PhD

Doctoral Program in Economic and Business

**AUDIO DESCRIPTION IN THE THEATER: ASSESSMENT OF EXPERIENCE QUALITY AND SATISFACTION AMONG INDIVIDUALS WITH VISUAL IMPAIRMENT**

Name: Yossi (Yosef) Freier Dror

Faculty: Business (management)

# Abstract

**The purpose of audio description**

Audio description aims to transmit visual information through verbalization while adhering to standard language rules, as well as precise, succinct and creative word choice, in order to give listeners a full picture of the characters and events taking place before them. Audio description is designed to be integrated into the pauses between music and dialog so as not to interfere with the verbal content of the source piece. The use of this technique makes it possible to provide thousands of blind and visually impaired individuals with the opportunity to consume cultural content along with their families and friends, and to take an active part in the cultural discourse.

**Audio description components in theatre**

**Preparing the play:** Once a play has been chosen, the audio describers prepare the audio description script. This preliminary stage takes up approximately fifty hours, during which the audio describers study the play, write down what they are going to say, and determine the points of the play at which the audio description should be integrated.

**Preshow**: a) Touch tour ­– as part of the tour the participants meet with the stage manager, the actors and the audio describers, hear explanations about the characters in the play, connect the voices of the actors with the characters, learn to identify the voices of the audio describers, and get familiarized with the stage layout, the major props and scenery. b) Trailer – the participants listen to a prerecorded trailer, which includes explanations about the play, the characters and the stage design. The trailer is also available for prior listening at home.

**During the play:** At this stage the spectators are ready to enjoy the play. The audio description is broadcast into their earphones live (not prerecorded) in parallel with the play’s content, describing what is happening on stage without interfering with the viewing experience and while remaining faithful to the play’s creators’ and interpreters’ intentions.

**Research goals**

Up until the present day, very few empirical studies have been carried out to corroborate the validity of audio description as a whole, and in the theater in particular. One of the main goals of the present research, therefore, was to put the practice of audio description itself to an empirical test. The study examined the effect audio description has on the quality of the experience of blind and visually impaired theater goers as expressed in terms of the following parameters: (1) spatial perception, (2) narrative perception, (3) sense of engagement in the experience. In addition, the study looked at the effect audio description has on the degree of enjoyment blind and visually impaired theater goers derive from the play. Since no validated tool was found in the relevant literature for the measurement of spatial perception, narrative perception, and sense of engagement, we developed our own tool, which we thoroughly validated using rigorous procedures.

An additional goal of the present research was to examine the quality of the different components of audio description – the audio device, the touch tour, the trailer, and the verbal description itself – in order to provide applicable conclusions and recommendations that could improve the quality of this kind of intervention. Furthermore, the study aimed to present an accurate picture of the considerations, challenges, and obstacles facing blind and visually impaired people who wish to participate in the theater-going experience, and to present practical conclusions and recommendations that could improve the implementation of audio description in feasible and significant ways.

**Methodology**

The present research employed an integrated, quantitative and qualitative study protocol. The quantitative findings are based on a sample of 83 participants with significant visual impairment or blindness. The mean age of the participants was 54, with 39% being 60 years of age or older. The qualitative findings are based on 25 interviews and 2 focus groups.

When examining the effect audio description has on the theater experience, the variable that carries the greatest risk of affecting the validity of the findings is the quality of the theater production itself. The standard of the performance shapes how the audience perceives the experience to a large extent, and can therefore obscure the contribution of audio description to the overall experience. Accordingly, a research protocol was put in place to separate the intervention from the quality of the play so that the effect (if any) could be attributed to the audio description.

The study consisted of five plays, each of which was performed twice – once with audio description and once without. Every participant watched two different plays, one with audio description and one without. By the end of the study, each play, in both versions, was attended by an equal number of participants. This protocol enabled us to isolate the effect of the audio description factor from the overall quality of the play. In addition, half the participants attended an audio described play first and a non-described play second, while the other half attended a non-described play first and an audio described play second. At the end of the first play, the participants completed a background questionnaire. At the end of each play, the participants completed an experience quality questionnaire (spatial perception, narrative perception, and engagement) and an enjoyment questionnaire. Likewise, at the end of each play, the participants completed a satisfaction and quality of audio description questionnaire.

**Quantitative findings**

In accordance with the research hypothesis, audio description was found to have a strong and significant effect (effect size=0.85, *p* < .001) on the overall quality of the experience, when compared to plays with no audio description. In addition, a positive and significant effect was also obtained for each of the observed components of experience quality separately: spatial perception (effect size=1.08, *p*<.001), narrative perception (effect size=0.77, *p*<.001) and sense of engagement (effect size=0.42, *p*< .01).

Another factor examined in the study was the participants’ degree of enjoyment. Here, audio description was found to have only a weak and non-significant effect (effect size=0.14, *p*=.17), when compared to plays with no audio description. That is, even though the quality of the experience was better when a play had audio description, the study could not confirm greater enjoyment of plays that included this type of intervention.

We also studied participants’ satisfaction. High levels of satisfaction were found regarding all aspects of the audio description – the audio device, the touch tour, the trailer, and the audio description itself. Nevertheless, the qualitative findings of the study showed that even minor changes may improve the quality of the audio description and the spectators’ satisfaction.

**Summary and conclusions**

Audio description was found to have a strong positive effect on the quality of the theater-going experience. In addition, participants reported high levels of satisfaction with the audio description components, as well as the description itself. Nevertheless, our qualitative findings showed that further actions need to be taken in order to make audio description a consistent and reliable reality for the blind and vision impaired and to provide them with equal opportunities to consume culture and art.

**Key words:** Accessibility, audio description, blind and visually impaired, leisure activities, cultural event

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# Acknowledgements

*“People will forget what you said,*

 *people will forget what you did,*

*but people will never forget how you made them feel.”*

*Maya Angelou*

The present study is one of the most meaningful and moving research projects I have ever had the pleasure to conduct. Through it, I had the privilege of getting to know incredible people and an amazing accessibility service that has had a positive impact on many culture consumers in Israel.

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# Introduction

**Visual impairment and lack of vision**

“Visual impairment” is defined as severe vision loss that cannot be corrected through the use of regular glasses, contact lenses, medication or surgery, and which impedes an individual’s ability to engage in day-to-day tasks such as reading, shopping, cooking and watching television (The National Eye Institute, 2018). The World Health Organization designates moderate to severe visual impairment as “low vision,” and the complete lack of vision as “blindness” (WHO, 2018). Approximately 234 million people over the age of 15 in the world struggle with various degrees of visual impairment, 81% of whom are over the age of 50 (Brouwer, Sadlo, Winding, & Hannman, 2008; WHO, 2018). The legal definition of blindness in Israel is vision that is lower than 3/60 in the better eye, with correction, or a visual field of less than 20 degrees. In Israel, 24,000 adults are registered as legally blind; however, only 10% of them are completely blind, meaning a total lack of vision. It is estimated that over 200,000 people in Israel have “low vision” (Ministry of Labor, Social Affairs and Social Services, 2014) and the prevalence of the disability is expected to rise due to the rising age of the population (Vladeck, 2005).

Governments around the world have called for the support and encouragement of the participation of people with various disabilities in social and recreational activities (U.S. Department of Health and Human Services, 2011). Although recreational activities may sometimes be considered secondary or non-essential pursuits, they merit serious consideration as contributors to a healthy lifestyle. As part of this consideration, we must take into account the environmental factors that facilitate or promote participation in community life (AOTA, 2008; Berger McAteer, Schreier, & Kaldenberg, 2013). Participation in cultural events such as film screenings, theater productions, sporting events and museum exhibitions provides community members with occasions for entertainment as well as social interaction, and has been identified as a key component of improving well-being and promoting overall health (Chang, Wray, & Lin, 2014; Doble & Santha, 2008). That being said, people with visual impairment often find their opportunities to engage in such activities very limited and dependent on the willingness of companions or aides to “translate” and mediate the visual environment for them.

**The audio description technique**

Audio description is a technique for making visual content accessible to people with visual impairment (low vision and blindness). The service helps to enhance this population’s experience of recreational events through a narrative description of the important images and visual developments taking place before them. The audio describer accompanies the listener throughout the event and concisely presents content related to storyline, display, backdrop, scene changes, clothing, body language, and any other significant visual element. The description is interjected at times when the performance contains no original text - dialogue, song, etc. (The American Council of the Blind, date?). The technique originated in the 1970s in US theater; however, today it is applied to a wide variety of cultural events such as cinema screenings, opera, museums, dance performances, video art and so on.

Scholars of the field describe audio description as a complex mediation of a multidimensional event involving language, voice, and vision. The procedure involves description of key visual elements, as well as sound elements that are difficult to decode through listening alone. This intervention is supposed to create a complex model for the listener, who assembles a “picture of meaning" by listening both to the audio description and to the sound elements of the event itself. This process also includes internal developments related to prior knowledge, prior experience and expectations (Romero-Fresco & Fryer, 2013; Walczak & Rubaj, 2014; Hutchinson & Eardley, 2018).

Braun (2007) defines audio description as a complex and multidimensional mental process that allows listeners to gain a thorough understanding of the event, by combining the audio information contained in the performance itself with a verbal description of the visual developments occurring therein. The participants themselves also influence the process by injecting additional information derived from prior knowledge, experience and expectations, individual mechanisms of information processing and the like.

Two main styles of audio description have emerged over the years: the conventional and the creative. The conventional style emphasizes the objective transfer of information and provides a description of the characters, locations, time, and circumstances surrounding sounds that are not easily recognizable, as well as of the actions and visuals taking place within the performance (Ofcom, 2008). The creative style, on the other hand, is characterized by a subjective and proactive approach, whereby the transfer of information can also include a subjective description of the characters and their actions, of the environment, and any other detail that can enhance the listener’s understanding of the plot.

In fact, it was only towards the end of the first decade of the 21st century that norms and regulations for audio describer training were put in place in Europe and the US, along with a compulsory mandate to make cultural performances accessible to people with visual impairment (Romero-Fresco & Fryer, 2012). Today, the use of audio description in the United States, Europe, and Australia as a means of adapting cultural performances for a wide spectrum of people with visual impairments is becoming more and more widespread (European Union-Lifelong Learning Program, 2014; Mazur & Chmiel, 2014).

**The purpose of audio description**

Despite the variety of audio description techniques and styles, the purpose of audio description is universal: to transmit visual information through verbalization while adhering to standard language rules, as well as precise, succinct and creative word choice, in order to give listeners a full picture of the characters and events taking place before them. The use of this technique makes it possible to provide thousands of blind and visually impaired individuals with the opportunity to consume cultural content along with their families and friends, and to take an active part in the cultural discourse.

**Components of the assessed audio description**

**Preparing the play:** Once a play had been chosen, the audio describers prepared the audio description script. This preliminary stage took up approximately fifty hours, during which the audio describers studied the play, wrote down what they were going to say, and determined the points of the play at which the audio description should be integrated. This component was not assessed separately; however, its attributes had an influence on the findings.

**Preshow**: a) Touch tour ­– as part of the tour the participants met with the stage manager, the actors and the audio describers, heard explanations about the characters in the play, connected the voices of the actors with the characters, learned to identify the voices of the audio describers, and got familiarized with the stage layout, the major props and scenery. b) Trailer – the participants listened to a prerecorded trailer, which included explanations about the play, the characters and the stage design. The trailer was also made available for prior listening at home via a designated URL.

**During the play:** The audio description was broadcast into the listeners’ earphones live (not prerecorded) in parallel with the play’s content. As stated previously, the audio description included succinct descriptions of visual content related to storyline, display, backdrop, scene changes, clothing, body language, and any other significant visual elements.

**Contribution of the present study to the field of audio description research**

Very little research has been done on the subject of audio description around the world. Most of the research to date has centered around audio description designed to accompany television programs and films (Pettitt, Sharpe & Cooper, 1996; Schmeidler & Kirchner, 2000), focusing mainly on technical and technological variables, language aspects, developing procedures for professionals in the field, and the reactions of people with visual impairment to this feature (European Union – Lifelong Learning Program, 2014; Braun, 2007). Moreover, most of the research on the subject has been qualitative, interview-based, and lacking empirical data regarding the impacts of audio description in general and in the theater in particular. The few studies that have attempted to put audio description to empirical testing were based on small samples and insufficiently rigorous protocols.

In terms of listener predilections regarding audio description style, no clear preference has been found. Some listeners prefer the description to include as many details as possible, others like it better when the description leaves room for their imaginations. As for the advantages of audio description, the available studies show that visually impaired people who have used audio description services found them to be useful in obtaining: a) a wider scope of information about the visual aspect of the performance/event; b) a better understanding of the event content, and thus an improved ability to participate in conversations about the event with fellow spectators; c) greater capacity for independent participation in cultural events, since do not need to rely on an aide to describe what is happening; d) greater social involvement; e) improved parity with the sight-abled; f) greater enjoyment of cultural events (Fels, Udo, Ting, & Diamond, 2006; Schmeidler & Kirchner, 2001). Likewise, earlier studies showed social and cognitive benefits to using audio description in television programs (Pettitt, Sharpe & Cooper, 1996; Schmeidler & Kirchner, 2000).

An additional handful of studies have examined audio description as a high-level cognitive-linguistic task associated with the perception of mediated visual content (Braun, 2007). Theoreticians in the field describe audio description as a complex mediation of a multimedia event that includes language, voice and vision, describing central visual elements, as well as some audio elements that are difficult to decipher by listening alone. This process is meant to generate a complex model for the listener who assembles a “picture of meaning” by listening both to the audio description and to the sound elements of the event itself. However, it also includes internal developments related to prior knowledge, prior experience and expectations. For such a complex procedure, there are not enough insights or data available about such factors as the impact of personal variables on the listener’s enjoyment of the event, the overall benefit of audio description, etc.

An overview of the currently available literature shows that at the present day there is a paucity of research in the field and that there have been few attempts to gain an in-depth understanding of audio description in order to map the different factors that affect its efficacy. In other words, there are no definitive conclusions and no categorical information regarding the subject of audio description (Fryer & Freeman, 2012). No comprehensive research with a sound methodological basis has been conducted to assess the effectiveness of voice description in the theater, and its contributions towards a better understanding of the performance, as well as a better overall theater experience. Furthermore, there has been no attempt to examine the relevance and qualities of the various components of accessibility – the audio describers, the audio description procedure, the theatre structures, the related accessories, the quality of the accessibility and the enhancement of the consumer experience.

The present study aims to construct a sound methodological basis through which to examine the effectiveness of using audio description in the theater, and its contributions towards improving the spectators’ understanding of the performance as well as their overall theater experience. In addition, the study examines the relevance and qualities of the various components of accessibility.

# The study

The practical objectives of the present research were to formulate conclusions and findings-based recommendations for the design of an optimal, comprehensive (applicable for a broad audience), and sustainable audio description service for theater productions. This, based on the perception that every person, including the visually impaired, is entitled to consume services equitably as an equal member of the community.

