STUDENT REPORTS ON THE USE OF A SIGHTED GUIDE AS A LOCOMOTION STRATEGY IN SCHOOL SETTINGS

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Abstract

The use of the sighted guide is one of the most used strategies in school settings when it comes to blind people's locomotion. This strategy, when well executed, offers the blind person safe guiding and contributes to the recognition and familiarization of environments. Within this theme, the research question is posed: how do blind students describe the use of this strategy in school environments? In this sense, the objective of this study was to identify the opinion of blind students about the use of a sighted guide as a locomotion strategy in school settings. Six blind students, enrolled in regular schools participated in the research. The data collection procedure was through a semi-structured interview. The analysis of the reports revealed five categories: positive and negative points about the help of sighted guide in the most crowded outdoor environments within the school; positive points and negative points about the help of the sighted guide in the most crowded indoor environments within the school; and, positive points regarding receiving assistance from the sighted guide in less crowded environments within the school. Through the reports, it was possible to identify that the help of the sighted guide was essential, especially regarding the most crowded school environments and less crowded school environments. The relationship of trust was the determining factor for the locomotion to occur faster and safer. On the other hand, it was identified that the fact that the students who act as guides did not know how to deal with the blind students in certain situations, generated insecurity and discomfort, causing the participants, in these cases, to prefer not to move and/or to use other locomotion strategies. Given the data, it is concluded that, because the sighted guides in the study do not have the knowledge on how to offer the blind student an active role during the locomotion and a more efficient development of their capacities and abilities, all the agents in the school institution should receive a qualified training on Orientation and Mobility techniques.

Keywords: Special Education. Orientation and Mobility. Sighted Guide.

Introduction

Among the different locomotion strategies used by blind people, the use of a sighted guide can be considered the most used one (MACIEL, 1988; 2003). When well executed, this strategy aims to offer greater physical security to the blind person, in addition to being the most effective strategy so that the recognition and familiarization of the environments - the elaboration of the mental map - can occur (GARCIA, 2003; ZENGO; FIORINI; MANZINI, 2016).

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The sighted guide can be defined as a person who has no visual constraints, who assists a blind person, and/or low vision person, during the locomotion in different environments (FELIPPE, 2001, MACIEL 1998, 2003).

When it comes to the school context, it is possible to affirm that most blind students have some people who act as guides to move within the environments, and the guiding selection varies from roommates to employees of the institution.

The main purpose of the sighted guide during locomotion is to provide the blind person with verbal and kinesthetic information that is clear and objective so that the person can interpret each one of them correctly, in order to execute the corresponding movements (FELIPPE; FELIPPE, 2001; MACIEL, 1998; 2003; MELO, 1991; NOVI, 1996). In this sense, for the locomotion to be truly safe and natural, it is imperative that the guide knows how to offer this information and the blind person knows how to interpret them and how to act accordingly.

In order to offer a systematization for the offer and interpretation of this information, the Orientation and Mobility programs were developed (BRUNO; MOTA, 2001; FELIPPE, 2001; FELIPPE; FELIPPE, 1997; GARCIA, 2003; GIACOMINI, 2008; GIACOMINI; SARTORETO; BERSCH, 2010; MACIEL, 1988; 3002; MAGALHÃES, 2010; MELO, 1991; NOVI, 1996). Such programs can be defined as care sessions and aim to teach and train the different mobility techniques - considering self-help techniques, with the sighted guide and the cane - so that blind people can move more safely, autonomously and independently in different environments (BRUNO; MOTA, 2001; FELIPPE; FELIPPE, 1997; GIACOMINI, 2008; GIACOMINI; SARTORETO; BERSCH, 2010; MAGALHÃES, 2010).

Regarding the techniques for the guides, the Orientation and Mobility programs aim to teach and train the implementation of specific techniques so that both the guide and the blind person know how to act in different mobility situations. For the guide, the training is directed to teaching necessary information - kinesthetic and verbal - so that, at the end of the training, he/she is able to describe the environment in a clear but detailed way and to consider variables such as : 1) the type of environment (indoor and outdoor); 2) objective of locomotion; and, 3) the situation in which they are inserted (very or a little, crowded or busy, public or private, etc.). Therefore, the sighted guide needs to learn this knowledge to understand about the most appropriate technique to be used, and thus, to offer the kinesthetic information related to it (FELIPPE; FELIPPE, 1997; GARCIA, 2003; MACIEL 1988; 2003).

