European Journal of Hospitality and Tourism Research
Vol.7, No.2, pp.1-25, May 2019
Published by European Centre for Research Training and Development UK (www.eajournals.org)

TOWARDS EFFECTIVE COMMUNICATION BETWEEN TOUR GUIDES AND INTELLECTUALLY DISABLED TOURISTS: AN EXPLORATORY STUDY

Mona Abdelbadie Elmoghazy (PHD)

Tourism Department, Faculty of Tourism and Hotels, Helwan University, Cairo, Egypt

ABSTRACT: *The current study examines the potential contribution of tour guides' communications to the vacation experience of intellectually disabled tourists. It investigates tour guides' perception of different verbal and non-verbal communication methods and tour guides' traits when interacting with this segment. The study assesses as well the effect of a disability awareness workshop on raising tour guides' knowledge and awareness of specific communication needs of intellectual disabled tourists. A survey questionnaire was developed and then tested for reliability and validity using a sample of tour guides. EFA and CFA were used to identify factors and to assess model validity. SME was performed to test the hypothesized relationships. Results revealed that the disability awareness workshop has a significant impact on raising tour guides' awareness of intellectually disabled tourists communication needs. Furthermore, the study shows that the non-verbal communication dimension with its two sub-constructs "Kinesics" and "paralinguistics and haptics", had a considerable significant regression weight on the proposed model (Tour Guide Communication Competences TGCC). Accordingly, this study serves as an exploratory research that provides a better understanding of the communication needs of intellectually - disabled tourist experience. Conclusions and recommendations for further research are provided.*

KEY WORDS: tour guides, intellectually-disabled tourists, verbal communication, non-verbal communication, personal and behavioural traits

INTRODUCTION

The disabled market is becoming a more significant market in tourism industry (Blichfledt and Nicolaisen, 2011; Darcy, 2010; Huh and Singh, 2007). Governmental regulations concerning disabled people have provided several guidelines for individuals with disabilities related to both businesses and society which in turn directed attention to disabled people particularly in terms of service providers in tourism and hospitality industry (Shaw and Coles, 2004).

Intellectual disability is one of the most important health problems in Europe (Wilhelmsson, *et al.*,2010). Sharing in leisure activities, finding a relevant job, and living independently as possible are key objectives for people with intellectual disability (Elder & Goosens, 1994; Sack and Mclean, 1997). However, Communication problems with people of intellectual disabilities are still very common (Bott *et al.*, 1997; Bradshaw, 2001; McConkey, *et al.*, 1999a; McConkey, *et al.*, 1999b). According to The UN Convention on the Rights of People with Disabilities,

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

communication barriers are considered one of the main obstacles to interact effectively with this segment (Pinazo & Reina, 2017)

The integration of people with disabilities has recently gained more importance through inclusive programs in education, employment and different support programs which generated groups who communicate with intellectually disabled people (Keith *et al.*, 2015; Metzel & Walker, 2001).

Likewise, there is a growing attention given in order to support communication between intellectually disabled people and others interacting with them (Mirenda & Iacono, 1990). Service providers should be aware of communication capabilities of intellectually disabled people and modify their communication performance accordingly (Bradshaw, 2001; Bartlett & Bunning, 1997). In this respect, McConkey, *et al.*, (1999a) pointed out that staff communication contributes to the challenging behaviors displayed by some people.

Previous research has examined the interaction between service providers and intellectually disabled people (Bakken, *et al.*, 2008; Bradshaw, 2001; Hall, 2008; Martin, *et al.*, 2010; Pinazo & Reina, 2017; Sack & McLean, 1997; Urea, 2012). The focus of these studies was on the quality and quantity of contact, while less attention has been paid to the relationship between staff who communicates with this segment and their actual communication needs (Bradshaw, 2001).

In spite of the efforts made to support communication with intellectually disabled people through improving careers' interactions (McConkey, *et al.*, 1999a), there is lack of information regarding how service providers in the tourism industry communicate with tourists with intellectual disabilities.

Acting as intermediaries between tourists and the destination which involve a high-contact and interaction, tour- guides are considered a key attribute in the success of tourist experience (Collins, 2000; Min, 2011; Min, 2012). One of the key requirements to exhibit interpersonal skills, tour guides should communicate in a way that responds to the different needs of tourists (Min, 2011). In other words, tour- guides' performance affects destination image, tourist satisfaction and loyalty (Bowie & Chang, 2005; Chow, 2004; Nyahunzvi & Njerekai, 2013; Zhang & Chow, 2004).

Since communication competences of tour guides is a substantial determinant of the success of tourist experience (Cohen, 1985; Leclerc & Martin, 2004; Pearce, 1984), tour guides' communication performance could largely enhance the experience of tourists with intellectual disabilities.

To one's surprise, there is a paucity of research that investigate communication competences of tour guides when interacting with intellectually disabled in spite of the recognized significant role played by tour guides in affecting tourist experience. The current study brings to the fore key communication competences of tour guides interacting with intellectually disabled tourists.

Three important dimensions in particular are worthy to investigate. First, the potential contribution of tour guides' communications to the vacation experience of intellectually disabled experience which has not been studied yet. Second, information on how tour guides perceive the importance of different verbal and non-verbal communication methods when interacting with such a segment. Third, to what extent do training workshops that provide information on different intellectual

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

disabilities' characteristics and communication needs assist tour guides to select the appropriate communication behavior and adapt their performance to the different requirements of this segment. The current study aims at filling these three gaps. It proposes a comprehensive model that encompasses tour guides' communication competencies (through verbal and non-verbal communication methods) as well as guides' personal traits and behavioral patterns when dealing with intellectually disabled tourists. Moreover, it provides tour guides with essential knowledge and awareness of specific communication needs of intellectually disabled tourists. Thus, enhancing tour guides understanding of this important segment.

LITERATURE REVIEW

Intellectually disabled tourists

The number of people with disabilities is increasing, there are 80 million people with disabilities in Europe, and this number is predicted to increase with the aging of population (Pinazo & Reina, 2017). Approximately out of each one hundred people, three individuals live with some sort of intellectual disability in the United States (Kressler, 2003).

Intellectual disability denotes considerable limitations in intellectual functioning and adaptive behavior (AAIDD, 2009). Intellectual functioning describes an overall mental ability for example learning and problem solving and is measured by IQ test. As for adaptive behavior, it refers to conceptual, practical and social skills which are learned and practiced by individuals in their daily lives (Grossman, 1983; Kressler, 2003)

The prevailing classification of developmental disabilities is: mental retardation, cerebral palsy, epilepsy, autism, and seizure disorders (Kressler, 2003)

Providing intellectually disabled people with opportunities to live a suitable life and practice appropriate activities in their environment and communicating with others is of great importance (Martin, 2010; Mirenda, & Iacono, 1990; Sack & McLean, 1997).

Intellectual disability no longer viewed as a constant attribute of a person, instead it is regarded as a "social-ecological" conception of the individual's interaction with the environment (Harris & Greenspan, 2016).

Intellectual disability depicts a level of impairment of intellectual functioning with the intensity of the disability ranging from mild and moderate to severe and profound intellectual disability (Bakken, 2008; Sack & McLean, 1997). While individuals with mild and moderate intellectual disabilities can live independently, people with profound disability have problems in perception, understanding, attention, memory, and reasoning (Sigafoos, 2016). It should be noted as well that intellectually disabled people may have other types of disabilities such as physical disability (Onley, 2001).

Generally, intellectual disabilities is a set of conditions of incomplete or arrested development of the brain and associated structures, many of these conditions affect communication (Schalick III, *et al.*, 2012).

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Importance of communication for intellectual disabled

Successful communication is a substantial aspect in achieving quality of life of intellectual disabled people (Martin, *et al.,* 2010). Communication deficiencies are an inherent problem among intellectually disabled people (Pinborough-Zimmerman *et al.,* 2007; Sigafoos *et al.,* 2016). It is revealed that many intellectual disabled confront hard situations in which they feel frustrated due to inability to convey their feelings and wants (Pinazo & Reina, 2017). Setting different resources, strategies and information concerning different communication needs is a main concern to overcome these obstacles (Pinazo & Reina, 2017).

