

Validity and Reliability of the Index of Active Listening (IAL)

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Abstract

The purpose of this study was to validate the Index of Active Listening (IAL) as an evidence-based practical measure for assessing active listening. In total, 120 adults participated in the study by filling out the IAL. Then, health and social care professionals assessed participants' active listening ability. Results indicated strong significant correlations between professional assessments and the behavioral or semantic differential scores on the IAL. The inter-rater reliability was 0.91. Thus, the IAL was deemed a highly valid and reliable measurement of active listening, making it a helpful tool for evaluating active listening skills in professionals.

Keywords: Active listening, Evaluation, Behavior, Professional Skills, Semantic Differential Methods

1 Introduction

Active listening has attracted considerable interest in practice and research for decades [1–4]: it is defined as the practice of re-stating or paraphrasing a speaker's message in order to fully understand it without judgment [5]. Active listeners are often engaged in helping relationships with speakers, and this kind of listening helps build empathy and trust with the speaker by showing unconditional regard for him or her and confirming his or her experiences. In addition, reflecting on the meaning of messages without judgment

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can help therapeutic clients understand their own feelings better [6].

Active listening has been considered essential for counseling, health and social, and educational professionals, and there is considerable empirical research on its effectiveness from all over the world [7–9]. Research suggests that active listening is a trainable skill, allowing therapists to improve their overall listening skills and put them in a better position to help their clients [10]; these effects appear to continue after training [11]. Other studies found that counseling students' overall listening skills improved with active listening training [12], as did crisis intervention counselors' empathic listening skills [13]. Furthermore, nonprofessionals may benefit from learning active listening skills [14]. For example, parents can learn to understand their children better after an active listening training course, and married couples can strengthen their relationship and become better able to resolve arguments [15].

Much of this previous research has found that active listening is effective in producing positive outcomes for both the listener and speaker [16, 17]. One study showed that first-year counseling students who were receiving specific micro-skill training in active listening considered themselves more effective as counselors and received higher ratings from their supervisors in a variety of counseling skills afterwards [18]. In addition, education students training as teachers perceived themselves as better listeners after receiving active listening training [19]. Even parents benefit from learning how to actively listen [14, 20].

With this background, it would be useful to develop methods for evaluating the level of active listening skills in health and social professionals, so that they could learn to improve these skills by identifying their weak points. This would benefit patients as well as professionals.

Thus, the purpose of this study was to clarify the validity and reliability of one such measure of active listening skills which we developed—the Index of Active Listening (IAL)—for use in practice.

2 Methods

2.1 Participants

Participants were 120 adults enrolled in an active listening brain study in the National Institute for Physiological Sciences.

Before the study was conducted, all participants signed informed consent forms and were made aware that they had the right to withdraw from the experiment at any time. A personal ID system was used to maintain confidentiality of personal information. Furthermore, all data were stored on a password-protected disk; only researchers who were granted permission had access to the data.

The ethics committee of the National Institute for Physiological Sciences approved this study.

2.2 Procedure and Measures

Participants used an observation room with a chair and were videotaped throughout the study. First, health and social professionals who were experts in this technique themselves assessed how well participants were able to engage in active listening, using a 5-point

scale of single item, and then filled out the IAL.

The IAL is a scale for assessing active listening behavior through professional observation. It consists of two subscales: behavior (5 items) and semantic differential (SD; 10 items). Evaluators completed both subscales of the IAL, which can each assess a different aspect of active listening.

The behavior items included presence of direct gazes, nods, facial expressions, posture, and gestures (e.g., “Posture is suitable for listening”); each item is rated on three-point scale, including 0 (“none”), 1 (“little”), and 2 (“often”). The SD items include “serious,” “communicate,” “interested,” “steady,” “trustworthy,” “sincere,” “admissible,” “conversable,” “comfortable,” and “amiable”; this subscale is scored on a 5-point scale ranging from 1 (“not applicable”) to 5 (“very much applicable”). The total sum of each item score becomes the subscale scores. Higher scores indicate a higher level of active listening.

2.3 Analysis

We conducted a correlational analysis using Spearman’s method to assess the relationships between the professional assessments and the IAL. Statistical Analysis System software (SAS version 9.1) was used for the data analysis.

3 Main Results

Figure 1 shows the distribution in professional assessments. Figures 2 and 3 are the distributions in the IAL subscales according to the professional assessments. Both the behavior and SD subscales had distributions that highly corresponded with professional assessments.

