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AN ANALYSIS OF DIFFERENCES IN THE WAY THAT PUPILS WITH AND WITHOUT SPEECH DISORDERS MAKE USE OF THEIR LEARNING STYLES

Case
Study

Keywords

Speech disorders,
Learning,
Learning style

Abstract

The present article aims to describe various types of learning styles and how learning could be improved for further progress. Although there is plenty of scientific research on learning styles, the test outcomes are not widely used in learning practice. This research was designed to identify the learning style of over 20 children with and without speech difficulties, using the questionnaire adapted by P. Honey and A. Mumford in 1986, from Kolb's experiential cycle. The investigation aims to answer two questions: 1. what learning styles are frequently used by children between 6-10 years old? 2. are there different preferences of the children with and without language disorders? As a conclusion to these findings, the article will reveal some educational implications of the SL testing act.

LEARNING STYLE CONCEPT

Learning is a holistic process, including thinking, feeling and behavior. This is a personal trait based on various connections between the individual and their social environment. Learning is the process of comprehending knowledge as a process not as something static. "Learning is the process whereby knowledge is created through the transformation of experience" (Kolb, 1984). An educational concept with practical implications is "the learning style", which has a variety of meanings. Thus, according to Keefe (1979), learning styles are cognitive, affective and psychological traits as constant indicators of how learners perceive, interact with and react to the environment. Fleming and Bonwell (2001) explain learning style as an individual mode of gathering, shaping and thinking about the information. Grasha (1990) recognizes the preferences children have for thinking, relating to others in the classroom. LS was historically related to different cultural variables. McChlery and Visser (2009) led a study, comparing the students' LS in the United Kingdom and South Africa. The outcomes of their research revealed that there were no differences between the learning styles of the participants in the two countries. In comparable older studies, on the contrary, the results are dissimilar. McKee et al. (1992) compared the learning styles of the Norwegian and American students and they found significant differences between the two nations. All these studies were most influenced by their national social dimension (Donald and Jackling, 2007). Also, cultural barriers may affect learning. For this reason, multicultural classrooms are very challenging spaces.

When children have the chance to learn in a good climate, managed in a proper manner, compatible with their learning style, their performance will improve according to these simulative conditions. Reid (1995) observed that all students have their own learning styles with strengths and weaknesses. "Encouraging students to find their personal pattern of learning empowers them to become more efficient learners and paves the way to improved school performance" (Guild & Garger, 1986). Children have personal characteristics that lead to a specific style. Knowing this style can be helpful for various reasons: students can upgrade their techniques, share knowledge or develop their learning skills (Honey and Mumford, 2000).

RESEARCH DESIGN AND INTERPRETATION

When measuring learning styles several factors need to be considered: preferred information (e.g., words, movements, pictures) the most stimulating mental

action (e.g., analysis, synthesis, comparison) and sensorial behaviors (e.g., for a visual, auditive or kinesthetic styles). Additional research on the usage of learning styles in instructional design and practice is necessary, especially in the case of children with language and speech disorders. Identifying children's learning style is important in the case of an individualized learning aiming at improving the quality of language development. According to D. Kolb (1986) experience is the main source of learning and development. The most popular instrument designed by Kolb is called Learning Style Inventory. The model represents two modes of accumulating experience—concrete experience and abstract conceptualization—and two modes of transforming experience—reflective observation and active experimentation. This Experiential Learning Theory (ELT) inspired P. Honey and A. Mumford to create a questionnaire with 40 items identifying learning styles preferences. Two of these LS are centered on the action, for example the active and pragmatic styles, and the other two are based on thinking, such as the theoretical and reflexive styles. The purpose of research explores a minimal difference in learning of children with and without speech difficulties. We have applied the questionnaire created by the two authors on two groups of children aged between 6-10, with and without speech difficulties.

According to the chart below (see Figure 1) most children with speech difficulties manifest a very strong preference for the active style. According to the authors, these children learn best when: they are involved in new experiences and opportunities for action; work efficiently with others in simulations, role-plays or teamwork.