Speech, language and communication disabilities are usually related to intellectually disabled people (Sigafoos *et al.,* 2016). In this respect, Martin *et al.,* (2013) revealed that a lower extent of communication ability is a main characteristic of individuals with intellectual disability.

There is a comprehensive definition of communication proposed by (Martin, *et al.,* 2010, p. 306) "a reciprocal process between at least two people of sending a message and interpreting it correctly through both verbal and non-verbal means".

Communication indicates sending and receiving messages, it may include "vocalization, spoken language, using of non-vocal as well as non-speech methods for instance: using gestures in a formal or informal way, manual signs, picture cards exchange and pointing to symbols/objects (Sigafoos *et al.,* 2016). Communication disability can range from developmental delay of early communication (e.g. joint attention) to profound communication disability. The person who has a severe impairment lacks a perceivable amount of speech or language and a deficiency in suitable communication methods, they usually depends on other modes of communications such as gestures, vocalization, body movements and facial expressions (Didden *et al.,* 2009; Bradshaw, 2001; Sigafoos, *et al.,* 2000; Sigafoos *et al.,* 2016).

According to the severity of intellectual disability, communication impairment can be classified into mild and moderate intellectual disability and severe and profound intellectual disability (Bakken, *et al.,* 2008; Sigafoos, *et al.,* 2007). People with mild and moderate intellectual disability have adequate speech and language to communicate appropriately with others. However, there is a general area of delay in language development such as word utterances, problems in the grammar used and taking turns in conversations (Schalick III, *et al.,* 2012; Sigafoos *et al.,* 2016). For people with severe and profound intellectual disability, they suffer significant communication problems; that is to say, they have difficulties in both expression due to limited or absence of speech and in understanding others (Sigafoos *et al.,* 2016). In this concern, Olney (2001) pointed out that severe disability has a thorough effect on person's communication ability and interaction, Olney added that intellectually disabled partners should have communication competences.

Communication plays a substantial role in individual's daily interactions and in formal situations in which a person interacts with service providers (Schalick III, *et al.,* 2012). Succeeding in communicating with people with intellectual disability should consider assessing the current communication ability of the individual as well as the type and intensity of speech, language, communication disability and any other physical, hearing and sight impairment (Bradshaw, 2001; Sigafoos *et al.,* 2016)

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Since communication difficulties are prevalent among people with intellectual disabilities, staff should assess the individuals' communication capabilities and adapt their communication behavior accordingly (McConkey, *et al.,* 1999b; Schalick III, *et al.,* 2012). Furthermore, Van der Gaag & Dormandy (1993) showed that the communication process become more effective when service providers are aware of the communication abilities of individuals and modify their communication style consequently .The adaptation process involves two dimensions: responding to specific needs of individuals they are communicating with, and adapt their communication to the various functions of communication such as giving instructions, eliciting opinions or social chats (McConkey, *et al.,* 1999b)

Mirenda and Iacono, (1990) indicated that collecting necessary information concerning communication abilities of intellectually disabled people is significant to identify obstacles of communicating with this segment. Furthermore, lack of this knowledge may contribute to making the staff interacting with this segment unaware of the attempts done by disabled to communicate.

Communication styles differ among people with intellectual disabilities; some may use speech, others rely mostly on non-verbal communication. Practices of professional and service providers who interact with them should be flexible accordingly (Gallagher, 2002; Keith *et al.,* 2015; Sack & McLean, 1997).

Verbal and non-verbal communication

Previous literature has identified two types of communication, verbal and non-verbal communication (Bradshaw, 2001; Martin, *et al.,* 2010; Onley, 2001). While verbal communication includes using words to deliver messages, non-verbal communication does not involve speech (Dyche, 2007; Martin, *et al.,* 2010; Onley, 2001). Although using both methods of communication is well established in literature, non-verbal communication is regarded as more significant in conveying a message. It involves facial expressions, touch, gestures and body language (Martin, *et al.,* 2010).

Previous research has shown that communication with intellectually disabled people is a challenging matter since there is a difficulty associated with receiving and understanding messages (Martin, *et al.,* 2010; Schalick III, *et al.,* 2012). It is revealed that failure of service providers to adapt their communication methods to the communication abilities of the intellectually disabled, for instance not paying a much concern to non-verbal communication, is one of the key obstacles in communicating with this segment (Martin, *et al.,* 2010; Wilhelmsson, *et al.,* 2010; Sigafoos et al., 2016).

The intense use of verbal communication by staff communicating with this segment is highly reported (Bradshaw, 2001; Finaly *et al.,* 2008; Healy & Noonan-Walsh, 2007). Using complicated language which exceeds the communication abilities of individuals, using long sentences, and posing more questions have also reported as problems related to staff communication with intellectually disabled people (Healy & Noonan-Walsh, 2007). Misunderstanding of the individual's preferences as well as giving less concern to non-verbal communication have been observed among staff presenting other communication barriers (Finaly *et al.,*

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

2008; Martin, *et al.,* 2010). In their studies, Balandin *et al.*, (2001); Martin, *et al.,* (2010) and McConkey *et al.*, (1999a) indicated that insufficient knowledge among service providers concerning communication substitutions methods has a negative influence on communication success.

Good communication is necessary to enhance the performance of service providers and to improve the quality of life of this important segment (McConkey *et al.*, 1999a; Pinazo & Reina, 2017). Accordingly, improving the communication competences of tour guides is a key challenge for successful interaction with intellectually disabled tourists.

Lack of necessary knowledge of different features and requirements of different disabilities as well as lack of special designed training for professionals and service providers may represent key obstacles in achieving successful communication with intellectual disabled people (Hall, 2008; Pinazo & Reina, 2017; Sack and McLean, 1997). In their study Hogg *et al.*, (2001) indicated that people with profound intellectual and multiple disabilities (PIMDs) do not relay on verbal communication. Instead, they depend on facial expressions, vocal sounds, body language and behavior to communicate. Therefore, it is significant for those who provide support to intellectually disabled people to gain more information concerning their means of communication and adapt their communication behavior accordingly.

Tour guides: Role and communication competences

Previous literature has shown that those who interact with intellectually disabled people may expose to situations which could not be predicted and that knowing specific communication needs, information and strategies are important factors to overcome such situation and to succeed in communication (Bradshaw, 2001; Pinazo & Reina, 2017; Sack & McLean, 1997).

Hall (2008) indicated that one of the main barriers in integration and inclusion of disabled people is the "attitudinal barrier" and that training programs designed to raise awareness of disability among service providers who interact with this segment has a significant positive effect on employees' understanding of the person's disability and the difficulties he/she is meeting will enhance the employees' knowledge, attitude and performance in communicating with this segment.

Tour guide are one of those service providers who have a direct contact with tourists (Huang *et al.,* 2010; Weiler and Walker, 2014) and should develop their knowledge, attitude, and communication abilities when interacting with this segment.

During the tour, tour guides have a high level of contact with tourists (Maka, *et al.,* 2011). Accordingly, tour guides' performance is a substantial factor in achieving tourist satisfaction (Ferguson, *et al.,* 2016). In this concern, Rabotic (2010) showed that a positive tourist experience is an important outcome achieved through the important role of tour guides and that contacting and interacting with customers are key determinants that affect tourist perception of a tour guide characteristics and service quality.

Tourists' expectations are increasing, and this adds more responsibilities on tour guides to gain more information and adapt to visitors' needs (Weiler & Walker, 2014). Recently, there are various

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

roles tour guides have to play from which communicative dimension in guiding is gaining more importance (Leclerc & Martin, 2004; Maka, *et al.*, 2011; Weiler & Black, 2014; Weiler & Walker, 2014). Much of the different roles of tour guides as a mediator of tourists' physical access, interactions with the local community and environment, and tourists' cognitive and affective access are carried out basically through verbal and non-verbal communication with tourists (Weiler & Walker, 2014).

