaire, validated by two experts of the special education field, was distributed among fifty teachers, including both general education teachers as well those of hearing-impaired students, trained by National Institute of Banking and Finance (NIBAF), a training institute of State Bank of Pakistan (SBP), accessed using purposive sampling technique. The responses of hearing-impaired teachers were analyzed through SPSS. The study revealed that male as well female teachers (general education as well as those of hearing-impaired students) emphasized the need of integration of financial literacy in elementary level curriculum to ensure the financial literacy amongst hearing impaired students across Punjab, Pakistan. The study paved the way for future research pathways aimed at improving financial status of hearing-impaired population of Pakistan through financial inclusion and economic sustainable development of hearing-impaired students.

**Keywords:** Curricula, financial literacy, students with hearing Impairment, Teacher education, Hearing Impairment

### Introduction

Financial literacy has been defined by many researchers and academia in different ways. Financial literacy is the capability to read, analyze, manage and communicate about the personal financial conditions that have one sort of or other type of impact on economic and wellbeing of the people. It entails the ability to come up with financial choices, manage and discuss money, delve into financial affairs without any discomfort. making plans for the future and respond to life and its events that have bearing on financial decisions, impacting the economy on the whole (Vitt et al.,2000). Remund (2010) defined financial literacy in his own way: “financial literacy is the skill to use the body of knowledge and other abilities in managing financial and economic resources effectively and efficiently for lifetime in the pursuit of financial well-being”.

Remund considered financial literacy as a measure of degree to which one comprehends key financial concepts and processes. It is the ability and confidence to manage personal finances through appropriate, short-term decision making. long term financial planning, being mindful of life events and changing economic conditions (Remund ,2010). Financial literacy is considered to be the combination of awareness, cognizance, skills, attitudes and behaviors required to reach at sound financial decisions, finally achieving financial well-being and economic growth (OECD, 2012). Financial literacy is also perceived as knowledge and understanding of financial concepts, risks, skills, motivation and confidence to apply such knowledge and understanding in making decisions in financial contexts with the aim of achieving financial well-being in society and to ensure participation in economic life of the people at large (OECS,2014).

Financial literacy, as per the review of literature , entails fundamental concepts like earning income ,budgeting ,saving ,banking , insuring .All these concepts must be taught to special students in such a way as to address their specific and diverse needs .These concepts ,collectively amount to be termed as financial literacy ,help special students like hearing impaired ones in setting personal financial goals, engage in financial decision making ,participate in problem solving and take actions that serve their interests on financial lines. These concepts are central and crucial to transition planning as special students prepare themselves for higher classes as was reported by Wehmeyer et al., 2012)

Financial Literacy enhances understanding of financial issues and matters. It acts as an enabler amongst the youth, empowering them to become financial decision makers of homes and outside, creating a generation of actors of economy. Without financial literacy, population of an economy cannot be made productive as it is the financial literacy which makes people producers of fiancés, actors of revenue generation and makes them instrumental for running the economic affairs at local, national and international levels. This financial literacy makes youth financially independent.

Financial independence and empowerment depend on being able to make financial decisions. The more one is financially knowledgeable and informed, the more one is able to contribute in the Gross Domestic and Gross National Product for the country one hails from. Youth, especially hearing-impaired ones, face myriad challenges in making financial decisions. Given the severe inflationary trends across the world, students with hearing impairments encounter a tough economic climate than ever. Economic challenges faced by hearing impaired students, as per the recent reports from National Longitudinal Survey, include high levels of credit access, and debt, slower income growth and high economic inequalities (Hodson and Dwyer, 2014). Despite getting education till secondary level, majority of hearing-impaired students have been found unable to qualify financial literacy tests (Mandell, 2008; Lusardi and Mitchell, 2014).

There is a dire need to educate the youth on financial lines. Without promoting financial literacy through educational settings, nations can't produce bankers, entrepreneurs, corporate leaders, investors, business tycoons, financial decision makers, chartered accountants, business and operations managers, marketers, advertisers, economists, budget planners, insurers, risk takers, business ventures and sagacious individuals interested in savings. All the aforesaid fields and individuals can have and do have deaf individuals as employers, employees and as enterprise runners. Without educating them on financial lines from the elementary level in school, we can't dream to see them highly successful assets in public as well as private sectors tomorrow.

