## WHAT CAN DEAF EDUCATION LEARN FROM VOCATIONALLY SUCCESSFUL DEAF AND HARD-OF-HEARING ADULTS?

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## ABSTRACT

The situation of vocationally successful deaf and hard-of-hearing (D/HH) adults has been the subject of a few studies. In our study we want to identify the resilience strengthening factors drawn from the biographies of 32 successful D/HH people that can be applied in educational programs. One part of the study includes guided qualitative interviews with specific questions on the participants' biographical experiences in the family, at school, and in their vocational training, as well as in their current situation. Additionally a questionnaire was applied to collect socio-demographic data and information on participants' life optimism, work-related self-efficacy, and general self-efficacy. Currently the data from all interviews are in, but not yet analyzed in detail. Some preliminary results are available from 24 participants regarding their answers to the final interview question. This asked participants to sum up what have been the five most important factors in their lives that have supported them to become vocationally successful D/HH adults. The results reveal that soft skills like personal competencies (self-discipline, openness, self-confidence, decision-making competence) and social competencies (capacity for teamwork, ability to communicate) as well as framework requirements (social support, in particular from parents or friends) are very important domains in this regard. These first results indicate that personal and social competencies have to be developed very early in D/HH children's lives, so that deaf education has to focus on this as an early intervention, continuing later in school and in professional settings.

The situation of D/HH adults who are successful in their working life and the parameters that lead them to describe themselves as successful have been highlighted in a series of studies over the past years (cf. Foster & MacLeod-Gallinger, 2004; Jacobs, 2010; Luckner & Muir, 2001; Luckner & Stewart; 2003; MacLeod-Gallinger & Foster, 1996; Punch, Hyde & Power, 2007).

For example Foster and MacLeod-Gallinger (2004) conducted a qualitative study with 15 D/HH graduates of Rochester Institute of Technology (RIT) who had made a career in primarily hearing settings. In semi-structured interviews the authors could identify amongst others that having a mentor in different stages of their lives has been of importance for their

career success. Often named were parents and teachers mentoring in the early years, and supervisors or co-workers in the workplace(s). The mentors were helpful in encouraging the D/HH individuals' self-esteem and self-confidence.

This result regarding encouragement was confirmed by a study of Luckner and Muir (2001). In their study the authors also identified successful D/HH students, all of whom were receiving most of their educational services in general education settings. One of their most important findings was the role of excellent teachers who were engaged with the 20 D/HH students in this study. What made the teachers outstanding was that they had high expectations of their students and were not afraid to challenge them in situations where they might fail. This seems to be very important to prepare them for the challenges of later life. Likewise the data from this study also reveal that the D/HH students interviewed appreciated the support and high expectations of their teachers.

In a subsequent study, Luckner and Stewart (2003) report on 14 D/HH adults who were successful in their careers. Important factors, beside the fact that all reported working very hard, were strong support from their families, the acceptance of the hearing loss by their family, the important role of school education (in particular learning to read and write), high personal motivation and the participants' love for life's challenges.

Jacobs (2010) in his work focuses more on the personal factors that are required to manage life successfully as a D/HH person. He defines a comprehensive and systematic framework of proactive psychosocial attributes and tactics that individuals who are D/HH can use to maximize their professional and social potential: Relevant factors referred to are control, desire, goal orientation, reframing, persistence, goodness of fit, learned creativity, and social ecologies. He concludes that an individual's aptitude for risk and resilience, rather than his or her hearing status or identity affiliation, is crucial for mastering each of the eight proactive psychosocial attributes and tactics mentioned above. In a following study, Jacobs, Brown, & Paatsch (2012) could reveal that it seems to be important for D/HH people to develop specialized skills for identifying, circumventing, or mastering deafness-related difficulties.

## AIM OF OUR STUDY

In our study with German D/HH adults who describe themselves as successful in their work we want to investigate their biographical backgrounds and experiences, focusing in particular on factors that have made them resilient and strong. If we can uncover such factors we should be able to give recommendations for educational practice on how conditions for strengthening resilience can be implemented as early as possible in educational settings.