In their study, Black & Weiler (2005) pointed out that different expected roles of tour guides are mainly depending on tour guides' communication skills. Tour guides are playing a key role in forming tourist experience and destination image, the prolonged interaction duration with tourists distinguishes the service of tour guiding from other tourism services (Huang, *et al.*, 2010).

Communication as a main function of a tour guide includes information exchange, interpretation, and responding to the tourists' inquiries. It is revealed that communication effectiveness is one of the key dimensions for assessing the quality of a tour guide (Maka, *et al.*, 2011).

The effectiveness of tour guides' communication competences positively affect tourist satisfaction (Min, 2011). Therefore, expanding quality of tour guides' communication competences to intellectually disabled tourists should be considered.

Building on previous research that verify the influence of service providers' communication competences, attitude and traits on the successful interaction with intellectually disabled people and according to previous studies which revealed the importance of using non-communication methods among this segment, as well as the positive effect of disability awareness workshops on raising service providers' knowledge of intellectually disabled people' communication needs, the current study postulates the following hypotheses:

H1: Tour guides communication competences is a multidimensional construct encompassing verbal, non-verbal communication and tour guides' traits

H2: non verbal communication methods are more appropriate than verbal methods when interacting with intellectually disabled people

H3: Disability awareness workshops have a positive impact on raising guides' knowledge and understanding of intellectually disabled tourists' communication needs.

METHODOLOGY

Measurement

A measurement scale for perceived tour guides' communication competences for interacting with intellectually disabled tourists was developed. A six-stage research design was used involving item generation, purification, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), reliability and validity tests and testing hypotheses.

Item generation

A preliminary pool of items was developed to assess the perceived communication competences of tour guides interacting with intellectually disabled tourists: 32 items were deemed to represent

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

the perceived verbal communication methods, these items were drawn from (Bradshaw, 2001; Leclerc & Martin, 2004; McConkey, *et al.,* 1999a; McConkey, *et al.,* 1999b; Olney, 2011); the non-verbal communication methods' 28 items were adopted from (Leclerc & Martin, 2004; Martin *et al.,* 2010; Sigafoos *et al.,* 2016; Ogletree *et al.,* 2011; McConkey, *et al.,* 1999b). Since tour guides' traits influence tourist' s experience, (Ap & Wong, 2001; Leclerc & Martin, 2004) integrating the tour guides' traits dimension into a model that assesses tour guides' communication competences when interacting with intellectually disabled tourists was indispensable. Accordingly, 12 items representing tour guides' traits were adopted from (ELEVATOR, 2015; Leclerc & Martin, 2004).

Item purification

The three dimensions and their corresponding items were presented to a list of 16 qualified tour guides certified by the FEG (European Federation of Tourist Guides Associations) and ENAT (European Network for Accessible Tourism). The selected tour guides have been engaged in the T- GuIDE project that trained a number of tour guides on basic principles to guide intellectually disabled people.

The certified tour guides have been contacted through emails and were provided with a brief introduction to the study objectives. They were asked to indicate the level of consent with the battery of measures for the value of communication methods and tour guides traits developed based on the extant literature. Then, they were encouraged to add items of either verbal, non-verbal communication methods or tour guides' traits that were not included in the existing set of measures. They have been asked to rate dimension that is more important and prevalent while communicating with intellectual disabled tourists: Verbal communication, Non-verbal communication or both according to their experience of communicating with tourists with intellectual disability. Finally, they have been required to select the items that they consider relevant and important for all items of the three dimensions. Only three certified tour guides out of 16 have responded, 80 percent was used as a cut-point for their aggregated scores (Hardesty & Bearden, 2004) .This stage resulted in deletion of 9 items concerning verbal communication and 2 items from non-communication methods and one item from tour guides' traits. This stage of scale development resulted in an initial pool of 59 items. All the above items were measured on 5- point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Tour guides' socio-demographic variables represent the last part of the questionnaire.

Exploratory pretests

After deletion of all items that the tour guides recommended, a formal pretest was conducted with the 59 items by asking 123 undergraduate students enrolled in guidance department in Faculty of Tourism and Hotel Management, Helwan University, Egypt who are getting practical training in tour guidance to complete the refined questionnaire. For the purpose of this study, a pretest-postest format was used to assess levels of awareness and knowledge concerning communication with intellectual disabled people. Students have been approached in their class rooms. Study objectives and importance have been presented to the students before distributing the questionnaires. Participating in the study was on a voluntary basis. Students who agreed to participate were asked to fill in the pre-test questionnaires. After collecting the completed questionnaires, a short workshop has been presented to the participants to provide them with necessary information

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

concerning people with intellectual disability, types of intellectual disability, and different communication methods with this segment. Additionally, the researcher presented a video of a tour guide providing a training tour designed for tour guides leading tourists with intellectual disability. The duration of the workshop was 2 hours. A post-test questionnaire with the same items of verbal, non-verbal communication methods and tour guides' traits was distributed immediately after the workshop to assess whether students who attended a disability awareness workshop would demonstrate a higher knowledge in disability matters and communication methods after attending a professionally designed workshop. The post-test questionnaires were gathered after being completed. Questionnaires that included uncompleted questions and pre-test questionnaires that were not followed by post-test ones were considered invalid and have been excluded. A total of 114 pre-test and 114 post-test questionnaires were useable representing 93% response rate.

Collected data was subjected to exploratory factor analysis (EFA) to assess the dimensional qualities of the scale. Factor analysis of tour guides' communication methods showed that Bartlett's Test of Sphericity was significant ($p<0.00$) and KMO measure of sampling adequacy was .836 which is above the recommended level (minimum value 0.60) (Hair, *et al.,* 2006), indicating that data was appropriate for factor analysis. A Principal Component Analysis with Varimax rotation was used to explore the main attributes featuring appropriate communication methods and tour guides' traits. A number of criteria were used to determine the number of factors extracted such as eigenvalue, scree plot, and percentage of variance, item communalities and factor loadings (Hair *et al*., 2006). Only factors with eigenvalue greater than or equal to 1.0 were considered, scree plots were also examined, items were retained if they load at 0.4 or more on a factor and did not load at more than 0.3 on any other factor. Two items that belong to verbal communication dimension, three items relate to non-verbal communication dimension and two items that belong to tour guides' traits dimension were removed as they failed to load at 0.400 or above on any factor. The remaining 52 items were rerun and a new eight-factor structure emerged with items clearly loading on their factors at 0.400 or above (Nunnally & Bernstein, 1994).

The eight constructs were named based on the items that loaded heavily on them: the first construct with 9 items is concerned with "effective speakingVC1", the second construct includes 5 items associated with "active listening and reinforcement VC2", the third construct is made up of 3 items and is concerned with "reflecting and clarifyingVC3". The fourth construct with 12 items related to "kinesics NVC1", the fifth construct with 7 items is concerned with "paralinguistics and haptics NVC2", the sixth construct includes 2 items associated with "smiling & using simple switches NVC3", the seventh constructs is made up of 5 items related to "personal traits TGT1" and the eighth construct involves 4 items associated with "behavioral traits TGT2". The total cumulative variance explained by these eight constructs was 62% and their Cronbach's alpha values were .73, .71, .70, .72, .74, .76, and .79 respectively which indicate good internal consistency (Nunnally, 1978).

Construct validation of the tour guide communication competences model (CFA)

For the full-scale test, the revised scale with the 52 items was administered to a sample of Egyptian licensed tour guides who were attending a training course organized by the Egyptian Tourism Ministry. Data collected throughout 9 sessions with different attendees over a period of four

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

months from October 2018 to February 2019. The average of attendees in each session was 26 attendees. A pre-post test technique was also employed to assess the level of awareness and knowledge of tour guides concerning communication methods and tour guides' traits to guide intellectually disabled tourists and the most important items according to their point of view before and after the workshop. The researcher obtained a prior permission from the Ministry of Tourism to distribute the questionnaires among the course attendees and participation was voluntary.

