**Psychological Factors Involved in the Acquisition of a Foreign Language among Students
with Visual Impairments**

Abstract

The current study presents a qualitative analysis of the psychological factors affecting the academic success of students with visual impairments, focusing on the students' perceptions of their own competence and abilities in learning a foreign language. Interviews were conducted with twenty-eight first-year college students in Israel who met the standard definition of being legally blind. Data were analyzed using a content analysis technique. This was conducted in two stages, first a within-case analysis and then a cross-case analysis. Three distinct themes emerged from the data: (1) self-perceptions of efficacy and feelings of competency, (2) achievement motivation, and (3) locus of control. The analysis of the interviews revealed that each of these three factors influenced students' experiences throughout their college years, both overall and in regards to their English studies in particular. The factors were interpreted using Bronfenbrenner's bio-ecological model of human development. Findings suggest that providing emotional and psychological support to students with visual impairments early in their academic studies could prove beneficial by providing them with the necessary tools for coping with the demands and requirements of higher education.

*Keywords:* visual impairment, self-efficacy, locus of control, motivation, bio-ecological model

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It is becoming increasingly important to enable students with disabilities to attend institutions of higher education (Hess, 2010); as such, institutions must find ways to accommodate the needs of these students. Implementing appropriate accommodations is particularly necessary for students with a visual impairment (henceforth VI) since they encounter unique challenges (Corn et al., 1995) and employ different methods for acquiring information in the classroom than students with sight (Morrow, 1999). VI refers to an eye or neural injury in the visual system that cannot be corrected by optic means; it limits the ability to accurately identify and detect details from a certain distance (Kadmon, 1989). One of the main obstacles that non-native English speakers with VI face during their academic studies is acquiring an adequate level of proficiency in English, which is often part of the academic requirements in institutions of higher education around the world. Nevertheless, little is known about the foreign language acquisition experiences of people with VIs.

Language Acquisition and VI

Written language is everywhere; it appears on billboards, in newspapers, on the internet, and in movies, among many other mediums. In contrast to people with sight, people with VIs are deprived of the casual exposure to the orthographic form of a language. There are contradicting views regarding the role of vision in language development. Two opposing theories dominate the debate. According to nativist scholars (Chomsky, 1980; Landau, 1997),

since the process of learning is flexible, lack of vision impairs the acquisition of language only slightly and could be compensated through other means (Urwin, 1984; Webster & Roe, 1998). Studies on the acquisition of language have found only minor quantitative differences between children who are blind and those who are sighted (Bigelow, 2005; Brambring, 2005, 2007). On the other hand, according to the empiricist view (Andersen et al., 1993; Araluc, 2002; Fraiberg, 1977; Preisler, 1997), sensory experiences are of crucial importance in the formation of concepts; therefore, due their different sensory experience, people who are blind would inevitably have different learning experiences than those of sighted people (Araluc, 2002).

These approaches to language acquisition also affect attitudes toward the acquisition of foreign languages. The prevailing belief in field of applied linguistics is that learners with VIs follow the same learning patterns as students with sight in their acquisition of a foreign language, as long as they have sufficient mastery of their native language (Cummiins, 1984). Other researchers have claimed that individuals with VIs exhibit a greater capability for acquiring a second or foreign language than sighted individuals. Morrissey (1931), for example, claimed that since blindness forces people to employ their other senses in order to compensate for their VI, they are in fact better equipped to learn a foreign language than people with sight. In addition, Nikolic (1986) claimed that people with VI have great potential to acquire a foreign language successfully due to their enhanced aural ability and intense memory training. Thus, Nikolic supports the teaching of foreign language to students with VIs within mainstream classes, provided that the instructional material is adapted to their needs. In other words, the materials would need to be modified in such a way that students with VIs can use their remaining senses to learn.

