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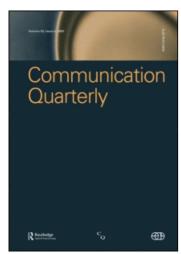
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The Active-Empathic Listening Scale (AELS): Conceptualization and Evidence of Validity Within the Interpersonal Domain

Graham D. Bodie

Although several theoretical perspectives highlight the importance of listening, our field has largely neglected developing valid listening measures. The purpose of this article is to provide a conceptualization and measurement of one type of listening important to relational and individual well-being: active-empathic listening. Results from two studies provide evidence of construct validity of a self- and other-report version of the Active-Empathic Listening Scale. The discussion focuses on directions for future research using this scale and for the need to develop additional measures that tap components of listening.

Keywords: Active Listening; Cognition; Communication Competence; Information Processing; Scale Development

Popular literature, trade publications, and a variety of self-help remedies stress that listening is an essential component of satisfying and successful interpersonal communication and relationships. The importance of listening is similarly touted in undergraduate texts on interpersonal communication (e.g., DeVito, 2006; Trenholm & Jensen, 2008). With the significance placed on listening as a core communication competency (Morreale, Rubin, & Jones, 1998), it is surprising that scholarly research and theorizing about listening is vastly underdeveloped (Bodie, Worthington, Imhof, & Cooper, 2008; King, 2008). Although interpersonal communication scholarship has certainly moved beyond a simple, linear model of the communication process

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whereby "speaking" and "listening" are considered separate roles or processes (Berger, 2011), this advancement is not justification for ignoring such a fundamental aspect of the communication process as listening.

As early as the 1930s, communication teachers and scholars argued that our field should take seriously the importance of listening (Adams, 1938; Borden, 1935). More recently, evidence that listening is considered an essential communicative function can be found within several lines of research including constructivism (Burleson, 2011), interpersonal skills (Spitzberg & Cupach, 2002), conversational memory (Stafford & Daly, 1984), and message interpretation (Edwards, 2011). Unfortunately, even within these lines of research, listening is not examined in any systematic way; instead, listening is a largely assumed process that undergirds important communication functions from social support to persuasion (Arnett & Nakagawa, 1983; Bodie, 2011). Indeed, the most thorough treatment of listening is found in interpersonal communication textbooks where and the focus is on "practical skill development rather than conceptual clarification or empirical research" (Stewart, 1983, p. 379).

This article provides the conceptual and empirical development of a particular type of listening proposed to be highly salient to close relationships. Specifically, active-empathic listening (AEL) is proposed as the active and emotional involvement of a listener during a given interaction—an involvement that is conscious on the part of the listener but is also perceived by the speaker. AEL combines two types of listening discussed in the extant literature that seems to coalesce around the notion of other-centered involvement as a listener—namely, active listening and empathic listening. For example, Carl Rogers, considered by many as the father of our current conceptualization of active listening, claimed that active listening is only effective to the extent that it is "firmly grounded in the basic attitudes of the user" (Rogers & Farson, 2007, p. 320). Indeed, suspension of one's own judgment and fully attending to the other on his or her own terms are defining features of active listening (Hutchby, 2005; Rogers, 1955). Similarly, within descriptions of empathic listening are notions of activity such as paraphrasing and remembering details (e.g., Myers, 2000; Walker, 1997). Certainly, it is hard to imagine an empathic listener who is not actively involved in the process.

Several studies suggest a host of potential benefits of AEL including emotional improvement (Burleson & Goldsmith, 1998; Clark, 1993), better medical care and satisfaction with one's medical provider (Silverman, Kurtz, & Draper, 2005), and increased satisfaction during business transactions (Drollinger, Comer, & Warrington, 2006). Although this research suggests connections between AEL and a range of beneficial outcomes, very little empirical work directly tests these claims (Bodie, 2010). Although there is certainly no dearth of conceptualizations of active or empathic listening, perhaps one reason for the lack of empirical research directly assessing AEL and its outcomes is the dearth of clear measures for this construct in the context of interpersonal communication. Thus, the purpose of this article is to provide evidence of validity for a multidimensional scale developed to assess AEL in the context of interpersonal communication and close relationships research. This article conceptualizes and tests a self-report (Study 1) and other-report (Study 2) version of a scale that measures individual differences in AEL.