According to Potton Vision (2018), Financial literacy is taken as a life skill which ensures interplay between theoretical and practical knowledge to improve financial attitudes and behaviors of people at large. Research studies published by OECD, nonetheless, claim that not students of all shades and colors are provided with financial literacy and education in a due way. Qualitative research, conducted in Malta, provided valuable insights into the current trends of young adults' consumption patterns vis-à-vis financial products and services and the teaching methodologies and strategies which are considered instrumental in teaching financial literacy to students. The results of the study indicated poor financial literacy among the youth in Malta. This was evidenced by over-reliance on credit facilities and reluctance to save the income for a rainy day. To study, in order to address the deficiencies, recommended that financial education and literacy ought to be included

within compulsory secondary school curriculum to ensure the financial awareness, competencies, independence and empowerment of Malta 's citizenry.

It has been observed by special education teachers of Pakistan that all students in general and hearing-impaired students in particular lack financial knowledge which is a pre-requisite for making financial decisions. Hence, it is the dire need of the hour to integrate financial literacy starting from the elementary level in schools. Similar attempts have been made by University of Central Florida which has designed a comprehensive financial literacy program model for its students.

The purpose of this study is to know the opinions of special education teachers either they consider hearing impaired students need financial literacy at elementary (middle) level in special education centers across Punjab .Apart from it, State Bank of Pakistan , through its project namely National Financial Literacy Program for the Youth(NFLP-Y) tried to train teachers as Trainers of Trainees to enable them to spread financial literacy amongst the youth to with an aim to make them financially empowered. The principal author of this study has been gone through the training in the said project of State Bank of Pakistan as a Master Trainer. The study is also aimed at getting feedback of teachers trained through National Financial Literacy Program for the Youth (NFLP-Y) project which was convened through National Institute of Banking and Finance (NIBAF) Islamabad to know either the said project served the very purpose of promoting financial literacy amongst the hearing-impaired students.

## Literature Review

Students with hearing impairments are facing numerous challenges including absence of sign language teachers, discrimination, prejudice, exclusion, lack of educational materials, lack of resource centers, shortage of specialized teaching resources and assistive devices, lack of parental involvement in making their children financially literate. All these factors contribute to the inability of hearing-impaired lot in accessing financial literacy (Zulu., 2022)

Extensive Researches were conducted to develop resources for financial literacy Lee, N. (2010), Hilton (1995), Sykes (2003),Varcoe and Fitch (2002; 2003) and Boucher and Bond (2000).The researches revealed that financial literacy was found to be misinterpreted because of poor qualifications of teachers and financial literacy curricula being inappropriate .The research endorsed the notion that financial literacy empowers individuals for financial independence through development financial literacy based curriculum, development of money management skills and by making students going through financial experiences, enabling students' economic behavior.

A number of research articles have concluded that educating students with financial concepts help them in long run by enabling them to become financially independent, autonomous in their spending purchasing and saving priorities, finally making them capable of taking control of their lives (Evans, Behrens et al. 2001).It is noteworthy that a number of researchers focused on educating teenagers in line with financial knowledge including specific educational groups like high school pupils, college going students and university enrolled students (Tennyson and Nguyen 2001; Chen and Volpe 1998; Chen and Volpe 2002; Beal and Deltahedra 2003; Varcoe 2002; Varcoe and Fitch 2003)

Mason and Wilson opined that children who are taught on financial lines become informed adults financially. They defined financial literacy as an ability of an individual to obtain, understand and evaluate the relevant information necessary to make decisions with financial consequences". Financial literacy affects students' lives in multiple ways. Its presence strengthens and it's lacking adversely affects the decision-making abilities of learners (Leyshon et al. (1998). Despite a lot of investments by concerned stakeholders on financial education, financial literacy of hearing-impaired individuals is yet not up to standards because of limited interests of educators, schools, curriculum developers and policy makers. A lot of individuals have been noticed who purchase financial services owing to lack of financial literacy which prove to be very unhealthy and detrimental to their economic and financial interests (Devlin, 2010). In the wake of this literature on

financial literacy, there is a dire need to conduct research in the field of financial literacy of all individuals in general and hearing-impaired ones in particular.

