Value priorities in hearing-impaired adolescents

Szeregowanie wartości przez młodzież z uszkodzonym słuchem

Abstract. Hearing impairment is regarded to be a barrier to the psychological development and language skills of deaf students. In understanding and establishing what comprises the value priorities amongst adolescents, certain deviations can be expected amongst teenagers who are deaf or who have hearing impairment. The article describes and compares the value priorities of 246 adolescents who are deaf or with hearing impairment from Poland and the Czech Republic with hearing peers. The Schwartz Portrait Values Questionnaire is used to measure the value priorities of the respective groups of participants. In comparison to peers responses the results indicate that hearing status impacts upon an individuals’ values of conformity, tradition as well as achievement, however, other value priorities are shown to be influenced by gender and country of domicile.

Key words: adolescents, hearing impairment, Schwartz Portrait Value Questionnaire (PVQ-21), values priority

Słowa kluczowe: młodzież, uszkodzenie słuchu, Portreto w Kwestionariusz Wartości S.H. Schwartza (PVQ-21), uszeregowanie wartości

INTRODUCTION

The psychological development of a child, in relation to educational aims and objectives, creates a prerequisite for providing key competencies at an achievable level that is suitable for the child’s current mental fitness. These key competencies help prepare children for further education and inclusion into society. Mastering key competencies, including value orientation, is a long-term and complex process that begins in pre-school and continues through primary and secondary school. Psychological and values development is, therefore, gradually accomplished over the course of a lifetime (Priestley, 2003).

Hearing impairment is undoubtedly reflected in the mental image of its bearer (Stachyra, 2001). The challenges connected with the development of psychological skills are linked to an individual’s development of communication competencies, and certain specifics can be expected in understanding values systems and subsequently in establishing ones value priorities. In addition, personal values are an integral part of culture; are diverse and specific to particular cultural backgrounds (Schwartz, 1996). In this instance the concept of group cultural specificity and value priority systems corresponds to the conception of self held by people who are deaf or who have hearing impairment. Deaf/hard of hearing people are...
defined as a specific cultural minority determined by cultural features such as language, which is a distinct characteristic different from the majority of people in society. Indeed, deaf people consider themselves as a linguistic and cultural minority (Kourbetis, Adamopoulou, Ferentinos, 2005). A cultural minority group is defined by demonstrated parameters such as history, values, and language and group acceptance (Holliday, 2010).

Long-term studies of behaviour of the deaf/hard of hearing children and adolescents indicate how values are perceived by the deaf (Gregory, Bishop, Sheldon, 1995; Kushalnagar, Krull, Hannay, Mehta, Candle, Oghalai, 2007; Turner, Windfur, Kapur, 2007; Tomaszewski 2007). Researchers report findings that coincide with educational activities and provision, however, a dearth of research in this field makes comparative studies conducted with teenagers from the hearing population challenging despite the cultural, linguistic and educational importance of this topic (Bellin, Stephens, 2002; Bidziński, 2008; Cieciuch, 2007; Řeháková, 2005; Wysocka, 2003). In a study by Wynford Bellin and Dafydd Stephens (2002), deaf teenagers who also experienced marginalization, develop similar value systems and priorities to peers. Moreover the study shows there are similarities in the priority of values between genders. Bellin and Stephens (2002) suggest that deaf adolescents are not absorbed into the adolescent population, and their identity as members of the deaf community is diffused.

There is a dearth of theoretical/methodological studies relating to the development of priorities and value systems in connection with education practice, however a few studies have concerned the field of hearing impairment and psychology. Thus, the development of priorities and the value systems of teenagers who are deaf and educational practice is an area for further investigation. The point of interest in this aspect of research is whether this group of adolescents share a common set of values or similar priorities in value systems with their hearing counterparts. The research question, therefore, seeks to determine whether deaf adolescents share the same overall tendency towards developing priority value systems that is similar to hearing adolescents, or whether this particular group of young persons is an exception.