#### METHODS

#### Sample

32 D/HH individuals will participate in the study, at present we have the data from 27 individuals; 15 are female, and 12 are male. The mean age of participants is 46 years (SD = 10.9), 9 individuals are older than 50 years, 13 individuals are between 30 and 50 years, and 5 are younger than 30 years. Furthermore, 20 participants have profound hearing loss, 5 have severe hearing loss, and 2 have moderate to moderately severe hearing loss. Of the participants, 17 use hearing aids, 6 wear cochlear implant(s), and 4 have no devices. For their communication, 18 participants prefer the spoken language and 9 prefer sign language. At least 21 of the participants have a certification for university access, 6 have achieved lower grades. While 11 only attended special schools for the deaf, another 11 only attended regular schools, and 5 attended both forms of school. The professions the participants currently practice reveal a broad spectrum covering vocations such as physician, engineer, social worker, translator, teacher, carpenter, yoga teacher, registrar, and hairdresser. While 18 participants have never been unemployed, 9 confirm having been unemployed at least once, while two were unemployed on more than one occasion. 23 of the participants work in a company with more than 50 work colleagues. 50 percent have other D/HH colleagues at their workplace, whereas the other 50 percent do not have D/HH colleagues. Nearly twothirds of the participants have no supervisory role in their company, but 9 individuals have a leadership role and also supervise hearing co-workers.

## Instruments

There were two parts to the survey in our study.

- 1. The first part was a semi-structured interview with each participant. For this we developed a guideline that highlights a series of important issues regarding factors and experiences in the story of the participants' lives.
  - At the beginning there are questions regarding the personal perspectives of the participants on their professional success: What does professional success mean for you? What do you think are your personal competencies and characteristics that have contributed to your success? Are there for you differences between a successful D/HH person and a successful hearing person?
  - A subsequent group of questions concerns family experiences and other experiences in early socialization: What is the contribution of your family, in particular of your parents, to your professional success? Are there experiences with other people in early childhood and adolescence that were important for you (e.g. peers, grandparents etc.)?
  - A broad domain of questions addresses the situation at school and then in vocational training or university: How was your time at school/vocational training/university? How did you experience it? Do you like to remember those times, and why (or why not)? Are there individuals from this period who supported you and prepared you

well for the challenges in vocational education? Which form(s) of communication did you prefer at school? How was it to learn together with people who were not proficient in your preferred communication mode?

• Finally, there is a set of questions regarding the experiences and conditions at the participants' current workplace: Is there any support for you considering your special situation as a D/HH person? Do you sometimes think it would have been better to learn and practice another profession? Are there specific competencies D/HH people have to learn to successfully manage the challenges of their work in a hearing world? Doing this work cannot always be easy, sometimes there are also failures: Do you have such experiences and if so, how did you cope with them? What are the specific competencies you need to get back on track again?

The interview ended with a final question requesting that the participant think over all the things he/she had discussed with the interviewer and to name the five factors that from his/her perspective are the most prominent for his/her professional success, beginning with the most important.

2. The second part of the survey was a questionnaire that the participant was given at the end of the interview with the request to fill in it at home and to send it back later. This included many questions regarding general and specific socio-demographic information about the person (see sample information above).

Additionally we included three scales:

1) The Work-Related Self-Efficacy Scale (Flemisch, 2007) to obtain information on specific problem-solving competencies in the workplace; item example: "I know that I can meet the challenges my work requires of me"; (Min. = 1, Max. = 5; M/SD = 4.47/.52; Cronbach's alpha = .66);

2) The Optimism Scale (Schmidt-Rathjens, Benz, van Damme, Feldt, & Amelang, 1997) on life optimism; item example: "I am very optimistic about my future life"; (Min. = 1, Max. = 5; M/SD = 4.35/.53; Cronbach's alpha = .68);

3) The Generalized Self-Efficacy Scale (Schwarzer, 1994) on general self-efficacy; item example: "In unexpected situations I always know how to behave"; (Min. = 1, Max. = 5; M/SD = 4.04/.53; Cronbach's alpha = .90).