The significance of financial literacy for all in general and for hearing impaired individuals in particular can't be ignored. Without financial literacy, youth empowerment can't be ensured as they lack financial knowledge, economic attitudes, banking awareness and investment minds. Nonetheless, individuals fighting with disabilities especially hearing-impaired ones face numerous challenges and obstacles in the way of financial education and literacy (Gargia-Iriarte et al. 2007; Hartnett 2006; Lehmann et al. 2000; Lombe et al. 2008; Mutawalli et al. 2009). Financial education should take into account the daily life experiences of deaf students. This notion is supported by study conducted in USA. The qualitative study concluded that financial literacy should integrate students' everyday experiences outside the school. The study also recommended that schools and policy makers should introduce culturally responsive and engaging financial literacy-based curriculum in schools (Hirsch, J. S. (2021).

Financial literacy empowers students with hearing impairment in multiple ways. One of these ways is: it helps them to earn income through getting employment opportunities. Hence, financial literacy promotes employment. Getting employed, special students like hearing impaired ones, find opportunities to get integrated in mainstream society, ensuring financial inclusion. Financial literacy, thus provides basis for saving, earning and budgeting (National Collaborative on Workforce and Disability, 2012)

Making all students with disabilities independent in general and hearing-impaired students in particular necessitates the integration of financial concepts in the curricula they are subjected to. However, the curricula available to the youth don't satisfactorily cater to the unique and diverse needs of students with hearing impairment as they give least to no consideration to financial literacy (Henning and Johnston-Rodriguez, 2018). It is the responsibility of special educators and associated professionals to craft and implement Individualized Education Plans and providing students facing hearing impairment with financial literacy. Instruction, however, it has been observed, in special education institutions is not embedded in financial education and literacy (Bay and Parker-Katz 2009). Developing IEPs based on financial literacy goals and rendering appropriate and relevant teaching to students with hearing impairment which is culturally responsive as well is a matter of utmost significance and calls for immediate attention. However, majority of special education teachers have reported not being equipped with required training and not having and proper financial literacy-based curriculum and miscellaneous resources. This fact amounts to research and calls for a timely research intervention (Brownell et al. 2004).

Researchers have been trying to investigate the thread of financial literacy as a skill for promoting entrepreneurial potential amongst the youth. A study was conducted to assess the development of financial literacy as skill to enhance entrepreneurship through money management skills amongst youth. However, it is also pertinent to note that related literature paints a bleak picture in this regard. Many people, of all ages, are deficient in financial literacy skills and projects that financial crunch prevalent across different regions of the world hinges on the lack of poor financial decisions and unsatisfactory money management skills (Atkinson & Messy, Carroll, 2012; Lusardi and Mitchell, 2014; OECD, 2008). In the light of the research studies mentioned above, literature is replete with calls for the integration of concepts of financial literacy in the curriculum for the youth.

Development of curriculum based on financial literacy is significant but the evaluation of any such developed curricula is equally important. Researchers evaluated as many as five financial literacy curricula in USA. These curricula ranged from Financial Fitness for Life (Gellman and Laux, 2011), Practical Money Skills (Visa 2000-2016), Finance in the Classroom (Utahn's), Money Talks for Teens (University of California Cooperative Extension, 2008) and Money Smart for Young Adults (Federal Deposit Insurance Corporation, FDIC, 2011). These curricula were initially assessed and evaluated by a professor of instruction and curriculum and a special education field professor (Henning and Johnston-Rodriguez, 2018). Both professors, as a result of evaluation of financial literacy curricula, came up with a rubric based on their shared interests and beliefs in the significance of meeting national content criteria, universal design and cultural responsiveness. This rubric did

not examine the curricula for their applicability to lower incidence disabilities .It was rather for students with specific learning disabilities ,speech and language impairments , intellectual disabilities , and emotional and behavioral disabilities( Minarik and Lintner,2016).Individuals with these four disabilities make up over 75 percent of students receiving special education services in US(Minarik and Lintner,2016).

Important and salient Financial Literacy Based concepts from National Standards, National Standards for Financial Literacy (CEE, 2013) recommended key concepts, titles, topics and benchmarking progressions for financial literacy. These recommended standards guide nations in the development of financial literacy. Many states have based their benchmarks on these recommendations. These recommendations revolve around concepts like income, budgeting, saving, banking and insuring. Persons with disabilities might have their assistants may have in the form of family members, persona agents, guardians or custodians to make financial decisions for them. Persons with financial literacy are in better position to get financial transactions done in terms of purchases, sales, borrowing, debiting, crediting, investing, saving and getting insured along with appropriate banking (Mutawalli et al., 2009).