Conversely, other researchers have asserted that there are substantial differences in the process of foreign language acquisition across individuals with VIs and those with sight. According to Guinan (1997), individuals with VIs have distinct needs from those of their sighted peers which, in turn, direct them toward utilizing different strategies when acquiring a second language. Furthermore, since foreign language instruction in the classroom is primarily visual and is largely based on sensory exploration, students with VIs receive a more limited, if not distorted, version of the class material (Munoz, 2004). This barrier, in turn, may cause difficulties in learning abstract concepts in a foreign language.

Another aspect that may impede the acquisition of a foreign language among individuals with VIs involves personal and psychological factors. The common assumption among educators is that knowledge is constructed not only as a result of a person's developmental level and experiences, but also through cognitive and affective processes such as expectations, attributions, values, and emotions (Pajares & Schunk, 2001; Schunk & Pajares, 2009). These internal processes can motivate people and keep them actively engaged in the process of learning. Therefore, the challenges that students with VIs encounter when learning a foreign language are related not only to their disability, but to a range of psychological factors that contribute to their feelings of competence in acquiring a foreign language. A study examining the decision of individuals with physical disabilities (including individuals with VI) who chose to study information and communication technology (ICT) found that the two most influential psychological factors in their decisions were viewing their disability as part of their personality (rather than a limitation) and their high levels of self-efficacy (Mononen, Halonen, & Hayrynen. 2016). 2016). Not only were the students confident and believed in their abilities, they also believed that in order to acquire a suitable profession, they needed to pursue higher education.

Social cognitive theory hypothesizes that human achievement is a result of interactions between a person's behaviours, personal factors (e.g., thoughts, beliefs), and environmental conditions (Bandura, 1997, 2006). An extensive body of literature has established that cognitive abilities, as well as personality traits, are important determinants of academic and occupational achievement (Duckworth & Seligman, 2005; Furnham et al., 2002; Noftle & Robins, 2007; Poropat, 2009). Thus, researchers have attempted to identify non-cognitive variables that can predict academic performance, including personality tendencies (Poropat, 2009). Inquiry into the role of these variables is important, particularly with regards to learning a language, since according to Krashen's (1981) affective filter hypothesis, affective variables play a facilitating role in the successful acquisition of a second or foreign language.

Although most academic institutions provide accommodations for the physical needs of students with VIs (e.g., small classes with other students with VIs; assistive technology such as closed-circuit televisions), these accommodations do not necessarily ensure a successful and positive learning experience, especially in regards to learning a foreign language. The goal of the current study was to examine the various psychological factors that contribute to, or impede, the learning of English as a foreign language among students with VIs in higher education institutions in Israel.

We utilized a qualitative approach to explore the psychological factors that influence the learning process among students with VIs. Qualitative methods are often used when studying aspects of people with disabilities' lives because they allow for an examination of the various complexities of their disabilities within a social context, and enable participants to provide their own interpretations (Denzin & Lincoln, 1998). Case studies, in particular, enable researchers to make inferences about human behaviour based on the unique stories of individuals

and allow researchers to uncover the motivations behind participants’ actions and behaviour; they can help provide a deeper understanding of the studied phenomenon (Tzabar Ben Yehoshua, 2001).

Methods

**Participants:** Participants were selected in three different ways. 1. Virtual community – a call for participants for a research study was advertised in a newsletter for the blind. 2. Academic support centers – a similar notification was sent to the coordinators of various academic institutions, with a request to post it on bulletin boards. 3. Prior acquittance of the researcher with students with VI – one of the researcher is the head of the support center of a college. Participants had to have a mother tongue other than English and had to attend an academic institution. Twenty-eight first-year college students defined as legally blind (social security documentation needed) participated in the study. Seven of the students were completely blind, and the rest were visually impaired. Nine students were men and 19 were women. Students were between 20 and 42 years old. For complete demographic information, see Appendix A. We used a sampling of eight students who were given assistance and services at the support center in the college of one of the authors. After interviewing them, we realized that their past experience had a great impact on their learning English as a foreign language. Thus to eliminate any information of the influence of their academic life on learning English, we then decided to focus on first year students and to explore the effect of their past experience only. At first, we interviewed thirty eight students with VI from different institutions. However, only twenty eight addressed the topic rather than other aspects of their disability. The researcher offered all participants the possibility of using pseudonyms, but surprisingly, all participants decided to use their real name and even asked to be sent the article after it is published.

