Client-Clinician Perspectives of the Importance of Factors in the Client-Clinician Interaction that Influence Hearing Aid Uptake: Initial Results

Points de vue client-clinicien de l'importance de facteurs, dans l'interaction client-clinicien, qui influencent l'acceptation d'un appareil auditif : résultats préliminaires

KEY WORDS

HEARING LOSS

HEARING AID UPTAKE

CLIENT-CENTERED CARE

SHARED DECISION MAKING

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Abstract

This brief report provides the results of a pilot study that investigated the importance ratings of factors in the client-clinician interaction that influence hearing aid adoption and compared the importance ratings between the client and clinician groups.

Eleven clients (six of whom owned hearing aids and five who did not), and nine audiologists who worked in a variety of clinical settings participated in the study. All participants were located within driving distance of the research site.

One hundred and twenty-two statements generated in a previous study by Poost-Foroosh and colleagues (2011) were used as the rating instrument in the current study. Participants were asked to rate how important each of the individual statements were in a person's decision to purchase hearing aids on a 5-point Likert scale (1= minimally important, 2= somewhat important, 3= moderately important, 4= very important, 5= extremely important). Importance ratings for each statement were averaged across each participant group and each concept to create mean statement and concept ratings for each group.

The comparisons of the importance ratings between groups indicated a significant difference only in the concept conveying device information by clinician, which was rated much higher by clients. These results are similar to findings in the medical literature which indicate that patients place greater value on the provision of information than do physicians. These findings suggest that audiologists may underestimate the importance of conveying information about hearing instruments to their clients. The differences between audiologist and client ratings at the concept and statement levels denote clients' preferences for acquiring informational resources to make an informed choice. Client participants indicated a preference for shared decision making and being empowered. The findings of the current study underline the importance of the shift from a biomedical model to client-centered approach to care in clinical encounters that may lead to increased hearing aid adoption. A nationwide follow up study is being undertaken to confirm the results of this study with a larger and more geographically and professionally diverse sample.

Abrégé

Ce bref rapport révèle les résultats d'une étude pilote sur le classement par ordre d'importance de facteurs qui, dans l'interaction client-clinicien, influencent le recours à un appareil auditif, et comparait les cotes d'importance entre les groupes de clients et de cliniciens.

Onze clients (dont six possédaient des appareils auditifs et cinq n'en possédaient pas), et neuf audiologistes qui travaillaient dans une variété de milieux cliniques ont participé à l'étude. Tous les participants étaient situés à distance de voiture du site de recherche.

Cent vingt et un énoncés générés dans une étude de Poost-Foroosh et collaborateurs (2011) ont été utilisés comme instrument de classement dans la présente recherche. On a demandé aux participants de classer par ordre d'importance sur une échelle Likert à 5 points (1= le moins important, 2= un peu important, 3= modérément important, 4= très important, 5= extrêmement important) les énoncés en lien avec la décision d'une personne d'acheter des appareils auditifs . On a fait la moyenne des classements par importance pour chaque groupe de participants et chaque concept afin de calculer la moyenne du score des énoncés et des cotes de concepts pour chaque groupe.

Les comparaisons des cotes d'importance entre les groupes ont indiqué une différence significative seulement dans le concept transmission d'information sur l'appareil par le clinicien, qui était noté beaucoup plus haut par les clients. Ces résultats sont semblables aux constatations dans la littérature médicale, qui indiquent que les clients placent une plus grande valeur que les médecins sur la transmission d'information. Ces conclusions suggèrent que les audiologistes peuvent sous-estimer l'importance de transmettre à leurs clients de l'information sur les appareils auditifs. Les différences entre les jugements des audiologistes et des clients pour ce qui est du concept et de l'énoncé dénotent les préférences des clients pour obtenir des ressources d'information afin de faire un choix éclairé. Les clients participants ont mentionné une préférence pour une prise de décision partagée et pour être en contrôle. Les conclusions de la présente étude soulignent l'importance que le passage d'un modèle biomédical à une approche axée sur le client, ayant lieu dans les cliniques, pourrait augmenter le nombre de personnes ayant recours à des appareils auditifs. Une étude de suivi à la grandeur du pays est entreprise pour confirmer les résultats de cette étude avec un échantillon plus grand et plus géographiquement et professionnellement diversifié.

Introduction

Hearing aids are the most common intervention for rehabilitation of hearing impairment (Kricos, Erdman, Bratt, & Williams, 2007; Weinstein, 1996). Despite considerable evidence for the negative consequences of untreated hearing loss (for example, Strawbridge, Wallhagen, Shema, & Kaplan, 2000), benefits of hearing aid use in reducing the adverse effects of hearing loss (for example, Stark & Hickson, 2004), and advancements in hearing aid technology, hearing aids continue to be underutilized by adults (National Institute of Health, 2010). In the United States only 19% of people who would benefit from amplification own a hearing aid (Lin, Thorpe, Gordon-Salant, & Ferrucci, 2011). In consequence, a major challenge for hearing health care professionals is increasing the rate of hearing aid adoption for adults with acquired age-related hearing loss (Fischer et al., 2011).