**Research goals**

Validity

To date, very few empirical studies have been conducted to validate the efficacy of audio description. Therefore, one of the aims of the present study was to put the practice of audio description itself to an empirical test. The study examined the effect audio description has on the quality of the experience of blind and visually impaired theater goers as expressed in terms of the following parameters: (1) spatial perception, (2) narrative perception, (3) sense of engagement in the experience. In addition, the study looked at the effect audio description has on the degree of enjoyment blind and visually impaired theater goers derive from the play.

Quality of the intervention (the audio description), considerations, challenges and obstacles involved in attending theater plays

An additional goal of the present study was to examine the quality of the different components of audio description – the audio device, the touch tour, the trailer, and the verbal description itself – in order to provide applicable conclusions and recommendations that could improve the quality of the service (intervention). Furthermore, the study aimed to present an accurate picture of the considerations, challenges, and obstacles facing blind and visually impaired people who wish to participate in the theater-going experience, and to present practical conclusions and recommendations on the subject that stand to improve the implementation of audio description in feasible and significant ways.

**Research protocol**

When examining the effect audio description has on the theater experience, the variable that carries the greatest risk of affecting the validity of the findings is the quality of the theater production itself. The standard of the performance shapes how the audience perceives the experience to a large extent, and can therefore obscure the contribution of audio description to the overall experience. Accordingly, a research protocol was put in place to separate the intervention from the quality of the play so that the effect (if any) could be attributed to the audio description.

The study consisted of five plays, each of which was performed twice – once with audio description and once without. Every participant watched two different plays, one with audio description and one without. By the end of the study, each play, in both versions, was attended by an equal number of participants. This protocol enabled us to isolate the effect of the audio description factor from the overall quality of the play. In addition, half the participants attended an audio described play first and a non-described play second, while the other half attended a non-described play first and an audio described play second.

Figure 1: Study protocol at the spectator level

**Research questions**

The first and second research questions examined in the present study relate to the qualitative portion of study, while the third question related to the quantitative portion:

1. What are the benefits of audio description for visually impaired people attending theater shows – what can people with visual impairment gain, in potential and in practice, from an audio description service?
2. What are the inhibiting/promoting factors that determine the success of audio description in the theater – what is needed to make an audio description service effective and sustainable, and what are the challenges it must overcome?
3. What are the considerations, challenges and obstacles facing visually impaired people when attending theater plays?

**Research hypothesis**

Our research hypotheses were tested in the quantitative portion of the study:

1. The experience quality as expressed in the degree of (1) spatial perception, (2) narrative perception, and (3) sense of engagement in the experience, will be greater for plays rendered accessible via audio description than for plays that were not.
2. The spectators’ enjoyment of the event will be greater for plays rendered accessible via audio description than for plays that were not.

# Methodology

**Population and sampling**

*Demographic background*

Our quantitative findings are based on a sample of 83 participants with severe visual impairment or blindness. The average age of the participants was 54, with 39% aged 60 and above. 50% of the participants were married or had a live-in partner. Demographically speaking, this sample deviates slightly from the general population of blind or visually impaired people in Israel; [[1]](#footnote-1) however, we must take into account that the optimal population for comparison would be blind and visually impaired people who consume culture and attend the theater, about which we have no data. Table 1 below presents the demographic breakdown of the participants in comparison with the general population of blind and visually impaired people.

Table 1: Sample attributes - demographic background, sample vs. population

|  |  |  |
| --- | --- | --- |
| Variable N=83 | Sample % | Population % |
| Gender (women) | 58 | 51 |
| Age (SD) M | 54 (14) |  |
| Aged 60 and above | 39 | 50 |
| **Family status** |  |  |
| Married or live-in partner | 50 | 55 |
| Single | 25 | 17 |
| Divorced | 18 | 8 |
| Widowed | 7 | 20 |
| Country of birth (Israel) | 72 |  |
| Mother tongue (Hebrew) | 75 |  |

*Socio-demographic attributes*

Among the study participants, 57% were employed in the free market, as opposed 33% among the general population of blind people (as of 2015). Economically, 91% of the participants reported a good or reasonable financial situation. It would seem that the sample population is economically stronger than the general population of blind people in Israel, however, as we said, the most fitting comparison would have been with the population of blind and visually impaired people in Israel who consume culture and attend the theater. Table 2 below presents the socio-demographic attributes of the study’s sample.

Table 2: Sample attributes - socio-demographic attributes

|  |  |  |
| --- | --- | --- |
| Variable N=83 | Sample % | Population % |
| **Education** |  |  |
| Primary | 10 |  |
| High school | 25 |  |
| Higher | 14 |  |
| Academic | 51 |  |
| **Current job status** |  |  |
| Free market | 57 | 33 |
| Sheltered workshop | 5 |  |
| Not employed | 39 |  |
| **Financial situation** |  |  |
| Good | 36 |  |
| Reasonable | 55 |  |
| Bad | 9 |  |

*Participants’ visual acuity*

Within the sample, 35% of the participants were completely blind, while 65% had significant visual impairement. Half of the blind participants were blind from birth or infancy. Table 3 below presents the sample attributes in terms of visual acuity.

Tablie 3: Sample attributes – visual acuity

|  |  |
| --- | --- |
| Variable N=83 | % |
| **Visual acuity** |  |
| Complete blindness | 35 |
| Large objects up close | 37 |
| Light and shadows only | 24 |
| Tunnel vision | 4 |
| **Age of impairment onset** |  |
| 0–2 | 49 |
| 3–10 | 6 |
| 11 and above | 45 |

*The plays*

The findings regarding the validity of audio descriptions – effects in terms of experience quality (spatial perception, narrative perception, and sense of engagement) and effects in terms of the enjoyment of the play – are based on a sample of 81 people who watched two plays: one with audio description and one without, as detailed in Table 4 below.

The study protocol was designed with the aim of having an equal number of participants attend each play, both in the audio described and in the non-described versions. However, in practice, technical difficulties arose which prevented the protocol from being implemented precisely as planned, and thus for two of the plays there ended up being a significant difference between the number of participants attending the two versions. Six more participants watched the play “The Guest” with audio description than the non-described version, whereas for the play “The Third Floor,” seven more participants watched the non-described version than the version with audio description. Since the satisfaction rating for the play itself was higher in the case of “The Third Floor,” the possible implications of the abovementioned inconsistency run counter to the research hypotheses.

Table 4: Spectators who had attended two plays

|  |  |  |
| --- | --- | --- |
| Play | Audio described | Non-described (N) |
| The Taming of the Shrew | 10 | 11 |
| The Guest | 25 | 19 |
| Billy Schwartz | 17 | 15 |
| The Third Floor | 13 | 20 |
| Dad’s Braid | 16 | 16 |
| Total | 81 | 81 |

The findings regarding satisfaction and quality of the audio description are based on a survey of the entire sample (N[[2]](#footnote-2)=83), and include all the plays in the audio described version, as detailed in Table 5.

Table 5: Spectators as a whole

|  |  |  |
| --- | --- | --- |
| Play | Audio described | Non-described (N) |
| The Taming of the Shrew | 10 | 11 |
| The Guest | 29 | 22 |
| Billy Schwartz | 19 | 18 |
| The Third Floor | 16 | 20 |
| Dad’s Braid | 16 | 16 |
| Total | 90 | 87 |

*Transport and costs*

In 48% of the cases, the participants arrived at the event by means of private transport. In 87% of the cases, the participants came escorted. The average cost of the evening out was 44 NIS (SD 52), not including the price of the theater ticket, as detailed in Table 6 below.

Table 6: Transport and costs

|  |  |
| --- | --- |
| Variables N=167 | % |
| **Means of arrival** |  |
| Private transport | 48 |
| Public transport | 37 |
| Prearranged group transport | 12 |
| On foot | 3 |
| **Came accompanied** | 87 |
| **Escort** |  |
| Family member | 25 |
| Partner | 12 |
| Friend | 28 |
| Group | 11 |
| Alone | 13 |
| Aide (not friend or family member) | 9 |
| Other | 2 |
| **How they heard of the play** |  |
| Through the research | 55 |
| Friend | 13 |
| Foundation for the Blind | 11 |
| Library for the Blind | 9 |
| Community center | 6 |
| Other | 6 |
| **Cost of the night out** |  |
| 0 | 34 |
| 1–40 | 25 |
| 41–65 | 23 |
| 66 and over | 18 |
| Cost of the night out M (SD) | 44 (52) |

**Research tools**

*Experience quality assessment tool*

This tool was partially based on the ITC-SOPI (ITC Sense of Presence Inventory) assessment tool developed originally for the assessment of virtual reality experiences among people with brain damage. The ITC-SOPI has also been used to assess the quality of the audio description experience among people with visual impairment (Fryer & Freeman, 2012).

Our experience quality assessment tool took into account three aspects of experience: spatial perception, narrative perception, and sense of engagement. The tool was based on participants’ rating of the experience on a scale of 1–5 (1=lowest, 5=highest). The tool was found to have good internal consistency, α=.87. The scores for each aspect and the tool as a whole were calculated based on the average rating for each item. The assessment tool is presented in Appendix 3.

Spatial perception

This measure originally included 5 items. An internal consistency test found that one item[[3]](#footnote-3) was irrelevant to this aspect of the assessment and had negative factor loading, therefore it was omitted. Based on the remaining 4 items, the aspect was found to have good internal consistency α=.81.

Narrative Perception

This measure included 3 items and was found to have good internal consistency α=.79. All items were found to be relevant and to have positive factor loading.

Engagement

This measure originally included 8 items. An internal consistency test showed that these items in fact represent two different aspects of experience: engagement and enjoyment. Following a factor analysis, the engagement field was found to include 3 items and to have good internal consistency α=.80.

*Enjoyment assessment tool*

As mentioned above, this aspect was originally included under the engagement aspect of the experience quality assessment tool. However, a factor analysis showed that it does not belong in the experience quality category at all. The tool included 5 items and was found to have very good internal consistency α=.92.

*Audio description component quality and satisfaction questionnaire*

The questionnaire examines the participants’ satisfaction from the four components of the audio description: the audio device, the preliminary explanation (the trailer), the touch tour and the audio description. The tool is based on satisfaction ratings on a scale of 1–5 (1 = lowest, 5 = highest). The scores for each field were based on the average of the item ratings. The full questionnaire is presented in Appendix 2.

*Questionnaires*

In addition to the tools and the satisfaction questionnaire detailed above, we made use of two additional questionnaires. The first was a background questionnaire, surveying the participants’ demographic and socio-demographic attributes, visual acuity, culture consumption habits, challenges in attending cultural events, and the associated considerations and obstacles involved in attending theater plays. This questionnaire is presented in Appendix 1. An additional questionnaire was employed to control for the parameters affecting the viewing experience of the plays included in the study, such as seat placement, sound quality during the play itself, means of transport to the event, costs and more. This questionnaire is presented in Appendix 4.

*Interview tools*

The interviews were conducted based on a structured interview tool. For the tool used to interview participants, see Appendix 5. For the tool used to interview audio describers, see Appendix 6.

**Procedure**

*Participant recruitment*

Participants were recruited in a number of ways: an open call put out through the publicity channels of the Central Library for the Blind, direct contact with the library’s members, and later by way of the snowball method, wherein participants referred acquaintances to become prospective participants in the study.

*Participation in the study*

Participants were given a written explanation of the study as part of an informed consent form that was read out to them. The signing was done individually while giving comprehensive answers to any questions that arose. All study participants signed the informed consent form.

*Feedback procedure and timings*

Half of the participants watched an audio described play as their first play, and the other half watched a non-described play as their first play. The average interval between the viewings of the first and second plays was three months. The questionnaires were filled in via phone contact with the participants,[[4]](#footnote-4) at a prearranged time and date. The questionnaires and assessment tools were presented in the following order:

* At the end of the first play, the participants responded to the background questionnaire.
* At the end of each play, the participants filled in the control questionnaire, the quality experience questionnaire, and the enjoyment questionnaire.
* At the end of each audio described play, the participants filled in the audio description components quality and satisfaction questionnaire.
* Roughly a year after watching the audio described play, the participants responded to a survey concerning their attendance of cultural events (outside the scope of this present paper).
* Interviews with participants, audio describers and other theater and program operators were performed at various points during the research process.

*Technical means*

The audio description was broadcast via two different systems: an infra-red system and the mobile audio system.

**Statistical processing and analysis**

For the qualitative variables, incidence was calculated in absolute terms and in percentages. For the quantitative variables, averages, standard deviations, and effect size were calculated. An effect size between 0.2–0.4 was considered weak; an effect size between 0.4–0.6 was considered medium; and an effect in size exceeding 0.6 was considered strong. In order to test the research hypothesis regarding the quality of the experience and the degree of enjoyment, a paired t-test was performed. The threshold for validating the study hypothesis was α=.05, unidirectional. The experience quality tool was submitted to factor analysis and Cronbach’s alpha internal consistency. The processing and analysis were done using dedicated statistical software – IBM’s SPSS Statistics 21.0. The answers to the open-ended questions and interviews were analyzed using qualitative content analysis, based on the phenomenological method while seeking to reach saturation and triangulation (cross-linking data from two or more sources of information to reinforce the validity of the findings).

# Quantitative findings

## Experience quality

Experience quality: spatial perception

Audio description in plays was found to have a strong (effect size=1.08) and significant (*p*<.001) positive effect in comparison to plays which were not audio described in terms of spatial perception. In other words, the participants’ spatial perception during plays that were audio described was significantly better than during plays that were not audio described. Moreover, a significant positive effect was seen for each of the items included in the spatial perception aspect of experience: the ability to visualize locations, the ability to experience scenes, and overall sensory stimulation. Table 7 presents the relevant findings for the parameter of spatial perception and shows the differences in spatial perception between plays with audio description and plays without audio description.

Table 7: Spatial perception – comparison between plays with and without audio description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item / Audio description | Yes | No | Effect size | p-value |
| You felt like you could imagine the locations where the story of the play takes place | 4.2 (0.8) | 3.3 (1.3) | 0.88 | <.001 |
| You felt like you were experiencing the scenes and events making up the play | 4.5 (0.6) | 3.6 (1.1) | 1.05 | <.001 |
| You felt all of your senses stimulated by the play | 4.4 (0.7) | 3.8 (1.1) | 0.68 | <.001 |
| **Spatial perception: overall score** | **4.3 (0.6)**  | **3.6 (0.8)** | **1.08** | **<.001** |

\* Rating scale: 1 (very little extent) – 5 (very large extent)

Experience quality: narrative perception

Audio description in plays was also found to have a strong (effect size=0.77) and significant (*p*<.001) positive effect in comparison to plays which were not audio described in terms of narrative perception. In other words, the participants’ perception of narrative during plays that were audio described was significantly better than during plays that were not audio described. Moreover, a significant positive effect was seen for each of the items included in the narrative perception aspect of experience: the ability to visualize characters, the ability to follow characters, and the ability to follow the plot of the play. Table 8 presents the relevant findings for the parameter of narrative perception and shows the differences in narrative perception between plays with audio description and plays without audio description.