**Procedure:** The present study is a phenomenological, qualitative one that made use of case studies. According to Stake (2005) this methodology enables the researchers to answer questions like "how" and "why" more often than "what" and "how much" that provide information as to the personal experiences. Informed consent was obtained from participants before the start of the study. Following an explanation about the research goals and study design, students completed a demographic questionnaire and a semi-structured interview of approximately 30-40 minutes with a research assistant. The interviews addressed the students’ experience of learning English, both in secondary school and in university. They explored students’ past learning experiences; factors that they perceived to contribute to or hinder the learning process, especially in learning English; expectations and experiences during their academic studies, such as contact with other students, tutors and lecturers; and use of assistive technologies and provision of accommodations. All interviews were audio-recorded and transcribed. Transcripts were coded and analyzed for themes by each researcher individually and then compared with the coding of the other researchers. This way we tried to avoid the bias that might influence our interpretations.

In the study, triangulation involved two in-person interviews with the same participants at different times, and same questions in different ways in each interview. Each participant was interviewed twice during the study. The first interview took place during the first semester, with the aim to gather background information on each student’s past experience with English studies, the attitudes reflected to him by the parents and teachers throughout the years, and the factors that helped or hindered English learning as well as expectations for assistive education in college. The second interview was scheduled towards the end of the academic year, so as to examine the way in which the students with VI dealt with the academic requirements. Moreover, the second interview aimed at revealing whether the student with VI received appropriate service during the courses, and comparing the accommodations and measures necessary for successfully completing the requirement in the courses at the general studies with those of the English courses.

Content analysis of the data was conducted in two stages: first, a within-case analysis was performed and then a cross-case analysis. During the within-case analysis, each case was first regarded as a comprehensive case; that is, data were analyzed in such a way that the researchers could learn about the different contextual variables involved in each specific case. After the completion of the within-case analysis, a cross-case Acquisition of a Foreign Language among Students with VIs

analysis was conducted in order to build abstraction across cases and provide a general explanation that would fit across the individual cases (Yin, 2008).

Results

In the current study, three distinct themes describing different psychological forces emerged from the data. The first theme related to self-perceptions of efficacy and feelings of competency among students with VIs. The second theme concerned the two types of motivation for achievement: intrinsic and extrinsic. The third theme that emerged was locus of control. Although these themes are applicable to all students studying a foreign language, their impact appears to be enhanced for students with VIs due to the additional hardships that these students face as a result of their impairment. Not only do students with VIs confront the challenges that come with learning a new language, but their prior knowledge of the language and exposure to its written form is likely more limited than sighted individuals, which could subsequently affect their perceptions about their ability to acquire the language.

Theme 1: Self-efficacy

In the current study, self-efficacy was a key aspect that most participants mentioned as affecting their ability to cope and succeed in their English studies. For example, despite potential

hardships, one interviewee named Sivan insisted on enrolling in a mainstream university program and fulfilling her dream of studying neuroscience:

I didn't want *this* [being in a special program for the visually impaired in college] to be the reason I don't study neuroscience, something that I have always wanted to study. So, I took the entrance exams—which were very difficult for me, because I couldn't really see... But I never gave up. I told my parents, that's what I wanted to do in life.

When Sivan was asked whether she is able to cope with the demands of her academic studies, she answered without hesitation, “Yes, definitely, yes!” Sivan's high level of self-efficacy is also evident in her perception of her competence in English. She believed that her English skills did not pose a problem while taking the college's compulsory English course.