As for the blind person, the focus of training is both on the interpretation of the information offered by the guide and on the learning and training of the movement execution, corresponding to this information. In this sense, it is important to highlight that, opposite to common sense, locomotion with the sighted guide cannot be

considered as exclusively dependent - where the blind person totally depends on the guide to move, since, for the locomotion to be safe and natural, in such a way to offer a greater movement autonomy to the blind person, it is necessary that they both master their respective movements in relation to each one of the techniques (GARCIA, 2003; MELO, 1991).

Although this is considered the safest locomotion strategy for blind people, it is possible to observe, through the literature, that blind students and their respective guides have hardly participated in specialized training programs (ZENGO; FIORINI; MAZINI, 2016; 2017). Considering that even without having participated in a program aimed at the training of Orientation and Mobility techniques, blind students do not stop moving around using this strategy, and in this context, the research question: what is the opinion of blind students about the use of a sighted guide as a locomotion strategy in school settings?

Therefore, the objective of this study was to identify blind students' opinions about the use of sighted guide as a locomotion strategy in school settings.

Method

This is a descriptive study. The selected participants met the following criteria: 1) have a diagnosis of blindness; 2) to be enrolled in a regular school, from the 5th grade on, as before this school phase, the recommendation is for pre-cane.

Six congenital blind students participated in the study. They were named as: P1, P2, P3, P4, P5 and P6. It is worth noting that, in addition to blindness, P2 also had physical disability in the upper limbs and P1, P3 and P4 had residual visual function (perception of clarity and presence of figures). The mean age of participants was 13 years, the youngest being 11 and the oldest 15 years.

For this research, all necessary ethical procedures were performed.

Procedures for data collection

The data were collected through a semi-structured interview, which is defined by Manzini (2006) as a procedure for searching objective information, face to face with the interviewee, and is characterized by the use of a previously prepared script.

For the construction of the script used in this study, both the locomotion strategies presented in the literature (BRUNO; MOTA, 2001; FELIPPE; FELIPPE, 1997; GIACOMINI, 2008; GIACOMINI; SARTORETO; BERSCH, 2010; MACIEL, 1988; 2003; MAGALHÃES, 2010) and the professional experience of the researcher,

who worked as an instructor of Orientation and Mobility in a specialized institution in a city in the state of São Paulo for one year were considered.

The first version of the script was sent and analyzed by two judges, so that it was adequate according to the purpose of the study. The final version integrated 56 questions addressing different locomotion strategies, such as tracking strategies, mental mapping, with the sighted guide and the cane.

The interviews were conducted individually and lasted an average of 50 minutes. The interview site varied according to the availability of each participant. The audios were recorded.

Data Treatment and Analysis

The interviews were transcribed in their entirety. In order to offer a greater clarity to the reports, it was decided to use both the grammatical norms and the symbology proposed by Marcuschi (1986). After the transcription, the contents of each of the interviews were analyzed through content analysis proposed by Bardin (2010), which according to the author, is defined by the combination of the elements of the discourses related to the same subject.

From this analysis one category was identified: locomotion with the sighted guide, and five subcategories: 1) positive points of receiving help from the sighted guide in the most crowded outdoor environments within the school; 2) negative points about the help of the sighted guide in the most crowded outdoor environments within the school; 3) positive points of receiving the help of the sighted guide in the most crowded indoor environments within the school; 4) negative points about the help of the sighted guide in the most crowded indoor environments within the school; and, 5) positive points of receiving help from the sighted guide in less crowded areas within the school.

Results And Discussion

The presented results are based on the five identified categories.

Positive points of receiving the help of the sighted guide in the most crowded outdoor environments within the school

One of the school settings is the outdoor environment, characterized as the ones where the students need to access to go from place to place within the school setting. These environments can also be called open environments. Among the most cited

outdoor environments by the participants are the corridors, the stairs, the patios, the eating areas and the cafeterias.

From the analysis of the reports, it was possible to identify that all participants have people who assist them during locomotion in these environments. For all of them, the closest friends are the ones that play the role of the sighted guide in these environments, that is, it was their friends who accompanied them at intervals and recess and from place to place.