The questionnaire was originally written in English. A brief description of the study nature was provided before distributing the pre-test questionnaire. The post-test questionnaires were distributed immediately after the workshop.

The post-test questionnaires were collected after being completed. A total of 265 questionnaires were distributed, 255 were returned while 246 of them were used for analysis after excluding a number of questionnaires that most of its questions were not answered by the respondents. Pre-test questionnaires that were not followed by post-test ones were considered invalid and have been excluded as well. Thus, questionnaires used for analysis presented a valid response rate of 92.8%. Of the remaining 246 surveyed tour guides, 37 % were males while 63% were females, 68% were between 20 and 29 years old, 72% were university graduates and 88 % of surveyed tour guides did not guide intellectually disabled tourists before.

To verify the validity of the measurement model, confirmatory factor analysis (Hair *et al.,* 2014) was run to assess convergent and discriminant validity. AMOS program (version 20.00) was used to evaluate the measurement model. Standardized factor loadings, composite reliability, and average variance extracted (AVE) were calculated to assess the convergent validity of the measurement model. The researcher did not expect the EFA factor analysis structure to be completely verified, as data collected from students are typically less reliable than data gathered in the field study. Expectedly, the 8-factor specification failed to converge. Analysis of modification indices suggested that deleting the construct "smiling & using simple switches NVC3", might cause the data to converge. The construct was dropped from analysis since its two items were captured by "kinesics NVC1". Moreover, items with low loadings (less than .50) had to be removed from further analyses (Anderson & Gerbing, 1988). The final confirmatory model includes 34 item indicators and 7 latent factors. Table 1 shows the model estimates. All standardized factor loadings of the 34 items ranged from .509 to .922, and all loadings were significant at $p<0.05$. The coefficient alpha values ranged from .701 to .838, showing evidence of the internal consistency of the items of each construct (Nunnally, 1978). Reasonable loading (0.44 - 0.97 with p=.000) between first- and second-order constructs also attests to convergent validity. The composite reliabilities of the constructs ranged from .730 to .880, which exceed the acceptable .70 level. The AVE values ranged from .44 to .63, which are approaching or greater than the acceptable level of .50. The construct is close to or meets the criteria for convergent validity.

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Table 1: Results of confirmatory factor analysis

Construct and items	Standardized factor loadings	Cronbach's alpha	Composite reliability	Average variance extracted
Effective speaking VC1		**.780**	**.780**	**.441**
Using story-telling techniques **V22**	.668			
Using appropriate grammar and avoid using complicated tenses **V15**	.523			
Using clear easy language **V19**	.722			
Presenting ideas clearly **V18**	.680			
Talks (talks slowly, clearly, loudly, clear articulation) **V9**	.611			
Active listening and reinforcement VC2		**.758**	**.786**	**.501**
Opinions Encourage them to talk and express their opinions. **V10**	.820			
Inviting other to do something **V20**	.756			
Suggestions **V11**	.633			
Using open questions **V4**	.509			
Reflecting and clarifying VC3		**.701**	**.730**	**.562**
Using clarification **V5**	.836			
Using positive language **V6**	.649			
kinesics NVC1		**.822**	**.840**	**.451**
Using body movements **NV8**	.633			
Laughing **NV23**	.534			
Using symbols (words, words approximations, objects, photographs, line drawing, print, manual signs) **NV10**	.819			
Listening **NV24**	.686			
Using body language **NV3**	.549			

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Maintaining direct eye contact (Eye gaze)**NV9**	.748			
looking **NV16**	.566			
Paralinguistics and haptics NVC2		**.830**	**.835**	**.440**
Using objects that can be touched, smelled **NV17**	.668			
Using large print formats **NV20**	.671			
Giving 'handouts' which uses pictograms, graphic symbols or pictures of the most important objects/ sights **NV18**	.758			
Providing parts to be filled in / or pictures to be painted by the participants.**NV19**	.549			
Pointing to symbols/objects **NV6**	.669			
Using facial expression **NV1**	.539			
Using sign language **NV4**	.654			
Personal traits TGT1		**.874**	**.880**	**.600**
Being inclusive **T8**	.677			
Being perceptive **T4**	.746			
Being interesting **T3**	.799			
Being creative **T5**	.817			
Be flexible **T11**	.805			
Behavioral traits TGT2		**.838**	**.878**	**.630**
Being patient **T6**	.674			
Being helpful **T10**	.922			
Being polite T9	.872			
Being natural **T7**	.641			

Note: the standardized factor loadings were significant at the .05 level.

To examine the discriminant validity, Fornell & Larcker (1981) recommended that the AVE estimates be greater than the squared correlation between any two constructs. As shown in Table 2, the AVE extracted in each construct was higher than the squared correlation between two constructs, providing evidence of discriminant validity.

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Table 2: Correlation among constructs.

Construct	VC1	VC2	VC3	NVC1	NVC2	TGT1	TGT2
VC1	**.441**						
VC2	.444**	**.501**					
VC3	.560**	.242**	**.562**				
NVC1	.647**	.478**	.480**	**.451**			
NVC2	.651**	.312**	.606**	.650**	**.440**		
TGT1	.680**	.381**	.344**	.664**	.523**	**.600**	
TGT2	.625**	.296**	.250**	.612**	.389**	.781**	**.630**

Note: The bold numbers on the diagonal are the AVE. Off-diagonal elements are the squared correlations among constructs, ** p<.01.

Structural equation modeling and hypothesis testing

Structural equation modeling was performed to confirm the validity of the suggested model, and to test the hypothesized relationships between the constructs (first and second order constructs). The goodness of fit statistics showed a good fit among the verbal communication's sub-factors, the non-verbal communication's sub-factors, and tour guide's traits sub-factors (χ^2/df= 1127.348/ 520) p <.001, RMSEA= .067, RMR= .043 GFI=0.91, CFI=0.93, NFI=0.92). The overall model's goodness-of-fit statistical results and the measurement model assessments support confirmation of the 7-factor model for TGCC consisting of "effective speaking VC1", "active listening and reinforcement VC2", "reflecting and clarifying VC3", "kinesics NVC1", "paralinguistics and haptics NVC2", "personal traits TGT1 " and "behavioral traits TGT2".

Hypothesis 1 which posited that perceived tour guide communication competences TGCC is a multidimensional construct reflecting verbal, non-verbal communication methods and tour guides specific traits was supported. The results revealed that the perceived tour guide communication competences is a higher-order construct consisting of seven first order factors that significantly loaded on the higher construct TGCC. The factor loadings of "effective speaking VC1", "active listening and reinforcement VC2", "reflecting and clarifying VC3", "kinesics NVC1", "paralinguistics and haptics NVC2", "personal traits TGT1 " and "behavioral traits TGT2" on TGCC are .84, .44, .45, .79, .63, .79, and .84 respectively. Furthermore, the R^2 results for all sub-constructs that represent verbal, non-verbal communication and tour guides' traits are high (.70, .19, .20, .63, .39, .94, .70). Thus, the contribution of TGCC on its seven sub-constructs is good. Moreover, H2 posits that non-verbal communication methods are more important than verbal communication methods when interacting with intellectually disabled tourists. Results of standardized regression/loadings of verbal and non-verbal communication methods demonstrated that the factor associated with "effective speaking VC1" which relates to verbal communication methods, and the factors of kinesics NVC1" and "paralinguistics and haptics NVC2", which

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

associate with non-verbal communication methods had the largest weights on the Tour Guide Communication Competences (TGCC) with 0.84, 0.79 and 0.63 respectively. Accordingly, hypothesis H2 is partially verified.

