Attribution Styles Of Deaf Children: Application Of Weiner Theory

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Abstract
The purpose of the study was to analyze attribution patterns of DHH and hearing students and DHH students who use total communication and those who use oral communication, the difference between attribution patterns and academic achievements of these students was also found. The sample of the study was 175 students, who comprised 50 DHH students who use oral communication and 53 those who use total communication. New Causal Dimension Scale (NCDS II ) consisting of 30 items was used to collect data. The attributonal styles of both hearing and DHH students differ on stable and unstable, controllable and uncontrollable negative and positive attributions. Similarly, a significant difference in achievement was found between hearing and DHH attribution groups and oral and total communication attribution groups. The negative attribution styles might be the cause of nonproductive/negative attributions of DHH children as per Weiner theory. The students using oral communication are likely to have high achievements and controllable, unstable and internal attributions than students using total communication.
**Keywords**: attributional style, academic achievement, oral communication, total communication, deaf and hard of hearing

**Attribution Styles of Deaf Children: Application of Weiner Theory**

Attribution theory is used to elucidate the contrast of motivation between high and low achievers. The high achievers will approach rather than avoid tasks related to examination/tests, because they have confidence that success is due to their effort and high ability. Weiner affirms that within the classroom, where accomplishment and failure are so common, test performance and group assessment offer unvarying and significant contributions, which in part, determine confidence and personal esteem. As learners’ existing self-perceptions are emphasized in the theory, so both cognitive theory and self-efficacy theory are a part of it and the self-perceptions of the learners will powerfully sway how they will comprehend the victory or collapse of their recent efforts, and therefore their propensity to execute similar behaviour in future (Gul, R., Tahir., Ishfaq, U., Batool, T. 2021; Bukhari, S, K, S.; Said, Hamdan; Gul, R; Seraj, P, M, I. 2021; Weiner, 1980, 1986, 2010; Assouline et al., 2006).

There are three dimensions of attributions; the first is the internality or externality of attributions. It means that we assume the origin of attributions is from within us or from our surroundings. Second is the stability or instability of causal attributions. We may deem that the reasons for our success and failures are stable, which means that the upshot of our actions due to our belief is expected to be the same in future. If the case is inverted then the result will be different, controllability refers to the degree of volitional control a person has over the outcome i.e., success or failure, demonstrating the degree of direct effect on the cause. (Ahmad, I., Gul, R. 2021; Ormrod et al., 2016; Batool & Arif, Uddin, 2010). Furthermore, global versus specific submits that an individual’s rationalization generalizes the event to other situations outside the overt episode in hand (Boman et al., 2009).

The attributions for success or failure as per Weiner theory are ability, task difficulty, effort and luck. Ability is a fairly internal and stable cause and the learner may not have much control over it. Task difficulty being an external and stable feature is mainly outside the control of the learner. An effort is largely within the control of the learner therefore it is an internal and stable factor. Luck (lucked out) is totally beyond the control of the learner; therefore, it is an external and unstable factor (Gul, R., Zakir, S., Ali, I., Karim, H., Hussain, R. 2021; Lilienfeld et al., 2010; Dewey, 2008; Mezulis et al., 2004). Internal, controllable and unstable attributions are named as high and productive attributions that affect academic achievement positively. On the other hand, external, uncontrollable and stable attributions are low and nonproductive attributions that influence students’ achievement negatively. The same event of success and failure is interpreted differently by different students, leading to a difference in their academic performance (Ormrod et al., 2016).

Weiner argues future behaviours are then determined by the expectancy of certain outcomes and the specific emotional consequence of that outcome (Weiner, 1986, 1992, 2010). An expected outcome might not be only good or bad but involve pride or shame in more specific terms.
Attributions constitute an individual’s comprehension of the causal organization of the universe, consequently, are significant determinants of his contact with it; these attributions generally do not represent the reality of the situation; rather, they are personal beliefs (Ayub, A., Gul, R., Ali, A., Rauf, B., M. 2021; Gul, R., Talat, M., Mumtaz, M., Shaheen, L. 2021; Kelley & Michela, 1980). Deafness impedes experiences by restrictive interactions and linguistic response from the social environment, which may affect the selection of appropriate attributions, and other psychological and behavioural difficulties (Kelley & Michela, 1980; Munoz-Baell & Ruiz, 2000; Kessler et al., 1999).