Curricula based on financial literacy for special students should introduce special students with banking, taking loans, settling loans and using checks, getting checks cashed. All these financial initiatives require financial literacy to be included in the curricula of special students (Johnson and Sherraden, 2007). Financial literacy curricula make special students aware about banking, budgeting, insuring and saving. Individualized Education Plans of special students must integrate the skills required for budgeting. Such IEPs, based on financial literacy, assist concerned special students in their transition plans as well (Mutawalli, 2015). Along with budgeting, financial literacy helps special students in planning saving initiatives and options like asset accumulation (Leadoff and Kaplan, 2001) and maintaining saving accounts (Cameto et al., 2004).

## Research Objectives

The study seeks to:

1. Unfold the opinions of teachers trained through National Financial Literacy Program for the Youth (NFLP-Y), a project of State Bank of Pakistan to train teachers to enable them to promote financial literacy, regarding financial literacy.
2. To check out the readiness of special education teachers of hearing-impaired students to educate hearing impaired students on financial lines
3. Recommend the strategies to promote financial literacy amongst hearing impaired students

## Research Questions

The study is aimed at addressing following research questions:

1. What is the feedback of teachers trained by State Bank of Pakistan through National Institute of Banking and Finance (NIBAF) Islamabad after getting training trained on financial lines?
2. What is the stance of special education teachers of hearing-impaired students regarding teaching hearing impaired students on financial lines?
3. How can hearing impaired students be provided with financial literacy?

## Research Hypotheses:

H1: There is a significant difference in the opinions of male and female teachers about the concept of Financial Literacy

H2: There is a significant difference in the opinions of public sector and private sector teachers about the concept of Financial Literacy

H3: There is a significant difference in the opinions of General Education Teachers and Special Education teachers about the concept of Financial Literacy.

### Research Methodology

The study employed quantitative method of survey research. Researchers developed a questionnaire (including 6 demographics as well as 19 statements) aided by five-point Likert type scale, got it validated through expert opinion of senior professors (N=2). Questionnaire was shared with respondents through WhatsApp while seeking their prior consent through Message and cellular phone calls to seek their willingness to participate in the survey research. Purposive sampling technique was employed to access all teachers who went through training of State Bank of Pakistan's project "National Financial Literacy Program for the Youth (NFLP-Y)". 39 out of 50 questionnaires returned (78 percent return rate) with successful completion. SPSS software was used to run descriptive as well as inferential statistics.

### Population and Sample

General education teachers as well as special education teachers of hearing-impaired students, across Pakistan, constituted population of the study. The sample of the study is fifty (N=50) teachers trained through NFLP-Y (A project of SBP, Conducted through NIBAF, Islamabad).

### Research Instrument

The researchers, after extensive study of relevant research literature, developed and employed a self-developed questionnaire containing 6 demographic variables and 19 statements for conducting Survey of trained teachers by NIBAF.

### Data Collection Procedures

Researchers gave due attention to ethical standards in data collection stage while accessing respondents with the help of WhatsApp Messages and Phone Calls. The respondents were informed about the purpose of research, letting them know that their decision to participate or not to participate in the study was their arbitrary decision, ensuring the confidentiality of the data provided by them. Self-developed questionnaire was composed in Google Form and was shared with all (N=50) respondents (trained teachers) by SBP through WhatsApp.

### Ethical Considerations

Researchers assigned high weight to ethical principles of conducting the study through following steps:

1. Respondents were briefed about the purpose and nature of the study.
2. Informed consent was obtained from respondents.
3. Respondents were informed that their data will be kept confidential and will solely be used for research purpose, keeping their names anonymous.
4. Respondents were informed that their participation in the study was optional and they could discontinue from the study at any time during the study on their will.

### Data Analysis and Results

Data collected through 39 respondents (teachers) trained by State Bank of Pakistan was analyzed through SPSS by running descriptive as well as inferential statistics.

### Reliability of the Instrument

Reliability indicates the extent to which the survey outcomes are error-free, expressed in terms of confidence intervals. Researchers developed a questionnaire including 6 demographic and 19 simple precise and understandable items for seeking feedback from teachers who were trained by National Institute of Banking and Finance (NIBAF). Reliability score measured survey's consistency. Higher the consistency, the more an

instrument is stable and reliable. A result of 0.70 is usually deemed acceptable. The Cronbach's Alpha for self-developed questionnaire was found to be 0.732 as is represented in Table No.1.

*Table 1: Reliability Score*

Reliability Statistics	
Cronbach's Alpha	No. of Items
.732	19

A frequency table was generated to portray the distribution of gender of teachers in the sample. Majority of participants were male (n=24, 61.5 %) whereas 15 participants (38.5 %) were female. The results for gender wise distribution of the respondents are presented in Table 2.