For persons with chronic conditions, a decision to adhere to a health professional's recommendation is simultaneously influenced by several factors that include: 1) social and economic factors, such as the age of the person or the cost of the treatment; 2) health condition-related factors, for instance severity or duration of the problem; 3) therapy-related factors, for example complexity of the treatment or required life style alterations; 4) client-related factors, such as self-efficacy or belief in the efficacy of the treatment; and 5) health care professional/health system-related factors, such as the relationship between the health care professional and the client or poorly developed health services (Sabaté, 2003). Research on client adherence is predominantly focused on client related factors and the assumption that the health behavior is a direct result of the client's decision making (Hunt & Arar, 2001; Sabaté, 2003). However, adherence may be better understood if it is recognized as being influenced by the interplay between the perspectives of the client and clinician.

Differences in explanatory models that were developed from the input of clients and clinicians have been suggested by Cohen, Tripp-Reimer, Smith, Sorofman and Lively (1994) as one reason for non-adherence to a prescribed treatment regimen for several diseases. Cohen and colleagues developed explanatory models from the input of persons with diabetes and health care professionals. They reported that the clients' main concerns were difficulties in the social domain and the impact of diabetes on their lives. Clinicians perceived diabetes primarily as a pathophysiological condition with an impact on the physical body and therefore emphasized technical control of the condition.

Medical anthropologists highlight the differences between clients' and clinicians' perspectives and postulate that differences in perspectives have implications for effective treatment management in chronic conditions (Hunt & Arar, 2001). Differing perspectives between health care professionals and clients have been reported in understanding the therapeutic alliance (Horvath, 2001; Horvath & Symonds, 1991), provision of information (Jung, Wensing, Olesen, & Grol, 2002), and milestones in hearing aid acquisition (Manchaiah, Stephens, & Meredith, 2011). Manchaiah et al. reported that hearing aid users identified a self-evaluation stage or milestone in their journey to becoming a hearing aid user, which was not identified by hearing health care professionals. The self-evaluation stage reflected the need for the person with hearing impairment to consider the costs, benefits, and alternative approaches prior to purchasing a hearing aid. A greater understanding and awareness of the differences in client and clinician perspectives may help clinicians to recognize how these differences influence the client-clinician interaction and, consequently, adherence to recommendations.

In a study investigating factors in client-clinician interactions that may influence hearing aid adoption, a concept mapping approach (Trochim and Kane, 2005) was used to identify eight concepts perceived to influence hearing aid purchase decisions (Poost-Foroosh, Jennings, Shaw, Meston, & Cheesman, 2011). Clinicians who prescribed hearing aids and clients who had recently received their first hearing aid recommendation participated in the study. Participants attended focus groups and generated 122 statements that described factors in the client-clinician interaction that they perceived were influencing hearing aid purchase decisions. Participants individually sorted these statements into meaningful groups. Multidimensional scaling and hierarchical cluster analysis was performed using each of the participants' sorted and grouped statements. The result was eight clusters, of related statements. Each of these clusters had a common theme, or concept, and created a concept map of the client-clinician interaction. The concepts were: (1) *Understanding and meeting client needs*, (2) *Acknowledging the client as an individual*, (3) *Client-centered traits and actions*, (4) *Ensuring client comfort*, (5) *Factors in client readiness*, (6) *Imposing undue pressure and discomfort*, (7) *Supporting choices and shared decision making*, and (8) *Conveying device information by clinician*. The concepts underlined the perceived influence of the client-clinician interaction in hearing aid adoption and the possibility of improving hearing aid adoption by empowering clients through a client-centered interaction (Poost-Foroosh et al., 2011).

The purpose of this pilot study was to compare clients' and clinicians' perspective of the importance of the eight concepts identified by Poost-Foroosh and colleagues (2011). A greater knowledge of what is most important to clients in the clinical interaction may help clinicians in the enactment of client-centered interaction, inform interventions to improve clinician communication skills, and enable clinicians to efficiently allocate the limited time in the clinical encounter.

Method

Participants

Thirteen clients and ten audiologists who participated in the Poost-Foroosh et al. (2011) study were invited to participate in the current pilot study. Participants in the client group included persons between 45 and 85 years of age (mean= 69.3 years) with an acquired sensorineural hearing loss who had received a hearing aid recommendation within the three months prior to the study, regardless of whether a hearing aid was acquired. Clients were recruited through advertisements in local newspapers and through their clinicians. Eleven clients, 55% of whom owned hearing aids (n= 6) and 45 % who did not (n = 5), participated in the study.