As seen in Figure 2, among the tested children, *nobody uses reflexive style as a very strong behavior*, possibly due to the poor internal language development. However, this can be a subject for future reflection as in Figure 3 there are four children from the investigated group who show a strong preference for this style. According to Honey and Mumford, thinkers learn best when: they observe people or groups while doing certain activities and they have the opportunity to analyze what has happened.

Only a few participants in the study have a strong preference for the theoretical style. These children like to understand the theory before putting it into practice. They like to be in situations where they can use their knowledge and skills. Situations are structured according to objectives that can be systematically followed. They are used to asking questions and checking the ideas behind the actions. What we can deduct from Figure 4, is that the pragmatic style does not characterize the learning behavior of children with speech difficulties.

Children with speech difficulties may be vulnerable to stress, time pressure or change. These children may take a longer time to develop their speech skills in order to be able to act. These pupils learn best when there is link between theory and practice. They prefer to give feedback to the others to reduce the time in order to accomplish a particular activity. They can successfully use a model they can follow, for example a recognized film or personality.

In conclusion (see Figure 5), it is the active style that predominates in children with speech disorders. In terms of the favorite style of typical children, the active style was chosen as a constant learning option (see figure 6). These pupils are usually directly involved in new experiences and are interested in what is happening here and now. They are stimulated by immediate new experiences, which make them enthusiastic. They tend to act first and examine the consequences afterwards. They usually solve problems through brainstorming. As soon as the emotion for an activity decreases, they look for another stimulus.

As seen in Figure 7, the reflexive style is moderately favored by these pupils, which means that their learning is not centered on thinking and its subtle aspects of reflection and observation. In this profile, pupils need to weigh and observe experiences from multiple perspectives. They can see a situation from different angles. They gather data both directly and indirectly through others and prefer to think thoroughly before reaching a conclusion. Gathering and thoroughly analyzing events is what matters most, so they tend to delay the conclusion as much as possible. When they act, they do so in a wider context including the past and the present based on their own and other people's observations.

As seen in Figure 8, what predominates in the learning behavior of the children without speech difficulty is the theoretical style. These children can adapt and integrate observations into logical theories. They think vertically, logically, step by step. These pupils assimilate disparate facts in coherent patterns. According to Honey and Mumford, they can sometimes be perfectionist and tend to be analytical and devoted to rational objectivity.

The pragmatic style is preferred by a quarter of the typically developed children. As seen in Figure 9, 32% have poorly developed the pragmatic style. According to Honey and Mumford (2000), pragmatists are always ready to try new ideas in order to see if they work in practice. These pupils look for new ideas and take advantage of the chance to experience new ones. They like to act quickly and tend to be impatient when talks extend for a long time. They like the idea that can be immediately applied in practice. Generally, Figure 10 (see below) presents all these preferences of the investigated children.

RESEARCH CONCLUSION

By comparing the two groups, we find that they show an obvious preference for the active style, which is specific to learning at the age of 6-10. At this age, children are interested in exploring the real world and operating with concrete objects through sensorial and perceptive experience. There is a little difference with regard to the number of options for the two groups. Anyway, it is the theoretical style that characterizes the learning behavior of the children without difficulty.

EDUCATIONAL IMPLICATIONS

This research offers the conclusion that children differ in regard to what style is most effective for their learning. The best language training or speech therapy should be based on the analysis of pupils' style. Children whose learning style has been identified can achieve the best outcomes in language development. Literature has focused on learning outcomes generated by these styles, except for the case of speech disorders. It is interesting to see the impact of these styles on language development or speech therapy. Speech therapy is an intervention planned to promote significant language learning and gathering of knowledge, whose effects can be enhanced if it is correlated to an individual style. Sprenger (2003) suggests that teachers (and therapists) should measure and adjust all their methods to pupils' style. The discrepancy between them can produce failure, frustration or demotivation. Research has focused on students' learning style preferences in order to diminish the negative aspects (Cekiso, 2011), which are frequent in children with speech impairments. We definitely agree with Sims and Sims (2006) who hold that matching these preferences leads to an improved level of learning motivation.