Regarding these mentioned school environments, students reported that two different situations could be experienced, the first one characterized by times when there were many people transiting - such as recess, arrival and departure - and the second one, at moments when there were few people transiting - as in class time. In both cases, the students reported that there were two main benefits of moving with a person without visual restrictions: faster and more agile locomotion and physically safer locomotion.

In terms of locomotion agility, students reported that in situations when they needed to move faster - such as at the recess, to go to the cafeteria line, for example - being with a sighted guide was the most appropriate strategy due to the fact that the locomotion was faster and they did not risk "wasting" recess time trying to find the end of the line.

Considering that among the three types of locomotion, the one performed with the sighted guide is considered to be the most dependent, this is due to the fact that in some situations, moving with the help of another person becomes a more interesting strategy than being independent and, as in the example mentioned above, not being able to quickly solve the problems arising from situations. In these cases, it is necessary to understand the importance of the student's decision-making power to choose the most appropriate locomotion strategy for each of the situations, even if he/she knows how to use the cane and is able to move independently.

After analyzing the interviews, it was possible to identify that none of the six participants - nor their respective guides - had received training in Orientation and Mobility techniques. In this context, it was found that, although both blind students and guides knew how to move in a functional way, because they were able to move from one environment to another, they did not know how to do it in such a way to allow the students to be an active member of locomotion, giving them greater movement autonomy.

Although the literature does not address the harm caused by the fact that a blind person moves with a sighted person who does not master the techniques, it is necessary to highlight that the worst is the fact that during the locomotion the blind person ends

up becoming, in most cases, dependent on the other. In other words, he/she fails as an active member of locomotion and becomes a dependent member, not being allowed to choose how to perform the movements. In this way, it is possible to understand that, due to the lack of knowledge about the specific techniques, the locomotion in relation to guide and blind person, although functional, becomes passive and dependent.

Another aspect mentioned as a positive point for the use of the sighted guide as a locomotion strategy was the fact that being with a person helping to move contributed to their physical safety during the trip. For P1, for example, being accompanied made him move more safely, as when coming across any obstacle, he was certain that the guide would be careful to warn him, telling him how he should act to overcome it so that accidents could be avoided.

> [...] what is your opinion about having the help of people for moving in these environments [...]? (E.).
>
> [...] It's great right? For the issue [...] the risk of you bumping, stumbling, falling. They help you diverting. They warn you [...] (P1).

In fact, one of the main functions of the guide is to provide the blind person with the necessary physical safety during the trip (FELIPPE; FELIPPE, 1997; GARCIA, 2003; MACIEL 1988; 2003). In addition, the fact that the guide instructs the blind person to overcome obstacles - holes, steps, changes on the floor surfaces, etc. - favors the construction of the individual's motor memory. That is, he/she will discover new ways of moving, and, over time, generalize this use to other environments in other situations.

However, the guide must know how to do this in a clearly and objectively so that the blind person does not get confused and ends up getting insecure in performing the movement. And one of the ways to know how to instruct the blind person effectively is through the training of Orientation and Mobility techniques.

When the guide does not master how to instruct the student to overcome and/or deviate obstacles during the locomotion correctly, as time passes, this situation causes the blind person to prevent the construction of the motor memory and feel insecure about getting around.

In addition to these benefits, P6 also highlighted the fact that moving with a guide in the outdoors allowed him to suspend the use the cane. According to the student, using the cane to get around was uncomfortable, as it made him different from other students. As a result, he preferred to move with other people.

> Why don't you like walking with the cane? (E.).
>
> Because it's bad ... Because I don't like it, I like to walk normal. (P6).
>
> Do you think that when you have the cane you are not normal? (E.).
>
> Yes, I think so. (P6).

It is important to note that blindness cannot always be identified visually, since there are innumerable reasons why a person can be born and/or acquire it. In some cases - when there is optic nerve rupture, for example - hardly the absence of vision can be identified, since the damage is internal, and there are no physical changes. In these cases, one of the few ways a person can be identified as blind is through the use of the cane. And because of the stereotypes formed by society - such as lessening the disabled person, loss of self-esteem, accompanied by their own underestimation - blind people often reject the use of the cane (MACIEL, 1988).

These data are in line with P6's report, who, faced with the lack of help from the sighted guide, prefers not to move:

> And when none of your friends are in school, how do you get around? (E.)
>
> Then I'll walk with ... I sit. (P6).