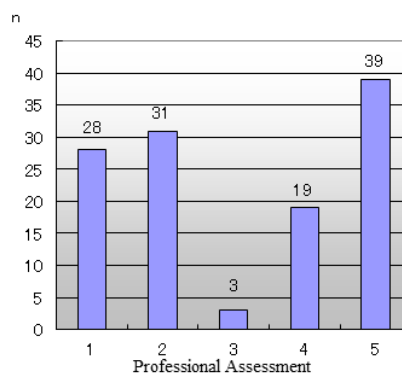


Figure 1: Distribution of professional assessment

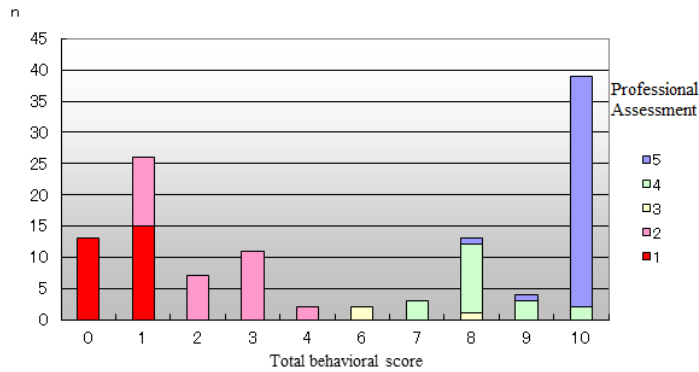


Figure 2: Distribution of total behavioral subscale score and professional assessment

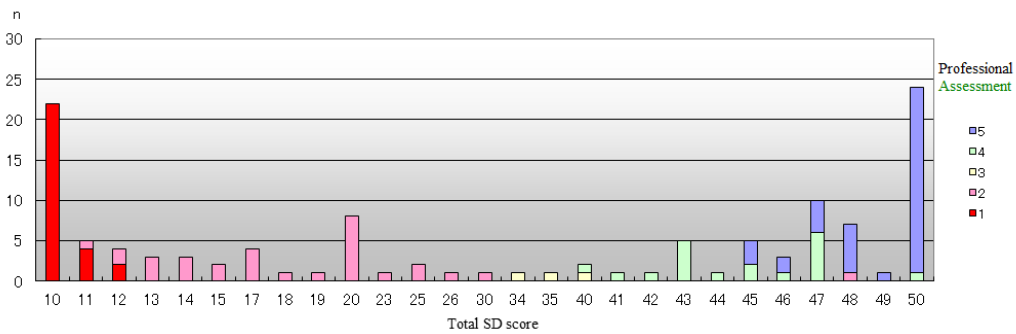


Figure 3: Distribution of total semantic differential (SD) subscale score and professional assessment

Table 1 shows the correlations between professional assessment and the behavior subscale of the IAL. The correlation coefficient for the total score was 0.96. Table 2 shows the correlations between the SD subscale and professional assessments; the correlation coefficient for the total score was 0.95. In Table 3, we show the correlations between the items of the behavior and SD subscales; the correlation between the total score was 0.92.

Table 1: Correlations between professional assessment and behavioral subscale items of the Index of Active Listening (IAL)

Items	1	2	4	5	6	7	8
	Professional Assessment	Total behavioral score	Gazes	Nods	Facial expression	Posture	Gestures
1. Professional Assessment	1						
2. Total behavioral score	0.96	1					
3. Gazes	0.89	0.91	1				
4. Nods	0.83	0.85	0.73	1			
5. Facial expression	0.88	0.88	0.79	0.70	1		
6. Posture	0.83	0.87	0.82	0.64	0.72	1	
7. Gestures	0.89	0.89	0.91	0.77	0.86	0.80	1

Note: Spearman’s rank correlation coefficient ($p < .01$)

Table 2: Correlations between professional assessment and the semantic differential (SD) subscale of the Index of Active Listening