Table 8: Narrative perception – comparison between plays with and without audio description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item / Audio description | Yes | No | Effect size | p-value |
| You were able to visualize the characters | 4.0 (0.9) | 3.3 (1.2) | 0.6 | <.001 |
| You were able to follow the characters | 4.4 (0.8) | 3.6 (1.2) | 0.72 | <.001 |
| You were able to follow the plot of the play | 4.7 (0.6) | 4.2 (0.9) | 0.64 | <.001 |
| **Narrative perception: overall score** | **4.3 (0.8)** | **3.7** **(1.0)** | **0.77** | **<.001** |

\* Rating scale: 1 (very little extent) – 5 (very large extent)

Experience quality: engagement

Audio description in plays was likewise found to have a medium (effect size=0.42) significant (*p*<.01) positive effect in comparison to plays which were not audio described in terms of engagement. In other words, the participants’ level of engagement during plays that were audio described was significantly better than during plays that were not audio described. Moreover, a significant positive effect was seen for each of the items included in the engagement aspect of experience. Table 9 presents the differences in level of engagement between plays with audio description and plays without audio description.

Table 9: Engagement – comparison between plays with and without audio description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item / Audio description | Yes | No | Effect size | p-value |
| You felt like you were completely absorbed by the play | 4.4 (0.9) | 4.0 (1.1) | 0.46 | <.01 |
| You were focused on the play and didn’t think about anything else | 4.5 (0.7) | 4.2 (0.8) | 0.29 | <.05 |
| You felt like you had lost track of time during the play | 4.0 (1.1) | 3.6 (1.4) | 0.31 | <.05 |
| **Engagement: overall score** | **4.3 (0.8)** | **3.9 (0.9)** | **0.42** | **<.01** |

\* Rating scale: 1 (very little extent) – 5 (very large extent)

Overall experience quality

Audio description in plays was found to have a strong (effect size=0.85) and significant (*p*<.001) positive effect in comparison to plays which were not audio described in terms of overall quality of experience. In other words, the quality of the participants’ experience of plays that were audio described was significantly better than their experience of plays that were not audio described. As shown above, a significant positive effect was found for each separate aspect of experience: spatial perception, narrative perception and sense of engagement. Table 10 presents the differences in overall quality of experience, as well as the differences for each aspect separately between plays with audio description and plays without audio description. The same findings are also represented graphically in chart form in Figure 2 below.

Table 10: Experience quality – comparison between plays with and without audio description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Aspect / Audio description | Yes | No | Effect size | p-value |
| Spatial perception | 4.3 (0.6) | 3.6 (0.8) | 1.08 | <.001 |
| Narrative perception | 4.3 (0.8) | 3.7 (1.0) | 0.77 | <.001 |
| Sense of engagement | 4.3 (0.8) | 3.9 (0.9) | 0.42 | <.01 |
| **Experience quality: overall score** | **4.3 (0.6)** | **3.7 (0.7)** | **0.85** | **<.001** |

\* Rating scale: 1 (very little extent) – 5 (very large extent)

Figure 2: Experience quality – comparison between plays with and without audio description

## Enjoyment

Audio description was found to have only a weak (effect size=0.14) and non-significant (*p*=.17) positive effect in comparison to plays which were not audio described in terms of enjoyment. In other words, even though the quality of the participants’ experience of plays that were audio described was significantly improved in comparison to their experience of plays that were not audio described, we could not conclusively confirm that the same improvement applied to enjoyment. Enjoyment, it would seem, depends more on the quality of the play than on the presence or absence of audio description. Table 11 presents the differences in enjoyment between plays with audio description and plays without audio description.

Table 11: Enjoyment – comparison between plays with and without audio description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item / Audio description | Yes | No | Effect size | p-value |
| You found the play moving | 3.9 (1.1) | 3.9 (1.0) | 0.05 | n.s. |
| You found the play to be a powerful experience | 4.1 (1.0) | 3.9 (1.1) | 0.2 | p=.09 |
| You would recommend seeing this play to a friend | 4.3 (1.1) | 4.2 (1.2) | 0.06 | n.s. |
| You enjoyed the play | 4.4 (0.8) | 4.3 (1.0) | 0.18 | n.s. |
| This play made you want to go see other plays | 4.4 (1.0) | 4.3 (1.1) | 0.11 | n.s. |
| **Enjoyment: overall score** | **4.2 (0.9)** | **4.1 (0.9)** | **0.14** | **n.s.** |

\* Rating scale: 1 (very little extent) – 5 (very large extent)

In summary, in terms of the efficacy of audio description, we found confirmation that it does have a significant positive effect on the quality of the experience as a whole, and on the different aspects of experience separately: spatial perception, narrative perception and sense of engagement. Nevertheless, we found insufficient evidence to confirm that audio description also has an effect on the degree of the spectators’ enjoyment of the play.

## Quality of audio description and satisfaction

The audio description process began with a presentation of the audio devices and instructions on how to operate them, followed by the touch tour. During the tour, participants were given an explanation about the play, the actors, the characters, the accessories and the decor. In some cases, it was possible to go on stage for tactile interraction with the accessories and the decor. The preliminary process took between half an hour to an hour, after which the play would begin, as would the audio description.

The quality of the audio description and participants’ satisfaction with the service was examined in terms of four separate components: the audio devices, the touch tour, the trailer, and the audio description itself. As stated previously, these parameters were examined through a quality and satisfaction questionnaire (Appendix 2). The results were as follows.

Audio description quality and satisfaction: audio device

We found very high levels of satisfaction with the operating instructions, the audio quality and the reliability of the device. Nevertheless, there were a few isolated instances in which the devices malfunctioned, which led to great disappointment among their users. The answers to the open-ended questions revealed that spectators were looking forward to the development of an app that would make audio description available via mobile phones, which would eliminate the need for instructions and significantly reduce the length of the preliminary process. Table 12 below presents the findings regarding spectator satisfaction with the audio device.

Table 12: Audio description quality and satisfaction – audio device

|  |  |  |
| --- | --- | --- |
| Item | Large and very large % | M |
| The instructions given for operating the device were clear | 91 | 4.6 |
| The device was comfortable and easy to use | 85 | 4.4 |
| The device worked smoothly (without malfunctions) | 70 | 4 |
| **Satisfaction with audio device quality** | **67** | **4** |

\* Rating scale: 1 (very little extent) – 5 (very large extent)

Audio description quality and satisfaction: touch tour

98% of participants took part in the touch tour, with only a few preferring to skip it. Participants were highly satisfied with the tour. According to the questionnaire responses, the tour contributed to an extent ranging between medium and large to their familiarity with the characters, their understanding of the items making up the set and their understanding of what was going to happen in the play. However, it was found that the quality of the touch tour depended on who was performing it. Some of the tours, most of which took place at the beginning of the study, were neither structured nor methodical enough, and the actors were not fully aware of its purpose or what specific information needed to be emphasized. This indicates the need for proper training and experience in order to perform such tours effectively, as well as the need for structuring the tour itinerary in a methodical fashion. The findings also showed that in most cases the stage was not spacious enough to accommodate large groups of people and have them be able to comfortably approach the props and the décor. In addition, the stage area abounds with physical obstacles, thus requiring the significant presence and involvement of sight-abled escorts. Accordingly, most of the tours did not allow participants to visit the stage. Table 13 below presents the findings regarding spectator satisfaction with the touch tour.

Table 13: Audio description quality and satisfaction – touch tour

|  |  |  |
| --- | --- | --- |
| Item (N=80)  | Large and very large % | M |
| The touch tour contributed to your ability to recognize each actor’s voice | 67 | 3.8 |
| The touch tour contributed to your familiarity with and understanding of the characters | 62 | 3.8 |
| The touch tour contributed to your understanding of the set components, such as props and decor | 66 | 3.8 |
| The touch tour contributed to your understanding of what was going to happen in the play | 60 | 3.8 |
| **Satisfaction with the touch tour** | **77** | **4.2** |

\*Not including the audio described version of “The Taming of the Shrew” performed at the Library for the Blind

Audio description quality and satisfaction: trailer

82% of participants listened to the trailer, 21% among them before their arrival at the theater, while 18% did not listen to the trailer at all. It should be noted that the willingness to listen to the trailer was probably influenced, among other things, by the presence of the research team, who assisted participants at the entrance to the theater hall and encouraged them to listen to it. Presumably, the percentage of listeners would be lower in the future without the presence of a research team. Most of the participants who listened to the trailer reported a very large extent of satisfaction with it: the trailer greatly contributed to their getting acquainted with the characters, understanding the structure of the set and its props, and understanding the events that were going to unfold in the play. Therefore, we recommend facilitating access to the trailer and encouraging attendees to listen to it before arriving to the theater, which stands to increase the number of listeners as well as shorten the preliminary process. Table 14 below presents the findings regarding participants’ satisfaction with the trailer.

Table 14: Audio description quality and satisfaction – trailer

|  |  |  |
| --- | --- | --- |
| Item (N=90) | Large and very large % | M |
| The trailer contributed to your familiarity with and understanding of the characters | 85 | 4.3 |
| The trailer contributed to your understanding of the set components, such as props and decor | 82 | 4.3 |
| The trailer contributed to your understanding of what was going to happen in the play | 76 | 4.1 |
| **Satisfaction with the trailer** | **85** | **4.4** |

Audio description quality and satisfaction: audio description characteristics

The extent of satisfaction with the overall quality of the audio description characteristics ranged from large to very large. Such a high level of satisfaction was pleasantly surprising, considering the variety of opinions and personal preferences that exist regarding certain aspects of audio description.[[5]](#footnote-5) 94% of participants indicated that the audio description contributed to a large or very large extent to their experience, and 87% indicated that the audio description made them want to go to further plays with audio description to a large or very large extent. Incorporating the audio description into a musical theater play was probably more challenging, and its integration was less successful.[[6]](#footnote-6) Table 15 presents the findings regarding the participants’ satisfaction with audio description characteristics.

Table 15: Audio description quality and satisfaction – audio description characteristics

|  |  |  |
| --- | --- | --- |
| Item (N=90) | Large and very large % | M |
| The words were clearly enunciated and easy to understand | 93 | 4.7 |
| The speaking pitch and intonation were appropriate | 86 | 4.4 |
| The pace and speed of speech were appropriate | 84 | 4.4 |
| The amount of text included in the audio description was appropriate | 80 | 4.2 |
| The audio description blended into the play without interrupting the flow of the scenes | 72 | 4.1 |
| The audio description contributed to your understanding of the play | 90 | 4.5 |
| The audio description contributed to a more powerful theater experience | 94 | 4.5 |
| **Satisfaction with the audio description** | **80** | **4.3** |
| **The audio description made you want to go to further plays with audio description** | **87** | **4.5** |

In summary, the examination of the quality of the audio description components and the participants’ satisfaction with them, showed a great deal of satisfaction with all the components: the audio device, the touch tour, the trailer and the audio description itself. Nevertheless, the findings revealed that minor changes could improve audio description quality and spectator satisfaction, such as: the ability to listen to the trailer and the audio description via a mobile app instead of using the audio device,[[7]](#footnote-7) a better structured and organized touch tour, and making the trailer available online before every play, to facilitate home listening.

## Considerations, challenges and obstacles involved in attending theater plays

In terms of the considerations, challenges and obstacles the visually impaired take into account when deciding to attend theater plays, our findings were as follows:

* The quality factor, that is to say, the perception of the quality of the play and the actors, constitutes a central consideration when making the choice to attend. Therefore, a careful selection process must be applied when deciding which plays to should be audio described.
* Accessibility factors constitute a central consideration for visually impaired people when deciding to attend the theater.
* The cost factor is a medium-low level consideration for visually impaired people when deciding to attend the theater.

Table 16 below presents our findings regarding the considerations, challenges and obstacles involved in attending theater plays.

Table 16: Considerations, challenges and obstacles involved in attending theater plays

|  |  |
| --- | --- |
| Considerations, challenges and obstacles (N=83) | Large and very large % |
| Quality of the play | 82 |
| Availability of a companion to escort me to the play | 71 |
| Quality of the actors | 65 |
| Transportation to the venue from my place of residence | 61 |
| Difficulty in understanding what is happening in the play | 56 |
| Distance between the venue and my place of residence | 46 |
| Accessibility of the theater hall | 46 |
| Accessibility of ticket purchasing | 40 |
| Overall cost of attending the play | 39 |
| Ticket cost | 37 |
| Scheduled performance time | 22 |

# Qualitative findings: program improvements and sustainability

Beyond corroborating the empirical validity of audio description as having a significant positive effect on the quality of the theater-going experience, the present research aims to present an accurate picture of the considerations, challenges, and obstacles involved in attending the theater for the blind and visually impaired, and to present practical conclusions and recommendations that could improve the implementation of audio description in feasible and significant ways. To achieve this goal, in addition to quantitative measurements, we conducted in-depth interviews with people representing a wide spectrum of relevant perspectives: entrepreneurs, policy makers, service providers (audio describers and theater operators) and service consumers. The interviews include an in-depth examination of the various aspects, stages and major components of the audio description service (the program).