*Table 2: Frequency Table of gender distribution in the sample*

Gender of Teachers				
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	24	61.5	61.5	61.5
Female	15	38.5	38.5	100.0
Total	39	100.0	100.0	

A frequency table was generated to portray the distribution of province of teachers in the sample. Majority of participants were from Punjab (n=18, 46.2 %) whereas only 2 participants (5.1 %) hailed from Baluchistan. The results for province wise distribution of the respondents are presented in Table 3.

*Table 3: Frequency Table of Provincial distribution in the sample*

	Frequency	Percent
Punjab	18	46.2
Sindh	5	12.8
Baluchistan	2	5.1
KPK	7	17.9
Gilgit Baltistan	3	7.7
Islamabad	4	10.3
Total	39	100.0

A frequency table was generated to portray the distribution of Status of Institute. Majority of participants were teachers of public sector Institute (n=30, 76.9 %) whereas 9 participants (23.1 %) were working in private sector institute. The results for distribution of the respondents according to the status of their institute are presented in Table 4.

*Table 4: Frequency Table of Status of Institute in the sample*

	Frequency	Percent
Public	30	76.9
Private	9	23.1
Total	39	100.0

A frequency table was generated to portray the distribution of Type of Institute. Majority of participants were teachers of Special Education (n=32, 82.1.9 %) whereas only 7 participants (17.9 %) were teachers of General Education. The results for distribution of the respondents according to the status of their institute are presented in Table 5.

*Table 5: Frequency Table of Type of Institute in the sample*

A frequency table was generated to portray the distribution of Qualification of Teachers. Majority of

	Frequency	Percent
General Education	7	17.9
Special Education	32	82.1
Total	39	100.0

participants were having master degree in Special Education (n=23, 59 %) whereas 4 participants (10.3 %) were those who had miscellaneous master’s degree. The results for distribution of the respondents according to the qualification are presented in Table 6.

Table 6: Frequency Table of Qualification of teachers in the sample

	Frequency	Percent
Masters (In any Subject)	4	10.3
Masters in special education	23	59.0
MPhil in special education	12	30.8
Total	39	100.0

An independent-samples t-test was conducted to compare the opinions of male and female teachers about Financial Literacy. There were no significant differences ( $t(37) = -1.456, p=0.154$ ) in scores for male teachers ( $M= 4.3903, SD= .025261$ ) and female teachers ( $M= 4.5058, SD=0.23761$ ), as is evidenced in Table No.7.

Table 7: Group Statistics of Sample’s Gender

	Gender	N	Mean	S. Deviation
Financial Literacy	Male	24	4.3904	.25261
	Female	15	4.5088	.23761

The magnitude of the differences in the means (mean difference = -1.1842, 95% CI; -.28317 to .04633) was very small, as is evidenced in Table No.8. Hence, H1 was not supported.

Table 8: Independent Sample T-Test

Independent Samples Test										
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval	
									Lower	Upper
Financial Literacy	Equal variances assumed	.307	.583	-1.456	37	.154	-.11842	.08131	-.28317	.04633

An independent-samples t-test was conducted to compare the opinions of public sector and private sector teachers about Financial Literacy. There were no significant differences ( $t(37) = -.994, p=0.327$ ) in scores for public sector teachers ( $M= 4.4140, SD= .025959$ ) and private sector teachers ( $M= 4.5088, SD=0.21540$ ), as is evidenced in Table No.9.

Table 9: Group Statistics of Teachers of Public and Private Sector Teacher

	Institute	N	Mean	S. Deviation
Financial Literacy	Public	30	4.4140	.25959
	Private	9	4.5088	.21540

The magnitude of the differences in the means (mean difference = -.09474, 95% CI; -.28779 to .09832) was very small, as is evidenced in Table No.10. Hence, H2 was not supported.



Table 10: Independent Sample T-Test

Independent Samples Test										
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Financial Literacy	Equal variances assumed	.691	.411	-.994	37	.327	-.09474	.09528	-.28779	.09832

An independent-samples t-test was conducted to compare the opinions of general education teachers and special education teachers about Financial Literacy. There were no significant differences ( $t(37) = -.694$ ,  $p=0.492$ ) in scores for general education teachers ( $M= 4.3759$ ,  $SD= .08282$ ) and special education teachers ( $M= 4.4490$ ,  $SD=0.27331$ ), as is evidenced from Table No.11.