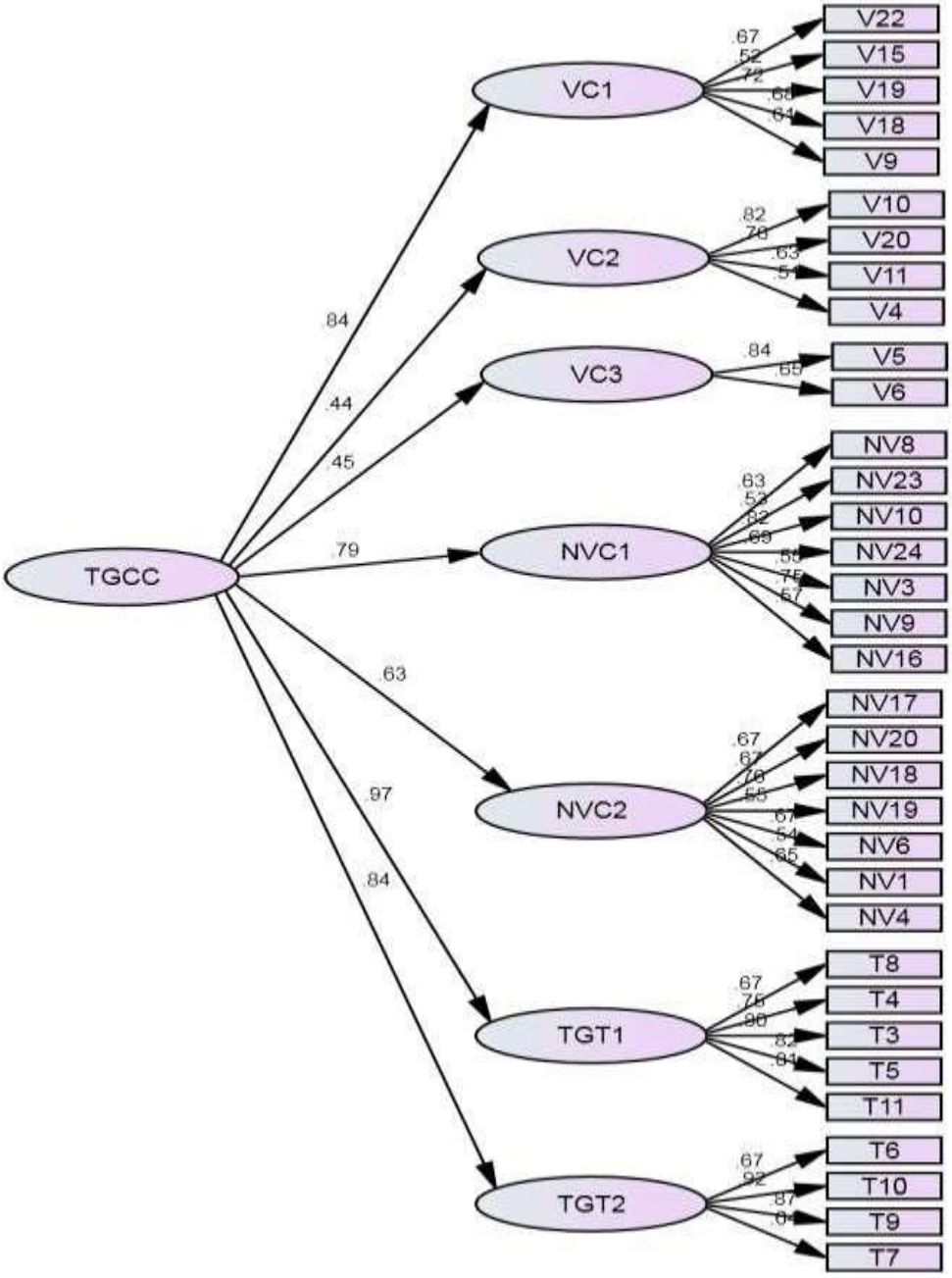

Figure 1. Proposed model of tour guides communication competences interacting with intellectually disabled tourists

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Differences in tour guides' perception towards verbal and non-verbal communication and tour guides traits before and after workshop

In order to determine if there were significant differences between tour guides' perception towards verbal and non-verbal communication and tour guides traits before and after workshop, a paired sample t-test was performed on the data set. Table (3) illustrates the pre- and post-workshop ratings of respondents on the 11 items relating to the verbal communication methods, the 14 items representing the non-verbal communication methods and the 9 items relating to the tour guides' traits. For the verbal communication methods, there were statistically significant improvements on ratings of importance of all of these methods ($P<0.05$) except items "Using clear easy language" and "opinions (encourage tourists to talk and express their opinions)".

Mean scores of tour guides' perception after workshop concerning non-verbal communication methods significantly improved from pre-workshop ratings. Statistically significant differences were also reported for non-verbal communication methods ($P<0.05$) except for "Laughing" and "Listening" items. For perceived tour guides traits, there were statistically significant differences as well in perceived tour guides' traits. However, there were no significant differences concerning "Being polite", "Being helpful" and "Being flexible".

For all of these methods, tour guides had higher mean scores compared to their scores before workshop. The findings showed that the disability awareness workshop did have an impact on increasing knowledge regarding disability matters. The increase in posttest scores provides evidence of the positive impact of the disability awareness workshop. Accordingly, the third hypothesis is verified.

Table (3) Differences in tour guides' perception towards verbal and non-verbal communication and tour guides traits before and after workshop

Construct and items	Before workshop	Before workshop	Sig.
Effective speaking VC1			
Using story-telling techniques **V22**	4.2	4.5	0.000
Using appropriate grammar and avoid using complicated tenses **V15**	4.3	4.6	0.000
Using clear easy language **V19**	4.6	4.7	0.575
Presenting ideas clearly **V18**	4.4	4.7	0.000
Talks (talks slowly, clearly, loudly, clear articulation) **V9**	4.6	4.9	0.000
Active listening and reinforcement VC2			
Opinions (encourage tourists to talk and express their opinions). **V10**	4.3	4.5	0.061
Inviting other to do something **V20**	3.7	4.1	0.000
Suggestions **V11**	3.7	4.1	0.000
Using open questions **V4**	3.5	3.9	0.004
Reflecting and clarifyingVC3			
Using clarification **V5**	4.3	4.5	0.000
Using positive language **V6**	4.2	4.5	0.000
Kinesics NVC1			

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Using body movements **NV8**	4.0	4.5	0.000
Laughing **NV23**	4.3	4.4	0.327
Using symbols (words, words approximations, objects, photographs, line drawing, print, manual signs) **NV10**	4.3	4.7	0.000
Listening **NV24**	4.6	4.7	0.455
Using body language **NV3**	4.3	4.6	0.000
Maintaining direct eye contact (Eye gaze)**NV9**	4.1	4.9	0.001
looking **NV16**	4.0	4.5	0.000
Paralinguistics and haptics NVC2			
Using objects that can be touched, smelled **NV17**	4.0	4.6	0.000
Using large print formats **NV20**	3.8	4.7	0.000
Giving 'handouts' which uses pictograms, graphic symbols or pictures of the most important objects/ sights **NV18**	3.9	4.5	0.000
Providing parts to be filled in / or pictures to be painted by the participants.**NV19**	3.8	4.3	0.000
Pointing to symbols/objects **NV6**	4.2	4.5	0.014
Using facial expression **NV1**	4.1	4.4	0.000
Using sign language **NV4**	4.1	4.6	0.000
Personal traits TGT1			
Being inclusive **T8**	4.3	4.6	0.000
Being perceptive **T4**	4.3	4.6	0.000
Being interesting **T3**	4.5	4.7	0.000
Being creative **T5**	4.6	4.7	0.000
Being flexible **T11**	4.6	4.9	0.102
Behavioral traits TGT2			
Being patient **T6**	4.6	4.7	0.028
Being helpful **T10**	4.7	4.8	0.056
Being polite **T9**	4.6	4.7	0.068
Being natural **T7**	4.5	4.6	0.008

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

DISCUSSION

Building on recent advances in communication with people with intellectual disabilities (Bakken, *et al.*, 2008; Bradshaw, 2001; Hall, 2008; Martin, *et al.*, 2010; McConkey, *et al.*, 1999a; McConkey, *et al.*, 1999b; Mirenda and Iacono, 1990; Pinazo & Reina, 2017; Sack & McLean, 1997; Schalick III, 2012), this study extends the existing literature by investigating communication competences of tour guides interacting with tourists with intellectual disability. Moreover, this study introduces an integrative model including the verbal, non-verbal communication and tour guides' traits dimensions in assessing tour guides' communication competences leading tourists with intellectual disability. The current study examines the relative importance of non-verbal communication methods in front of verbal communication methods according to tour guides' perception. In addition, the study investigates the differences between the pre-test and post-test workshop perceptions to assess the potential impact on raising the knowledge and awareness of tour guides concerning the disabled tourist market and its inherent characteristics, requirement and communication needs.