Attributional style means one way to clarify the causes of events and one should be cautious about his/her attributional style because it may be associated with dejection, helplessness, self-regard, and contentment (Bukhari, S. K. U. S., Gul, R., Bashir, T., Zakir, S., & Javed, T. 2021; Meadow-Orlans, 1983; Mwanyuma, 2016). The absence of hearing is an obstruction to optimal communication in a primarily hearing world (Gray et al., 2007). Besides, making verbal messages more exigent, deafness can also affect such varied extent of the individual life as intellectual and emotional wellness and physical wellbeing, social proficiency, self-concept and relationships (Batool et al., 2017; Gul, R., Ayub, A., Mazhar, S., Uddin, S., S., Khanum, M. 2021; Hosie, et al, 2000).

Both Minter (1986) and Ingram (2015) concluded that deaf and hard of hearing (DHH) students showed greater externality of attribution styles and selected luck as an attribution for their success or failure out of luck, ability, task difficulty and effort than their counterparts, and the hearing students were found to have internality as their attribution style, as they used to prefer effort on luck and effort is an internal attribution. Kusche et al. (2009) found that language plays a significant role in the selection of causal attributions, emotions, causality and proves that early speech deprivation may cause delayed emotional and social growth. Morgan et al. (2010) and Gul, R., Khilji, G. (2021) established through their research that attributions are more generally shaped by whether an individual’s attributional conclusions are consistent or inconsistent with their salient values. Assouline et al. (2006) concluded that not putting necessary effort might be the perceived attribution of gifted students for their failure, and they may not prefer to choose the attribution of not being able enough. Gender variations were established in attributional preference for general academics, science, mathematics, and language arts. Hau and Salili (2006) found that small children had higher professed test accomplishments, expectations of victory in prospective examinations, and perceived achievement in classroom activities than grown-up students. Also, grown-up students attributed their outcomes to external and controllable factors, while the elder children’s ascriptions were more internal and uncontrollable. Batool and Akhter (2012) established in their study that the students, who experience success, attribute their failure to external and uncontrollable factors and frequently experience helplessness in the achievement-related task.

The research also needs to be carried out on DHH adolescents to determine if their perceived causes of success and failure were similar to hearing adolescents, and how the method
of communication may affect attributional style. Through the alteration of attribution selection, teachers may overcome worse psychological consequences and attitudinal barriers in the achievement of DHH students. This study also provides a better understanding of how attributional style and achievement motivation may be supportive in enhancing the achievement level of students. DHH students are a part of the stigmatized group of our society with different characteristics, educational placements; oral/total communication methods that may affect their attributional style (Brice & Strauss, 2016; Gul, R., Khan, S. S., Mazhar, S., & Tahir, T. 2020). The findings of the present study could facilitate school psychologists and special educators in enhancing the achievement of their students by altering their attributional style.

In Pakistan, 66% of children are enrolled in schools to attain primary education, leaving 34% without education. Children with disabilities constitute a foremost part of this marginalized group. Pakistan has more than one million deaf children of school age, only five percent of them attend a special school for DHH (Batool & Shabnaz, 2008). These children with special needs attend the special schools of their disability. DHH children have been attaining their education in schools of the deaf. They are placed in a segregated system which has reduced likelihoods of social interaction and therefore detaches them from the everyday learning and socio-emotional practices of hearing peers (Akram & Bashir, 2012). Generally, both teachers and parents agree that DHH children have lower learning ability. Teachers and staff in these traditional schools lack training and resources to manage DHH children in classrooms of hearing peers. Therefore, it is assumed that special schools have the responsibility to deliver education for DHH children (Bashir, 2005). The general communication style of DHH children in Pakistan is sign mode. But only sign language experts or their DHH peers can understand their sign language. The curriculum for DHH children is similar to general education, but with the addition of auditory training and speech therapy. A limited number of schools have teams of experts, including psychologists, special education teachers, speech therapists and physical therapists (Khatoon, 2003; Husain, 2003). The deaf community uses two types of sign languages: Indo-Pakistani Sign Language (IPSL) and Pakistani Sign Language (PSL). Both IPSL and PSL have multiple dialects in different regions of the country. The education is provided through hearing aids, audio system speech therapy, speech therapy training, sign language, fingerspelling, oral reading, and this combination of techniques is known as total communication in the context of Pakistan (Lynch et al., 2020). During oral communication individuals interact with each other, and also with their social and physical surroundings by exchanging information in form of language, signals, and behavior. This listening and speaking mode is commonly known as the oral communication style in deaf schools, which is not a preferred mode for learning in the classroom, the reason may be the difficulty of comprehension and overcrowded classrooms of DHH students (Mushtaq & Reba, 2017). The students are place in different programmes on the basis of their achievement scores in entrance test and not on the basis of their communication modes. A large majority of the parents of these children are illiterate, this lack of parental education is the main reason for their access to rehabilitation/ habilitation, education and age of identification of deafness, and such services reside in the big cities only.
Purpose of the Present Study
From the above literature review, we find that little research has been done on the attribution patterns and academic achievement of DHH children and the relationship between these two variables. Most of the research conducted relies on the views of teachers and parents of DHH students, absolutely avoiding the significance of the perspective of children themselves, probably due to the communication impediment (Hau & Wu, 2019). Given the magnitude of a self-report by DHH children on their attribution patterns, the study is designed to find out the difference of attribution style between DHH students who use oral communication and those who use total communication, to explore the difference in attribution style of DHH and hearing students and to analyze the difference of the academic achievement scores between DHH and hearing students, and between DHH students who use oral communication and those who use total communication.