Defining AEL

Definitions of listening are as varied as researchers studying the phenomenon (Bodie et al., 2008). Within these varying definitions, however, is a common acknowledgment of at least two aspects of listening—namely, the behavioral and the cognitive (Witkin & Tochim, 1997); that is, listening is typically conceived of as a cognitive process involving steps such as sensing, processing, and responding but also as a perceived behavior (Janusik, 2007). Like the generic term listening, AEL can also be conceptualized in terms of cognitions and behaviors (L. T. Thomas & Levine, 1994). Specifically, listeners can demonstrate AEL in at least three different stages of the listening process: sensing, processing, and responding. The listener demonstrates AEL during the sensing stage by being actively involved while the other is speaking, indicating that he or she is taking in all of the available information. This includes not only sensing the actual words, but also picking up on a message's relational content (Edwards, 2000) and being sensitive to the emotional needs of the other (Walker, 1997). Within the processing stage, AEL is engaged when the listener remembers comments produced by his or her interlocutor, asks for clarification of points when appropriate, and integrates different parts of the speaker's talk into a working whole. It is within this stage that conversational listening capacity (Janusik, 2005, 2007) and the ability to engage in appropriate schematic processing seem important (Fitch-Hauser, 1984, 1990). Finally, AEL during the response stage is characterized by asking questions or paraphrasing, as well as using nonverbal signals such as head nods and backchannel responding that indicate active attention (Wolvin & Coakley, 1996; Yngve, 1970). Perhaps more than any other stage, the response stage is what is typically labeled as AEL.

Measuring AEL

Although much conceptual work on AEL exists, very little has been done in the way of measuring this social skill. For example, although most measures of communicative competence or other social skills include items that tap elements of listening, those items give very little attention to the various components of or behaviors associated with listening. Moreover, listening rarely constitutes a separate factor within multidimensional social skill scales; instead, these scales often clump listening together with general reception and attention-related items (e.g., Spitzberg, 1995) or exclude listening en masse (e.g., Riggio, 1986).

Given the previous conceptualization of AEL, its operationalization should meet several criteria. First, the scale should adequately measure each component of listening (sensing, processing, and responding), allowing for both behavioral and cognitive aspects of those components where applicable. Second, because both the perspective of the listener and the perspective of the listened-to are important in any assessment of competence (Rubin, 1982), the scale should be able to capture both self- and other-report perceptions. Based on these criteria, two studies are reported that attempt to provide evidence of construct validity for a multidimensional scale that measures AEL.

Construct validity is the degree to which inferences made about a construct can be legitimately made from the operationalization of that construct. Several pieces of evidence can be used to make a case for construct validity including confirmatory factor analysis (CFA), convergent and discriminant validity, and pattern matching (Carmines & Zeller, 1979; Cronbach & Meehl, 1959; DeVellis, 2003; Trochim, 1985). In the studies that follow, two pieces of evidence are used to provide evidence of the construct validity of the Active-Empathic Listening Scale (AELS). First, CFA is employed to investigate the dimensionality of AEL. Second, several measures of related constructs are employed concurrently with the AELS to assess convergent and discriminant validity. Measures of activity and empathy are used because these concepts are thought to comprise the nomological network of AEL (Cronbach & Meehl, 1959).