Acknowledgements

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REFERENCES

- [1] Cekiso M. (2011). *Profiling learning style preferences of first-year university students: Implications for course design and instruction*. SAJHE, 25(7): 1298-1309.
- [2] Fleming, N., Bonwell (2001). *How Do I Learn Best: Student's Guide to Improved Learning*; V. ARK, Visual Aural Read/Write Kinesthetic Charles. Christchurch, NZ.

- [3] Grasha, A.F. (1990). *Using Traditional versus Naturalistic Approaches to Assessing Learning Styles in College Teaching*. Journal on Excellence in College Teaching.
- [4] Guild, P. & Garger, S. (1986). *Marching to different drummers*. Alexandria, VA.: Association for Supervision and Curriculum Development.
- [5] Keefe, J.W. (1979). *Learning style: An overview*. NASSP's Student learning styles: Diagnosing and proscribing programs (pp. 1-17). Reston: VA. National Association of Secondary School Principals.
- [6] Kolb, D.A. (1984). *Experiential learning: experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- [7] Donald, J., Jackling, B. (2007). *Approaches to learning accounting: a cross-cultural study*, Asian Review of Accounting, Vol. 15 Issue: 2, pp.100-121, <https://doi.org/10.1108/13217340710823341>
- [8] Honey, P., & Mumford, A. (2000). *The Learning Styles Helper's Guide*. Maidenhead: Peter Honey Publications Ltd.
- [9] McChlery, S. and Visser, S. (2009). *A Comparative Analysis of the Learning Styles of Accounting Students in the United Kingdom and South Africa*. Research in Post-Compulsory Education, Volume 14, Issue 3, 299–315.
- [10] McKee TE, Mock TJ, Ruud TF. (1992). *A comparison of Norwegian and United States accounting students' learning style preferences*. International Journal of Accounting Education, 1(4): 321-341.
- [11] Reid J. M. (ed.). (1995). *Learning Styles in the ESL/EFL Classroom*. Boston, MA: Heinle & Heinle. Institute for Learning Styles Journal Volume 1, Fall 2007
- [12] Sprenger, M., (2003). *Differentiation through learning styles and memory*. New York: Corwin Press, Inc.
- [13] Sims RR, Sims SJ. (2006). *Learning Styles and Learning: A Key to Meeting the Accountability Demands in Education*. New York: Nova Science Publishers