Sample

The qualitative portion of the study is based on 25 in-depth interviews and 2 focus groups as detailed below:

* 9 in-depth interviews with consumers, of whom 4 were completely blind, and 5 suffered from severe visual impairments – narrow field of vision, light and shadows, large objects up close
* 1 focus group consisting of consumers
* 1 in-depth interview with the partner of a consumer
* 6 in-depth interviews with audio describers
* 4 in-depth interviews with representatives of theaters that offer audio described plays
* 1 focus group with representatives of theaters that offer audio described plays
* 2 in-depth interviews with representatives of the Central Library for the Blind and Reading Impaired
* 1 in-depth interview with the service founder
* 1 in-depth interview with a representative of the relevant department at the Ministry of Labor, Social Affairs and Social Services
* 1 in-depth interview with a representative of the relevant department at the National Insurance Institute of Israel

## Overall importance of the service

The program founders and operators, as well as its participants, attribute a high degree of importance to the service’s existence and sustainability

*“The subject of making culture accessible, not just for blind people, but in general, is* ***extremely important*** *both for the integration of the population in question, and for the internalization of the general concept that culture is not a luxury; it is* ***one of the ways in which we construct our individual identities*** *and it can affect the course of our lives.* ***I have heard about cases where people have said that the content they have been exposed to, thanks to accessibility, has changed their lives.*** *I am aware of course that this is not an easy adjustment to make in terms of the institutions and infrastructures, and it can be somewhat exhausting, but that is mostly because there aren’t enough human resources and the field is not sufficiently regulated. If there were enough human resources allotted to the accessibility process it could make the integration process pleasant and smooth for all sides involved.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

*“As a body that deals with improving the welfare of people with disabilities and blind people, the subject of accessibility is an inseparable part of this mission. Anything that can broaden people’s sense of independence, we feel that it’s our obligation to get involved with it. In all aspects of life. Even though the subject of culture is linked with people’s spare time, unlike housing or employment, it is no less important in my eyes.* ***There is no reason that a blind person shouldn’t be able to enjoy a play. Our mission is to allow equal opportunities to people with disabilities, in the broad sense of the word.*** *The notion of audio description, which Nurit first mentioned to us a whole decade ago, is very much in line with this vision as far as we’re concerned.”* (Representative of the National Insurance Institute of Israel)

*“****There should be audio description available across the board*** *– in museums, during ceremonies (this is starting to catch on), for tours, not just theater plays. In all areas of culture and recreation. A large portion of our population is elderly. They have a lot of time to dedicate to recreation and the consumption of culture.”* (Representative ofthe Ministry of Labor, Social Affairs and Social Services)

*“****The hope is that this door we’ve opened, with the help of the National Insurance Institute and the Library, to present this service called ‘audio description’ in the theater and in the cinema, will become the norm in the cultural arena in Israel by way of legislation that will mandate all theaters, museums, operas, ballets, and national ceremonies to include audio description****, according the formula that will be determined by the regulations, in terms of the number of events that have to be made accessible for the blind. The implementation of the regulations will mainly concern the Ministry of Culture, the Ministry of Education, and the Internet.”* (Service founder)

*“The experience of audio describing a play is fantastic, because it’s a live description, it’s like a radio broadcast –* ***you prepare for it, but things happen and you have to find solutions and improvise.*** *It’s an experience I am very fond of.* ***I believe that the audio describer is part of the cast of actors and I act accordingly…*** *I follow their lead and adapt myself to the atmosphere that I’m participating in – such as raising my voice in moments of excitement, etc.”* (Audio describer)

*“The expectations I had were that* ***a blind person would be able to go see a theater play like a regular spectator*** *without needing to rely on another person to whisper in their ear,* ***and that it would help the blind and visually impaired public to participate in cultural events****.”* (Consumer)

**Achievements of the program**

The key achievement of the program is the creation of a new and important service that enables the blind and visually impaired to enjoy theater plays and cultural events, to understand the content presented to them more fully, and to feel less dependent on others in their social environment

*“****The key achievement is the creation of a service that didn’t exist before, and one that works*** *and is now in its fourth year of operation, which means that the theaters and the audiences are familiar with it now, and there is a certain work flow that has come together,* ***enabling regular activity****…We’ve seen very good feedback, people were excited and enjoyed the service. Beyond the thing itself,* ***the people using the service really appreciate someone paying attention to their needs and providing a solution****, so we’ve seen a lot of expressions of that and of gratitude…****The theater crews are more aware now and know how to manage things****, the actors are familiar with it.* ***With every passing year we get another theater, it spreads to new cities****.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

*“The very fact that people come to see the plays and are provided with audio description, and that raises their levels of enjoyment and understanding of the play, is a sizeable achievement.”* (Representative of the National Insurance Institute of Israel)

*“****We’ve seen very positive initial reactions from the population*** *who can now go with a partner without them having to do the job of the audio describer.”* (Representative ofthe Ministry of Labor, Social Affairs and Social Services)

*“****I would be happy to have more plays with audio description*** *– provided that people come to see them. Around twenty people and the theater is in the black. The availability of the service* ***also contributes to the theater in terms of image and marketing****, and presents no particular difficulties on the technical front. It has* ***broadened the theater’s audience, but only for these audio described plays, thanks to the Library and the group for the blind****.”* (Theater representative)

*“****The theaters that participated in the project, that were totally a part of it, mostly cooperate really well. It’s not the same for theaters who were not part of the project, who are less involved.*** *In that sense,* ***I have to commend the project, which, by its very nature, demanded continuity – and that has had a positive influence on the continuous integration of this field.*** *For instance, HaBima, the Cameri, Beit Lessin, which all produce their own plays, have allowed us to use their plays and that has allowed us to go out into completely new theaters, which were not initially linked to the project.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

Blind and visually impaired people who participated in the study described the difference, in terms of the overall theater-going experience, between attending an audio described play and attending a play with no audio description as a factor and a major motivating element in deciding whether to go see a play

*“****It’s as if this person is sitting next to you and whispering in your ear, and my partner is let off the hook.*** *Before I had a partner I couldn’t go to the theater.* ***Now, with audio description, single people can also go to plays****.”* (Consumer)

*“****As far as I’m concerned, it’s the difference between seeing the play and not seeing it.*** *It’s that major. I require some kind of mediation. My loved ones mediate for me and it’s only thanks to them that I can take an equal part (and I’m only visually impaired, not blind).* ***Audio description for me completes the parts that I miss out on****. If the audience laughs and I don’t understand why, because there was some kind of gesticulation or something fell, I won’t know why they laughed.* ***It really completes the missing parts of the picture****.”* (Consumer)

*“I had an* ***amazing experience – I felt like I could see****. The audio description filled in the missing information and also communicated the emotions on stage.”* (Consumer)

*“The experience in practice* ***was beyond all expectation****. Everything came together to make up a much fuller and more complete picture,* ***I could experience the play almost fully… Without the audio description I wouldn’t have been able to understand what was happening on stage****.”* (Consumer)

The service frees both the blind or visually impaired person and their partner from their sense of dependency

*“****Audio description actually liberates two people. It liberates me from having to strain to see or from asking, and it liberates my wife from having to mediate.*** *If my wife wasn’t coming to see a play with me, I wouldn’t go, because she knows exactly the kind of things I’m missing. And that’s exactly what the professional describer knows how to do, even though he doesn’t know you.”* (Consumer)

*“The audio description makes things significantly easier for us. It* ***gets rid of that anxiety*** *–will someone tell me to be quiet or not, is there a lot to explain or not.* ***I come to the theater relaxed.*** *Otherwise couples find themselves in a trap of either your partners enjoys the show or you enjoy the show.* ***There’s a difference between describing a film at home, where you can press pause, or something I’ve already seen and have to describe, and a play that’s new to me as well, and where there’s no possibility to press pause…*** *The fact that there is audio description makes a big difference to me as the partner – it’s wonderful and liberating, and I can enjoy the play. Sometimes something funny happens and I want to laugh with him, but he doesn’t know what we’re laughing about, and that takes away from my enjoyment.* ***It just creates a kind of equality – we get to the theater and both of us experience and watch the play and we can talk about it on equal footing.****”* (Partner of a consumer)

Another significant achievement is the creation of audio description as a profession, which enabled the project to raise additional budgetary support for expanding the service and its user base

*“****The Library managed to raise designated donations for the audio description******service*** *in theaters because it has managed to become established… It also has a ripple effect on movies… In addition,* ***the National Insurance Institute has been a significant and very supportive partner – both in this current project which has come to an end and in certifying the upcoming training course.*** *The idea of the course is that the course will also produce audio description content – so* ***it is a significant support, because at the end of the day it creates a service.****”*

*“****Soon we will begin an additional round of training for audio describers, which we expect to be wider. It has become an official profession that is recognized by the Ministry of Finance****, so the course we’re putting in place will be one that gives professional certification. It’ll have aspects that will cover areas of legislation, technology and a wider range of experience, getting to know the population, with the aim of broadening the offering.* ***Our outlook is not focused just on the here and now, but on creating a solid foundation, because once the legislation passes, we will need more describers****. And there’s also a need for describers in the cinema and in museums, so the next course will include other aspects of description, not just for the theater.”*

*“The research that was done was a great help in reaching a new population that would not have been exposed to it otherwise.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

The certification of audio description as a profession and the general development of the field was also reflected in the positive feedback given by the audio describers

Interviews conducted at the beginning and end of the program indicated high levels of satisfaction with the training process. The audio describers appreciated the opportunity to learn through hands-on experience, practice writing a script, receive constructive feedback from the lecturer who provided them with a sense of confidence, create an open discussion about describing a sample play, gain a sense of what constitutes the right amount of text for a description, have a productive session with the language editor, and find a balance between strict adherence to the text and a degree of improvisation. Most importantly, **over the past year, thanks to the work accomplished as part of the program, there has been an increase in the degree of importance and meaning attached to the role of audio describer, and the audio describers subsequently derived more fulfillment and a greater sense of purpose from their work.**

*“The experience taught me* ***not to be heavy-handed with the text*** *– I received feedback that the audience doesn’t need to hear the describer the whole time, that we have to be somewhat economical with our words…* ***The feedback from the audience is encouraging and gives you more confidence*** *in doing your job.”* (Audio describer)

*“We make sure to keep in touch with the other audio describers, and we consult each other when necessary. Also, there is ongoing contact with the Director of Culture and Information Accessibility at the Central Library – for feedback, guidance, recommendations and providing solutions for special needs that arise from time to time.”* (Audio describer)

*“The audio device quality is getting better and better. In the past year I haven’t run into any problems with the audio.”* (Audio describer)

*“****Over the last year there have been more good and suitable plays chosen for audio description****, both in terms of the amount of text (not too much, not too little) and in terms of the amount of visual details. Overall it looks like there has been* ***a rise in the amount of plays to describe****.”* (Audio describer)

## Challenges facing the service

There is a budgetary challenge in running the service and the need for significant collaborations with theaters and with organizations that can spread the word about the service and publicize it

Financial support is required in order to guarantee job security for audio describers (continuity, scope of work, compensation for cancellations, travel expenses, etc.), make audio description available in more languages, broaden the service to additional municipalities, provide the service for a wider variety of plays, and more

 *“One major challenge is the funding issue. This thing costs money. We’ve tried the Ministry of Culture and we’ve tried to push theaters too to take it upon themselves.* ***People have to really believe and want it very much in order to spend money on it, and in that sense, our work is not done yet. The Ministry of Culture subsidizes theatres that create their own productions based on several criteria, one of which is contribution to the community****, and theaters that include audio description of their own initiative get higher points in this regard, so they will also get more funding.* ***I am not sure that enough theaters are aware of this fact.*** *It’s also unclear just how significant a difference it makes.* ***Right now there is no body in charge of providing funding for this, and it’s not yet mandated by law.”***(Representative of the National Insurance Institute of Israel)

*“****As things stand right now, audio describers have no job security and therefore there is a problem with their availability.*** *The Library for example has readers who have stability and security because the Library provides them with a fixed amount of hours per week, so the reader is obligated to supply these hours. It would be great to get to a similar point with audio describers…****There is no consistency in the amount of involvement and effort audio describers put in****. The audio description process involves, among other things a preliminary encounter (preliminary tour), as well as preliminary contact and assistance which are valuable. Some audio describers take an active part in the tour and improve the spectators’ experience, and some not so much. In addition,* ***we need diversity in terms of the describers’ voices****, especially for movies, but for plays as well sometimes, and in terms of the description languages. Mainly* ***there seems to be a lack of audio description in Arabic, Russian and English.****”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

*“****There is difficulty involved in getting to certain places****, there is no organized transport. Organizing more convenient transport would greatly improve working conditions, in terms of expenses as well… Some jobs require* ***a lot of commuting*** *and just the commute time adds up to an entire day of work (8 hours)…****There’s no adequate compensation for that.****”* (Audio describer)

An additional important challenge is in establishing significant and long-term collaborations with theaters. This issue has a lot of bearing on the success and sustainability of the service

*“It’s a challenge to create a reality in which every cultural institution is mindful of the accessibility issue.”*

*“****The process of putting audio description in place is still not running as smoothly as it can,*** *even though we can see that* ***there has been progress.******But to get there requires ongoing work with theaters and their full cooperation.*** *When the theater is an active partner, it works, when the theater is not an active partner, it doesn’t work.* ***There are theaters with whom we don’t yet have an ongoing stream of activity*** *– that is to say, we don’t work with them on a regular basis. It’s a challenge* ***to find a system that works for the Library to collaborate with a theater. The human factor is important here, as well as the continuity, and the character and size of the theater. With theaters that create their own production, our work tends to be less systematic. It’s harder to create a protocol, whereas a host theater orders about ten plays a year, four of which are audio described, and we can agree on what we’re going to do a year in advance.*** *Producing theaters only have their one or two plays so it’s not quite… For example, the Cameri Theater, over the past year we haven’t seen one play from them that we wanted to describe that’s running in the theaters I work with. (A play that is suitable for audio description is – not a musical, not just talk, an interesting play, and one that bears describing, meaning it’s not just two actors on a stage). For example, HaBimah produced “Dad’s Braid” – it was obvious that this play was going to be performed in lots of theaters and that it needs to be audio described. Because there is budgetary dimension to all this – a play that’s been ordered by a lot of theaters, there must be some potential they’ve seen in it, and* ***because we have limited funds, we’d rather provide audio description for a play that will be performed in lots of other theaters****.”*

*“Today, the situation is such that all the theaters who participated in the project got the equipment and have upheld their commitments. However, the protective greenhouse that was the project is no longer there,* ***and now there is a challenge to work out some kind of configuration with each theater, one that will last over time, and take into account the theater’s style, the particularities of the people living in the area, and the kind of plays they put on. Every place is different.****”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

Additional challenges include insufficient awareness of the service, and a lack of complimentary accessibility – of the information about the audio described plays, the cultural institutions themselves and the means of transport to them

We could still discern a lack of complete independence among the study’s participants, as at this stage, the service provides them with only a partial sense of independence

*“****It is difficult to reach the entirety of the audience who might enjoy the service.*** *The information about the service is disseminated via the local centers for the blind (which not every town has), via the library’s subscribers and blind people’s forums.* ***We are unable to reach isolated blind people who don’t belong to any of these groups –*** *people who don’t belong to any organized frameworks, which makes them almost impossible to reach, whereas* ***my goal and ambition is to have every single person know that this thing exists. Even the concept itself, “audio description,” is not well known, and my ambition is to have everyone know it exists, know what it is, and know where to find it and when. For every single person to know that there is an accessibility service for the blind in the theater.****”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

*“Another challenge is that people need to know about it, and I don’t know how many blind people in general are aware of it. The ones that are active in the groups know.* ***We’ve been able to reach the groups, but there are so many isolated blind people.*** *A possible solution: the Service for the Blind has everyone’s details, perhaps it would be best to disseminate through them, to send people a message informing them of it. Out of the 24,000 blind people, I think relatively few know about the service.”* (Representative of the National Insurance Institute of Israel)

*“The theaters chosen for the pilot run of the audio description service are theaters located in large population centers. Today we are at the stage where it’s important to expose as much of the public as possible to the existence of such a thing as audio description.* ***Recruiting people to use this service is a significant challenge****.”* (Representative ofthe Ministry of Labor, Social Affairs and Social Services)

*“****It’s clear to us that there will have to be a transition budget – even after we mandate theaters to have audio description once or twice a month, we will have to provide solutions to other challenges that those who use the service face (such as transport to the theater, etc.).*** *I think that* ***the Ministry of Culture will also have to be involved*** *and to encourage the theaters in parallel with their obligation to integrate the service. As long as there is no law, there is help from National Insurance Institute. Once the law passes, then it’ll be up to the theaters to do it on their own, and it would be best if the Ministry of Culture were there to help them.”* (Representative ofthe Ministry of Labor, Social Affairs and Social Services)

*“****It would be best for the accompaniment inside the theater hall to be handled by the library, and not by the theater.*** *It would be less appropriate for ushers to do that. The best way to go about it would be to figure out how many people are needed to accompany a group under optimal conditions and for the Library for the Blind to take care of it* ***(with the financial support of the National Insurance Institute/a government ministry).****”*(Theater representative)

*“It’s a challenge getting to the theater and moving about inside it.”* (Consumer)

*“Another factor that affects the decision of whether to go see a play is the accessibility of the theater and of the specific seat assigned to me.* ***I use a guide dog, and if I have had a negative past experience at a theater, for example if the space between the rows is very narrow, or the seats where the dog can lie down comfortably are very expensive,*** *I prefer to postpone seeing it until the play is performed somewhere with better access.* ***The guide dog issue is critical****; a dog that’s been stepped on won’t want to go to that place again.* ***In addition, for people who can see the stage even a little, it’s important for their seat to be at an optimal distance from the stage.****”* (Consumer)

*“****If the theater is not accessible enough, it’s a consideration to take into account…*** *The Cameri Theater is more convenient than Beit Lessin in terms of access. When the HaBima Theater was under renovations, I wouldn’t go there, or only if a sight-abled person came with me, because it would be somewhere else every time.”* (Consumer)

*“****It would be good to have a subscription service*** *– if you’ve got a subscription to certain plays – to know which audio described plays are available in the next six months to a year,* ***and to give the means of access and the performance times.*** *It has to be like a theater subscription, where the plays are on fixed dates, the tickets are sent in advance via post or you can download them on your computer, or on your smartphone. And it can also include optional plays.* ***Every website of every theater should have a menu of audio described plays, made accessible by the theater, that would present all the shows of the upcoming season, plus the audio described plays. And so when I choose to go see a play, I won’t have to go with a group from the Center for the Blind, but as a free, private citizen able to purchase tickets from the theater. To be just another person in the audience, to be natural, to get my earphone and not bother anyone.****”* (who said this?)