Self-efficacy levels are situational and develop around specific areas in life; thus, a high level of self-efficacy in one realm may not necessarily indicate the same level in another (Kaniel, 2006). An example of the situational effect of self-efficacy was illustrated in Yaffa's interview. Yaffa had finished her high school studies with an average of 100.4. The only exception to her academic performance was English, a subject for which she did not take the matriculation exam. She is a self-proclaimed perfectionist, who said she can achieve anything she wants to provided that she makes the necessary effort. English, however, was the one subject that made her feel unsure and anxious:

Once I start something, I always finish it, and do it perfectly.... I knew I was capable and smart, and I managed. English, on the other hand, was something I always had trouble with. I think I just don't have the ability to learn other

languages. What can I do...? Not only that, but I really felt physically ill every time I had to take an exam in English. I just didn't feel like I could do it perfectly like everything else.

Another example is Limor who was born visually impaired. Despite her inborn disability, she has never encountered any problem in her studies but in English. Limor stated that she was capable of reaching any academic achievement she set for herself regardless of her disability.

“Everything was just so easy…I have a history of success, so I didn’t have any misgivings or anxiety thoughts over not succeeding at the university… English, on the other hand, was a bit different. Although I was very sure of my abilities in all the other courses, I felt less confident in English. I wasn’t sure I could actually pass the exams or study without any help…”

Theme 2: The Dynamics of Motivation

In the current study, participants exhibited different patterns of motivation for learning English as a foreign language, as well as different success rates. An example of intrinsic motivation for English language learning was described by Shira:

I have always wanted to study English. I have always loved English... I think it's

a great language, and I just love listening to English and reading books. I am constantly curious to learn more about the language.

Although Shira was born blind, she believes that her teachers and parents do not need to be lenient with her because of her impairment. She learned Braille both in Hebrew and English, and found it to be very useful for maintaining her independence and expanding her knowledge without additional assistance.

On the other hand, another interviewee, Ziv, only understood the necessity of her English course for completing her bachelor’s degree once she was confronted with the consequences of neglecting her English studies. After several attempts to be exempted from English studies in college, she finally accepted the fact that without English she would not be able to graduate and continue on to her master’s studies:

Now I understand that if I pass the English course, my options for continuing to a master’s degree are open. Without English, I can just throw away my B.A., because I can’t do anything else without it. I study English only because I need it, I would have preferred to just not deal with it!

Ziv’s motivation for learning English is clearly an extrinsic one - the instrumental value of completing her English requirements. Indeed, her continued attempts to be exempted from her English studies highlight her extrinsic motivation.

Another example is Nechama whose love for English motivated her to learn more about the language.

“I always loved English. I found the language so interesting and exciting. I always want to know more and learn more about the language. My dream was to study English at the university, and to be an English teacher….I was actually quite looking forward to finally learn English at a formal setting”

When asked about her other studies, Nechama stated she had no motivation to succeed, however, she had high intrinsic motivation to learn English and to succeed.

Theme 3: Locus of Control

In the current study, students with VIs often attributed the difficulties they encountered in their studies to external factors, ranging from their VI to the unaccommodating school system, and even to the English language itself. Many expressed that they were certain that if not for their impairment, they would have been able to acquire English more easily and thus succeed in their studies.

Limor, for instance, excelled in her studies and was in her university's excellence program for studying psychology and biology. She noted that, throughout her studies, she never encountered any difficulties that she could not cope with on her own. Nevertheless, when asked about her English studies, she made quite a different claim:

I needed the English texts to be enlarged, unlike other texts in Hebrew. I think that the problem is with the English language. I am good at everything else, so the troubles I had in English were probably because of the fact that English is aforeign language. I don't think it has anything to do with me. I tried very hard, but the impairment made it difficult to properly learn English.