The background to the central research question is based on the human rights model of disability, particularly that all people with hearing impairment have an equal right to educational provision, furthermore, that needs fulfillment is a basic human right. The human rights model of disability (Harris, Enfield, 2003) differs from two other models, the medical model and the socio-cultural model (Lane, 2000). The medical model focuses on the outcome of hearing impairment, the extent of the person’s hearing loss, the etiology and the impact of the disability upon the person’s daily life. The social/cultural model focuses on an individual with disability acceptance. As members of a cultural and language minority group the use of the term deaf delineates separate and linguistic nature of this minority. As an extension to this concept, Carol A. Padden and Tom L. Humphries (2006) suggest that the distinct cultural differences emerge for people who are deaf in the course of their socialization and language development. Hearing impairment is a fundamental factor to affect language and psychological development, however, despite the fact that the majority of hearing impaired children are born to hearing parents (Mitchell, Karchmer, 2004), the parents may not be not familiar with sign language.

A further study conducted by Ross E. Mitchell and Michael Karchmer (2004), concerns hearing status and its impact on value systems and priority development, for deaf adolescents in comparison to their hearing peers. Mitchell and Karchmer (2004), find the importance of deaf cultural awareness in the contexts of gender and nationality.

The present study is based on the assumption that adolescents with hearing impairment have a particular value priority system as a result of perceptual restrictions. In addition to belonging to a cultural or linguistic minority many different means of communication are used. The value priority system, therefore, is modified by the child’s perceptual restrictions.
and other social factors such as gender and nationality. These variables lead to the following two hypotheses:

1. Hearing impairment is a significant factor that differentiates the value priorities in adolescents.
2. Social variables and independent variables of gender and country of domicile further influence the development of value priorities patterns.

**METHOD**

**Subjects**

Students with a severe and profound hearing impairment aged 15–20 took part in a country comparison between Poland and the Czech Republic. There were two groups which comprised students who were hearing impaired and their hearing counterparts.

The students with hearing impairment or who were deaf attended residential secondary schools either in Poland or the Czech Republic. Students who attended Polish schools were situated in the Małopolska Voivodship in the south of Poland, but students from the Czech sample were from all over the country. The hearing adolescents were also aged 15–17 and attended boarding schools. Thus the socialization backgrounds of the groups of students were similar to students who attended boarding schools for the deaf. Both national groups were a non-clinical cohort with no additional special needs such as developmental disorders as stated by the participants’ parents and teachers. Table 1 presents the characteristics of the groups.

Prior to the commencement of the study, parents gave their written permission for their child to be included.

**Measures**

**The Schwartz Portrait Values Questionnaire.** Each student was given national version of the Schwartz Portrait values Questionnaire (PVQ-21). The PVQ-21 was used in the European Social Survey in 2002 across 20 representative national samples. Alpha reliabilities of the values with this version averaged .56, ranging from .36 (tradition) to .70 (achievement). The structure of the 10 values of the Schwartz Portrait Values Questionnaire has shown cross-cultural stability and has been found to relate meaningfully to real behaviors, such as pro-social, anti-social, environmental, political, consumer, and intellectual ones (Bardi, Schwartz, 2003). The questionnaire included 21 items representing 10 types of values: universalism, benevolence, conformity, tradition, security, power, achievement, hedonism, stimulation, and self-direction.

In the study, subjects used a 6-point scale to assess the importance of each value by identifying themselves with an imaginary person who represented the maximum expression of the value (the person is like me = 1) or its minimum expression (the person is not like me = 6), therefore, a high score represented a high importance of the relevant value. As recommended by Schwartz (2006) the procedure of centring responses around the mean was used.

### Table 1. Group characteristics

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to control the effect that some responses recorded were the extremes of the scale, while others limited themselves to the middle or the end part of the scale.

Procedure

The research was conducted in the school setting. Polish and Czech versions of the Schwartz Portrait Values Questionnaire (PVQ-21) were obtained and independent translations and back-translations of the survey were used in the study. Each student was given either the Polish or Czech version of the PVQ-21 and asked to fill the response form freely and anonymously.