*“****Sometimes we’d like to go as a couple, or with friends, and not as a group of blind people.*** *Knowing in advance helps.* ***It’s really important to inform people sufficiently ahead of time when there is an audio described play on.*** *So that’s it’s not always dependent on the Center for the Blind.* ***The best way to do it would be through the theater itself****.”* (Partner of a consumer)

There are likewise technical challenges involved in the theater’s set up and in operating the equipment

*“There are places where* ***the equipment doesn’t work one hundred percent*** *and sometimes that can affect the experience.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

*“****Technical issues*** *can arise sometimes* ***during the use of the audio equipment****.”* (Service founder)

*“There is no way to assist a person who encounters* ***issues with the audio device after the play has started.*** *Most of the problems stem from incorrect use of the device, however with time the audience becomes familiarized with the device and we see improvements.”* (Audio describer)

*“****It’s important to have control over the audio description – the ability to turn the device on and off.*** *Because not everyone needs it at the same rate and you don’t want to be listening to the audio description at every given moment. It’s important to have the option to choose when to listen.”* (Consumer)

*“The thing that bothered me throughout all the plays was the quality of the devices (FM and infrared).* ***Both kinds of devices had reception problems. It was better with the infrared device, but there were still problems. At every single play I attended I experienced having to adjust the device and deal with reception issues.”*** (Consumer)

*“It’s very important that the blind people in the theater hall are seated next to each other because of the problems and issues that can arise with the audio devices – that would make it easier to identify the problem and enable quick and easy access to the blind spectator. Personally I’ve never encountered any problems with the uadio devices.”* (Consumer)[[8]](#footnote-8)

*“Budget-wise, it would be a relief to have the Library bring in the technical equipment and demonstrate how to operate it every time, because then the theater can then operate with one less technician. It should be done by* ***people with technical know-how and a background in accessibility. The distribution of headsets has to include instructions on how to use the equipment and that is not something the theater can do****.”* (Theater representative)

*“It’s pointless for us to keep the equipment here. It’s very expensive equipment that’s currently locked up in the theater’s storage.* ***It would be best if they delivered the equipment on the day of the show.*** *This is also not our home theater, so it’s risky here, because it’s not secure. They can do it here the same way they do it everywhere else in the country. Come with the equipment.* ***Maybe if there was a play once a month and not once every six months, it would be possible to leave the equipment in the theater, but it would still be more convenient for each side to do what they do best – the Library for the Blind would be in charge of accompanying the group, distributing equipment, operating the equipment, instructing the spectators about the equipment, training and placing the audio describers. And the theater would provide the stage manager, a meeting with the cast, and coordinate with the Library****.”* (Representative of a theater that participated in the program)

Some of the theaters have yet to organize a proper audio description station – both in terms of properly functioning equipment and in terms of an appropriate physical location

*“The preparations for audio descriptions can be somewhat problematic – some theaters still haven’t seen to the issue of setting up an audio description station… I feel like I have to come well in advance in order* ***to make sure that everything is set up and working properly, because I have been put in challenging situations in the past*** *– difficulty seeing/hearing the play, the quality of the audio equipment.”* (Audio describer)

*“I have run into problematic broadcasting conditions in the past – I had to* ***audio describe in a tiny room from which I could barely see the stage****… In two other instances I encountered hearing problems –* ***I couldn’t hear the play from the audio description station and had to describe without hearing.*** *In addition, some theaters haven’t resolved their technical issues –* ***the system experiences repeated failures, the audio quality goes down.****”* (Audio describer)

The touch tour, which constitutes a part of the audio description approach, presents a challenge and there is no consensus over the degree of its necessity

*“Some theaters face the* ***problem of not having insurance****, which prevents the visually impaired public from going up on stage. Likewise, there is not always enough time for them to meet the actors. There are* ***time constraints****, the theater’s demands, actors arriving late, and so on.”* (Service founder)

*“The touch tour is very important in terms of improving accessibility and the spectators’ experience of the play, however* ***over the past year there have been almost no touch tours****. Moreover, in many cases there was* ***an evident lack of awareness of how important the meeting the cast portion is*** *– the actors arrive late, or are pressed for time, and the stage manager or the theater crew rushes them to wrap up the session in a manner that is perceived by the audience as unpleasant.”* (Audio describer)

*“It would be highly preferable for* ***the entirety of the preliminary tour to take place with the spectators seated in the first row while we bring out the actors and the various elements to them. There is also a problem with conducting the tour of the stage in the technical sense, since it can damage expensive equipment, such as microphones.****”* (Theater representative)

Among the focus group of service consumers there was a consensus that the preliminary tour is by and large unnecessary and that a recording of the actors’ voices added to the trailer would suffice. Nevertheless, some of the interviews with the participants showed that the encounter with the actors as part of the preliminary tour constituted a significant experience factor.

*“It would be better to record sentences from the play spoken by the actors and put that in the trailer – the preliminary tour is redundant,* ***I want to be part of the regular audience and not part of some special group that the actors have to make time before the show for.*** *You can put it in the trailer.* ***It would save us the need to arrive early and save time for the actors, it would allow the experience to remain natural, and not something artificial that also requires a thousand different systems to be set up for it.*** *The preliminary tour is an experience in and of itself for some of the participants, but it’s not necessary from the point of view of accessibility, since there is an easier and more liberating alternative.”* (Consumer)

This suggestion is in line with the goal promoted by the National Insurance Institute and the Ministry of Labor, Social Affairs and Social Services for visually impaired people to be able to attend the theater independently, and not necessarily as part of a group of blind people who require special attention.

This suggestion would also help negotiate the theaters’ apprehensions about the tour in terms of insurance issues, as well as their suggestion to hold a preliminary meeting instead of a preliminary touch tour. Such a meeting can be provided optionally to those who are interested, while those who prefer to do without it could opt for a prerecorded alternative (an extended trailer that would include recordings of the actors’ voices).

## Future goals (for the service)

Amending public accessibility legislation

*“The most important thing, as far as the Library is concerned, is* ***that the Equal Rights for People with Disabilities Commission change the public accessibility regulations****. Today, in terms of accessibility in theaters and cinemas, the law mandates accessibility for the hearing impaired; however, it mentions nothing about blind people. From the moment the regulations come into effect, the whole field will have to be standardized.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

*“The law still doesn’t describe audio description as an obligation. The reason used to be that there were no audio describers.* ***I am part of the team working towards standardizing this profession, for it to be recognized, and then it can be budgeted and become established.****”* (Representative ofthe Ministry of Labor, Social Affairs and Social Services)

Funding and occupational stability for audio describers – financial security for them and for the Library

*“The same way that the Ministry of Culture allocates budgets to cultural institutions (the Library for the Blind among them),* ***it’s important that the Ministry allocate a permanent budget for audio description in theater plays and movies, a budget that would be transferred to the Library, as the managing body.*** *We are talking about something in the realm of half a million shekels a year, which would allow for establishing occupational security in the field, positioning the field in the market, adding descriptions in more languages, creating awareness among new populations that could use the service, and so on. From the point of view of occupational security for audio describers, in order to create* ***a stable pool of active describers, with an element of commitment and mutual responsibility, we would need a budget of 150 thousand shekels a year****.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

*“****Looking forward, this is a feasible and practicable service that needs to exist. It can very easily be turned into a routine thing that doesn’t create a mega event. Standard regulations would help. The equipment is not complicated. The difficulty is mainly organizational. The actors really love the audio described nights. There has to be financial backing for it – compensation to the theater for the associated costs, and clear work procedures for the collaboration between the Library and the theaters.*** *It works well for the plays that are put on in Israel. It’s more complicated at Beit Lessin because the technical side of things – the equipment, the instructions on how to use it and the tour, which doesn’t take place in practice – has to be handled by the theater.”* (Theater representative)

*“There’s a need for additional funding in order to add attendants to accompany the people inside the theater, someone who will present instructions on how to use the equipment, and it would also be good to have a marketing person designated to the accessibility aspect of the audio described plays on behalf of the Library for the Blind.”* (Theater representative)

*“Any training and certification would be welcome. I would really like to* ***specialize in the field of audio description for museums.****”* (Audio describer)

*“There are currently ten active audio describers.* ***A much more comprehensive and in-depth training course is being planned.*** *The first course was just a pilot. In fact,* ***the moment the audio description law comes into effect and theaters will start offering the audio description service*** *to the visually impaired public,* ***some of the Ministry of Culture’s budget that’s defined as “contribution to the community” will go to those theaters.*** *As a result,* ***those theaters will be able to directly purchase the services of audio describers, and so their scope of work and compensation is expected to change for the better****.”* (Service founder)

*“We feel like we went through training* ***and we are not making the most of our skills. There isn’t enough work…So why is there another course already planned? Why get more people into a profession when there’s not enough work hours for people who’ve already been trained for it?****”* (Audio describer)

*“****We get paid little relative to what we do. It demands a lot of preparation. And it sometimes means being out for as much as eight hours during the evening. Some people don’t work in this profession because of the matter of compensation****.*” (Audio describer)

Publicity campaign advertising the service to the relevant population and maintaining contacts with it

*“For that we need the help of the National Insurance Institute, to reach the masses. To go from a place of a niche service to a mass phenomenon.* ***Nationwide broadcasts – in fact.*** *When it comes to the hearing impaired, they did something like that, where they publicized it over all the media, at least it was a move that didn’t limit itself to a narrow audience, publicity-wise… It would be significant for the National Insurance Institute to give us backing for televised publicity – with the screen time it has. In addition, we need more personnel to provide support and listen to the population and do customer retention of sorts.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

*“****It feels like we’re holding a treasure in our hands and just waiting for someone to put it to good use, but we aren’t able to penetrate the market. That’s the most frustrating things about working in audio description as a whole – that it doesn’t reach enough people.*** *It is mostly concentrated in the central region. Although, even at a play in Petah Tikva, only ten blind people will show up – something about the publicity is not working well enough.* ***I get that it’s only the beginning, but I expected that two years down the road it would be used by more people and it’s not so far… Is there anyone whose job it is to market the audio described plays to blind people across the country?****”* (Audio describer)

*“****The Service for the Blind*** *has starting supporting us financially, and it would be great if it continued to do so. They help to organize rides to the venues, and it’s important that they keep doing that.* ***They can also help of course with the distribution side of things since they have a database of all the blind people in Israel****.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

This point is line with the theaters’ wishes as well: *“****We don’t have a client base apart from those who come in through the Library or through the blind people’s group****. I’ve got maybe a couple of subscribers. I would like it to reach the entire population –* ***recruitment is hard work and that is why there needs to be a national system for informing people, like an awareness campaign, so that every household will know about the existence of the service****. so that people who are blind or visually impaired will be fully aware that there are audio described plays being put on in Israel and that they can enjoy theater plays like any able-bodied citizen.”* (Theater representative)

*“From what I know, as of today, people come mostly in groups, which is an improvement in the right direction, but not what we had in mind. Perhaps it’s a necessary stop on the way there. Our aim is for every blind person who wants to see the play to be able to go see the play. To know that they have the possibility to go see the play.* ***The idea is that they don’t necessarily need to come as part of a group, but to have the freedom to come to the theater on their own, or with a partner.*** *For every theater to put out an announcement saying that once every reasonable period of time the play will be audio described and they can come independently.”* (Representative of the National Insurance Institute of Israel)

*“There is work to be done on a number of levels. The service providers (the theaters) need to have a better understanding of the subject – commercially it’s right for them because there is quite a large population of people who are hard of seeing. In addition, we’re in charge of informing the population about the existence of the service. The simpler the technology gets, the easier it will be – for example using smartphones instead of headsets.* ***In other words, the action has to take place on two parallel levels – on the government level (legislation, standardization) and on the level of the service providers who are working with the population who uses it, to provide them with the user experience that they won’t want to do without in the future. Not only in the theater, but in the cinema as well.****”* (Representative ofthe Ministry of Labor, Social Affairs and Social Services)

Having the Ministry of Culture and the Ministry of Labor, Social Affairs and Social Services be put in charge of the successful and permanent implementation of the service

“***The entities that should be given responsibility over the service are the Ministry of Culture – because culture should be made accessible to everyone, according to the Equal Opportunity Law, and the Ministry of Social Services who’s in charge of the blind population.*** *The National Insurance Institute has already done its part. As far as partnerships to ensure the ongoing success of the service are concerned, the central relevant body is the Library for the Blind. They are the body that represents the population, knows it well and has proven itself to be up to the task. Other partners would be the Center for the Blind and the relevant foundations.”* (Representative of the National Insurance Institute of Israel)

Accessible theaters and means of transport to the venues

*“****It’s important for the theater to be committed to accessibility and to be willing to help out inside the venue as well.*** *Outside of the theater, in terms of everything that has to do with means of transport and accessibility, it would be best to set up a position of a cultural agent (possibly a volunteer) or for every theater to have a phone number for an* ***accessibility agent*** *– an accessibility coordinator that would respond to queries and give information. It’s worthwhile to try and set up a* ***nationwide network of volunteers*** *to help with getting people to the theater and to escort them during the show. In many instances this requires a special connection and a lot of listening, and also a kind of customer retention. It requires human resources.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

*“Some of the spectators come as part of organized groups (club members, associations), some come accompanied by a family member on a regular basis, but some don’t have anyone to go with – which prevents them from the going to the theater despite their desire to do so.* ***It would be good to create a pool of volunteers, so the volunteer can meet the visually impaired person at the entrance to the theater and the two can see the play together. In that case, the volunteer would have to purchase their own theater ticket****.”* (Service founder)