Methodology
The study design is causal-comparative; two independent variables were used in this study. The first was the communication style of the DHH student, either oral or total communication. The second independent variable was the hearing status of students, either hearing, DHH who use oral communication or DHH who use total communication. Organismic variables included: gender, age, degree of deafness, and age at onset of deafness. The average age of the respondents was 15 years.

The data were collected individually from each DHH student which took seven weeks i.e. from 14th October 2019 to 30th November 2019, whereas the data from hearing students was collected within one week i.e. from 2nd December 2019 to 9th December 2019. Both DHH and hearing students received the same questionnaire to gather data for the study, the time for data collection and administration of the Raven Standard Progressive Matrices were exclusive for DHH students, mainly because deafness is characterized by several distinctive aspects, beginning with qualities unique to DHH and their families.

Sample
The sample of the study was 175 students. These students included 50 DHH students who used oral communication, 53 DHH students who used total communication; both these groups belong to a Special Education school and 72 regular education hearing students who belong to a Public School. The Raven Standard Progressive Matrices (Zhang & Wang, 1985) was utilized to determine the intellectual ability of DHH children. Each DHH student’s score on it was then converted into a percentile rank, which specifies his/her intellectual level. Percentile ranks lesser than 5% specify intellectual disability. Thus, none of the DHH children was found intellectually disabled. All these students were enrolled in arts and computer groups of 9th grade, session 2018-2019. Their mean grade equivalent reading ability was nine and ranged from nine to 12 and mean grade equivalent writing ability was eight and ranged from eight to 11, obtained by
applying OWLS-II (2011), Written Expression Scale (WES) & Reading Comprehension Scale (RCS).

The study protocol was submitted to the University Research Ethics Committee for review, guidance and approval before the study began. All procedures in this research were determined following the ethical standards of the Institutional Research Council and the Helsinki Declaration of 1964 and its subsequent revisions or similar ethical standards.

Each participant was fully aware of the goals, methods, and sources of funding, any possible conflicts of interest, and the institutional affiliation of the researcher, the expected benefits and potential risks of the study, as well as possible discomfort and post-study regulations. The subjects were informed of their refusal to participate in the research at any time without retaliation. Due to the nature of this research, participants of this study did not agree for their data to be shared publicly, so supporting data is not available.

**Instruments**

Two questionnaires were used in this study CDSII (McAuley et al. 1992) and a self-developed demographic survey. Generality (global/ specific) was the final dimension offered as a refinement to the overall idea of controllability. This dimension considers whether the attributions are perceived to be a function of a specific context (Specific) or generalizable to a broader environment (Global). In keeping with the math example, a specific attribution might be “I’m bad at math” or “Math exams are difficult” whereas a global attribution might be “I’m bad at school” or “All paper-based exams are difficult.” The Global/Specific dimension was not used by Weiner explicitly but it is also one of the theme of Weiner’s Attribution theory, so it was also adapted from Learned Helplessness Scale (LHS) by Quinless and Nelson (1988), the blended scale was named as New Causal Dimension Scale (NCDSII), which was composed of such situations as ‘Generally I fail a test because a) My teacher makes hard tests, b) I didn’t try harder c) Because I do not have the ability in the subject, d) it was not my lucky day’ or ‘Generally I get good marks in a test because I put much effort in it or I got good marks in a test because the subject teacher likes me’ etc.