The researcher was accompanied by a school teacher, who explained the purpose of the study and the questionnaire to the students. The PVQ-21 was administered to groups of 20 and 28 hearing adolescents at their schools. Hearing impaired students responded to the questionnaire in subgroups of six to eight pupils of one grade.

Students filled in the written Polish/Czech forms independently according to group characteristics. For students with hearing impairment special DVDs were made and the PVQ-21 was translated into manually coded Polish (SJM) or Czech Sign Language (CzSL). A qualified teacher who used signing as communication in his/her daily school practice was present. Participants with hearing impairment then viewed the DVD statement by statement, they read the written form and recorded their responses. If necessary, the supporting teacher helped participants understand the instruction by repeating the recorded version.

RESULTS

The hypothesis about the factors influence on the value priority in adolescents was tested by analysing the impact of three independent variables, hearing status, gender and country on the priority scores of the ten dependent variables.

The ANOVA statistical method for the three factors was used to determine the influence of the variables as well as any dual and/or triple interactions. The sample sizes were unequal, therefore the Tukey post-hoc analysis method was used. In addition, this analysis tool was used to determine the direction of intergroup differences.

Results were analysed in reference to (1) values influenced by hearing status, (2) values affected by gender and/or country, and (3) values not related to the controlled independent variables. Hearing status was the core factor to affect value systems and their priority, although hearing status related to only three of the measured dependent values, which were conformity, tradition and achievement.

Hearing status was the differentiating factor for conformity (F = 8.086; p < .001): deaf adolescents (x deaf = .763) were more conformist than the hearing group (x hearing = .517), however, conformity did not differ in reference to separately handled independent variables such as gender (F = .828; p > .05) and country (F = 1.395; p > .05). In addition, the dual interactions between each two of the independent variables did not yield a significant effect, although a significant interaction between the three independent variables of gender, country and hearing status (F = 3.657; p < .05) occurred. Conformity results are presented in Figure 1.

As shown in Figure 1, the general effect of hearing status was based on the fact that the Czech deaf females obtained a significantly higher result in conformity (x = 1.027) than Czech hearing females (x = .415). No similar patterns of difference were found amongst Polish female subgroups, moreover, there was no difference found between deaf and hearing males both in the Polish and Czech subgroups. So, was interpreted that for the Polish subgroup neither gender nor hearing influenced conformity.

Hearing status was a differentiating factor of tradition (F = 7.925; p < .001), and so was the country of domicile (F = 5.944; p < .001). More interestingly, an interaction between the country and hearing status was found (F = 4.166; p < .05). On the other hand, gender did not affect the participants values of tradition.
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(F = 1.387; p > .05), however, gender was involved in the dual interaction between variables with both countries (F = 3.768; p < .05). The triple interaction was not significant. The results for the level of tradition are presented in Figure 2.

In the Polish subgroup, the level of tradition was similar and independent of hearing status. In the Czech subgroup of hearing adolescents, a higher level of tradition (x̄ = −.503) was found than amongst participants who were deaf (x̄ = −.074). However, the tradition importance was similar for both Czech and Polish deaf adolescents.

The interaction between country and gender in reference to tradition was as follows. In the Polish subgroup tradition was more important for females (x̄ = .201) than for males (x̄ = −.078), however, in the Czech subgroup there was no difference found between genders. The tradition level of Polish females was similar to those of Czech subgroups independent of their gender.

The third dependent variable to be differentiated was in reference to the hearing status was achievement (F = 4.505; p < .05). Achievement was also related to country (F = 16.967; p < .0001), however, it did not differ in reference to gender (F = .419; p > .05). Dual and triple interactions between the independent variables were not significant. The influence of the country and hearing status on achievement are presented in Figure 3.

Hearing status was found to impact on achievement. Hearing adolescents valued achievement higher than the deaf (F = 4.504; p < .05). Achievement was also differentiated in reference to nationality: Polish students valued achievement higher than the Czech groups (F = 16.967; p < .001). Such a relationship direction occurred in the Polish sample, however, with reference to the overall number of hearing participants, the interaction between country and hearing status was not significant.