*“When the theaters realize that it’s an activity that can raise donations for them, that’s when they’ll become committed to the subject. If a theater that makes itself very accessible get donations, that can help. Or it can be done through philanthropic foundations – maybe they can create a special track for accessible theaters.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

*“It’s important to clarify that audio description is not the end all and be all of accessibility. We must understand the other obstacles that culture and recreation consumers face (transport for example) and how common they are.* ***When they come to see a play, often they’ll sit together as a group, and they’re not supposed to be a separate group. It’s important to get to a state of total accessibility that enables the visually impaired to go to the theater as part of the general public and not as a separate group****.”* (Representative ofthe Ministry of Labor, Social Affairs and Social Services)

*“The theaters that have been chosen to have audio described plays meet the accessibility conditions for the blind and visually impaired. Not all theaters meet these conditions, and some of them need to undergo renovations in order to do so. Once that happens, the service can grow and spread to other towns.”* (Service founder)

*“In the more intimate theaters,* ***where the stage is smaller and the audience sits closer to it, it’s easier to take in what’s happening on stage.*** *When they have an audio described play, it’s better when it’s in a theater like that. The less deep the stage and the less it is spread out over a large amount of space, the better visually impaired people are able to register the movements of characters on the stage. For instance, the play “Much Ado about Nothing” – there’s a certain space at the front of the stage where the action takes place.”* (Consumer)

More audio described plays, improvement of service quality and its expansion into new geographic regions and time slots

*“We have an ambition to get to* ***a point where we’ll have a yearly calendar of audio described plays that will be advertised on the schedules of theaters across the country as part of the their event schedule. A milestone in getting to this point would be getting the Audio Description Law passed, which would mandate theaters to offer audio described plays.****”* (Service founder)

*“We need an annual budget of about fifty hours a year for an Arabic speaker to work at the Library to have the possibility to do audio description in an additional language, and on top of that, next year I’d like to have ten regular plays running in every possible theater as well as ten one-off plays.”* (Director of Culture and Information Accessibility at the Central Library for the Blind and Reading Impaired)

*“****I’d like to see the play schedule as something fixed and known in advance, with audio-description available every few performances. And to have that be part of the legislation.****”* (Representative ofthe Ministry of Labor, Social Affairs and Social Services)

*“There is an awareness of the fact that* ***for a part of the visually impaired population, going out of the house in the late evening hours constitutes a big challenge*** *and in some cases it’s not possible at all.* ***Therefore one of our goals is to be able to schedule plays for earlier time slots.****”* (Service founder)

*“If we decide to do a run of audio described plays, it has to be coordinated and prepared in advance. We have to decide when the plays will be on. How many people will come.* ***There’s no problem with having lots of audio described plays. If the Library for the Blind or another body can shoulder the associated costs then we can have one on every night. It’s just a question of equipment and budget. It’s important for the service to be publicized nationwide*** *and that, for the theater’s individual marketing efforts, we use the Library’s logo, so that no one feels the theater is trying to get rich on the back of blind people.”* (Theater representative)

*“There need to be more describers, more plays, to have it be a permanent part of the format and not something one-off that, if you missed it, that’s pretty much it.* ***To have it be integrated in the big theaters nationwide. So that it’s an inseparable part****.”* (Consumer)

*“****It would be nice if the theater could offer a discount subscription to the blind person and his companion, while committing to have five out of the seven plays in the subscription be audio described.*** *For now, only one theater (the Haifa Theater) offers a discount subscription for a blind person and his companion, and they have a reserved seat for the year, and they also have plays in the afternoon,* ***but there’s no built-in program for audio described plays****.”* (Consumer)

*“****I would like for audio description to become more available*** *– maybe it’s possible to do that through a prerecorded version that each spectator can play individually…****If plays were audio described I would have the option of going without my wife in case she can’t make it****.”* (Consumer)

*“They should try to pick plays that aren’t too action packed – it makes it stressful to try to understand and follow everything that’s happening, and it feels like you’re missing out. So the plays have to be less busy.* ***There needs to be a right balance, so it’s possible to follow all the action.*** *That’s why with a musical, it’s usually more difficult. For example, operatic shows have a pace that makes it possible to follow the characters and the singing, unlike more rhythmic musicals…****It’s important that the pace of the play enables you to get into the experience and not get lost in it****, and it doesn’t necessarily depend on becoming familiar with the voices, which is done during the preliminary tour, but more on the pace of the show and on the kind of show it is.”* (Consumer)

*“There’s a difference in the way people who are blind from birth are able to perceive things, as opposed to the visually impaired.* ***It’s possible that visually impaired people find it more difficult than blind people to follow quick sequences of events while still remaining relaxed and enjoying the play****.”* (Consumer)

Audio description during breaks in dialogue, laconic description that maintains a neutral tone

*“The describer has to be mindful* ***not to start describing while the actors are talking****. It happens sometimes during musicals. They should only talk when the actors are exchanging glances but not while they’re speaking, and when they’re describing it has to be* ***short and to the point!*** *They shouldn’t steal the spotlight from the show itself.”*

*“They should speak laconically. For example, instead of saying, now he’s entering the stage, just say: enters the stage. The describer isn’t supposed to add to the play and it’s also important not to describe with feeling. They don’t need to think for us. It’s more like a technical transfer of information. If it’s a humorous scene, they can speak with a smile; if it’s serious they should be serious.* ***It’s like an announcer. They should remain neutral rather than interpret the play*** *by inserting their own emotions or commentary. It’s more like being an announcer –* ***clear, articulate and focused.****”*

*“The description should be integrated* ***in very specific places and when something is going on on stage – change of décor and the like – it’s important that the describer say what’s happening.*** *It’s important also for the describer to* ***have sufficient knowledge of the play****.”*

*“When they’re describing what’s happening on stage, they don’t say* ***on which side of the stage it’s happening. That’s a significant detail, especially for the visually impaired****.”*

*“It would be best to decrease the amount of visual description. In some scenes where there was too much visual description I had to make a great effort in order to follow and I don’t know how it would affect someone who has a harder time processing an overload of densely packed information.”*

(Consumers)

Option of listening to a preliminary reading of the play

*“The Library could provide the possibility of listening to a prior reading of the play, like a book. An initial reading of the play would allow you to go to the play with less information to process during the show. It’s like an introduction to an experience, and then it’s easier, during the play itself, to follow the sequence of events and not feel like you’re missing something.”* (Consumer)

Better quality sound and equipment

*“Another point – external headphones scatter the sound waves outwards, while internal earphones let in less external noise. If you stick with the external headphones for hygiene reasons, you should get better quality ones.* ***In order to optimize the experience of accessibility you have to make the most of the available technology. Good amplifiers, good headphones.****”*

*“There has to be built-in equipment at the theater. A spectator who comes in gets headphones and returns them at the end, or make it possible for everyone to get their own personal gear – earphones and a receiver – that they can use in all the theaters.”*

*“One thing I would improve – when you turn the volume up loud in the headphones it bothers the people sitting next to you. So maybe you need a type of headphones that would enable you to listen without bothering everyone around you. On the other hand, it shouldn’t be too insulating either, so as not to be completely disconnected from the theater hall.”*

*“****I definitely think there’s room for more soundproof earphones into which you could broadcast the soundtrack of the play itself, and put the audio description on top of that. In terms of noise reduction it would make things much easier.*** *Because if there’s noise on stage or in the theater you can’t hear the audio description very well and you have to start fiddling with turning up the volume on the device, and sometimes it’s still not clear.”*

(Consumers)

*“There should be a standard procedure for testing the equipment together with a technician. As things stand today, the technician tests the equipment before the arrival of the audio describer. If they were to test it together, it would give the describer more assurance and he would also be able to give a second opinion, which is important for him.”* (Audio describer)

An optional preliminary tour (with the available alternative of listening to a trailer that includes recordings of the actors’ voices)

**Some participants found the touch tour to be a significant and powerful part of the theater-going experience.** For these spectators it would be best to continue offering a similar tour, although not on stage, but rather seated in the theater hall, or in another room backstage. **Nevertheless, it is important for those spectators who are not interested in arriving to the theater early, as part of a group, to have the option of listening to an extended trailer at home.**

*“The meeting with the actors is a wonderful thing, it heightens the experience… The actors showed a lot of patience and good will.* ***Having every actor talk a little about themselves is important and helpful in recognizing their voice during the play. In general the opportunity to meet the actors is an experience in and of itself****.”*

*“It’s important that* ***the meet and greet with the actors include a touch tour since it’s just as important an element as getting to know the actors****.”*

*“A preliminary tour constitutes an opportunity for the blind person to learn to recognize each actor’s voice. It would be good, during the meeting, for the audio describer to be present in order to* ***mediate between the visually impaired public and the actors****.”*

(Audio describer)

A trailer for every play (even those that are not audio described)

*“****The trailer was also very helpful in the description. It gave a physical description and got down into the details, which is important.*** *It’s important for the trailer to be detailed because small details are critical in some plays.”*

*“****The trailer is also a significant and contributing element****.”*

*“It’s worth considering* ***recording trailers for plays that haven’t been audio described yet. It would make it easier to understand what kind of play you’re going to see – even if it is not audio described****.”*

(Consumers)

Include a rating of how visual any given play is

*“I would love it if* ***the summary of the play online included a rating of how visual the play is, in case there is no audio description available****. I would then feel more confident going to plays and movies, even if they aren’t audio described.”*

*“Assuming that it’s a play that isn’t audio described –* ***I try to find out through the theater or through friends how visual it is****. If it’s too visual, I swap it for another play included in the subscription. It’s a key criterion.”*

(Consumers)

Suggestion for future development of accessible theater – interactive plays

*“Creating a play with the limitations of blind or visually impaired people in mind, which means creating a powerful theatrical experience for the visually impaired, with them included in the space of the play.* ***An interactive play*** *that takes place next to you. Or maybe playback plays as well.* ***If you produced a play with that kind of direction in mind it would be possible to have an entire audience made up of visually impaired people, and it would be a show especially for them. And it would be enjoyable for a sight-abled audience too of course. You don’t need audio-description, the actors are right there, moving next to you. Breathing next to you. Their energy is so close that you can feel the power of the acting right by your side.****”* (Consumer)

Establishing a club that encourages outings to cultural events, provides rides and discount tickets, assists with finding someone to accompany the visually impaired person, and provides over the phone assistance

*“****The financial aspect can be an obstacle*** *if the play is too expensive.”*

*“The price is a factor. Theaters could offer discounts similar to the ones they offer club members.”*

(Consumers)

# Findings summary: validity, achievements, challenges, conclusions and recommendations

## Background

The initiative to promote an audio description service to benefit people with visual impairment stemmed from the idea of inclusion in general, and in particular in the field of culture, which is a key element of the human experience and of belonging to a community. Access to culture is an important part of the public accessibility principle as expressed in the Equal Rights for People with Disabilities Act in Israel (1998, 2005), which includes the visually impaired population. Having said that, the state is still in the process of legislating, implementing and enforcing service accessibility regulations among the public. The existing law already cements the rights of hearing-impaired people to have access to hearing aids, subtitles, transcriptions and translation to sign language in the theater, the cinema, etc.. However, the legislative processes that would make cultural institutions accessible to the visually impaired have yet to bear fruit. The development of an audio description service and of a training process that certifies professionals in the field is a first and important step in making not only the physical space, but all services accessible to people with visual impairments. It is likewise an essential foothold in the process of legally cementing this issue by way of service accessibility regulations. Entities who have embraced the concept – the National Insurance Institute, the Ministry of Social Affairs and the Library for the Blind – have joined efforts to found the service, train its practitioners, implement and research it.

The vision of all parties concerned is the establishment of audio description as a standard service provided to blind people at an array of various cultural events, including theater plays, movies, television programs, ballets, operas and musicals, sporting events, ceremonies, and museum tours. This service enables people suffering from visual disability to participate in the event and understand it visually without relying on the aid of friends or family members, whose experience of the event also suffers due to the need to describe the visual aspect of the proceedings to their companion throughout their duration.

This comprehensive research aimed to examine the validity of the audio description intervention in theater plays, which, as of 2018, has yet to be put to any significant empirical test. The study examined the effect of audio description on the experience quality and enjoyment of people with visual impairments attending a theater play. Beyond the audio description itself, the study looked at various aspects of the service in order to help guide it towards optimal efficacy and sustainability. This was done by examining the important stages and components of audio description in the theater through the perspective of both the service providers and its consumers.

## Validity

To this day, very few empirical studies have been conducted with the aim of corroborating the validity of the audio description technique. Therefore, one of the goals of the present research was to observe and measure the effect of audio description by way of empirical means. The study examined the effect audio description has on the quality of the experience among blind and visually impaired theater goers as expressed in terms of the following parameters: (1) spatial perception, (2) narrative perception, (3) sense of engagement in the experience. In addition, the study looked at the effect audio description has on the degree of enjoyment blind and visually impaired theater goers derive from the play.

The study managed to successfully corroborate the advantage of audio description and of audio described plays over non-described plays. Our findings confirm that for plays made accessible via audio description, the levels of spectators’ spatial perception, narrative perception, and sense of engagement were higher than for plays watched without the audio description service.

Nevertheless, the study’s findings show that audio description does not make a significant difference to the theater-goers’ enjoyment of the experience, and that mostly high levels of enjoyment were recorded for non-described plays as well. A possible explanation, supported by evidence found during the in-depth interviews we conducted, is that the experience is holistic and larger in scope than the play itself. That is to say, for people who do not have frequent opportunities to attend cultural events (or to go out much at all), the very fact of meeting friends, sitting at a café before the show, discussing the play afterwards, and interacting with people in general constitutes an event greater than the play itself. Thus, even though the play is the central part of the outing, these elements are also integral to it and contribute greatly to the participants’ enjoyment. Another possible explanation that arose from the in-depth interviews is that the experience is mostly unmediated. In other words, people enjoy a good play even when it isn’t entirely accessible. They may know that they are missing certain things without audio description; however, this doesn’t spoil their enjoyment. One could compare it to the experience of going on a nature walk: an explanation about the plants and animals, about the history of the place and so on may certainly make it more interesting; however, most of the enjoyment will still be derived from the very fact of being in nature.

## Accomplishments

The program’s main accomplishment is the establishment of a new service for the welfare of the visually impaired population in Israel, one that has been active in other countries around the world for over twenty years. The service is an active, structured and methodical one, including a standard operational protocol, and awareness of its existence is constantly growing both among the target audience and among theaters, as well as other service providers.

The study shows that visually impaired people derive a quantifiable benefit from audio description in the theater and that the service tangibly contributes to the quality of their experience. Participants made a special mention of the fact that audio description provided them with access to information about events taking place on stage, facial expressions and the emotions accompanying dialogue – all elements that can be critical in understanding the play’s content. Moreover, the audio described play conferred a feeling of independence upon the participants, since they could enjoy and understand it without needing to rely on a partner or an escort for mediation, and even control the listening device and regulate its function according to personal preference and need. Partners of participants also benefited from the service and found that accompanying their visually impaired companion to the theater without having to translate the visual medium made the experience more enjoyable, relaxed and mutual. The service provided differently abled couples with a sense of equality for the duration of the event, as reported during conversations conducted with the participants and their partners following the play. The very knowledge that the event was going to be audio-described bolstered participants’ sense of independence and their confidence in going to the theater.