The NCDSII was administered in the classroom settings to both hearing and DHH students to avoid the likelihood of the access of children to conversations with and the thoughts and views of their parents and teachers; this was an endeavour to attain exclusively the judgments of students for the research. The students were asked to imagine they were in the described situations and then instructed to write one cause for each event. They were then asked to rate the internality, stability, controllability and globality of the event using a five-point scale. Locus was measured by asking the adolescents whether outcomes were due to something about him/her (internal) or something about other people or circumstances (external). Stability was measured by asking the adolescent if the cause happened one time (stable) or would be present again (unstable). Controllability was determined by asking successful student whether their success was due to their ability or effort. Globality was determined by asking adolescents to rate whether the cause influenced this situation only (specific) or other areas of their life (global).
Controllability differentiates causes one can control, such as skill/efficacy, from reasons beyond individuals control, such as aptitude, mood, others’ actions, and luck. Higher scores were given to attributions that were considered internal, unstable, controllable and specific, while lower scores were associated with external, stable, uncontrollable and global attributions. The statements are negative or positive as per the attribution theory given by Weiner.

The NCDSII not only incorporated aspects of causal attribution like locus of control but also accounted for the interaction between causal inference and outcome valence. The scores could be obtained reflecting internal, stable, controllable or global attributions concerning positive or negative events. The wording on the instrument was adapted in the Urdu language in addition to its English version to facilitate both DHH and hearing students participating in the study. The demographic survey was developed to seek personal and family information considered relevant to the study from both hearing and DHH students. Three former educators of the deaf, linguistics instructors and sign language interpreters with top-level certification from the Directorate of Special Education, Pakistan were also requested to validate NCDSII for the study, who approved it. A report on the reliability of the instrument was determined by using 70 hearing and 40 DHH students. The internal consistency on the three scales was found as; internality .79, stability .85, controllability .81 and globality .88.

A confirmatory factor analysis was performed to assess the single factor structure of the NCDSII, the results showed that fit indices were all within the acceptable limit the scale was then subjected to a Confirmatory Factor Analysis, Which indicated a good model fit, i.e., $\chi^2$/df =2.02; RMSEA = .08, RMSEA 90% CI [.058-.066]; CFI = .93; TLI = .94; IFI = .92; RFI = .89; SRMR = .066. The values of AVE=.50 and CR=.877 indicate evidence of construct validity. The scores on the subsequently held final examination were taken from the concerned departments.

**Results**

**Table 1** Demographic characteristics of the participants (N=175)

<table>
<thead>
<tr>
<th>Age</th>
<th>DHH</th>
<th>%</th>
<th>Hearing</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>19</td>
<td>10.2</td>
<td>17</td>
<td>9.2</td>
<td>36</td>
<td>19.5</td>
</tr>
<tr>
<td>15</td>
<td>52</td>
<td>28.1</td>
<td>28</td>
<td>21.1</td>
<td>91</td>
<td>49.2</td>
</tr>
<tr>
<td>16</td>
<td>32</td>
<td>17.3</td>
<td>27</td>
<td>15.1</td>
<td>60</td>
<td>32.4</td>
</tr>
<tr>
<td>Male</td>
<td>51</td>
<td>27.6</td>
<td>29</td>
<td>15.7</td>
<td>80</td>
<td>43.2</td>
</tr>
<tr>
<td>Female</td>
<td>52</td>
<td>28.1</td>
<td>43</td>
<td>23.3</td>
<td>95</td>
<td>51.3</td>
</tr>
</tbody>
</table>

Demographic characteristics of DHH participants (N= 103)

<table>
<thead>
<tr>
<th>Oral</th>
<th>Total Communication</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>616</td>
<td><a href="http://www.webology.org">http://www.webology.org</a></td>
<td></td>
</tr>
</tbody>
</table>
Table 2 Difference of Achievement Attribution styles between DHH and Hearing Students