First, the study results indicate that the proposed model of perceived tour guide communication competences TGCC in the case of guiding tourists with intellectual disability is a multidimensional construct encompassing verbal, non-verbal communication methods and tour guides specific traits. The findings of the initial contact that has been carried out with the three certified tour guides who communicate with intellectually disabled tourists reveal also that verbal and non-verbal communication are both important dimensions to guide this type of tourists. These findings are in line with previous research showing the importance of communication to tour guides and tourists alike; Ap and Wong (2001) showed that good communication skills are among key qualities and standards tour guides should have. Likewise, Ryan and Dewar (1995) indicated that tour guides' communication with the tourists enhance social interaction and that effective communication abilities have a positive effect on tourist satisfaction.

On the other hand, findings reveal that tour guides' traits is a significant predictor of effective communication with intellectually disabled tourists since the two sub-constructs of tour guides' traits loaded heavily on the TGCC model (.97, .84). Similarly, when asking the three certified guides who actually guide intellectually disabled tourists, they confirmed the importance of guides' traits specifically being "patient" and "flexible". However, they revealed that it is more importantly for guides to be trained on showing appropriate attitude towards tourists with intellectual disability. Comparing this result with the responses of the tour guides involved in the field study, it appears that there may be slight differences on the importance weights of guides' traits, this support that specialized training and practice could bring different perceptions and more suitable attitude.

As expected, the non-verbal communication dimension with its two sub-constructs "kinesics NVC1"and paralinguistics and haptics NVC2" have a considerable significant regression weights on the TGCC compared with the verbal dimension with exception to the "effective speakingVC1" sub-construct that has a high weight as well. This confirms findings of Martin, *et al.*, study (2010) that intellectual disabled people relay on nonverbal communication. Likewise, findings of Mirenda and Iacono study (1990) revealed that although both verbal and non-verbal communication are used by intellectually disabled people, non-verbal communication is the most frequently observed

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

among people with intellectual disability. However, there were important facts provided by the three certified guides in this concern according to their experience in guiding this segment. They revealed that some non-verbal communication methods are not appropriate for some types of intellectual disability such as autism. On the other hand, they emphasized the importance of some of these methods as contributors to effective communication such as "listening". Previous results suggest that designing different and more suitable specific types of training for different types of intellectual disabilities will be indispensible.

Therefore, knowing the tourist's disability type and communication abilities are of great importance for tour guides' success. In this respect, recent research has shown that the lack of a comprehensive knowledge of different disabilities and basic requirements and the lack of specialized training on the part of professional and staff communicating with people with intellectual disability have a negative impact (Pinazo *et al.*, 2017). Similarly, in their study, Sack and Mclean (1997) revealed that the role of staff interacting with intellectually disabled people should encompass the inherent communication abilities of all individuals.

Results also show that tour guides have higher mean scores compared to their scores before disability awareness workshop for verbal, non-verbal communication methods and tour guides' traits. These results support the assumption that the higher the level of training on different communication requirements of intellectually disabled people, the higher the level of knowledge, awareness and performance. These results are consistent with previous research (Weiler & Walker, 2014; Ap & Wong, 2001; Black, *et al.*, 2001) that specialized training is substantial for tour guides to enhance their performance and communication skills. Likewise, Sack and Mclean's study (1997) revealed that training provided to staff interacting with intellectual disabled people is considered a valuable way to improve communication with people with intellectual disability.

Given the positive relationships between training tour guides and improving their performance, official tourism bodies of tour guides should pay much concern to design specific training programs to segments with special needs as a growing travel market particularly the communication dimension in case of disabled visitors and consider their special requirements during the visit. Therefore, being acquainted with the special needs of visitors could bring valuable guiding insights and assist in organizing more relevant and rather disabled tailored guided visits. Considering communication needs provides opportunities to every tourist with special needs to actively participate in the tour regardless of his/her particular needs. In this concern, McConky, *et al.*, (1999b) indicated that the effectiveness of communication increases when staff can assess the disabled communications and modify their communication style accordingly.

Improving tour guides practices in a way that enhances intellectually disabled tourists' experience, is a further important aspect that could make a disabled visit an enjoyable experience. For instance, organizing guided tours to students with intellectual disabilities enrolled in private schools is another area of interest that could enhance the ability and performance of tour guides and their communicative role. Similarly, specialized programs should tailor students enrolled in guidance departments in tourism faculties and colleges as potential tour guides who will communicate with tourists with different types of disabilities.

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Practice will assist tour guides to improve their performance since it provides them with the experience needed to communicate with this segment and better deal with unexpected situations that might occur while dealing with disabled tourists and make their visit meaningful. This is consistent with Sack and Mclean's study (1997) which revealed that providing opportunities of actual practice should be included in training courses designed to staff communicating with people with intellectual disability.

Since successful communication is a key determinant to improve quality of life and care of people of intellectual disability (Martin, *et al.*, 2010), the ability of tour guides to communicate positively with tourists with intellectual disability will ascertain that all travel segments have equal opportunities to access tourism.

CONCLUSION

Although communication have been considered a significant approach to examine the determinants of tourist satisfaction (Ap & Wong, 2001; Leclerc & Martin, 2004; Rabotic, 2010; Ryan & Dewar, 1995; Weiler & Walker; 2014; Zhang & Chow, 2004)), yet no previous studies have investigated communication competences of tour guides when interacting with intellectually disabled tourist. The current study moved beyond prior research by adopting a multidimensional approach that examines tour guides' key communication skills when leading tourists with intellectual disability. The study provides a conceptual and empirically verified framework that captures tour guides' perceptions of verbal and non-verbal communication as well as tour guides' specific personal traits and behavioral patterns while interacting with intellectually disabled tourists thereby extending existing research on people with intellectual disabilities.

The study concludes that tour guides' communication competences remarkably contribute to the visiting experience of intellectually disabled tourists and to their satisfaction. It suggests as well that tour guides must take into consideration improving their knowledge, awareness and communication skills regarding intellectually disabled tourists to enrich disabled visitors' experience, specifically the non-verbal communication dimension which has a considerable influence on the communication success. Likewise, the findings recommend that tour guides should take into account the communication abilities of intellectually disabled people to satisfy this important niche market and improve their quality of life. The study establishes the representative dimensions of tour guides communication competences who engage with tourists with intellectual disability and the relevant indicators that measure each dimension. Dimensions and indicators that have been identified in the scale were validated by certified tour guides who actually communicate with tourists with intellectual disability. Accordingly, tour guides can accurately assess their performance, tourist satisfaction, the quality of certain services designed for visitors with special needs and the required advancements that should take place.
The aim of this study is to raise awareness of the communication needs of tourists with intellectual disability and improve the communication abilities of tour guides interacting with this segment to make their tours more inclusive.

Although the current study is designed for tour guides, it may also be beneficial for other tourism staff who provide information, escort intellectually disabled tourists throughout their visit, and those who assist them. Accordingly, the study provides valuable contributions to tour guides and

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

other tourism service providers who might engage with tourists with intellectual disabilities in different tourism services settings.
More training programs that could respond to the specific needs of disabled market should be considered. This is pertinent to official tourism authorities organizing regular training programs to tour guides and faculties that have guidance departments to provide their students with courses that are designed specifically for tourists with special needs. Acquiring such basic knowledge regarding the specific needs of this segment, would definitely guarantee a better communication between both parties. Concomitantly, it would deeply enhance the overall performance of tour guides and enable them to better serve the disabled tourist market and provide more accessible tourism services and activities.