Limor's case demonstrates the influence that an external locus of control has on the motivation to learn. She believed that her difficulties in learning English were the result of factors beyond her control, and unrelated to her own actions and beliefs. In contrast, Ziv exhibited a clear internal locus of control, whereby she takes full responsibility for the difficulties she encountered while learning English. Ziv had transferred to three different high schools for various reasons, but in every case, she took responsibility for her failures:

I couldn't cope with boarding school. I love my home and can't be away from it. I am spoiled that way.... When I transferred to my second school, I left it because I couldn't adjust to the requirements of the major that I chose.

Ziv described herself as an assertive, and even stubborn, person. She decided that English posed too much of a challenge and necessitated more efforts than she was willing to make; thus, she did everything she could to be exempted from English studies. As a consequence, she finished high school with an incomplete certificate because she neglected to take the English matriculation exam. Once she reached university, she once again tried to be exempted from her English studies. She claimed that since English is too difficult for her, she did not feel the need to make much of an effort. Unlike other participants, Ziv was fully aware that she had given up on learning English and did not place the blame on anyone or anything else besides her own character, personality, and choices.

Another example is Shay who attributes his difficulty in his studies, and specifically in English to his being visually impaired. According to him, his VI limited his exposure to English through the media, such as watching films and TV. He also blames the school for not providing him with the necessary assistance and facilities to succeed and for not believing in him.

“They are mostly to blame. Everyone always told me I have great potential, but they didn’t know how to realize my potential…. They didn’t have high expectations of me… the school didn’t make the necessary adjustments to provide me with what I required. The school used a teaching method and program that didn’t fit my abilities or disabilities, which is why I failed.

In English I had difficulties because of my impairment. I couldn’t watch movies and TV like everybody, so I was not exposed to the language as I could have. ”

Shay dropped out of school, and despite the fact that he is currently studying for a law degree at a university, he keeps directing the blame for his difficulties to others.

Discussion

To the best of our knowledge, this study is the first to explore various psychological factors that influence the experience of students with VIs in learning English as a foreign language. VI Not only do students with VI face the challenges of acquiring a foreign language, they also carry the burden of the difficulties associated with their impairment, such as limited exposure to the orthographic form of the language. The analysis of the interviews with the students revealed three main themes: self-efficacy, motivation, and locus of control. Each of these factors influenced the students' experiences throughout their secondary school years and during their studies in college, both overall and in English courses in particular.

The findings indicated that an influential factor in increasing motivation for learning in general, and for English in particular, was self-efficacy or, in other words, the belief in one's competencies. Researchers of personality and social psychology have long been interested in the role of self perception in affecting behaviours. Individuals who are similar in objective aspects may differ in their perceptions of themselves and in their perceptions about how others view them, which may subsequently lead them to exhibit different types of behaviour (Bandura, 2012; Bong &

Skaalvik, 2003). Beliefs and perceptions about oneself are often related to a person's past experiences and achievements (Shapiro et al., 2005).

One way in which beliefs about oneself can be measured is in the way people judge their own capabilities and level of competence, otherwise known as *self-efficacy.* In his original theory of behavioural change, Bandura (1977) defines self-efficacy as the “beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments” (p. 3). Self­efficacy refers to the expectations and beliefs that people hold of themselves in regard to their achievement ability, and it is assumed to affect people's motivation and behaviours (Bandura, 2006; Bong & Skaalvik, 2003).

Educators have long recognized that students' convictions regarding their capabilities to succeed in academic activities affect their academic performance (Pajares & Schunk, 2005; Usher, 2009; Zimmerman, 2000). Students with different self-beliefs have been shown to exhibit varying levels of engagement in school, cognitively, socially and emotionally. Thus, *academic self­efficacy* reflects individuals' confidence that they can successfully perform a given academic task at a designated level (Bandura, 1997). Numerous studies have examined the notion of self­efficacy in education and have found that students' self-efficacy beliefs are linked to achievement in various academic areas (Usher & Pajares, 2006). Furthermore, students who believed in their academic abilities tended to be more interested in their schoolwork, had higher academic goals, were more willing to exert greater effort in order to succeed, and displayed greater resilience when encountering difficulties during the completion of tasks (Bandura, 1997; Pajares & Schunk, 2005).