The second group of values related to gender or/and the country of domicile. Gender, when handled as a separate factor, influenced the values priority of benevolence (F = 6.786; p < .01). Females valued benevolence significantly lower (x̄ female = −.93) than males (x̄ male = −.76).
Figure 2. Tradition – the effect of the hearing status – country and gender-country interactions
The security level was not differentiated in reference to the separate treatment of independent variables such as gender (F = 2.493; p > .05.) and hearing status (F = 2.961; p > .05), but it differed in reference to country (F = 12.128, p < .001). The Czech subgroup valued security higher than the Polish participants. A significant factor was the dual interaction between the variable of gender and country (F = 5.614; p < .001), however, the triple interaction was not significant. Security was related to the interaction between country and gender. The results are presented in Figure 4.

There was no difference in security in reference to gender for the Czech group. The Polish group, however, showed that males (\(\bar{x} = .258\)) valued security lower than females (\(\bar{x} = .607\)), where the females valued security at the same level as both males (\(\bar{x} = -.485\)) and females (\(\bar{x} = -.446\)) from the Czech group. It was interpreted that Polish males valued security at a lower level than the other three subgroups.

Differences in power valuation related to gender (F = 3.723; p < .05) and country (F = 16.198; p < .001), however, no dual or triple interaction were found. The influence of gender and country on power are presented in Figure 5. Czechs value power higher than Polish participants, and females value power higher than males.

Hedonism differed between the two subgroups (F = 7.887; p < .001). Polish participants valued hedonism higher than Czechs. The dual interaction between gender and country was also significant (F = 8.415; p < .001), however, no dual (hearing status – gender and hearing status – country) or triple interaction between the independent variables was statistically significant. The detailed results of the interactive influence of gender and country on hedonism are shown in Figure 6.

In general Polish participants valued hedonism higher than Czechs, however this relationship was strongly modified by gender. It was the Polish males who caused this effect: they obtained higher results in hedonism than both the Polish females and Czech males and females.
Figure 4. Security – the effect of the gender and country interaction

Figure 5. Power – the effect of the gender and country interaction

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Stimulation was differentiated by the country factor (\( F = 6.088; p < .01 \)), which was further modified by the gender influence (a dual interaction between gender and country (\( F = 4.882; p < .05 \)). Neither dual interaction nor triple interactions were significant. Detailed results are shown in Figure 7.

The general effect of the country factor suggested that Polish valued stimulation higher than Czechs and was related to the modifying role of gender. It was found that Polish males valued stimulation higher than Polish females, who obtained similar results to the Czech subgroups which were independent of gender.

The third group of values consisted of two variables: self-direction and universalism and were not related to controlled independent variables. The final and crucial finding was that neither self-direction nor universalism stood in reference to either the separately handled independent variables or their interactions. The importance of those values was similar in Polish and Czech groups and was found to be independent of any measured variables. Neither gender nor the country or hearing status affected differences in valuing self-direction and universalism in adolescents.

**DISCUSSION**

The impact of hearing impairment on values systems and their priority is seen in the findings for the values of conformism, achievement and tradition. Findings indicate that language and communication difficulties in mainstream society are an obstacle to the acceptance and fixation of values. The specificity of Deaf culture partially follows from the very core of deafness, the implication of which is the domination of their visual perception of the world, which is partially an effect of social life – firstly in the school dormitory and then outside the boundaries of the school, to a community that uses a common language code. The process of enculturation into Deaf culture comes intrinsically and naturally through the birth of a deaf child in a Deaf family, whereas children of hearing parents join the Deaf com-
community by contacts with their peers at a residential school for the Deaf, where sign language dominates (Priestley, 2003). In children educated in integrated classes, the process of integrating into the Deaf culture is even more delayed if the Deaf model is not present; it occurs during the study period and in adult life. Friendship bonds established at schools for the deaf are maintained throughout the person's life. Referring to terminology proposed by Geert Hofstede (2003), Deaf Culture is perceived as a collective as opposed to the strongly individualistic culture of hearing people, so conformity is valued higher by hearing impaired adolescents than by hearing ones, as it helps them participate in the social life of the Deaf community at school. Padden and Humphries (2006) in their study point out the linguistic inadequacy of the hearing impaired when it comes to the mainstream (hearing) population, which accounts for the greater closeness of people with deafness or hearing impairment. This may also contribute towards the perceived fixation on group values and a low degree of flexibility to respond to the values of mainstream society held by people in the deaf community.