The inclusion criteria for the clinicians included audiologists and hearing instrument specialists/hearing aid dispensers who prescribed/dispensed hearing aids. Clinicians who worked within a one hour driving distance from the research site were sent an invitation to participate in the study. Nine audiologists who worked in a variety of clinical settings including university clinics (n=2), sole ownership settings (n=4), and private practice chains (n=3) participated in the study. No hearing instrument specialists agreed to participate. Three of the clinicians had less than five years experience, two had 5-10 years, and four had over 10 years of clinical experience.

Procedures

The 122 statements generated in a previous study by Poost-Foroosh and colleagues (2011) were used as the rating instrument in the current study. The list of the statements and their corresponding concept can be found in Appendix A. Participants were asked to rate how important they thought each of the individual statements were in a person's decision to purchase hearing aids on a 5-point Likert scale (1= *minimally important*, 2= *somewhat important*, 3= *moderately important*, 4= *very important*, 5= *extremely important*). Client participants completed the rating task at the National Centre for Audiology, in London, Ontario. The rating material was mailed to the audiologists and they returned their ratings to the researchers using self-addressed stamped envelopes.

Statistical Package for the Social Sciences (SPSS) Version 19.0 and Concept System Software (Concept Systems Incorporated, 2010) were used to analyze the data. Ratings for each statement were averaged across each participant group and each concept to create mean statement and concept ratings for each group.

Results

A comparison of client and clinician ratings of the 122 statements was performed. Table 1 and Figure 1 show the mean and standard deviations of the eight concepts' importance ratings for each participant group. A Mann-Whitney U test was conducted to evaluate the differences in the ratings of the concepts between client and clinician groups. A statistically significant difference between client and clinician groups' median ratings of the concept *conveying device information by clinician* ($U = 23$, $p = .04$) was observed. This concept was rated as more important by clients than clinicians. The difference between the groups' median ratings for the concept *supporting choices and shared decision making* approached significance ($U = 26.5$, $p = .07$), with clients rating this concept as more important than clinicians.

Using Concept System Software, a pattern match graph (Figure 2) was computed to visually illustrate the differences in the mean ratings between the groups. The pattern match is a graph of each concept's mean rating for the client group and the clinician group and is plotted on a set of vertical lines. The order of the points on the vertical lines illustrate the ranking of the mean ratings for each group and the angles of the lines connecting the points compare the groups' absolute ratings. The concept *understanding and meeting client needs* ($M = 4.03$, $SD = .32$) was given the highest importance ratings by clients, while the highest rated concept for clinician group was *ensuring client comfort* ($M = 4.14$, $SD = .51$). The lowest rated concept for the client group was *factors in client readiness* (M = 3.07, SD =.81), while clinicians rated the concept conveying device information by clinician the lowest in importance (M = 3.27, SD =.65). The differences between the ratings are the most apparent visually for three concepts: *conveying device information by clinician, supporting choices and shared decision making,* and *factors in client readiness*. However, only the difference in *conveying device information by clinician* is statistically significant. The mean ratings of the *concept conveying device information by clinician* was ranked five places

Table 1. Mean and standard deviation of the eight concepts for client and audiologist groups and the differences between the means for the two groups.

Concept	Clients n = 11	Audiologists n = 9	Mean Difference
	M (SD)	*M (SD)*	
Understanding and meeting client needs	4.03 (.32)	3.83 (.72)	.20
Acknowledging client as an individual	3.81 (.28)	3.94 (.41)	-.13
Conveying device information by clinician	3.88 (.41)	3.27 (.65)	.61*
Client centered traits and actions	3.80 (.53)	3.99 (.51)	-.19
Ensuring client comfort	3.94 (.43)	4.14 (.51)	-.20
Supporting choices and shared decision making	3.76 (.60)	3.38 (.77)	.38
Factors in client readiness	3.07 (.81)	3.57 (.89)	-.50
Imposing undue pressure and discomfort	3.73 (.59)	3.81(.47)	-.08