The reports allow us to verify that the sighted guide is a functional strategy that offers more speed and safety for the day-to-day movement of the blind students, considered by them as the most used strategy in school outdoor environments.

Negative points about the aid of the sighted guide in the most crowded outdoor environments within the school

While this is the most used strategy by participants in outdoor settings, students reported that in some cases being assisted by a sighted person was not an appropriate strategy.

According to the students, the main negative point for the use of the sighted guide as a locomotion strategy in the outdoor school environments was the lack of a relationship of trust between them and the guide. For the participants, confidence was characterized as the determining factor for the locomotion success. Thus, the lack of trust was understood as the main point for making them feel insecure when moving with certain people, opting, in these cases, for using other locomotion strategies - such as tracking and the cane - or not getting around as in the case of P6.

Regarding the importance of establishing the trust relationship between the blind person and the guide and the consequences of their absence, P1, P2 reported that:

> [...] when you are with someone you already know and you feel confident, you know when there is something he will say it [...], but [...] if it is with someone [...] you don't know, he will not know how to deal with you, he/she doesn't know when he has to warn you, he doesn't know how to do it [P1].

> When you don't know the person [...] if there is a "bump" in front of you, he may forget to warn you. When there is something in front of [...] an obstacle, [...] the gate [...] the wall, he/she may forget to warn you. (P2).

In analyzing the reports, it was possible to perceive that the relationship of trust goes beyond whether they have already moved together or not, according to the students, they must perceive that the person is honest, "cool" and will not let them go through any embarrassing situation. As an example, P4's report when asked what his reaction would be if a student from another classroom, whom he had no contact with, offered help:

> I would not trust him/her very much ... I don't know, I don't know if he/she might be up to something for me, right? This is one of my fears. So, I only trust people I know [...] I'm kind of warned. It takes me a little while to trust people. You have to show me that you are not a stranger and that you will not put me through anything, right? (P4).

And P3 pointed out:

> [...] I have to trust a little bit in that person, I have to see if that person is cool [...] (P3).

From these data, it is important to highlight the need to gain the blind person's confidence so that they can move with the greatest safety and naturalness possible with the guide.

Another negative point, pointed out by P3, was the fact that although they require the help of people to move around in the outdoor environments, it often caused the locomotion to slow down. According to him:

> Going with the guide is a bit slower [...] because as there are two people walking, one holding on the other's shoulder, we have to walk close to each other [...] and it is dangerous to stumble on each other's feet [...]. It gets a little harder. (P3).

This report may be characterized as another example of how lack of training can lead to uncomfortable motion for both the guide and the blind person. Among the different behaviors to be trained in the Orientation and Mobility programs is the

positioning behavior with the guide. Such behavior is fundamental so that situations such as the one reported by P3 do not occur. In this case, it is understood that if P3 knew how to position himself correctly when moving with the guide, his opinion about this strategy in outdoor environments could have been different.

In addition, it is important to highlight that in the training of Orientation and Mobility techniques, the guide is informed about how to position towards the blind person, and also about the importance of adapting to the development of the locomotion, so that locomotion can be safe and natural. For example, at the beginning of the school year at a new institution, the speed of a blind student's locomotion is likely to be slower, however, as the time passes because of a developed better mental map and motor memory, the speed of locomotion may increase. In such cases, it is imperative that the guides are sensitive to follow this change of speed so that they can offer the blind students more comfortable, natural and safer locomotion.

Positive points of receiving the help of the sighted guide in the most crowded indoor environments within the school

Another school setting is the indoor environment, also named as closed environments, i.e., they are those environments with access through doors. Indoor environments reported by the participants were: classrooms, coordination room, principal rooms, tennis courts, multifunctional resource room, restrooms, library, computer laboratory and video room.

When questioned, it was identified that only P1 used the sighted guide in indoor environments. According to the student, having the help of a person to move in these environments:

> It facilitates and much! [...] Because you no longer have that concern of bumping somewhere, of thumping someone, he already deviates you ... It makes it much easier. (P1).

In this sense, it was identified that the only positive point for using the guide was the fact that the locomotion became faster and safer, since knowing and trusting the people who guided him - best friends - he knew that he would not suffer any kind of embarrassing situation – bumping into people or furniture, bumping into the wall and so on.

Regarding the non-use of this strategy by the other participants, it was identified that, due to knowing the indoor environments mentioned above, P2, P3 and P4 opted to use other locomotion strategies, such as tracking and mental mapping. For them, it was useless to have the help of a person in these environments, since they were able to move independently.