In sum, this study makes several contributions to both tourism and disability research; the study contributes to the tourism industry through suggesting ways which tour guides can use to improve their communication competences when leading tourists with intellectual disability. It also contributes to disability field as well through investigating ways of enhancing their tourism experience and improving their quality of life.

Limitations and future research

Although the current study is considered an initial base for understanding the importance of tour guides communication competences to enrich intellectually disabled tourist experience, a few limitations should be mentioned. Findings are specific to intellectually-disabled tourists; therefore, the study is not representative of other types of disabilities where differences may occur. Future research should extend the current study and investigate the effect of tour guides performance and communication competences on tourists with other different types of disabilities.

It is worthwhile as well for future research to go beyond a tour guide context and study the effect of communication competences of other tourism service providers including accommodation, flights, parks and other tourist attractions to better understand how service providers' communication performance could influence intellectual disabled tourist experience and behavior.

Though the results revealed the significant impact of training workshops on raising awareness and knowledge of tour guides regarding the intellectually disabled market, other potentially pertinent factors such as assessing tour guides performance through on-the-job observations and satisfaction of tourists might be included in future models.

One more possible extension to this study is to conduct a qualitative research by interviewing intellectual disabled tourists after their vacation and investigate the effect of tour-guides' communication competences on their satisfaction to gain more insights in this concern.

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

References

American Association on Intellectual and Developmental Disabilities (AAIDD) (2009), www.operationhousecall.com/.../2016/.../AAIDD_definition_of_ID-... accessed *on December,10 ,2018*

Anderson, J. C. and Gerbing, D. W. (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423.

Ap, J. and Wong, K. K.F. (2001) "Case study on tour guiding: professionalism, issues and problems", *Tourism Management,* Vol. 22, pp.551-563

Bakken, T.L., Eilertsen, D. E., Smeby, N. A. and Martinsen, H. (2008) "Observing communication skills in staff interacting with adults suffering from intellectual disability, autism and schizophrenia", *VARD I NORDEN*. PUBL. NO. 87, VOL. 28, NO. 1, pp. 30–35

Balandin, S., Hemsley, B., Sigafoos, J., Green,V., Forbes, R.,Taylor, C. & Parmenter,T. (2001) 'Communicating with Nurses: The Experiences of 10 Individuals with an Acquired Severe Communication Impairment', Brain Impairment, Vol. 2 No. 2, pp. 109–24.

Bartlett C. & Bunning K.T. (1997) "The importance of communication partnerships: a study to investigate the communicative exchanges between staff and adults with learning disabilities" *British Journal of Learning Disabilities* Vol. 25, pp. 148–153.

Black, R., & Weiler, B. (2005) "Quality assurance and regulatory mechanisms in the tour guiding industry: a systematic review" *Journal of Tourism Studies*, Vol. 16 No. 1, pp. 24 -37.

Black, R., Ham, S., & Weiler, B. (2001) "Ecotour guide training in less developed countries: some preliminary research findings" *Journal of Sustainable Tourism*, Vol. 9 No. 2, pp. 147-156.

Blichfeldt, B.S. and Nicolaisen, J. (2011) "Disabled travel: not easy, but doable," *Current Issues in Tourism*, Vol. 14 No. 1, pp. 79 -102.

Bott C., Farmer R. & Rohde J. (1997) "Behaviour problems associated with lack of speech in people with disabilities" *Journal of Intellectual Disability Research*, Vol. 41, pp.3-7.

Bowie, D., & Chang, J. C. (2005) "Tourist satisfaction: a view from a mixed international guided package tour" *Journal of Vacation Marketing*, Vol. 11, No. 4, pp. 303-322.

Bradshaw, J. (2001) "Complexity of staff communication and reported level of understanding skills in adults with intellectual disability" Journal *of Intellectual Disability Research*, Vol. 45, No. 3, pp. 233-243

Cohen, E. (1985) "The Tourist Guide: the origins, structure and dynamics of a role", *Annals of Tourism Research*, Vol. 12, pp. 5-29

Collins, V. R. (2000) "Becoming a tour guide: The principles of guiding and site interpretation" London: Continuum

Darcy, S. (2010) "Inherent complexity: Disability, accessible tourism and accommodation information preferences," *Tourism Management*, Vol. 31, pp. 816 -826.

Didden, R., Sigafoos, J., Korzilius, H., Baas, A., Lancioni, G. E., O'Reilly, M. F., & Curfs, L. M. G. (2009) "Form and function of communicative behaviors in individuals with Angelman syndrome" *Journal of Applied Research in Intellectual Disability,* Vol. 22 , pp. 526–537.

Dyche, L. (2007) "Interpersonal Skill in Medicine: The Essential Partner of Verbal Communication" *Journal of General Internal Medicine*, Vol. 22 No. 7, pp. 1036-1039.

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Elder, P., & Goosens, C. (1994) "Engineering training environments for interactive augmentative communication: Strategies for adolescents and adults who are moderately/ severely developmentally delayed" Birmingham, AL: Southeast Augmentative Communication Conference Publications.

ELEVATOR (2015) "Inclusive tourist guiding handbook for guiding people with special access requirements" The European Commission, http://www.accessibletourism.org/elevator, accessed on 08 October 2018

Ferguson, M., Walby, K. and Piché, J. (2016) "Tour Guide Styles and Penal History Museums in Canada" *International Journal of Tourism Research*, Vol.18, pp. 477 - 485

Finlay,W. M. L.,Walton, C. & Antaki, C. (2008) "Promoting choice and control in residential services for people with learning disabilities" *Disability and Society*, Vol. 23 No. 4, pp. 349 - 360.

Fornell, C., and Larcker, D. F. (1981) "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error" *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.

Gallagher, E. (2002) "Adult clients with mild "intellectual disability: rethinking our assumptions" *Australian and New Zealand Journal of Family Therapy ANZJFT*, Vol. 23, No.2, pp. 202-210

Grossman, H. J. (Ed.). (1983) "Manual in terminology and classification in mental retardation" Washington, DC: American Association on Mental Deficiency (now called American Association on Mental Retardation).

Hair, J., Black, B., Babin, R., Anderson, R., and Tatham, R. (2006) "Multivariate data analysis" (6th ed.), Prentice Hall, New York.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014) "Multivariate data analysis" Pearson New International Edition (7th ed.), Pearson Education Limited , Edinburgh Gate.

Hall, E. W. (2008) "Changing the way employees interact with guests with disabilities" *Journal of Disability Policy Studies* ,Vol. 19 No. 1, pp.15-23

Hardesty, D and Bearden, W.O. (2004) "The use of expert judges in scale development: implications for improving face validity of measures of unobservable constructs" *Journal of Business Research*, Vol. 57, pp. 98-107

Harris, J.C. and Greenspan, S. (2016) "Definition and nature of intellectual disability" ***In*** Singh, N.N. (eds.) Handbook of Evidence-Based practices in intellectual and developmental disabilities, Springer International Publishing Switzerland.

Healy, D. & Noonan-Walsh, P. (2007) "Communication among Nurses and Adults with Severe and Profound Intellectual Disabilities" *Journal of Intellectual Disabilities*, Vol. 11 No. 2, pp. 127–41.

Hogg, J., Reeves, D., Roberts, J. and Mudford, O.C. (2001) "Consistency, context and confidence in judgments of affective communication in adults with profound intellectual and multiple disabilities" *Journal of Intellectual Disability Research*, Vol.45, No. 1, pp. 18-29

Huang, S.S., Hsu, Cathy H. C. and Chan, A. (2010) " Tour guide performance and tourist satisfaction" a study of the package tours in Shanghai" *Journal of Hospitality & Tourism Research*, Vol. 34, No. 1, pp. 3-33

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Huh, C. and Singh, A.J. (2007) "Families travelling with a disabled member: Analyzing the potential of an emerging niche market segment" *Tourism and hospitality Research,* Vol. 7 No. 3/4, pp. 212-229.