*p < .05

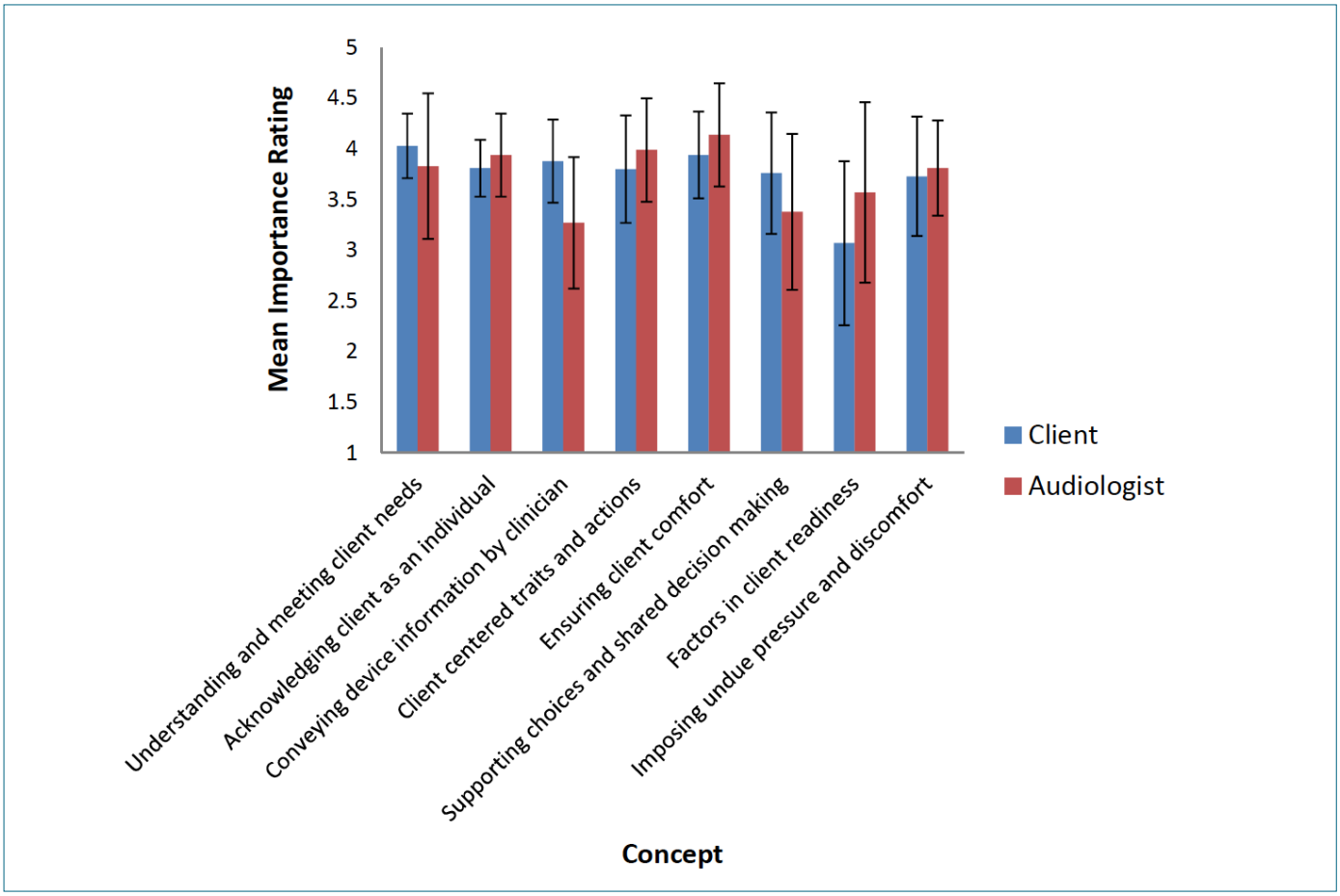

Figure 1: Mean importance ratings of the eight concepts for clients and audiologists. Error bars denote one standard deviation around the mean.

higher for clients than clinicians. A Pearson correlation coefficient of .28 ($p > .2$) indicated that clients and clinicians had fair to little agreement on the mean ratings of the concepts in the client-clinician interaction (Portney & Watkins, 2000).

A bivariate scatter plot was also computed to compare the mean importance ratings of the individual statements between clients and clinicians. The scatter plot was divided into quadrants based on the grand mean importance ratings for the client and clinician groups. The goal of this analysis was to indicate individual statements that were rated more important by clients compared to clinicians. The lower right quadrant of the scatter plot includes items rated above the average by clients and below the average by clinicians (Figure 3).

The average importance rating per statement for clients can be found along the abscissa and ranged from 1.55 to 4.73. The overall average rating of the statements was 3.8 for the client group. The average ratings per statement for the clinicians which are found along the ordinate, ranged from 1.67 to 4.89 with an average of 3.72 for all the statements. There are 18 items in the lower right quadrant that were rated above average rating by clients and below average by clinicians. These statements are indicated by an asterisk symbol (*) in Appendix A. For example the mean ratings of the statement 23 (the client has control over the hearing aid settings) was 4.09 for client group, while it was 1.67 for clinician group.

Discussion

This pilot study investigated the importance ratings of the factors in client-clinician interactions influencing hearing aid adoption for clients and clinicians and compared the importance ratings of the concepts between the two groups. The comparisons of the importance ratings between groups indicated a significant difference only in the concept *conveying*