Table 11: Group Statistics of General and Special Education Teachers

	Type of your Institute	N	Mean	S. Deviation
Financial Literacy	General Education	7	4.3759	.08282
	Special Education	32	4.4490	.27331

The magnitude of the differences in the means (mean difference =  $-.07307$ , 95% CI;  $-.28645$  to  $.14031$ ) was very small, as is evidenced from Table No.12. Hence, H3 was not supported.

Table 12: Independent Sample T-Test

Independent Samples Test										
		F	Sig.	t	D	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Financial Literacy	Equal variances assumed	3.236	.080	-.694	37	.492	-.07307	.10531	-.28645	.14031

Item-wise frequency descriptive, pointing out frequency and percentages are being mentioned hereunder:

**Item No.7: Program (NFLP-Y) proved helpful in increasing financial literacy among hearing impaired students**

	Frequency	Percent
SD	1	2.6
N	3	7.7
A	19	48.7
SA	16	41.0
Total	39	100.0

As many as 48.7 percent teachers agreed and 41 percent teachers strongly agreed that Program (NFLP-Y) proved helpful in increasing financial literacy among hearing impaired students.

**Item No. 8: The program (NFLP-Y) strengthened the money management skills among hearing impaired school going students**

	Frequency	Percent
N	2	5.1
A	16	41.0
SA	21	53.8
Total	39	100.0

As many as 53.8 percent teachers strongly agreed as well as 41 percent teachers agreed that the program (NFLP-Y) strengthened the money management skills among hearing impaired school going students.

**Item No.9: The program (NFLP-Y) improved economic behavior of hearing-impaired students**

	Frequency	Percent
N	2	5.1
A	15	38.5
SA	22	56.4
Total	39	100.0

As many as 56.4 percent teachers strongly agreed as well as 38.5 percent agreed that the program (NFLP-Y) improved economic behavior of hearing-impaired students.

**Item No.10: The program increased sense of saving among hearing impaired students**

	Frequency	Percent
N	2	5.1
A	15	38.5
SA	22	56.4
Total	39	100.0

As many as 56.4 percent teachers strongly agreed as well as 38.5 percent teachers agreed that the program increased sense of saving among hearing impaired students.

**Item No.11: The program increased sense of investing among hearing impaired students**

	Frequency	Percent
N	2	5.1
A	19	48.7
SA	18	46.2
Total	39	100.0

As many as 48.7 percent teachers agreed as well as 46.2 percent teachers agreed that the program increased sense of investing among hearing impaired students.

**Item No.12: The program helped to teach hearing impaired students how to make domestic budgets**

	Frequency	Percent
D	1	2.6
A	20	51.3
SA	18	46.2
Total	39	100.0

As many as 51.3 percent teachers agreed as well as 46.2 percent teachers strongly agreed that the program helped to teach hearing impaired students how to make domestic budgets.

**Item No. 13: The program taught hearing impaired students how to plan their future financially**

	Frequency	Percent
N	2	5.1
A	20	51.3
SA	17	43.6
Total	39	100.0

As many as 51.3 percent teachers agreed as well as 43.6 percent teachers strongly agreed that the program taught hearing impaired students how to plan their future financially.

**Item No.14: The program created awareness among hearing impaired students about their financial rights as consumers**

	Frequency	Percent
N	1	2.6
A	22	56.4
SA	16	41.0
Total	39	100.0

As many as 56.4 percent teachers agreed as well as 41 percent teachers strongly agreed that the program created awareness among hearing impaired students about their financial rights as consumers.

**Item No. 15: The program created awareness among hearing impaired students about their financial responsibilities**

	Frequency	Percent
N	2	5.1
A	24	61.5
SA	13	33.3
Total	39	100.0

As many as 61.5 percent teachers agreed as well as 33.3 percent teachers strongly agreed that the program created awareness among hearing impaired students about their financial responsibilities.

**Item No.16: The program created awareness among hearing impaired students about banking**

	Frequency	Percent
A	19	48.7
SA	20	51.3
Total	39	100.0

As many as 51.3 percent teachers strongly agreed as well 48.7 percent teachers agreed that the program created awareness among hearing impaired students about banking.

**Item No. 17: The program created awareness among hearing impaired students about insurance**

	Frequency	Percent
N	2	5.1
A	21	53.8
SA	16	41.0
Total	39	100.0

As many as 53.8 percent teachers agreed as well as 41 percent teachers strongly agreed that the program created awareness among hearing impaired students about insurance.