Study 1

The first study to recognize the need for a measure of AEL was published in 2006 by Drollinger and her colleagues. Their scale was developed within the context of a particular interpersonal relationship (i.e., between a salesperson and his or her client); but to what extent does AEL extend to other interpersonal relationships? Certainly, there is no reason to believe AEL is unique to the salesperson–client relationship, but the degree to which the measurement of AEL is valid across contexts is an empirical question (Levine, Hullett, Turner, & Lapinski, 2006), and one that deserves research attention. Thus, the first purpose of Study 1 is to provide evidence of construct validity for the AELS within the context of everyday interpersonal exchange.¹

Several concepts have been developed in the interpersonal communication literature that seem related to the active component of AEL. One of the earliest concepts developed was interaction involvement (II), or the degree to which an individual is cognitively and behaviorally engaged in a conversation (Cegala, 1981). II is proposed to tap three specific dimensions of conversational engagement—attentiveness, perceptiveness, and responsiveness. Attentiveness refers to an individual's tendency to attend to and focus on an interaction with another person, whereas perceptiveness entails an awareness of the meanings and significance of the interaction for the other person. The final dimension, responsiveness, is the ability to respond appropriately to an utterance by the other person.

A similar concept, conversational sensitivity (CS), was developed by Daly, Vangelisti, and Daughton (1988), and refers to an individual's attention to and awareness of underlying meanings in conversations. The original study found eight underlying dimensions of CS—detecting meanings (ability to detect deeper and multiple meanings from what others say), conversational memory (ability to remember conversational content), conversational alternatives (ability to develop different conversational strategies), conversational imagination (tendency to imagine conversations), conversational enjoyment (tendency to enjoy participating in or listening to conversations), interpretation (capacity to detect underlying meaning, irony, sarcasm, etc.),

perceiving affinity (ability to detect who likes whom from conversations), and perceiving power (ability to detect underlying power struggles from conversations). Daly et al. found overall CS moderately related to II (r = .28) and that only the perceptiveness dimension of II was strongly related (r = .55) to an individual's total CS score. To the extent that a scale measuring AEL assesses activity in listening, it should be positively related to both II and CS.

Although not a complete antithesis to conversational activity, the individual difference in propensity to compulsively talk can be considered a third concept related to activity in listening. In general, the more an individual talks, the less time she or he has to devote to actively listening. Thus, a measure of compulsive talking was employed in this study to assess the discriminant validity of the AELS.

In addition to activity in listening, AEL additionally incorporates an individual's ability to experience and exhibit empathy while listening. Although empathy is a core component of many definitions of listening (Glenn, 1989), empathy is generally confined to the listening response (i.e., listening behavior). Instead, as Drollinger et al. (2006) commented, with "[AEL], empathy is considered to be an integral part of all aspects of the listening process" (p. 163). Consequently, each dimension of AEL should correlate positively to dimensions of empathy.

In sum, Study 1 sought to test the hypothesis that the AELS developed in the context of salesperson-client relationships can be modified to research investigating other interpersonal relationships.

Method

Participants. College student volunteers (N=416; 165 men and 250 women) reported an average age of 20.0 (SD = 3.0; range = 18–47) and were of various class ranks: Freshman (n=103), Sophomore (n=130), Junior (n=91), Senior (n=85), and Graduate (n=3). Participants were primarily Caucasian (81.7%); other ethnicities were represented including African American (n = 51), Asian (n = 19), Hispanic (n=12), "other" (n=9); e.g., Arab or Middle Eastern), Native American (n=6), Latino (n=4), and Pacific Islander (n=1). The courses from which the sample was drawn serve several academic areas of study. Thus, participants represented Business (n=179), Arts and Sciences (n=86), Basic Sciences (n=32), Engineering (n=27), Agriculture (n=25), Education (n=20), Mass Communication (n=16), and Veterinary Medicine (n=10); other schools and colleges represented <1% of participants.

Procedures

During the Spring semester of 2009, participants reported to a computer lab in groups of up to 20, provided informed consent per institutional review board (IRB) protocol, and completed a computer-based survey. Participants took an average of 25 min to complete the study and were rewarded partial fulfillment of a course research requirement for their participation.