Keith J. M. , Bennetto, L. and Rogge, R. D. (2015) "The relationship between contact and attitudes: Reducing prejudice toward individuals with intellectual and developmental disabilities" *Research in Developmental Disabilities,* Vol. 47, pp. 14–26

Kressler, R. (2003) "E-mail Cyber-friendships: A comparative analysis of communicative interaction among adults with intellectual disabilities and adults without intellectual disabilities", A Dissertation, Howard University.

Leclerc, D. and Martin, J.N. (2004) "Tour guide communication competence: French,

German and American tourists' perceptions" *International Journal of Intercultural Relations,* Vol. 28, pp. 181–200

Maka, A. H.N., Wong, K. K.F. and Chang, R. C.Y. (2011) "Critical issues affecting the service quality and professionalism of the tour guides in Hong Kong and Macau" *Tourism Management,* Vol. 32, pp. 1442-1452

Martin, A. M., O' Connor - Fenelon, M., and Lyons, R. (2010) "Non-verbal communication between nurses and people with an intellectual disability: a review of the literature" *Journal of Intellectual Disabilities,* Vol. 14 No. 4, pp. 303–314

Martin, G. E., Losh, M., Estigarribia, B., Sideris, J., and Roberts, J. (2013) "Longitudinal profiles of expressive vocabulary, syntax and pragmatic language in boys with fragile X syndrome or Down syndrome" *International Journal of Language and Communication Disorders*, Vol. 48, pp. 432–443.

McConkey, R., Morris, I. and Purcell, M. (1999a) "Communications between staff and adults with intellectual disabilities in naturally occurring settings" *Journal of Intellectual Disability Research*, Vol.43, No. 3, pp 194-205

McConkey, R., Purcell, M., and Morris, I. (1999b) "Staff perceptions of communication with a partner who is intellectually disabled" *Journal of Applied Research in Intellectual Disabilities*, Vol. 12, No 3, pp. 204-210

Metzel, D. S., & Walker, P. M. (2001) "The illusion of inclusion: Geographies of the lives of people with developmental disabilities in the United States" *Disability Studies Quarterly*, Vol. 21 No. 4, pp. 114–128.

Min, J. C. H. (2011) " Tour guides and emotional intelligence" *Annals of Tourism Research*, Vol. 38, No. 1, pp. 322–325.

Min, J. C. H. (2012) "A short-form measure for assessment of emotional intelligence for tour guides: Development and evaluation" *Tourism Management,* Vol. 33, pp. 155-167

Mirenda, P. and Iacono, T. (1990) "Communication options for persons with severe and profound disabilities: State of the art and future directions" *JASH,* Vol. 15, No. 1, pp. 3-21

Nunnally, J. (1978) "Psychometric theory" 1st ed. McGraw-Hill, New York.

Nunnally, J. C. and Bernstein, I.H. (1994) "Psychometric Theory" (3rd ed.), McGraw-Hill, New York.

Nyahunzvi, D. K. and Njerekai, C. (2013) "Tour guiding in Zimbabwe: Key issues and challenges" *Tourism Management Perspectives,* Vol. 6, pp. 3–7

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Ogletree, B. T., Bruce, S. M., Finch, A., Fahey, R., and McLean, L. (2011) "Recommended communication-based interventions for individuals with severe intellectual disabilities" *Communication Disorders Quarterly,* Vol. 32, No. 3, pp. 164– 175

Olney, M. F. (2001) "Communication strategies of adults with severe disabilities: supporting self-determination" *RCB Rehabilitation Counseling Bulletin,* Vol. 44, No.2, pp. 87-94

Pearce, P. (1984) "Tourist-guide interaction" *Annals of Tourism Research,* Vol. 11, pp. 129–146

Pinazo, E.P. & Reina, M.C. (2017) "A model to enhance interaction for people with severe intellectual disability in healthcare, education and interpreting, 7th International Conference on Intercultural Education "Education, Health and ICT for a Transcultural World", EDUHEM 2016, 15-17 June 2016, Almeria, Spain *Procedia - Social and Behavioral Sciences* Vol. 237, pp. 1189 – 1195

Pinborough-Zimmerman, J., Satterfi eld, R., Miller, J., Hossain, S., and McMahon, W (2007) "Communication disorders: Prevalence and comorbid intellectual disability, autism, and emotional/behavioral disorders" *American Journal of Speech-Language Pathology,* Vol. 16, pp. 359–367.

Rabotic, B. (2010) "Professional tourist guiding: The importance of interpretation for tourist experiences" 20th Biennial International Congress: *New Trends in Tourism and Hotel Management,* Opatija (Croatia), 06–08.05.2010

Ryan, C., & Dewar, K. (1995) "Evaluating the communication process between interpreter and visitor" *Tourism Management,* Vol. 16 No.,4, pp. 295-303.

Sack, S.H. and McLean, L.K. (1997) "Training communication partners: the new challenge for communication disorders professionals supporting persons with severe disabilities" *Focus on Autism And Other Developmental Disabilities,* Vol. 12, No. 3, pp. 151-158

Schalick III, W. O., Westbrook, C. and Young, B. (2012) "Communication with individuals with intellectual disabilities and psychiatric disabilities: A summary of the literature, working paper WP 2012-264, Michigan Retirement Research Center University of Michigan

Shaw, G. and Coles, T. (2004) "Disability, holiday making and the tourism industry in the UK: a preliminary survey" *Tourism Management,* Vol. 25, pp. 397–403.

Sigafoos , J., Lancioni, G. E., O'Reilly, M. F., Lang, R., Singh, N.N., Didden, R. , Green, V. A., and Marschik, P. B. (2016) "Communication" In Singh, N.N. (eds.) "Handbook of Evidence-Based practices in intellectual and developmental disabilities" Springer International Publishing Switzerland.

Sigafoos, J., O'Reilly, M. F., & Green, V. A. (2007) "Communication difficulties and the promotion of communication skills" In A. Carr, G. O'Reilly, P. Noonan Walsh, & J. McEvoy (Eds.) "The handbook of intellectual disability and clinical psychology practice" (pp. 606–642). London: Routledge.

Sigafoos, J., Woodyatt, G., Keen, D., Tait, K., Tucker, M., Roberts-Pennell, D., & Pittendreigh, N. (2000) "Identifying potential communicative acts in children with developmental and physical disabilities" Communication Disorders Quarterly Vol. 21, No. 2, pp. 77 - 86

Urea, R (2012) "The influence of the teacher's communication style on the Alter's social perception in preadolescents with mental disabilities" *Procedia - Social and Behavioral Sciences,* Vol.33, pp. 50 – 54

Van der Gaag A. and Dormandy K. **(1993)** "Communication and Adults with Learning Disabilities" London: Whurr.

Print ISSN: ISSN 2054-6424(Print), Online ISSN: ISSN 2054-6432(Online)

Weiler, B., & Black, R. (2014) "Tour guiding research: Insights, issues, implications" Bristol: Channel View.

Weiler, B and Walker, K. (2014) "Enhancing the visitor experience: Reconceptualising the tour guide's communicative role" *Journal of Hospitality and Tourism Management*, Vol. 21, pp. 90-99

Wilhelmsson, A. B., Graneheim, U. H. , Berge, B. M., Johansson, S., Åström, S. (2010) "Everyday life experiences among relatives of persons with mental disabilities", *Procedia Social and Behavioral Sciences* Vol. 2, pp. 4896–4900

Zhang, H. Q., & Chow, I. (2004) "Application of importance-performance model in tour guides' performance: evidence from mainland Chinese outbound visitors in Hong Kong" *Tourism Management*, Vol. 25, No. 1, pp. 81-91.

Acknowledgement

Special thanks go to the professional certified tour guides (Viola Lewis, Scotland; Athena K. Tsakiri, Greece; Leo Engelmayer, Austria for their valuable contribution in revising the scale and for sharing useful information gained through their experience in guiding tourists with intellectual disabilities.