**Item No.18: The program created awareness among hearing impaired students about how to start and run a business**

	Frequency	Percent
N	2	5.1
A	17	43.6
SA	20	51.3
Total	39	100.0

As many as 51.3 percent teachers strongly agreed as well as 43.6 percent teachers agreed that the program created awareness among hearing impaired students about how to start and run a business.

**Item No.19: The program created awareness among hearing impaired students about financial management**

	Frequency	Percent
N	1	2.6
A	25	64.1
SA	13	33.3
Total	39	100.0

As many as 64.1 percent teachers agreed as well as 33.3 percent teachers strongly agreed that the program created awareness among hearing impaired students about financial management.

**Item No. 20: There is a need to include concepts of financial literacy in the curriculum of hearing-impaired students at primary level**

	Frequency	Percent
D	1	2.6
A	18	46.2
SA	20	51.3
Total	39	100.0

As many as 51.3 percent teachers strongly agreed as well as 46.2 percent teachers agreed that there is a need to include concepts of financial literacy in the curriculum of hearing-impaired students at primary level

**Item No.21: There is need to include concepts of financial literacy in the curriculum of hearing-impaired students at elementary level**

	Frequency	Percent
N	2	5.1
A	14	35.9
SA	23	59.0
Total	39	100.0

As many as 59 percent teachers strongly agreed as well as 35.9 percent teachers agreed that there is need to include concepts of financial literacy in the curriculum of hearing-impaired students at elementary level

**Item No.22: Hearing impaired students were found happy with learning the concepts of financial planning and financial management through National Financial Literacy Program for the Youth (NFLP-Y)**

	Frequency	Percent
A	15	38.5
SA	24	61.5
Total	39	100.0

As many as 61.5 percent teachers strongly agreed as well as 38.5 percent teachers agreed that hearing impaired students were found happy with learning the concepts of financial planning and financial management through National Financial Literacy Program for the Youth (NFLP-Y).

**Item No.23: Teachers of hearing-impaired students should be trained to teach concepts of financial literacy to their students at primary level**

	Frequency	Percent
D	1	2.6
N	1	2.6
A	19	48.7
SA	18	46.2
Total	39	100.0

As many as 48.7 percent teachers agreed as well as 46.2 percent teachers strongly agreed that teachers of hearing-impaired students should be trained to teach concepts of financial literacy to their students at primary level.

**Item No. 24: Teachers of hearing-impaired students should be trained to teach concepts of financial literacy to their students at elementary level**

	Frequency	Percent
N	1	2.6
A	16	41.0
SA	22	56.4
Total	39	100.0

As many as 56.4 percent teachers strongly agreed as well as 41 percent teachers agreed that teachers of hearing-impaired students should be trained to teach concepts of financial literacy to their students at elementary level.

**Item No.25: Curriculum Developers of Punjab Text Book Board and Special Education Department should integrate the concepts of financial literacy in elementary level books**

	Frequency	Percent
N	4	10.3
A	13	33.3
SA	22	56.4
Total	39	100.0

As many as 56.4 percent teachers strongly agreed as well as 33.3 percent teachers agreed that Curriculum Developers of Punjab Text Book Board and Special Education Department should integrate the concepts of financial literacy in elementary level books.

**Discussion**

Researchers placed financial literacy as equivalent to inculcating the spirit of entrepreneurship in the learners. Promotion of financial literacy has been found as an economic driver, resulting in the creation of job opportunities, fostering economic growth as well as social development amongst the youth. European Commission proposed a framework known as Intercom to establish critical competencies amongst learners, the most important competency being financial literacy (Bacigalupo et al., 2016). This very competency is

considered to be an asset for individuals with hearing impairment, helping them translate ideas into products and services through value creation. Hence, it is apt to argue: the more an individual is financially literate, the more successful entrepreneur he/she turns to be, ultimately enabling individuals to become a good decision maker for business ideas.