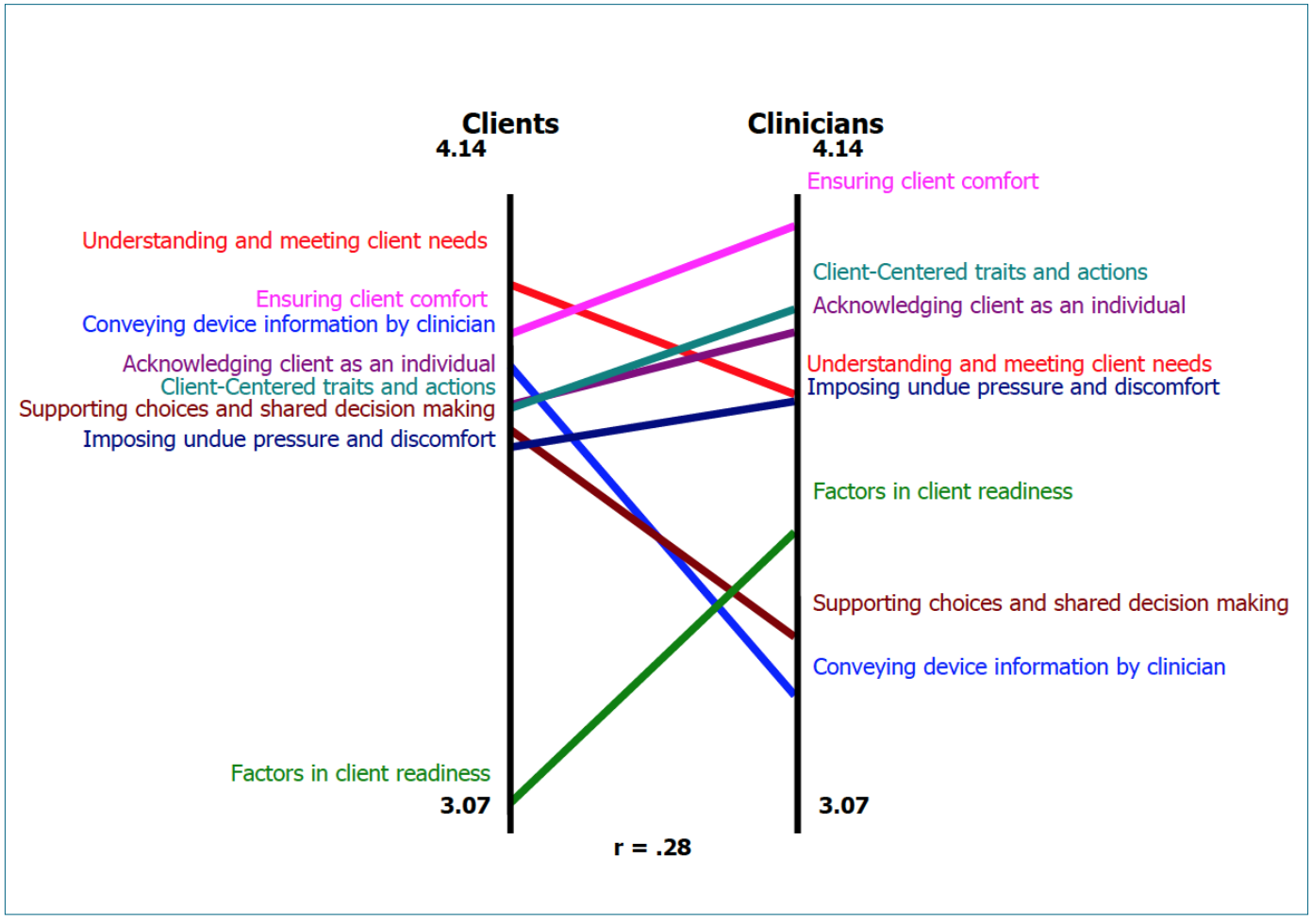

Figure 2: Pattern match of the eight concepts for clients and clinicians

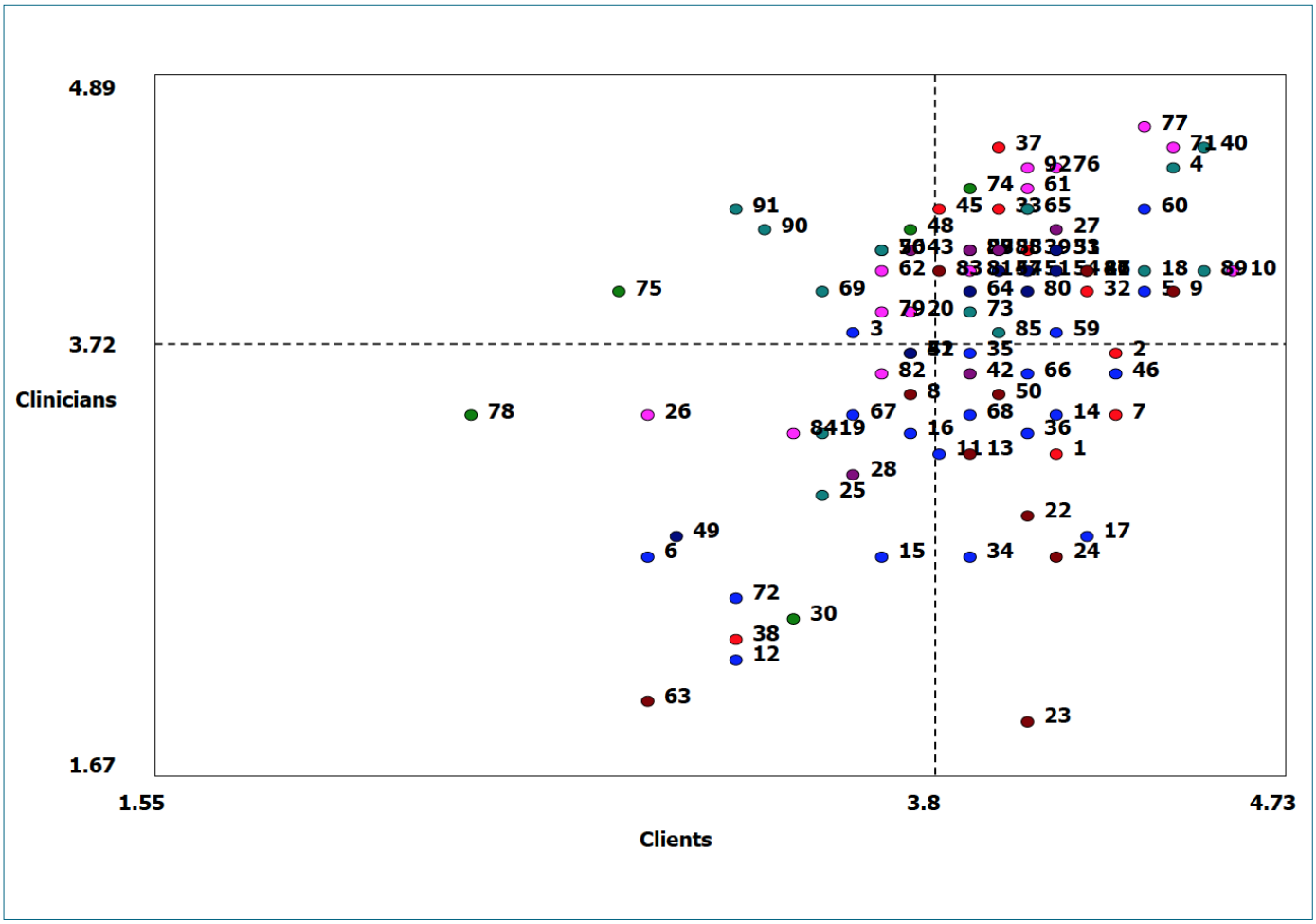

Figure 3: Plot comparing the mean importance rating for each statement by clients and clinicians

device information by clinician, which was rated much higher by clients.

This difference in the clients and clinicians importance ratings of the *conveying device information by clinician* concept is a new finding. This concept, which was given the lowest importance ratings of all the concepts by the clinicians, ranked considerably higher in importance by the clients. A similar finding in the medical literature has indicated that patients place substantially greater value on the provision of information than physicians (Laine et al., 1996) and the provision of adequate information about the illness, diagnosis, and treatment procedures has been reported as being an absolute requirement for good general practice care (Grol et al., 1999). The results of the current study indicate that the same may be true in the hearing health care domain of hearing aid acquisition.

The statements in the lower right quadrant of the bivariate scatter plot are from three concepts of *conveying device information by clinician, understanding and meeting client needs,* and *supporting choices and shared decision making*, with the majority of the statements from the *conveying device information by clinician* concept. Clients placed more value on statements that are directly related to device information, for example "the clinician explains pros and cons of each hearing aid" (item 66), "the clinician explains all the features of the hearing aid" (item 36), and "the clinician explains why a hearing aid needs to be adjusted by the clinician" (item 34). These findings suggest that clinicians may underestimate the importance of this type of dialogue for clients.