Interviews with theater management personnel revealed that they believe the service could widen the potential audience of their plays, while allowing the theater to contribute to the community and raise their profile.

Allowing the program to remain informed by the dialog between service consumers and its providers made it possible to reveal the most efficient ways of implementing the service in practice and to choose the plays best suitable for audio description in terms of their visual and verbal contents.

## Challenges facing the service

The key overall challenge in operating the audio description service is the current lack of legislation and regulation in the field of cultural service accessibility to the visually impaired. However, setting that aside, we shall turn out attention here to the more specific challenges reported by service providers and consumers over the course of the study. The participants, their escorts and/or partners noted that, despite their interest in the service and overall satisfaction with it, there are still more than a few obstacles preventing a visually impaired person from attending the theater on a regular basis and feeling part of the regular audience. What follows is an overview of the main challenges found during the study.

1. Awareness of the service

The first challenge mentioned by most of the study’s participants, both on the service provider and consumer sides of the equation, is the lack of awareness of the service. Most participants heard of the service through the Central Library for the Blind, community centers dedicated to blind people, or social networking means proper to this population. This raises the question of what are the most efficient ways to bring information about the existence of audio described theater plays to the awareness of the general public, and especially to the awareness of visually impaired people and their families who are not in contact with the organizations and foundations servicing this community. Furthermore, service consumers remarked on the difficulty of purchasing subscriptions to audio described plays, as well as the difficulty of booking tickets to such shows independently and getting to the theater by individual means, as opposed to through a dedicated organization or as part of a visually impaired group.

1. Operating the service

The second challenge is the theaters’ struggle to operate the service independently of entities dedicated to providing aid to the visually impaired, such as the Central Library for the Blind. At this point in time, the Library for the Blind operates as the central agent in raising funds dedicated to the financing the service, obtaining budgets for transport, organizing the transportation of groups and individuals to the venues, managing the technical side of equipment maintenance and its distribution in some of the theaters, coordinating communications with audio describers and more. Some theaters have integrated the process and allotted staff members to supervise operations and assist with problems, however many theaters have yet to do so.

The specific challenges involved in running the program in theaters are:

* Choosing an appropriate play in terms of the variety of action and visuals, one which allows a relatively easy integration of audio description in between dialogues, and one that is likely to tour theaters nationwide. Participants mentioned that the number of audio described plays is limited, which in turn limits their choice.
* Creating an economically advantageous reality for theaters
* Technical issues related to the audio equipment – storage, distribution of audio devices and operating instructions, allotting technicians to resolving device malfunctions during the show. Some of the theaters have integrated the process; some have yet to do so.
* Technical issues in the theater hall: finding a permanent and suitable work station for the audio describer.
* Accessibility inside the theater and lack of trained personnel to accompany visually impaired people to their seats.
* The touch tour is not possible to perform in every theater for a number of reasons: actors having little or no time to spare before the play, the stage being too small, safety hazards in going on and off the stage and lack of insurance for the participants in case of accidents. That being said, some participants stated that the touch tour was not as important to them as the trailer. In their eyes it would be better to record the actors’ voices in advance and include them in the trailer so as to recognize them during the show. The participants’ comments raises the question of whether the touch tour would not be better replaced by other preparatory means. Likewise, the interviews revealed a need to create a program that is technologically flexible, i.e. one that would allow different solutions for performing the audio description and its accompanying elements.
* Budgets and financing, especially in terms of human resources. At this stage there is no official body in charge of financing the audio description service, mostly because it is not yet mandated by law. The regulations concerning service accessibility were passed before the existence of audio description professionals, which led to the current situation wherein, despite the involvement of several public institutions, there is no government budget allotted to the service, and the Ministry of Culture is not involved in its operation.
1. Accessibility of the theater and its environment

Another distinct challenge that emerged from the reports of consumers (people with visual impairment) and theaters is the impact of environmental access barriers on the interactions outside and within the theater. Consumers noted that the physical accessibility of the theaters does not correspond to their needs, which is reflected, for example, in the lack of seating suitable for a person with a guide dog. Likewise, the participants indicated physical difficulties in getting to the venue and entering it, which in many cases preclude them from going to cultural events in the first place. What these findings emphasize is in fact the principle of access continuity, which dictates that even if the audio description service itself is accessible, if the entrance to the theater, the ticket office, the way to the theater hall or the seat are not accessible, the disabled person cannot consume the service in an egalitarian manner, as beneficial and well thought out as it may be in and of itself. Accordingly, theaters and other cultural institutions must take into account all the components of service and environmental accessibility to adapt themselves to the needs of the visually impaired.

1. Training and employment of audio describers

The final challenge we wish to address is the training and employment of audio describers. Audio description is a new field of expertise for which there are yet to be structured curricula or certified teachers available. Therefore, the training framework for this profession is still in the process of development and concretization. The solutions found within the program were to invite lecturers from abroad and translate existing materials on the subject from European and American sources. The past few years have seen a local team of professionals begin to emerge and contribute their expertise towards developing the training process. That being said, in the absence of fixed funding for the program and a standard protocol for its operation, audio describers still lack secure and steady employment. As of today, there are only four audio described plays included in the annual schedule of each theater, which makes it hard to create any kind of occupational continuity for audio describers. It’s important to emphasize that the demand for the service is rising likewise in the cinema, as well as at conventions and other performance events, however, there too, the lack of legislation means that the employment opportunities remain relatively limited.

## Conclusions and recommendations

For the audio description service in the theater to become a sustainable reality for the blind and visually impaired population, and allow them to have an egalitarian experience of consuming culture and art, future action is required on several levels. Herein follow the recommendations produced by the study.

**Legislation** – The field requires the legislation of regulations to solidify the obligation to include audio description in cultural, sports and entertainment events.

**Government responsibility for implementing and funding the service** – In practical and financial terms, in order for the service to operate it must be taken under the responsibility of the appropriate government ministry. Possible candidates are the Ministry of Culture, the Ministry of Labor, Social Affairs and Social Services, and the Ministry of Education. With a permanent budget and clear-cut procedures for implementing the service in place, it will be possible to audio describe a larger number of plays per year and to have them performed regularly. It is of critical importance to have a fixed government entity in charge of operating the program and funding it.

**Awareness of the service** – The service must be much more widely publicized to the visually impaired population, as well as the general population. A national campaign is needed to market and spread awareness of the service among the general public, and in particular among the target audience, their families and their social circles.

**Theaters** – Efforts must be made to promote accessibility in the theaters in terms of physical structure and service, in addition to audio description. Every theater has to make sure it is physically accessible, including convenient access to the theater and mobility within the hall, seats in the front rows reserved for the visually impaired, and designated seats for people with guide dogs. According to the service accessibility regulations, every organization with over 25 employees must have an accessibility coordinator on staff. However, even a small theater with less employees would benefit from employing someone in this capacity who would help operate the service and facilitate its integration.

**Allotting human resources to operating the service** – Ideally, at every audio described play there should be at least one accessibility usher to see to the needs of the visually impaired spectators, including: distributing equipment, instructing and guiding them, accompanying them to their seats, checking the devices and taking care of problems as they arise. In fact, this already falls under the responsibility of theaters today, however the service is only partially implemented.

**Fixed work stations for audio describers** – Based on professional recommendations, the optimal place for the audio describers to be positioned is in the control room. In the event that this is not possible, the theater must allocate a different station while taking into account the circumstances of the performance and the technological requirements.

**A standard protocol and order of operations must be established for the implementation of audio description.**

**A permanent, pre-planned schedule of audio described plays must be made available, both on the theater's website and via an automated phone service.** Audio described plays must also intermittently be scheduled for afternoon performances, for the sake of spectators who find it difficult to attend events in the evening. The goal would be for each play to be performed in its audio described version on a number of different, pre-announced dates and times, based on the regulated protocol.

**Setting up a volunteer-based system of theater escorts –** The system, ideally, would be financially supported by a foundation or a philanthropic fund dedicated to the field of accessibility to the visually impaired. Nevertheless, it is important to emphasize that this would not mean that the responsibility for implementing the service in general would be transferred from the government and the theaters to these foundations and volunteers.

**The audio describers** – The field must be recognized as a registered profession, with all that this entails, including a standardized training and certification process, permanent employment, higher wages and so on. The recognition of audio describer as an official profession would significantly help in overcoming some of the abovementioned challenges and widen the pool of service providers.

**The audio description itself** – The existing service can be improved in the following ways:

* **Number of plays and performance times** – There should be more audio described plays, more performance dates, as well as performances scheduled earlier in the day.
* **Trailer** – The procedures of the touch tour and the ways of listening to the trailer should be reexamined. We recommend that a trailer be produced for all plays, including those without audio description, and that the possibility of providing a recorded reading of the entire play for interested parties be considered. It is likewise recommended that recordings of the actors’ voices be added to the trailer.
* **Theater hall** – In order to improve the audio description experience, it is worthwhile considering performing the plays in smaller halls, with a relatively shallow stage and good quality loud speakers at a moderate volume.
* **Description language** – Audio description should be made available in more language, especially in Arabic and Russian.
* **Play listings accessibility** – It would be worthwhile to add a rating of “visuality” in listings of non-described plays, to be available on the theater’s website, which make service users better able to decide whether they would like to watch the show even without audio description.
* **Audio quality and audio description recording** – The service must make optimal use of the available technology in the field and the possibilities it provides, both in terms of the audio quality and in terms of the possibility of rewinding to a previous portion of the audio description during the show. We recommend examining the possibility of developing a smartphone app that would be available to all theater-goers who may find the audio description service useful, while taking into account that some theaters are set up to block cellular networks.
* **Touch tour** – Improvements must be made in terms of the availability and ease of conducting the tour, both for the theater crews and for service consumers. Providers must consider where and how the tour would be best conducted within the theater, and offer alternatives if possible – for instance, a recording of the actors voices included in the trailer. In terms of touching the props and décor, it is recommended that spectators be allowed to interact with them in a separate and more accessible space in the theater, rather than in the performance hall.

# Contributions of the study to the field, limitations and suggestions for further research

## Contributions of the study to the field

The study contributes to the research in the field of audio description in three significant ways:

1. **Conceptually** – The study’s conceptual contribution is not the result of empirical research, in fact it precedes it. In a field where there have been very few empirical investigations, the present study proposes a paradigm, including the relevant questions and aspects (spatial perception, narrative perception and sense of engagement) to look at when examining the effect of audio description in the theater. These constitute investigative guidelines that this young research field can focus on and around which it could potentially coalesce.
2. **Methodologically** – The present study proposes a methodology that is adapted to a reality that renders empirical observation relatively challenging, in terms of the difficulty of isolating the quality of the experience from the quality of the play.[[9]](#footnote-9) In addition, the study has produced a reliable and valid research tool – the first in this field. Together, our methodology and research tool make it possible to empirically study the effect of audio description.
3. **In terms of results** – Through empirical observation, the present study is the first to measure the effect of audio description on the theater-going experience. In other words, for the first time, we can empirically confirm that audio description has a positive effect on the theater-going experience of visually impaired spectators.

Furthermore, the study contributes to the field in its holistic approach to the audio description service (beyond the audio description itself):

1. By defining and studying the individual elements of audio description in the theater, including the trailer, the audio device, and the touch tour.
2. By defining and studying the relevant parties involved, including policy makers, audio describers, theaters and escorts of visually impaired people.

In other words, beyond the contribution of its findings, which confirm the benefits of audio description in the theater in and of itself, the study offers a wide overview of the components and systems that this field of research must take into account in terms of how they shape the experience of attending an audio described play. The thorough study and investigations of these factors, through empirical means, should make it possible to establish an effective and sustainable audio description service.

## Research limitations

The study has a significant limitation in that it was only conducted in one country. This affects its external validity and requires careful consideration in applying its findings to other countries and cultures, as there are major differences between countries in terms of the service of audio description in the theater, including the description itself and its various components (the audio device, the touch tour and the trailer). Cultural differences can also be assumed from the perspective of the consumers, such as their expectations from the audio description (conventional style description emphasizing the objective transfer of information transfer objectively versus creative style description which includes subjective descriptions of the characters and their actions), as well as the considerations, challenges and obstacles they face in going to the theater (with or without audio description). It is our opinion that these differences threaten the external validity of our study’s findings, especially when it comes to enjoyment and satisfaction with the audio description service, as well as the considerations, challenges and obstacles involved in attending the theater, and to a lesser extent the quality of the experience (spatial perception, narrative perception and sense of engagement).

Even though this limitation has no bearing on the validity of our findings, it is important to understand what was and what wasn’t examined in the course of the study. The research tool we developed is a subjective assessment tool. In other words, the respondents assessed their own spatial perception, narrative perception and sense of engagement; however none of these aspects were measured objectively. There is no doubt that the subjective experience of perception is, in this context, at least as important as actual perception; however, an objective measure of perception would have made our overall understanding of the experience more complete.

Most of the study’s participants (the sample) came to the theater through a group format which took care of transportation. However, in reality, most people go to the theater by themselves (in countries where this is not the reality, it is nevertheless a worthy ambition). We are confident that this discrepancy does not impact the validity of our findings regarding experience quality, however, in terms of the considerations, challenges and obstacles involved in attending the theater, it is possible that there are differences between people who attend mostly within the context of a group as opposed to people who go to see plays independently.

## Further research

Audio description in the theaters has existed for approximately thirty years, yet the field of research dedicated to audio description in general and in the theater in particular has only emerged in recent years. Moreover, most if not all of the studies in the field have been either qualitative and/or descriptive, and did not put the effects of audio description to an empirical test. In this context, any empirical research examining the effect of audio description in the theater will be a welcome contribution to the sparse research field.

The present research chose to focus on experience quality and propose the relevant parameters for texting the effect of audio description in the theater (spatial perception, narrative perception and sense of engagement). Nevertheless, this research was carried out within a single national context. We think it would be valuable to carry out further research that would replicate the present study in different countries and cultures in order to corroborate the internal validity and extend the external validity of its findings.

Finally, the present study looked at experience quality from the subjective perspective alone. We would recommend expanding the nominal definition of experience quality to include the objective aspect as well. In other words, future studies would do well to integrate, on the operational level, a tool for measuring spatial and narrative perception, rather than relying on subjective self-assessment alone.

# Conventions and awards

The interim findings of the present study were presented at three conventions, and the Library for the Bind received an award for its significant and beneficial action in the field of audio description for operating the service. The quantitative findings of the study were published in a professional journal during the writing of the thesis.

Ferziger, N., Freier-Dror, Y., Gruber, L., Nahari, S., Goren, N., Neustadt-Noy, N., Katz, N., Bar-Haim Erez, N. (2019). Audio Description in the Theater: Assessment of Satisfaction and Quality of the Experience Among Individuals with Visual Impairment.*British Journal of Visual Impairment*(April 2020).