Hoare (2003) is concerned about the low rate of financial literacy in the UK and is of the opinion that the 14-19 generations should be encouraged to take numeracy and financial literacy seriously. Research conducted by Mutawalli et al. (2019) revealed that there is lack of curricula based on financial literacy as well as culturally responsive norms. And if in some states across the world, there are found curricula based on financial literacy, they tend to enhance the discriminatory practices. Financial education based on financial literacy, though enhances financial empowerment of the general public, it, at the same time, widens the gap between whites and minorities, haves and have nots (Al-Bahrani et al., 2018). Extensive research literature suggests that those coping disabilities must be provided with financial literacy to enable them get out of the vicious cycle of exploitation, poverty and discrimination. People with special needs are more in need of financial literacy as compared to their normal peers (Mansfield and Pinto, 2008).

As far as teaching practices, trainings, workshops and capacity building programs are concerned, majority of teachers are found unprepared or underprepared when it comes to implementing curriculum based on financial education concepts. Exposure of special education teachers regarding financial literacy and financial education-based training is limited (CEC, 2012). Financial literacy proves instrumental in many ways. It is crucial to transition preparation for youth with disabilities especially hearing-impaired ones. Financial literacy promotes money management skills for life. Financial literacy teaches hearing impaired students' concepts like saving, money management, insurance, budgeting and finance handling in and outside homes.

Financial literacy prepares the youth for financial world around wherein they are supposed to take and make financial decisions every now and then. Financial vulnerability of youth, their rising indebtedness financially, likelihood of being exposed to financial frauds, all necessitates the financial literacy and financial education for all individuals in general and for hearing impaired youth in particular (Hodson and Dawyer, 2014). As students with special needs go through the experience of transition to adulthood, they are more likely to be exposed to tougher financial circumstances and vicious poverty cycle (Newman, et al., 2011). In the wake of transition period of special students like hearing impaired ones, the need of financial literacy becomes pressing. However, the reality depicts the reverse case: exposure of special students including hearing impaired ones is currently limited (Mutawalli et al., 2009). As level of financial literacy among high school pupils below 50% (Mandell, 2008), making youth acquire financial literacy at graduation or post-graduation level is too late. It should be arranged early among students at high school (Hodson and Dwyer, 2014).

## Conclusion

The study concluded that there was no significant difference in the opinions of male and female teachers about the concept of Financial Literacy as is clear in Table No.8. Hence first hypothesis was rejected. The study further revealed that there was not found any significant difference in the opinions of public sector and private sector teachers about the concept of Financial Literacy, as is clear in Table No.10. Hence, second hypothesis was also not supported. The study further showed that there was found no significant difference in the opinions of General Education Teachers and Special Education teachers about the concept of Financial Literacy, as is clear in Table No.12. Hence, hypothesis No.3 is also rejected.

The study documented the feedback of teachers trained by State Bank of Pakistan through National Institute of Banking and Finance (NIBAF) Islamabad on financial lines. The study concluded that majority of teachers trained by State Bank of Pakistan were of the opinion that the program (National Financial Literacy program for the Youth) proved helpful in increasing financial literacy amongst hearing impaired students through

strengthening money management skills, improving economic behavior, enhancing sense of saving, investing, budgeting and financial planning.

The study further concluded that the majority of respondents (teachers) were of the opinion that the program (NFLP-Y) helped create awareness amongst hearing impaired students about their financial rights and obligations, banking, and insurance. The study concluded that majority of respondents (teachers) thought that the program of State Bank of Pakistan (NFLP-Y) created awareness amongst hearing impaired students about how to start and run a business and enabled hearing-impaired students in terms of financial management.

The study also concluded that the majority of the teachers (respondents) felt that there was a dire need to include concepts of financial literacy in the curriculum of hearing-impaired students at primary as well elementary/middle level. The study pointed out that majority of respondents opined that teacher of hearing-impaired students must be trained on financial lines to enable them to inculcate the concepts of financial literacy amongst hearing impaired students of primary as well as elementary level as the latter were found happy with learning concepts of financial literacy through NFLP-Y.

The study empirically suggested that curriculum developers of Punjab Text Book Board Punjab as well as those of Special Education Department Punjab should incorporate and integrate the concepts of financial literacy in the elementary level books.

Collectively, these findings support the view that teachers of hearing-impaired students must be trained on financial lines as did State Bank of Pakistan through its project/program titled 'National Financial Literacy Program for the Youth (NFLP-Y)'. The consensus among respondents via this study revealed that the best way to teach financial literacy to hearing impaired students is two-fold strategy: firstly, through incorporation and integration of concepts of financial literacy in the curriculum of hearing-impaired students; secondly, teachers of hearing-impaired students be trained on financial lines.

To conclude, the research highlights the importance of financial literacy for hearing impaired students at primary and elementary level.

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