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
<td>External-Negative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DHH</td>
<td>67</td>
<td>2.75</td>
<td>.48</td>
<td>127</td>
<td>-2.48</td>
<td>NA</td>
</tr>
<tr>
<td>Hearing</td>
<td>62</td>
<td>2.54</td>
<td>.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal-Positive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DHH</td>
<td>69</td>
<td>2.16</td>
<td>.91</td>
<td>162</td>
<td>.97</td>
<td>NA</td>
</tr>
<tr>
<td>Hearing</td>
<td>61</td>
<td>2.03</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stable-Negative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DHH</td>
<td>66</td>
<td>2.73</td>
<td>.69</td>
<td>136</td>
<td>2.97***</td>
<td>.66</td>
</tr>
<tr>
<td>Hearing</td>
<td>62</td>
<td>3.00</td>
<td>.41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unstable-Positive</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DHH</td>
<td>68</td>
<td>3.15</td>
<td>1.02</td>
<td>163</td>
<td>3.64***</td>
<td>.56</td>
</tr>
<tr>
<td>Hearing</td>
<td>62</td>
<td>3.65</td>
<td>.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncontrollable-Negative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DHH</td>
<td>66</td>
<td>2.73</td>
<td>.69</td>
<td>163</td>
<td>3.64***</td>
<td>.56</td>
</tr>
<tr>
<td>Hearing</td>
<td>62</td>
<td>3.00</td>
<td>.41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controllable-Positive</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note. In Pakistan the most of women deliver their babies at home and there is no screening facility in such cases. Generally, parents have doubts about the hearing loss of their child, and may get it diagnosed by a physician later on.

All 175 students had a nonverbal IQ of no less than 80 as well as their ages were between 14-16 years. The mean age of DHH students was 15.3 years, SD = 1.56 whereas, the mean age of hearing students was 14.8 years, SD 1.71, students above and below this age limit were not included in the study.
Table 2 indicated that the attributional styles of both hearing and DHH students differ on use of stable attributions and the size of the difference is large i.e. .66, thus the hearing students were more likely to use stable attributions for negative events, which is described as non-productive for achievement related tasks by Weiner, thus this difference is in favour of DHH students. Both groups also differ on unstable attributions, and this difference is in favour of hearing students, which means hearing students have more unstable attributions about positive events. Similarly, hearing students believe they have no control over negative outcomes, but they can control the outcomes which are positive as the difference size is .66 and .56. The both groups also differ on stable/unstable-negative the size of difference was .66, thus the hearing students were more likely to use specific attributions for negative outcomes and do not generalize these attributions to other life events as compare to DHH students.

### Table 3 Difference of Achievement Attribution styles between DHH Students using Total Communication and DHH Students using Oral Communication

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External-Negative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC</td>
<td>52</td>
<td>2.79</td>
<td>.54</td>
<td>99</td>
<td>-1.31</td>
<td>.20</td>
<td>na</td>
</tr>
<tr>
<td>OC</td>
<td>49</td>
<td>2.62</td>
<td>.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal-Positive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC</td>
<td>50</td>
<td>2.01</td>
<td>.78</td>
<td>92</td>
<td>-2.44***</td>
<td>.02</td>
<td>.51</td>
</tr>
<tr>
<td>OC</td>
<td>47</td>
<td>3.17</td>
<td>1.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stable-Negative</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC</td>
<td>48</td>
<td>2.61</td>
<td>.74</td>
<td>96</td>
<td>1.33</td>
<td>.19</td>
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<tr>
<td>OC</td>
<td>50</td>
<td>2.79</td>
<td>.66</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Uncontrollable-Negative</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>TC</td>
<td>49</td>
<td>3.01</td>
<td>1.10</td>
<td>95</td>
<td>1.80</td>
<td>.08</td>
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<tr>
<td>OC</td>
<td>48</td>
<td>3.41</td>
<td>1.01</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Table 3 specified that DHH students who use total communication and those who use oral communication differ in their use of internal/external attributions for the positive events and oral communication group students have positive and internal attributions whereas, students with total communication have not. Similarly Oral communication group students have more uncontrollable attributions for negative outcomes as compare to the students of total communication group, which shows these students are more declined towards the attributions like luck and ability. As mentioned above the combination of techniques (sign language, fingerspelling, oral communication etc.) is known as total communication in the context of Pakistan.

Table 4  Significance of difference between mean achievement scores of hearing and DHH attribution groups

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAG</td>
<td>103</td>
<td>3.17</td>
<td>1.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAG</td>
<td>72</td>
<td>4.02</td>
<td>1.18</td>
<td>173</td>
<td>3.72**</td>
<td>.78</td>
</tr>
</tbody>
</table>

Note. DAG=DHH attribution group; HAG=Hearing, attribution group; **p <.01

Table 4 indicated that hearing attribution group students (M= 4.02, SD=1.18) were more likely to have high achievement scores as compared to DHH attribution group students.