The three statements from the *understanding and meeting client needs* concept also relate to the information transfer from clinician to client. These statements are: "the client is shown the hearing test results on a graph and the results are compared to normal hearing" (item 1), "the clinician provides enough information about hearing loss" (item 2), and "the clinician explains hearing test results

thoroughly" (item 7). Similar findings have been reported in a study comparing patients' and general practitioners' evaluations of general practice care (Jung et al., 2002). Patients rated aspects of care related to provision of information higher than general practitioners.

The differences between client and clinician ratings at the concept and statement levels that are discussed above denote clients' preferences for acquiring the informational resources to make an informed choice. Information exchange is one of the important elements in shared decision making (Charles, Gafni, & Whelan, 1999). The findings of the current study underline the importance of the shift from biomedical model to a client-centered approach to care in clinical encounters that may lead to increased hearing aid adoption. In a biomedical model, the clinician is the ultimate decision maker, who may not offer clients the resources needed to be active in decision making. Client participants in this study indicated a preference for shared decision making and being empowered.

All the statements from the *supporting choices and shared decision making* concept that are located in the lower right quadrant of the bivariate scatter plot correspond with empowering clients in the decision making process, for example "the client is given time to think about the hearing aid purchase" (item 50); "the client has the opportunity to try a different hearing aid" (item 24); and "the clinician provides three different price levels from which to choose" (item 13). These items are consistent with one of the steps of the shared decision-making model developed by Laplante-Lévesque, Hickson, and Worrall (2010): understanding the chronic nature of hearing impairment. This step consists of allowing extra time for decision making, allowing for reversible decisions, and allowing for multiple interventions.