Measures

AEL. The AELS (Drollinger et al., 2006) asks participants to indicate how frequency they perceive each of 11 statements (see Table 1) to be true of them on 7-point scales ranging from 1 (never or almost never true) to 7 (always or almost always true); the midpoint (4) read occasionally true. Items are specified to load on one of three latent constructs: sensing, processing, and responding. The scale was modified to apply to general conversational dispositions. For instance, the original item, "I assure my customers that I will remember what they say by taking notes when appropriate," was rewritten as, "I assure others that I will remember what they say."

Validation items—activity. To provide evidence of construct validity for the active component of AEL, two measures of conversational involvement were administered. First, the 18-item Interaction Involvement Scale (Cegala, Savage, Brunner, & Conrad, 1982) was employed as a measure of three dimensions of II—attentiveness, perceptiveness, and responsiveness; each scale is responded to on 5-point Likert scales. Consequently, participants were assigned three scores, one for each dimension: attentiveness ($\alpha = .74$), perceptiveness ($\alpha = .65$), and responsiveness ($\alpha = .81$).

Table 1 Active-Empathic Listening Scale Items, Standardized Factor Loadings, and Internal Consistency Reliability

Construct	Item	Standardized loadings	α
Sensing		0.89/0.95	.73/.85
	I am sensitive to what others are not saying.	0.58/0.76	
	I am aware of what others imply but do not say.	0.65/0.70	
	I understand how others feel.	0.56/0.74	
	I listen for more than just the spoken words.	0.76/0.86	
Processing		0.90/1.02	.66/.77
Ü	I assure others that I will remember what they say.	0.54/0.60	
	I summarize points of agreement and disagreement when appropriate.	0.64/0.79	
	I keep track of points others make.	0.70/0.78	
Responding		0.94/0.97	.78/.89
	I assure others that I am listening by using verbal acknowledgments.	0.66/0.84	
	I assure others that I am receptive to their ideas.	0.74/0.78	
	I ask questions that show my understanding of others' positions.	0.69/0.81	
	I show others that I am listening by my body language (e.g., head nods).	0.64/0.83	
Total scale	-		.86/.94

Note. The first number represents data from Study 1, and the second number represents data from Study 2.

Second, the 36-item scale developed by Daly et al. (1988) was used to measure CS. Although the original study found eight factors, little research has used the scale since its inception; that which has reports variations of the original factor structure (Salisbury & Chen, 2007; Stacks & Murphy, 1993). Thus, a principal axis analysis with varimax rotation was utilized to assess the factor structure present in this sample. Based on the Kaiser rule and inspection of the resulting scree plot, an eight-factor solution was interpreted that explained 60.25% of the item variance. The extracted factors matched the original solution. Cronbach's alpha for the subscales ranged from .56 to .86 (M=0.74); the total scale was highly reliable ($\alpha=.89$). In addition, the Talkaholic Scale was employed as a measure of the propensity to compulsively talk (McCroskey & Richmond, 1995). All 16 items (5-point Likert) were employed, and 10 (e.g., "I just can't stop talking too much") were used as a respondent's Talkaholic score ($\alpha = .90$).

Validation items-empathy. Twenty items were borrowed from Weaver and Kirtley (1995) to measure three aspects of empathy shown to be correlated with relationally oriented listening behaviors. The Empathic Responsiveness (ER) scale consisted of seven items (e.g., "I don't get upset just because a friend is upset") that tapped an individual's tendency to experience "a congruent affective response to overt or covert cues of another's affective state" (p. 132). Perspective taking (PT)—the ability to adapt the other's perspective—was measured with five items (e.g., "I try to look at everybody's side of a disagreement before I make a decision"). Finally, eight items were employed to measure sympathetic responsiveness (SR), or the tendency to feel concern or sorrow for another but not necessarily to directly empathize (e.g., "I am the type of person concerned when others are unhappy"). All items were measured on 5-point Likert scales. The internal consistency estimates for this study were ER ($\alpha = .70$), PT ($\alpha = .70$), and SR ($\alpha = .82$).