These findings are in accordance with theoretical frameworks that outline the contribution of self-efficacy in motivating students (Bandura, 1977). One aspect in which deficits in self-efficacy were most pronounced was in participants' perceptions of their own competence with regards to studying English. Overall, even participants who considered themselves to have high levels of self-efficacy in other domains expressed feelings of incompetence or an inability to successfully learn English. Regardless of whether or not these feelings were indeed justified, most students in this study found learning English to be a task too difficult to handle, which subsequently led to increased levels of stress and anxiety. These feelings, in most cases, resulted in a decreased motivation for learning English and, thus, to low academic achievement in this area.

Another factor within the theme of motivation that emerged from the data was the type of motivation that participants exhibited.

Participants who expressed having intrinsic motivation for learning English often reported a higher competency in the language compared with those with extrinsic motivation, who were only motivated to learn English in order to “get ahead” (i.e., earn their academic degree). The contribution of intrinsic motivation to learning English has also been identified among sighted students (Dornyei, 2009). In the current study, it appeared that learning English for the sake of learning itself helped participants to better cope with the increased hurdles that they encounter as students with VIs, including the limited means that are available to them for acquiring the language.

The final theme that emerged from the data was locus of control.

In particular, having an internal locus of control, namely a belief that one's own behavior or personal characteristics (i.e., ability, effort) influences one's outcomes, was found to affect students' attitudes towards leaning English (Mamlin et al., 2001). Individuals with VIs who possessed an internal locus of control exhibited greater motivation in pursing their academic studies, reported higher levels of self-efficacy, and generally noted having better academic achievements.

The contribution of psychological factors to participants' academic success in their English studies can be interpreted using Bronfenbrenner's bio-ecological model of human development (Bronfenbrenner, 2001, 2005). The bio-ecological approach offers a framework for understanding the effects of disability on development by emphasizing the interaction between a person's individual characteristics ad his or her environment. The research focuses mainly on the individual characteristics, i.e. internal factors and their effect on the learning experience. Self-efficacy, motivation and locus of control were found to have an impact on the success and achievements of the learning process of individuals, and on the learning of English in particular. Additionally, the model highlights an individual's strengths rather than his/her weaknesses. Moreover, this model proposes that people have a role in changing their contexts, either by simply being present in a particular environment, or through their reactions to and interactions with others in their immediate surroundings.Importantly, the model asserts that individuals’ behavioral tendencies are most likely to direct their future development, either by motivating them to take action or sustain a current action or, conversely, by serving as an obstacle to development (Bronfenbrenner, 2001, 2005; Bronfenbrenner & Ceci, 1994).

Implications

Psychological variables are important factors that influence the learning a foreign language and, thus, it is imperative to consider them when working with students with VIs. The current research findings suggest that enriching students’ emotional and psychological strengths early on in their studies could be beneficial, especially for students with VIs, as it provides them with the necessary tools for coping with the demands and requirements of higher education. Therefore, we suggest that academic institutions should focus on students’ affective factors and promote personal empowerment with the goal of enabling students to take responsibility for their studies and confront the difficulties they may face during the process of acquiring a foreign language.

Limitations and Future Directions

This study was conducted with a relatively small number of students from the higher educational system in Israel and did not account for differences by gender. In addition, the study did not examine whether causal relations existed between the different factors. As the first study of its kind, this research is a starting point for future studies that should employ longitudinal designs and recruit greater numbers of participants in order to better understand the influence of psychological factors on academic success. Further, examining additional measures may provide a broader picture of the psychological factors responsible for participants’ academic success.

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