Lane (2000) drew attention to the problems of psychological testing linked to language and reading comprehension, which must be taken into consideration. The questionnaire assessment method to test the deaf sample was adapted, however, it can be argued that for most authors (Padden, Humphries, 2006; Ladd, 2003; Lane, Hoffmeister, Bahan, 1996; Barnes, Mercer, 2002) who deal with hearing impairment and the consequences, that it is a question of culture withdrawal from language and communication. This concept is rather misleading, because culture is a relatively broad base and value orientation should be considered an essential component of culture. It means that harmonious relationships and strong ties between members are rewarded through sharing information, mutual decision-making, and domination of the group over individual private life. The main interests of the Deaf community as

Figure 7. Stimulation – the effect of the gender and country interaction
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a whole are language protection, the education of hearing-impaired children, and the organization of the deaf community as well as their social lives (Lane, 2000, 2005), therefore, individual achievements of community members are less important.

Findings from the current research indicate that values that relate to tradition are valued less for hearing impaired adolescents than for their hearing peers. This result might be analysed in the context of the value transmission process across generations. With the hearing-impaired child the transmission of values from childhood is complicated because the deaf population is very heterogeneous: 95% of children with hearing impairment are born to hearing parents (Mitchell, Karchmer, 2004), which is a reason for the existence of communication barriers and an alleged basis of other problems not only in personal development, but also in the acquisition and training of social competencies. Deaf children of hearing parents usually grow up in an environment with poor stimulation and low levels of engagement, and they are often treated as objects of speech therapy, which is connected with a more authoritarian way of communication that seems to focus on the parents’ own wishes rather than the subject of the personal dialogue in which the child’s feelings and needs are respected (Zalewska, 1998). In such a situation, deaf children of hearing parents are usually deprived of any possibilities or motivation to explain their own needs and take their own independent decisions. Additionally, children who are deaf might be less involved in the enculturation process of their parents’. Tradition might also be less important for hearing-impaired adolescents because of a less intensive interpersonal dialog with their parents and other family members, as well as the lack of proper understanding of the historical secondary time perspective. Kaiser-Grodecka and Cieszynska (1991) findings state that deaf adolescents are delayed in the process of secondary time understanding, furthermore, common modes of communication within a family seem to be involved in inculcating temporal concepts in deaf children, as well as time event ordering at two separate levels: the primary time level, which is related to personal individual experiences, and the secondary time level, which is a fundamental base for the development of structures of historical event understanding either in the context of personal history or national or general history.

The presented study reveals a crucial influence of gender and national factors on most values described by the Schwartz circular model. The findings reported in this article reveal the intercultural differences between the subgroups of Polish and Czech adolescents, which appear irrespective of hearing impairment, and which may account for the discrepancies in living conditions of Poles and Czechs. The results show that the hearing status of adolescents was the core factor that affects value priority systems and show that the three values of conformity, tradition, and achievement, are affected, however, gender and/or country differentiated other dependent variables. The Schwartz Portrait Values Questionnaire (Schwartz, 2006) concerns universal values, and Schwartz’s (2006) theory reflects the values and beliefs of the inhabitants of the rich West (Boski, 2009). Despite their territorial proximity, similar political experiences and numerous historical interconnections between Poles and Czechs, selected objective indices show there are differences between living conditions. On the basis of data collected by Remigiusz Koc (2006), based upon the Report on Human Development and carried out within the United Nations Development Programs (UNDP), in comparison to Czechs, Poles are in a less favourable situation with regard to economic determinants (average income per citizen, rate of national income, rate of social inequalities) and broadly defined living conditions (such as living standard, rate of long-term unemployment). Due to the existing diverse living conditions, in comparison with Polish adolescents, Czech youth in the current study highly value security and sense of power, whereas Polish adolescents are shown to value hedonism, stimulations and achievements.
which can be explained as their compensating for negative emotions that follow from harder living conditions (Koc, 2006).