FIGURES

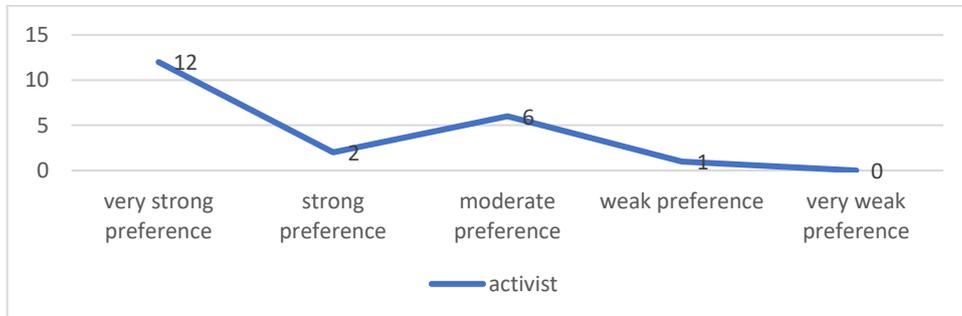


Figure No. 1. Active style preference of children with speech disorders

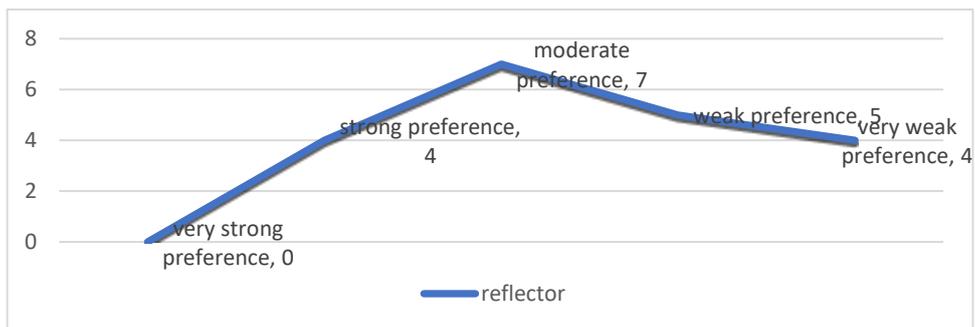


Figure No. 2. Reflexive style preference of children with speech disorders

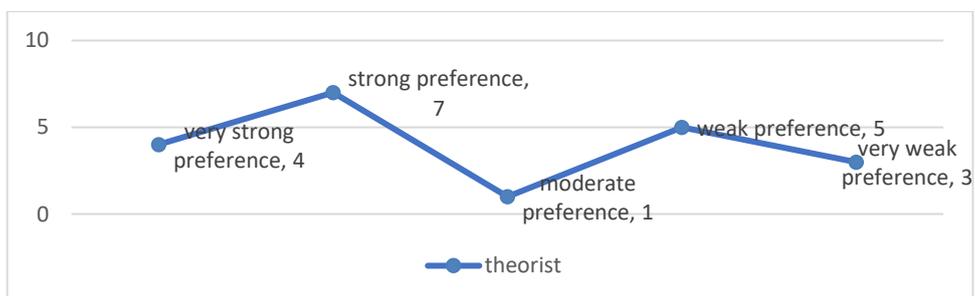


Figure No.3. Theoretical style preference of children with speech disorders