Results

Based on recommendations by Hu, Bentler, and Kano (1992), the study was sufficiently powered to assess model fit and provide parameter estimates for the CFA. For correlations, with alpha set at .05 and 416 participants, power was .65 to detect small effects (r = .10) and above .99 for medium (r = .30) and large (r = .50) effects.

Dimensionality of the AELS. Data conformed to assumptions underlying multivariate techniques, and missing data constituted <5% of all data; therefore, mean imputation was used to replace missing values (Tabachnick & Fidell, 2007). The final data were analyzed using AMOS 16.0 (SPSS, Chicago, IL). The second-order model fit the data well: $\chi^2(41, N=416) = 119.10$, p < .001; goodness-of-fit index (GFI) = .95, adjusted goodness-of-fit index (AGFI) = .92, comparative fit index (CFI) = .95, root mean residual (RMR) = .062, and root mean square error of approximation (RMSEA) = .06 (90% confidence interval [CI] = .05, .08.); all standardized residual covariances were below 2.58 in absolute value. No error terms were correlated to achieve model fit. Factor loadings are presented in Table 1.

Table 2 Descriptive Statistics of AELS and Correlations Among AELS and Rel

Table 2 Descriptive Statistics of AELS and Correlations Among AELS and Relevant Constructs: Study 1

Variable	AELS-S	AELS-P	AELS-R	AELS–Total
M (SD)	5.04 (0.96)	4.91 (0.97)	5.54 (0.90)	5.20 (0.79)
Empathic responsiveness	.15**	.05	.18**	.16**
Perspective taking	.31**	.28**	.44**	.41**
Sympathetic responsiveness	.29**	.18**	.40**	.35**
II–Responsiveness	.67**	.19**	.24**	.24**
II–Perceptiveness	.44**	.41**	.41**	.50**
II–Attentiveness	.13*	.19**	.25**	.23**
II–Total	.29**	.31**	.37**	.39**
CS-Detecting meanings	.42**	.39**	.33**	.45**
CS-Conversational memory	.21**	.32**	.22**	.30**
CS-Conversational alternatives	.29**	.38**	.27**	.37**
CS-Conversational imagination	.07	.06	.07	.08
CS-Conversational enjoyment	.21**	.08	.17**	.18**
CS-Perceiving power	.20**	.21**	.27**	.27**
CS-Perceiving affinity	.20**	.22**	.24**	.26**
CS-Interpretation	.16*	.11***	.17**	.18**
CS-Total	.38**	.40**	.36**	.45**
Talkaholic	.09	.13*	.03	.09

Note. Mean is not a whole number because of data imputation. When the mean was calculated on the non-imputed data, the range for the responding subscale was 2 to 7. AELS = Active-Empathic Listening Scale; S = sensing; P = processing; R = responding; II = interaction involvement; CS = conversational sensitivity. $^*p < .01. ^{***}p < .001. ^{***}p < .05.$

Correlations with other scales. Bivariate relationships were computed among the AELS constructs and the scales employed to provide the second piece of evidence for construct validity. As seen in Table 2, 59 of the 68 bivariate relationships were statistically significant at the .05 level or below. Overall, these results provide a second piece of evidence for the construct validity of the AELS.

Discussion

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The AELS was originally developed in the context of sales and sales performance. This study found support for the conceptualization of AELS as a higher-order construct with three dimensions—sensing, processing, and responding. This factor structure is consistent with several definitions of listening found throughout the academic literature (Bodie et al., 2008; Glenn, 1989; Wolvin & Coakley, 1996). Moreover, eight items that comprise the AELS achieved high factor loadings ($\lambda > .60$), and the remaining three achieved adequate loadings ($\lambda > .50$; Hair, Anderson, Tatham, & Black, 1998), suggesting no current need to add or remove items to obtain an

adequate scale. Although internal consistency reliability estimates were somewhat low for the individual subscales, the reliability of the total scale was acceptable (see Table 1). The alpha coefficients for the sensing and responding subscales are equivalent to those provided by Drollinger et al. (2006); the reliability of the processing dimension was slightly lower in this study than the .74 estimate provided in previous research. Because reliability is a product of data and not of a scale, future research using the scale in a variety of contexts and with a variety of populations and subsequent generalizability studies should be conducted (Thompson, 2003).