ACB-ADP 2018 Achievement Award for promoting audio description (international) was given to the Central Library for Blind and Reading Impaired People (CLFB)

Bar-Haim Erez, Ferziger, Gruber, Nahari, Freier Dror & Katz (2019). Audio Description in Cultural Events: Perspective of Clients With Low Vision and Service Providers. The 2019 AOTA Annual Conference & Expo, April 4-7, 2019.

Bar-Haim Erez, Ferziger, Gruber, Neustadt-Noy, Goren, Katz & Freier Dror (2018). Audio Description for Individuals with Visual Disability: Enabling Participation in Cultural Events. A lecture in the World Federation of Occupational Therapists association conference. South Africa.

Bar-Haim Erez, Gruber, Nahari, Freier Dror, Ferziger & Katz (2017). Audio Description in Multi-Participant Events for Individuals with Visual Disability: Audio Description in the Theater. The Annual Convention of the Israeli Society for Physical Therapy and Rehabilitation. Tel Aviv, Israel.

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# Appendices

## Appendix 1: Background questionnaire

Hello,

I will now, with your permission, like to ask you a few background questions. These questions are for statistical segmentation purposes only and your answers will remain confidential. The data collected herein will be used in this study alone. Thank you for your cooperation.

Demographic and socio-demographic background

Familial status: 🞎 Married 🞎 Single 🞎 In a serious relationship 🞎 Other [elaborate] \_\_\_\_\_\_\_\_\_\_\_\_

Residence: 🞎 With partner 🞎 With parents/sibling 🞎 Assisted living 🞎 Other [elaborate] \_\_\_\_\_\_\_\_\_\_\_\_

Place of residence: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Country of birth: 🞎 Israel 🞎 Other [elaborate] \_\_\_\_\_\_\_\_\_\_\_\_ [Year of immigration]: \_\_ \_\_ \_\_ \_\_

Mother tongue: 🞎 Hebrew 🞎 Other [elaborate] \_\_\_\_\_\_\_\_\_\_\_\_

Year of birth: \_\_ \_\_ \_\_ \_\_

Mobile: \_ \_ \_-\_ \_ \_ \_ \_ \_ \_

Email address: \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

Education: 🞎 None 🞎 Elementary 🞎 High school 🞎 Higher 🞎 Bachelor’s 🞎 Master’s and above

Other certificates and qualifications: \_\_\_\_\_\_\_\_\_\_ , \_\_\_\_\_\_\_\_\_\_ , \_\_\_\_\_\_\_\_\_\_

Occupational status: 🞎 Currently employed 🞎 Previously employed 🞎 Never employed

Current employment: 🞎 Free market 🞎 sheltered workshop 🞎 Not employed

How would you describe your financial situation: ➀ very bad ➁ bad ➂ reasonable ➃ good ➄ very good

Visual acuity

Visual impairment: 🞎 Sharpness 🞎 Field of vision 🞎 Other [elaborate] \_\_\_\_\_\_\_\_\_\_\_\_

Quality of vision: 🞎 Can’t see at all 🞎 Light and shadows 🞎 Large objects from up close

Type of impairment [diagnosed]: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Onset of impairment: 🞎 Birth 🞎 At what age did the impairment begin: \_\_ \_\_

Cultural consumption and event attendance habits

I will now ask you about the frequency with which you have attended various events over the course of the past year [12 months].

In the last year, have you been to the cinema: ➂ Yes, three times or more ➁ Yes, once or twice ➀ No

In the last year, have you been to a museum: ➂ Yes, three times or more ➁ Yes, once or twice ➀ No

In the last year, have you attended a concert or an opera: ➂ Yes, three times or more ➁ Yes, once or twice ➀ No

In the last year, have you attended a theater play: ➂ Yes, three times or more ➁ Yes, once or twice ➀ No

What kind of cultural events do you find interesting: \_\_\_\_\_\_\_\_\_\_ , \_\_\_\_\_\_\_\_\_\_ , \_\_\_\_\_\_\_\_\_\_

Have you attended an event made accessible via audio description in the past: ❒ No ❒ Yes [elaborate] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Considerations, challenges and obstacles involved in attending the theater

In relation to each of the following, please state to what extent it influences your decision to go see a play.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **5** | **4** | **3** | **2** | **1** |
| **Very large** | **Large** | **Medium** | **Little** | **Very little** |
| 1. Accessibility of ticket purchasing
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. Ticket cost
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. Overall cost of attending the play (transport, escort, etc.)
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. Scheduled performance time
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. Distance between the venue and my place of residence
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. Transportation to the venue from my place of residence
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. Accessibility of the theater
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. Availability of a companion to escort me to the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. Difficulty understanding what is happening in the play (in the absence of audio description
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. Quality of the actors
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. Quality of the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |

Are there other significant factors that influence your decision whether or not to go see a play?

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Appendix 2: Audio description component quality and satisfaction

Audio device

1. Did you receive instructions on how to operate the device and the attached headphones before the play: Yes / No, why? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **5** | **4** | **3** | **2** | **1** |
| **Very large** | **Large** | **Medium** | **Little** | **Very little** |
| 1. To what extent were the instructions given for operating the device clear
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent was the device comfortable and easy to use
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did the device work smoothly (without malfunctions)
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent were you satisfied with the audio quality of the device
 | ➄ | ➃ | ➂ | ➁ | ➀ |

1. Is there anything you would like to add regarding the device itself and the operating instructions you received? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Preliminary exposition [trailer]

1. Did you listen to the trailer for the play? Yes, at home / Yes, before the show / No, why? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **5** | **4** | **3** | **2** | **1** |
| **Very large** | **Large** | **Medium** | **Little** | **Very little** |
| 1. To what extent did the trailer contribute to your familiarity with and understanding of the characters
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did the trailer contribute to your understanding of the set components, such as props and decor
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did the trailer contribute to your understanding of what was going to happen in the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent are you satisfied with the trailer for the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |

1. Is there anything you would like to add regarding the trailer for the play? Was there anything missing? Is there anything that could be improved? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Touch tour

1. Did you participate in a touch tour before the play: Yes / No, why? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **5** | **4** | **3** | **2** | **1** |
| **Very large** | **Large** | **Medium** | **Little** | **Very little** |
| 1. To what extent did the touch tour contribute to your ability to recognize each actor’s voice
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did the touch tour contribute to your familiarity with and understanding of the characters
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did the touch tour contribute to your understanding of the set components, such as props and decor
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did the touch tour contribute to your understanding of what was going to happen in the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent are you satisfied with the touch tour preceding the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |

1. Is there anything you would like to add regarding the touch tour preceding the play? Was there anything missing? Is there anything that could be improved? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Audio description characteristics

[Emphasize] Regarding the audio description,

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **5** | **4** | **3** | **2** | **1** |
| **Very large** | **Large** | **Medium** | **Little** | **Very little** |
| 1. To what extent were the words clearly enunciated and easy to understand
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent were the speaking pitch and intonation appropriate
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent were the pace and speed of speech appropriate
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent was the amount of text included in the audio description appropriate
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did the audio description blend into the play without interrupting the flow of the scenes
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did the audio description contribute to your understanding of the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did the audio description contribute to a more powerful theater experience
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent were you satisfied with the audio description
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did the audio description make you want to go to further plays with audio description
 | ➄ | ➃ | ➂ | ➁ | ➀ |

1. Is there anything you would like to add regarding the audio description? Was there anything missing? Is there anything that could be improved? Could you give examples of the things you have mentioned? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Appendix 3: Experience quality

Spatial perception

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **5** | **4** | **3** | **2** | **1** |
| **Very large** | **Large** | **Medium** | **Little** | **Very little** |
| 1. To what extent were you able to discern from which part of the stage the different voices were coming
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did you feel like you could imagine the locations where the story of the play was taking place
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did you feel like you were experiencing the scenes and events making up the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did you feel all of your senses stimulated by the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |

Narrative perception

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **5** | **4** | **3** | **2** | **1** |
| **Very large** | **Large** | **Medium** | **Little** | **Very little** |
| 1. To what extent were you able to visualize the characters
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent were you able to follow the characters
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent were you able to follow the plot of the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |

Engagement and enjoyment

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **5** | **4** | **3** | **2** | **1** |
| **Very large** | **Large** | **Medium** | **Little** | **Very little** |
| 1. To what extent did you feel like you were completely absorbed by the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent were you focused on the play and didn’t think about anything else
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did you feel like you had lost track of time during the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did you find the play moving
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did you find the play to be a powerful experience
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent would you recommend seeing this play to a friend
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extent did you enjoy the play
 | ➄ | ➃ | ➂ | ➁ | ➀ |
| 1. To what extend did this play make you want to go see other plays
 | ➄ | ➃ | ➂ | ➁ | ➀ |

## Appendix 4: Control factors [participant]

1. Where were you seated? Row \_\_ \_\_, seat number \_\_ \_\_.
2. How would you rate the sound quality of the play? ➄ Very good ➃ Good ➂ Average ➁ Bad ➀ Very bad
3. How did you purchase your ticket to the play? 🞎 Collective purchase [with a group] 🞎 Individual purchase 🞎 Other: \_\_\_\_\_\_\_\_\_\_\_\_
4. How did you get to the venue? 🞎 Organized ride 🞎 Public transport 🞎 Private transport
5. Who accompanied you to the play? 🞎 An organized group 🞎 Family member (partner, child, etc.) 🞎 Friend 🞎 Other: \_\_\_\_\_\_\_\_\_\_
6. Where / how did you hear about the play? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. How much did you pay to see the play? \_\_ \_\_ \_\_ NIS
8. How much did you pay for the overall outing [including transport, escort, babysitter, etc.]? \_\_ \_\_ \_\_ NIS

## Appendix 5: Participant interview tool

Hello,

My name is \_\_\_\_\_\_\_\_\_\_\_\_, from the Ono Academic College / Mashav company. Thank you very much for agreeing to do this interview. The Ono Academic College and the Mashav company are collaborating with the National Insurance Institute in conducting a formative study for the establishment of a program to make theater plays accessible by way of audio description. The purpose of this interview is to hear your feedback about: a) aspects of the accessibility and audio description service that contribute / could contribute to your welfare and overall experience, to your satisfaction and the quality of the audio description; and b) your needs, concerns, and overall interest in seeing plays in general and audio described plays in particular. This is a discreet interview and the things discussed in its context are reserved from being divulged to any third party. The report submitted to the National Insurance Institute will be based on the aggregated information gleaned from the interviews. If you are interested in further details, you can contact me via email, at info@mashav-research.com.

**Aspects of the accessibility and audio description service that contribute / could contribute to your welfare and overall experience**

1. Have you had any previous experience of audio description? How did you hear about it? What were your expectations from using the audio description during the play?
2. How would you describe your experience of the audio description? How did it affect your viewing of the performance? Could you give a few examples?
3. What were the advantages and disadvantages of using the audio description based on your experience? What would you improve and what would you preserve as is? Why? How would these things potentially affect your experience of the play?

**Needs, concerns, and overall interest in seeing plays in general and audio described plays in particular**

1. Do you go to see theater plays? What kind? What affects your decision to go see a play? Can you give a few examples?
2. Would you like to see more plays? If so, what would encourage you to do so? What kind of plays would you like to see? What factors influence your choice?
3. Could the availability of audio description influence your decision to see a play?
4. Is there anything else of significance that we haven’t discussed? In terms of theater play accessibility? In terms of audio description? In terms of your experience of theaters in Israel?

Ask for a mobile phone number for background detail attribution: \_ \_ \_-\_ \_ \_ \_ \_ \_ \_

**Thank you very much for your cooperation!**

## Appendix 6: Active audio describers interview tool

Hello,

My name is \_\_\_\_\_\_\_\_\_\_\_\_, from the Ono Academic College / Mashav company. Thank you very much for agreeing to do this interview. The Ono Academic College and the Mashav company are collaborating with the National Insurance Institute in conducting a formative study for the establishment of a program to make theater plays accessible by way of audio description. The purpose of this interview is to hear your feedback about: a) the audio describer training process; and b) your work as an audio describer. This is an anonymous interview and the things discussed in its context are reserved from being divulged to any third party. The report submitted to the National Insurance Institute will be based on the aggregated information gleaned from the interviews. The interview will take approximately half an hour and you are free to stop it at any point.

**The training process**

1. What drove you to the field of accessibility? What drove you to undergo training and work as an audio describer?
2. Could you describe the training process you underwent? Could you give a few examples please?
3. What were the advantages and disadvantages of the training process? How did they affect your work? Was there anything about the training process that was particularly memorable? Why?

**Working as an audio describer**

1. Please describe your work as an audio describer. What does your daily schedule / your professional routine look like? What are your ongoing work procedures?
2. What makes the job of audio describer unique? What drew you to it? How does it affect your personal life outside of work, if at all?
3. What will make you keep working as an audio describer?

**The field of audio description**

1. What, in your opinion, should or needs to happen in order to advance the field of audio description? What is required in order to raise the awareness, exposure and integration of audio description?
2. Is there anything else of significance which hasn’t come up during the interview that you would like to mention?

**Background**

Hello,

With your permission, I would like to ask you a few background questions. These questions are for deep analysis only. The interview is anonymous and your answers will not be divulged to any third party.

Year of birth: \_\_ \_\_ \_\_ \_\_

Gender: 🞎 Male 🞎 Female

Country of birth: 🞎 Israel 🞎 Other [elaborate] \_\_\_\_\_\_\_\_\_\_\_\_ [Year of immigration]: \_\_ \_\_ \_\_ \_\_

Mother tongue: 🞎 Hebrew 🞎 Other [elaborate] \_\_\_\_\_\_\_\_\_\_\_\_

Education: 🞎 None 🞎 Elementary 🞎 High school 🞎 Higher

🞎 Bachelor’s in: \_\_\_\_\_\_\_\_\_\_\_ , \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

🞎 Master’s and above in: \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other certificates and qualifications: \_\_\_\_\_\_\_\_\_\_ , \_\_\_\_\_\_\_\_\_\_ , \_\_\_\_\_\_\_\_\_\_

Profession: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Current job: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Thank you very much for your cooperation!**

1. The population of people that have been issued a blindness or visual impairment card. [↑](#footnote-ref-1)
2. Not including the audio described version of “The Taming of the Shrew” that was performed at the Library for the Blind. [↑](#footnote-ref-2)
3. Voice placement [↑](#footnote-ref-3)
4. With the exception of the play performed at the Library for the Blind and an additional play performance which took place at the beginning of the study, wherein the questionnaire was presented in detail and filled in on location. [↑](#footnote-ref-4)
5. As shown by the qualitative findings and by the literature at the Library for the Blind. [↑](#footnote-ref-5)
6. This cannot be statistically corroborated since there was only one musical included in the study, but a validation was obtained from the quality content analyses. [↑](#footnote-ref-6)
7. This step would involve overcoming technological difficulties due to the inconsistent cell reception in the theaters, as well as the obligation to switch off mobile phones during the play. [↑](#footnote-ref-7)
8. A suggestion that has to be mitigated by the desire of many spectators not to be part of a blind people group. [↑](#footnote-ref-8)
9. The quality of the play has a “halo” effect on the components of the audio description. [↑](#footnote-ref-9)