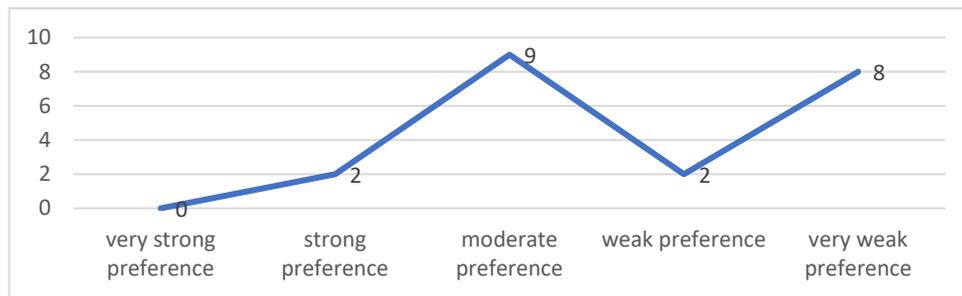


Figure No.4. Pragmatic style preference of children with speech disorders

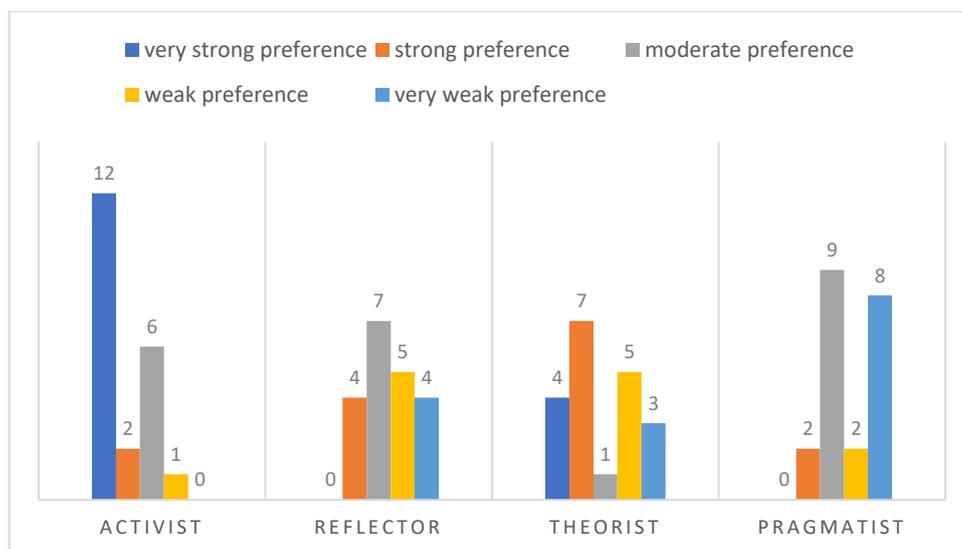


Figure No.5. Learning style preferences of children with speech disorders

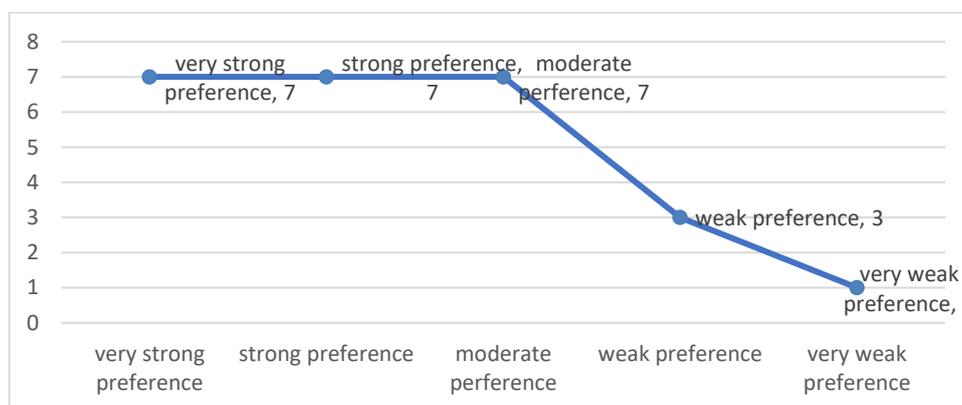


Figure No.6. Active style preference of typical children

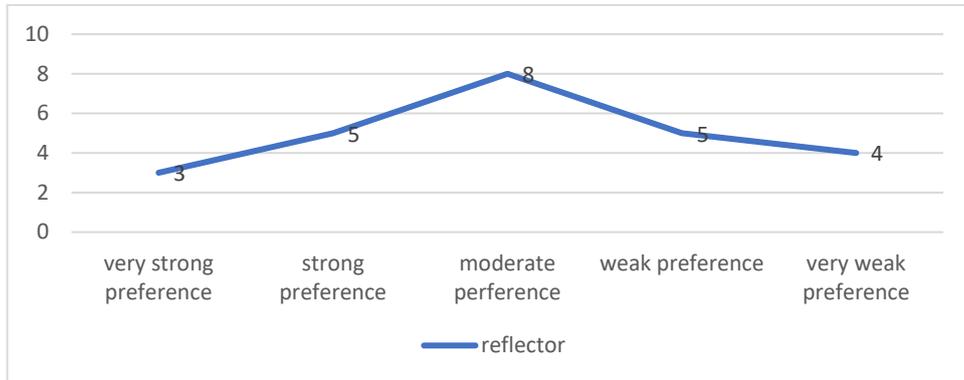