Items	1 Professional Assessment	2 Total SD* score	3 Serious	4 Communicate	5 Interested	6 Steady	7 Trustworthy	8 Sincere	9 Admissible	10 Conversable	11 Comfortable	12 Amiable
1. Professional Assessment	1											
2. Total SD score	0.95	1										
3. Serious	0.93	0.94	1									
4. Communicate	0.95	0.93	0.94	1								
5. Interested	0.94	0.95	0.96	0.94	1							
6. Steady	0.92	0.93	0.97	0.94	0.95	1						
7. Trustworthy	0.90	0.95	0.94	0.90	0.94	0.94	1					
8. Sincere	0.92	0.94	0.94	0.93	0.94	0.95	0.96	1				
9. Admissible	0.95	0.96	0.94	0.95	0.95	0.93	0.94	0.95	1			
10. Conversable	0.92	0.95	0.92	0.92	0.92	0.92	0.92	0.91	0.93	1		
11. Comfortable	0.90	0.96	0.92	0.90	0.92	0.91	0.93	0.92	0.93	0.96	1	
12. Amiable	0.91	0.96	0.92	0.90	0.92	0.91	0.92	0.92	0.93	0.96	0.98	1

Note: Spearman’s rank correlation coefficient ($p < .01$)

Table 3: Correlations between behavioral and semantic differential subscales of the IAL

Items	Total behavioral score	Gazes	Nod	Facial expression	Posture	Gesture
Total SD score	0.92	0.88	0.78	0.83	0.79	0.86
Serious	0.91	0.90	0.77	0.82	0.83	0.89
Communicate	0.94	0.92	0.81	0.84	0.84	0.90
Interested	0.92	0.90	0.80	0.83	0.83	0.89
Steady	0.90	0.92	0.76	0.83	0.83	0.91
Trustworthy	0.89	0.88	0.77	0.80	0.78	0.90
Sincere	0.90	0.89	0.79	0.81	0.80	0.90
Admissible	0.93	0.90	0.81	0.83	0.81	0.90
Conversable	0.91	0.88	0.78	0.86	0.76	0.89
Comfortable	0.89	0.87	0.76	0.85	0.76	0.89
Amiable	0.88	0.87	0.75	0.84	0.75	0.87

Note: Spearman’s rank correlation coefficient ($p < .01$)

Finally, the inter-rater reliability coefficient between two evaluators was 0.91.

4 Discussion

In this study, we assessed the reliability and validity of the IAL. The results showed that both subscales were highly associated with professional assessments of active listening skills, indicating that these subscales validly and reliably assess multiple aspects of active listening. Many researches indicated the association of different aspects of active listening [21–24], as it has been shown in our study to affect each subscale of active listening.

We note three main strengths of the IAL at this juncture, as follows.

First, we precisely assessed IAL scores by videotaping the assessment sessions, to ensure that our data were precise.

Second, we find that the IAL is highly adaptable to many situations, due to its low number of items. Thus, it would be fairly easy to administer.

Third, we have evidence that the IAL has adequate construct and concurrent validity, given the strong correlations observed with the professional assessment.

However, several limitations should be noted. First, the IAL might not encompass all dimensions of active listening, due to its simple nature. Second, the present study focused on observed active listening, that is, active listening as assessed by a behavior. Thus, the type of active listening that would be effective for coping—such as that perceived by the speaker—might not have been assessed in this study [25, 26].

Future research should examine strategies for enhancing active listening, such as examining the most effective communication methods [27, 28]. Overall, our findings suggest that the IAL is an effective tool for evaluating active listening in professionals.

5 Conclusion

This study provides evidence of a simple, valid, and reliable measure to assess active listening. We believe that this measure will be of practical use for the education of counselors and health and social professionals.

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Appendix:

Index of Active Listening (IAL)

1. Behavior Subscale

(1) Gazes	0. None	1. Little	2. Often
(2) Nods	0. None	1. Little	2. Often
(3) Facial expressions	0. None	1. Little	2. Often
(4) Posture	0. None	1. Little	2. Often
(5) Gestures	0. None	1. Little	2. Often

2. Semantic Differential Subscale

(1) Serious	1. Not applicable	2.	3.	4.	5. Very much applicable
(2) Communicate	1. Not applicable	2.	3.	4.	5. Very much applicable
(3) Interested	1. Not applicable	2.	3.	4.	5. Very much applicable
(4) Steady	1. Not applicable	2.	3.	4.	5. Very much applicable
(5) Trustworthy	1. Not applicable	2.	3.	4.	5. Very much applicable
(6) Sincere	1. Not applicable	2.	3.	4.	5. Very much applicable
(7) Admissible	1. Not applicable	2.	3.	4.	5. Very much applicable
(8) Conversable	1. Not applicable	2.	3.	4.	5. Very much applicable
(9) Comfortable	1. Not applicable	2.	3.	4.	5. Very much applicable
(10) Amiable	1. Not applicable	2.	3.	4.	5. Very much applicable