Table 5  Significance of difference between mean achievement scores of total and oral communication attribution groups

<table>
<thead>
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Note. TC= Total communication, OC= Oral communication
Table 5 indicated that oral communication attribution group students (M= 3.02, SD=1.01) were more likely to have high achievement scores as compared to total communication attribution group students.

**Discussion**

The attributional styles of both hearing and DHH students differ on internal and external positive attributions, stable and unstable positive and negative attributions and also controllable and uncontrollable negative and positive attributions which resemble the results of the research produced by Kusche et al. (2009). He concluded that language plays a significant role in the comprehension of causal attribution, emotional concepts, and cause-effect associations and that early language deprivation may result in delayed socio-emotional development. Munoz-Baell and Ruiz (2000) found that DHH and hearing children interpret their emotional practices using identical attribution styles, which are progressively refined up to age 13. The developmental setback in DHH children's emotional comprehension interferes in ways that the social experience of the DHH child of hearing parents affords a narrow chance to talk about emotional causality. Hosie et. al (2000) found in their study that DHH and hearing children interpret their emotional practices in a similar way, which are gradually polished. The results of the present study are also in line with Marschark et al. (2016) findings, they concluded in their study that DHH students at the secondary level having better communication skills had high test scores. The findings also match with the study of Meadow-Orlans (1983), who concluded that DHH students by using oral communication can merely attain their finest potential in academics when their attribution styles are critically considered by all stakeholders.

Weiner theory of motivation is based on the notion as to how hopes, sentiments, and actions at accomplishment errands are determined by the causes that students ascribe to previous outcomes it is a possibility that the variation in academic achievement, amongst the students in the same classroom, may perhaps be because of the variation in their causal attributions. The justifications specified by students regarding their precedent achievement or lack of it direct their prospective behaviour, which is confirmed by the results of the current study.

Teachers may not attribute pupils’ failure to causes that are uncontrollable and stable, should not react to student faults with sympathy, commend for the excellent attempt and unsolicited assistance. They should hold high expectations for pupils’ performance and facilitate them to realize these standards; they may use such strategies as scaffolding for low performing students. Similarly, from the first day of class, the expectations for academic and social success should be publicly visible i.e. maybe in the form of a class pledge. For most types of tests, such expectations can be communicated by providing a rubric. Teachers ought to attribute the success
of both hearing and DHH students to a combination of effort and ability, downplaying the influence of luck on students’ achievement. On the other hand, the success of students should be attributed to effort only when they have made effort and their failure should be attributed to controllable and unstable factors such as lack of effort, change of study habits etc. Both parents and teachers may not respond to students mistakes with pity and unsolicited help. When students fail despite the effort, attribute it to lack of effective learning methods and help them acquire such skills as learning for understanding than rote learning. It is better to praise student effort as a personal characteristic rather than the effort itself, “you are hardworking” as opposed to “you worked hard”. It must be remembered by teachers that success attributed to personal effort produces pride that promotes future effort, whereas success attributed to luck yields surprise rather than pride, which may not promote future efforts. The present research emphasizes the encouragement for hard work and the purposive reassurance of past effort and its relationship to positive achievement. In future, researchers need to differentiate the achievement-attributional styles and associated differences and similarities of achievement between DHH students who have hearing parents or DHH signing parents, as well as ages of diagnosis and language access.

Conclusion
The attributional styles of both hearing and DHH students differ on the use of stable attributions, hearing students were more likely to use stable attributions for negative events, which is described as non-productive for achievement-related tasks by Weiner, hence this difference is in favour of DHH students. Both groups also differ on unstable attributions, and the difference is in favour of hearing students, which means hearing students have more unstable attributions about positive events. Similarly, hearing students believe they have no control over negative outcomes, but they can control the positive outcomes. Both groups also differ on stable/unstable-negative the hearing students were more likely to use specific attributions for negative outcomes and do not generalize these attributions to other life events compared to DHH students. The total communication and oral communication differ in their use of internal/external attributions for the positive events and, oral communication group students have positive and internal attributions whereas, students with total communication have not. Similarly, Oral communication group students have more uncontrollable attributions for negative outcomes as compare to the students of the total communication group. It is also concluded that hearing students were more likely to have high achievement scores as compared to DHH students. Similarly, oral-communication attribution group students were more likely to have high achievement scores as compared to total communication attribution group students.

Disclosure of Interest
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