In view of the reports, it is observed that, although the indoor environments were composed of many students and many furniture pieces, they were characterized as environments where P2, P3 and P4 could move more independently, that is, without the assistance of another person.

Given this data, it is worth highlighting that being in the same settings every day allows the blind person, if well instructed, to build the mental map of the place and to adjust the specificities of the place. In this way, as the students acknowledge the environment - by identifying the reference points, the physical experimentation of the place – they can master their movements in relation to the environment, until the help from another person becomes dispensable and they are able to move around more independently.

Unlike the other participants, P5 and P6 reported that the main factor preventing them from using the sighted guide to get around in indoor school settings was that they did not move within these environments. According to P5 and P6, the only time they made use of the sighted guide was when they arrived in these environments - and they were placed in their desks and/or chairs - and at the moment the class time was over and they needed to leave these places.

From this data, it is possible to discuss the importance and the need to carry out collaborative work. In general, accomplishing independent locomotion cannot be based on an isolated and/or empirical teaching of one or another area of knowledge (MACIEL, 1988, 2003). In this way, it is fundamental that professionals from different areas - such as psychologists, teachers, physical educators, occupational therapists and physical therapists - are involved and work collaboratively so that different aspects of development can be stimulated.

In this case, for example, more than mastering the specific techniques of Orientation and Mobility, it was necessary to work on aspects related to confidence, security, self-esteem, and concepts related to orientation and spatial organization, among others.

Negative points about the help of the sighted guide in the most crowded indoor environments within the school

In relation to the negative points about the use of the sighted guide indoors, where the participants were familiar with, P3 reported that the fact that the other students were moving around the room made him uncomfortable in using this strategy.

According to the student, when P3 chose to move with the guide in these environments, the other students would eventually bump into them, causing them to split, and as a result, he would get "lost." Realizing that these situations began to

recur, he decided to learn other ways of getting around indoors, so that he was not so dependent on the other and would not go through such situations. Thus, he was learning to get around using the tracking and the cane.

The fact that the other participants did not make use of the sighted guide indoors, made them unable to give their opinion on the negative points for their use.

Positive points of receiving help from the sighted guide in less crowded areas within the school

This subcategory refers to less crowded school environments mentioned by the participants. They were reported by them: the computer room, the parking lot, distant halls, the principal's room, the laboratory, the coordination room and the video room.

After the analysis of the reports, it was possible to identify that all the students who participated in this research indicated the sighted guide as essential to go to these environments and to move inside them. According to the students, the main benefit to being accompanied by the guide was that through it, information about the structure of the environment and their positioning in relation to the environment were offered in greater detail.

For the blind students, this strategy was perceived as the most appropriate for them to obtain the information they needed to mentally map these environments more quickly. According to P4, having the help of a sighted person to guide him in these environments:

> It's good, at first, it's good they help me walk because after that I'll know where each thing is [...]. (P4).

In fact, one of the most important roles of the sighted guide, especially in less crowded and/or unfamiliar environments, is to provide detailed information about the environment so that the blind person can appropriate them, and thus, is able to elaborate a mental map of the place (FELIPPE; FELIPPE, 1997; GARCIA, 2003; MACIEL, 1988; 2003).

However, describing the environments and structures they are composed is not a very simple task, it is necessary for the person to know how to offer this information in an objective and clear way so that the student can understand each one of them and finally master these spaces more naturally. This situation, if not well managed, can cause the blind person to misinterpret the spaces, causing insecurity and, consequently, the dependence of the locomotion.

Conclusions

It is concluded that the use of the sighted guide is essential for the locomotion of the blind students, especially when it comes to locomotion in the most crowded school environments and in the least crowded school environments.

In contrast, when they move around in more crowded indoor environments, this does not become the most appropriate strategy. The use of the cane and the tracking are those that offer them more independence.

It is also concluded that this is one of the most used strategies by students in school environments, that the training of the specific techniques of the Orientation and Mobility programs is indispensable for the student to be offered with an active role in locomotion, autonomy of movements and a naturalness in locomotion.

Considering these data, the present study suggests that the stakeholders within the school community - teachers, students, employees and management - receive a qualified formation, so that they have knowledge on how to favor development of the different aspects - psychomotor, psychological, physical and social - of the student.

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