Findings of this study suggest a need for discourse on the empowerment of clients in the hearing aid uptake process through provision of information. Clinicians need to be aware of practices that counteract client empowerment. Clinicians may need to re-evaluate the amount of time they currently spend for hearing aid candidacy evaluation for new clients. New clients are often booked for a hearing assessment and hearing aid candidacy evaluation in one session. The time that is usually allotted for new clients for the first visit in which hearing aids are recommended may not be enough to exchange all necessary information and to synthesize the information in order to make decisions. As a result, condensing the necessary information into one session may not be wise. Adequate information is an important requirement for client empowerment (Charles et al., 1999; Trummer, Mueller, Nowak, Stidl, & Pelikan, 2006) and entails not only the amount, but also the content and the format of the information. McCaul, Peters, Nelson, and Stefanek (2005) stated that the ability to make a rational decision in patients who are faced with information overload may be hindered. For example, diabetic clients reported that the amount of information presented to them in the first visit overwhelming (Wikblad, 1991). When a large amount of information is presented in one session clients are unlikely to retain all the information. Indeed, Flocke and Stange (2004) have reported that clients recall less than 50% of the information that they received for health behavior change.

The results of this study may have implications for clinicians in how to interact with their clients in a client-centered way. They highlight the importance of the provision of information for clients. For example, clinicians could provide leaflets or websites containing the information that clients value most, such as information about different degrees of hearing loss and how they relate to communication difficulties an individual may experience; or pictures and information about the availability and appropriateness of different styles, and features of hearing aids for a specific individual. Written material provides the opportunity for clients to review the information as many times as they need, allows them to have time to process the information and return to the clinician with questions, and facilitates shared decision making.

This study provides quantitative measures of the importance that participants placed on factors in the client-clinician interaction. As such, the results have implications for clinician education, development of preferred practice guidelines, and development of instruments to measure the quality of interaction that are weighted according to the clients' preferences. The concepts that clients consider highly important, such as *conveying device information by clinician* and *supporting choices and shared decision making*, which are aspects of client-centered care, can be incorporated in the hearing health care professionals' training programs. Audiology programs need to put more emphasis on communication skills training, training students on how to exchange information with clients in accordance with client-centered care, and teaching skills to facilitate shared decision making.

The present pilot study used a convenience sample of 20 participants (11 clients and 9 clinicians), all of whom were from within 1 hour driving distance of the research site and the majority of the clinicians were graduates of

a single audiology program. The sample was comprised of adults with a hearing aid recommendation within the 3 months prior to the study. As a result, findings may not be representative of other hearing aid users. Client participants completed the rating task at the National Centre for Audiology and this may have influenced the importance ratings. A nationwide follow up study is being undertaken to confirm the results of this study with a larger and more geographically and professionally diverse sample.

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APPENDIX A

Eight clusters and statements in each cluster.

Item No	Understanding and meeting client needs
37	The clinician asks what situations are difficult for the client.
31	The clinician explains the reason why the client needs hearing aids.
33	The clinician relates the assessment results to the difficulty they are having.
39	The clinician explains the test or procedure that she/he is doing.
32	The clinician explains what the audiogram means in terms of how a hearing aid will help.
45	The clinician considers the client's life style and/or work requirements.
2*	The clinician provides enough information about hearing loss.
7*	The clinician explains hearing test results thoroughly.
118	The clinician can simplify the technical terms and technology by explaining in layman's terms.
1*	The client is shown the hearing test results on a graph and the results are compared to normal hearing.
38	The clinician sends a report to the client.
	Acknowledging client as an individual
27	There is consistency in information obtained from different clinicians.
122	The clinician provides an opportunity for the client to express his/her concerns.
88	The clinician values what is important to the client.
116	The client feels his/her concerns have been heard and validated.
29	The clinician explains throughout testing to build trust.
87	The clinician is confident in conveying information.
44	The clinician realizes everyone has different needs.
101	The clinician is able to explain things to the client at appropriate level.
43	The clinician realizes everyone is different.
107	The clinician makes the transition very easy.
114	The clinician assures a follow-up appointment.
42*	The clinician helps the client to explore his/her communication importance.
41	The clinician helps the client to be more aware and assess his/her problems.
110	The clinician is able to accommodate individuals with special needs.
28	Information is posted about the profession, degrees and credentials in layman's terms.
104	The clinician doesn't overwhelm the client with too much technology at first.
	Conveying device information by clinician
60	The clinician explains why a particular hearing aid is recommended.
5	The clinician provides enough information about hearing aids.
47	The clinician relates the hearing aid technology to the client's lifestyle or listening needs.