Results indicate that both in Poland as well as in most Central European countries, including the territory of the Czech Republic, a specific set of values prevails, which are different from the characteristic patterns of Western European countries. As shown by Schwartz’s studies, Poles and Czechs have a high regard for conservative (traditional) values in particular, findings indicate that people from both central European countries tend to shift emotional, intellectual autonomy and egalitarianism into the background. This tendency is specifically noted amongst Polish people (Schwartz, Bardi, 2001). Research findings from the current study indicate that the value of tradition is particularly vital to Polish female adolescents. Similar tendencies are found concerning conservative values held by people in Poland and the Czech Republic, which has been emphasized in previous cross-country studies (e.g., Inglehart, Basanez, Moreno, 1998).

Attachment to materialistic values show that Poles are similar to Czechs, however, people living in both countries differ from most other Central European nations with regard to respected authority, which in the case of Poles is religious as opposed to secular-rational. In the Czech Republic, a study that focuses on the religiosity of people with hearing impairments shows that attitudes towards religion and nationality bear no significant difference in comparison hearing peers (Potměšilová, 2012). Owing to the diverse educational environments of the current study, the aspect of religiosity is not captured. However, the context of school settings for example residential special schools and inclusive local schools, findings indicate that students achievement is higher (Potměšil, 2011), which can be explained by the high quality of education for students who are deaf and attend schools for the deaf. Teachers in schools for the deaf have didactic skills that reflect the visual needs of their students with additional class management skills (Potměšil, 2011), however, students are far away from their family and home culture.

Like all families, children with hearing impairment who have parents with hearing impairment share similar orientations of particular value systems (Lane et al., 1996). In addition, the values orientation of children is also reflected in their approach to the school climate and in their attitudes to learning. In this instance studies show there is no significant statistical difference between hearing children and children with impaired hearing (Lasek, Potměšil, 1999).

CONCLUSION

The research was conducted to determine differences in the value priorities of hearing and hearing impaired adolescents. The hypotheses was based on the assumption that different priority patterns exist due to a person’s perceptual restrictions. Hearing status is the core factor to affect development factor in addition to cultural differences between the groups. The results showed that:

1. Values such as conformity, tradition and achievement are influenced by an individual’s hearing status. Findings from the current study indicate that students with hearing impairment assign higher values to conformity than to values of tradition and achievement and that scores assigned by students with hearing impairment were lower than hearing adolescents.

2. Value priorities of benevolence, security, power, hedonism and stimulation are affected by gender and country or by interactions between gender-country variables.

3. Self-direction and universalism are values not related to the controlled independent variables.

The survey includes some important data, however, it is difficult to generalize the results and draw a general conclusion because the hearing impaired population is highly heterogeneous. The family background and mode of...
communication are crucial variables, however, the school setting (special, mainstream or inclusive) as well as the dominant method of teaching and communicating (oral, sign, Total Communication, bilingual) are also important factors for consideration. In future studies those factors should be investigated further to improve our understanding of hearing impaired persons.

NOTE

The socio-cultural deafness model states that the hearing impaired person is a member of a linguistic and cultural minority due to the sign language usage. According to this model, the Deaf community use the term of „Deaf” (in opposition to „deaf”) to delineate its separateness from the community who communicate orally (Lane, 2000). Deaf children of Deaf parents are Native Signers because of their early access to the sign language but deaf children of hearing parents are late signers because they usually get access to the sign language at school. This extension is fundamental for communication skills development.

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