# Procedure

Data collection occurred sequentially from February 2014 till February 2015. The sample was recruited through various means, including posting messages on several deaf-related German websites and personal email distribution by corporations known to employ many D/HH staff. We set no criteria regarding the question "what is successful?" but we left this decision to the D/HH respondents and planned to discuss this topic with the participants later on in our interviews.

#### RESULTS

As reported above we only have data from 24 participants regarding their sociodemographic characteristics, their results on the three scales on work-related self-efficacy, life optimism and general self-efficacy as well as regarding their answers to the final question of the semi-structured interview ("what are the five most important factors contributing to success in your work?").

Evaluating the role of work-related self-efficacy and general self-efficacy as well as life optimism we see (cf. instruments) that our participants possess rather high competencies in this regard: All three measures reveal a mean score higher than 4.0 on a scale ranging from 1 to 5. In particular the work-related competencies (M/SD = 4.47/.52) seem to be very strong. The correlations between the three measures reveal significant relations between life optimism and general self-efficacy (r = .71, p < .001), and between life optimism and workrelated self-efficacy (r = .50, p < .001). The relation between work-related self-efficacy and general self-efficacy only indicates a statistical tendency (r = .32, p < .10). When comparing the scale scores with the available socio-demographic data there is only one significant result to report: Participants who were unemployed on one or more occasions (but are now employed again!) during their professional career reveal significantly higher scores in the life optimism domain (F = 4.72, p = .038) and the general self-efficacy domain (F = 6.26, p = .019). Although the relation is a correlational one it seems that coping successfully with stressful events may contribute to strengthen self-efficacy and optimism.

Regarding the final question in our semi-structured interview we made a qualitative content analysis regarding the answers given by the participants. Figure 1 shows the results of this analysis.

The data in Figure 1 reveal on the one hand the factors contributing to personal vocational success and how often the factors were named by the participants (n = 130). On the other hand the data reveal how many of the participants mentioned each factor. We see that most of the factors are so-called soft skills, and personal competencies, in particular, seem of most importance for vocational success. Individuals who have high self-confidence, high self-discipline and a generally positive attitude to the world ("it is important to be optimistic – not to take too many things too seriously") seem to be advantaged. Regarding social competencies, to be able to work with a team, in particular, seems very important. A strong social network is another domain which helps D/HH individuals to make their way successfully (parents, friends, partners etc.).



Figure 1 Factors contributing to vocational success (n = 130)

## DISCUSSION

At this juncture we can present only very preliminary results from our study. The main work (analyzing the semi-structured interviews with 32 participants) still lies ahead of us and we hope to complete our present data with more detailed information in 2015/16. The available data, however, indicate anyway that strengthening social support and, in particular, developing the personal competencies of D/HH individuals seem to be a main task for deaf education. This also confirms the data from studies conducted by other researchers in the field (Jacobs, 2010; Luckner & Muir, 2001; Luckner & Stewart, 2003). In particular, having a positive attitude to the world seems to help D/HH individuals to cope successfully with challenges in their workplace. Our data reveal that life optimism is highly correlated with the perceived competence to manage work affairs.

First considerations regarding the conclusions indicated by the available data from our study make clear that the competencies named by the participants cannot be achieved when D/HH students leave school or university and start employment, rather these competencies are founded in childhood and youth. So it is of great importance to strengthen skills like reading, writing, doing math etc. but it seems to be just as important to strengthen the personal and social competencies of D/HH children very early on. D/HH students have to learn to cooperate with other students in kindergarten and at school, and they should be supported in their self-esteem and their strengths. Such a resource-oriented perspective in deaf education starts in early education and should be continued at school and later in the workplace.

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