21	The client is offered different styles and choices of hearing aids.
46*	The clinician explains different styles of hearing aids and earmolds and what they will do for the client.
59	The clinician explains why a particular size or style of hearing aid may not be suitable.
115	The clinician assures the client that the hearing aids can be returned.
66*	The clinician explains the pros and cons of each hearing aid.
14*	The clinician explains the client's rights (such as the mandatory 30-day trial period).
35*	The clinician explains that background noise may be a problem.
36*	The clinician explains all the features of the hearing aid.
3	The clinician shows pictures of hearing aids.
68*	The clinician explains how long the hearing aids are expected to last.
17*	The clinician provides an information sheet about the care of hearing aids.
16	The clinician has knowledge of funding sources to access that the client is not aware of.
11*	The clinician provides a demonstration of sample hearing aids.
117	The client experiences what a hearing aid feels like on his/her ear.
67	The clinician discusses the hearing aid warranty.
34*	The clinician explains why a hearing aid needs to be adjusted by the clinician.
15	A trial period longer than 30 days is available.
100	The client can hear what a hearing aid sounds like.
72	The clinician provides pamphlets with information for different hearing aids.
6	The clinician provides information about other programs of care (e.g. aural rehabilitation programs).
12	The client is given a website so that he/she can do research at home.

Client-centered traits and actions

40	The clinician is upfront and honest.
4	The client feels the clinician is knowledgeable.
89	The clinician's level of expertise.
18	The clinician is thorough.
93	The client feels that all his/her questions have been answered.
55	The clinician is pleasant.
85	The client and clinician communicate easily.
70	The clinician meets the client's expectations for professionalism.
73	The clinician does not appear hurried.
108	The same clinician is seen from start to finish.
90	The clinician shows empathy towards the client.
91	The client's rapport with the clinician.
69	The clinician projects a professional appearance.
98	The client feels the clinician cares about him/her.

19	The clinician can be reached easily by phone.
25	The clinician is down to earth.
105	The clinician and client's personalities are compatible.

Ensuring client comfort

77	The client has trust in the clinician.
71	The client has confidence in the clinician.
97	The client's perception of the clinician's expertise.
10	The client feels that the testing is thorough and accurate.
76	How much the client believes what the clinician is saying.
92	The client's feeling of the clinician's competence.
61	The clinician provides sufficient time in the appointment to explain recommendations.
96	The client feels that the clinician is sincere in his/her intentions.
65	The client doesn't feel pressured.
113	The client feels the clinician has patience with the client during the whole process.
81	The client is comfortable asking the clinician questions.
56	Office staff is professional.
62	The amount of time spent with the client.
20	The client feels comfortable calling clinician on the phone with questions.
79	The client has trust in the facility that the clinician works in.
82	The client is comfortable answering the clinician's questions.
109	The client is taken on time for the appointment.
84	The physical environment is comfortable and welcoming.
26	The clinician sits and chats.

Supporting choices and shared decision making

102	The recommendation is based on a medical decision and not on a sale.
9	The client is given sufficient information to empower him/her to make choices.
86	The clinician's response to the client's expressed financial constraints.
95	The client has freedom to make some of the decisions with respect to the hearing aid.
58	The clinician accepts client's decision to purchase one versus two hearing aids.
83	The client feels he/she is allowed to make choices.
94	The client feels that he/she is a part of the process.
50*	The client is given time to think about the hearing aid purchase.
8	The clinician provides information about outside funding agencies and potential eligibility.
119	The clinician is willing to accommodate the client's desire for a certain feature or model.
13*	The clinician provides three different price levels from which to choose.
22*	The client has the opportunity to get a second opinion.

24*	The client has the opportunity to try a different hearing aid.
99	The client feels the decision is not final.
23*	The client has control over the hearing aid settings.
120	The clinician prescribes a hearing aid from client's preferred company.
111	A family member is included in the appointment.
63	The clinician provides information and options about other locations where the hearing aids can be purchased.
	Factors in client readiness
106	The client accepts there is a need for hearing aids.
74	The client's readiness to pursue hearing aids.
48	The client has a positive attitude.
75	The client's experience with friends or family that have hearing aids.
30	The client is referred by his/her physician.
78	The clinician has been involved in another family member's care.
112	The client has had a bad experience with another clinician.
103	The client is referred by a friend.
	Imposing undue pressure and discomfort
53	The client feels some pressure to purchase.
54	The client has difficulty understanding the clinician during testing.
51	The client feels rushed and as if on an assembly line.
80	The client feels that the clinician is prescribing hearing aids that exceed the client's needs.
57	The client has the impression audiologist is "up-selling".
64	The client feels that the clinician is prescribing hearing aids beyond client's price range.
52	The client has concerns with the relationship between the clinic where test is done and where he/she is referred to purchase the hearing aid.
49	The clinician pushes certain hearing aids.
121	The client is given too many choices.

*Note. *indicates statements in the lower right quadrant of the bivariate scatter plot in Figure 3.*