Figure No.7. Reflexive style preference of typical children

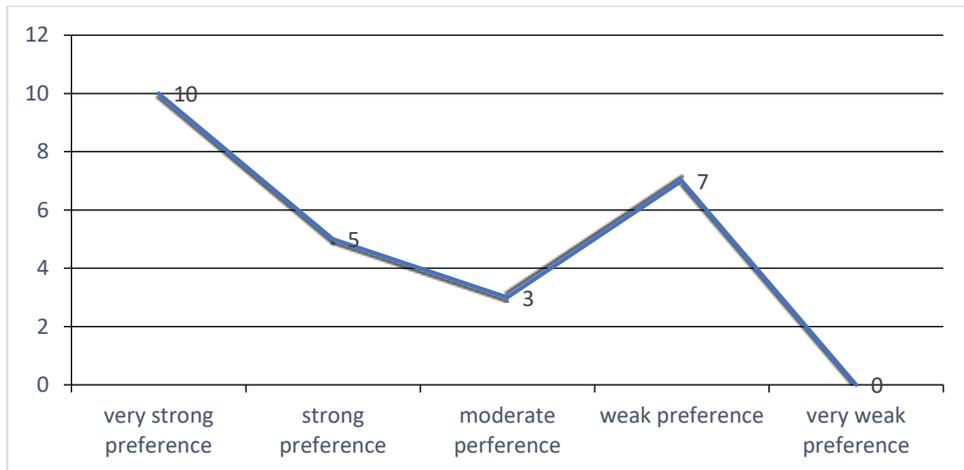


Figure No. 8. Theoretical style preference of typical children

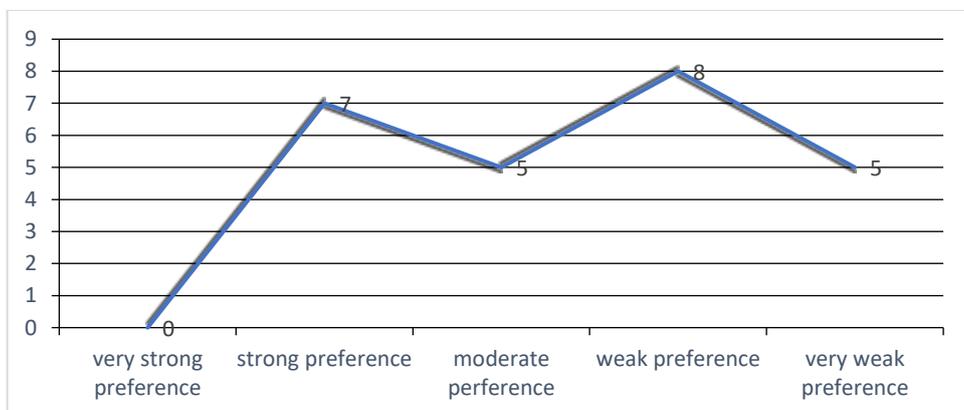


Figure No.9. Pragmatic style preference of typical children

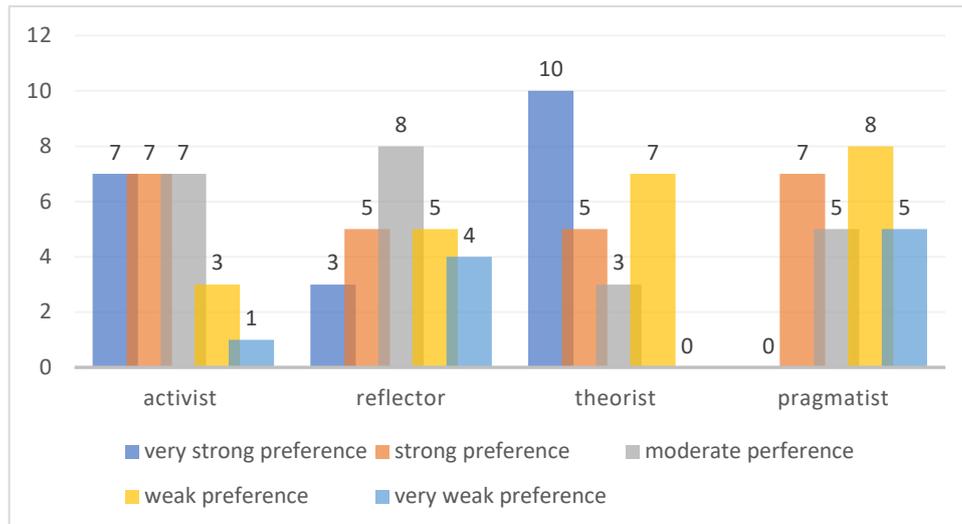


Figure No. 10. Learning style preference of typical children