This study also provides construct validity evidence for AELS by showing it is associated with three aspects of empathy and several aspects of conversational awareness. The relationship between the AELS and empathy mirrors the work of Drollinger et al. (2006), who found correlations of similar magnitude between each AELS subscale and measures of empathic concern and PT. The only nonsignificant relationship between the AELS and the empathy measures in this study was between the processing subscale and ER. The processing dimension seems to tap the ability to retain and remember conversational information (see Table 1 for items), which may have little to do with the ability to identify with others in an emotionally relevant way. Indeed, correlations between ER and relevant elements of CS (e.g., detecting meaning, conversational memory) and the II dimensions were all nonsignificant, whereas correlations between the other two empathy dimensions (i.e., PT and SR) and these same variables were all statistically significant.² This pattern of results suggests that sensing and responding in active-empathic ways are more indicative of an ability to experience congruent emotional responses within an interaction than is processing. The implications of this pattern of results are certainly grounds for future research.

The relationship between the AELS, II, and CS mirrors the work of Daly et al. (1988), who found an overall correlation of .28 (p < .02) between the CS total score and the II total score, and a somewhat higher correlation (r = .55, p < .001) between perceptiveness and the CS total score. For this study, the correlations among the AELS subscales and the total scores for the II and CS scales ranged from .29 to .45. Slightly higher correlations were found between II-Responsiveness/AELS-Sensing (.67) and II-Perceptiveness/AELS-Total (.50). Thus, data support the notion that AEL is a unique construct that shares conceptual space with CS and II, both of which can be considered measures of active involvement in conversation, but is not isomorphic to either.

In addition, the AELS seems empirically unrelated to compulsive talking. In other words, being an active-empathic listener does not necessarily predispose one to compulsive talking (or vice versa). There was, however, one significant relationship between the processing subscale of the AELS and the Talkaholic Scale—that, although relatively small in magnitude, deserves consideration. Overall, this correlation between processing and compulsive talking—seems to indicate that individuals who keep track of conversational points to either assure others of listening or to summarize parts of the conversation have to talk more to achieve these listening-related goals. To test this speculation, a new variable was computed that grouped individuals based on their Talkaholic score. Based on recommendations from McCroskey and Richmond (1995), "truly compulsive talkers" were defined by scores of 40 and above (n=17), individuals with scores between 30 and 39 were given a label of "borderline talkaholics" (n=98), and individuals with scores of 29 and below were not compulsive talkers (n=292). T tests comparing compulsive talkers to those scoring low on the Talkaholic Scale showed no significant differences on any of the AELS subscales or the total scale (all ps > .38). Therefore, at best, the correlation may suggest the need to talk in order to demonstrate active-empathic information processing. Perhaps, however, the relationship between processing and compulsive talking is merely the product of method bias. Certainly, multitrait–multimethod approaches to the measurement and study of a variety of communication-based predispositions (including listening) is warranted (Campbell & Fiske, 1959).

Overall, this study provides evidence that the concept of AEL is related to an ability to remain involved in interaction (i.e., activity) and be sensitive to elements of a conversation (i.e., empathy). This study is, however, limited insofar as participants were rating their own listening predispositions. Although such a self-report scale is useful, perhaps more useful is the ability to detect behaviors or individual differences that predispose others to be considered an active-empathic listener. The next study attempts to provide evidence of validity for the AELS as a scale that can be used to report on another person's listening behavior.

Study 2

The purpose of Study 2 is to extend the utility of the AELS by providing evidence of validity when describing the AEL of another person. Specifically, this study investigated the relationship between AEL and three constructs relevant to AEL in the context of assessing behaviors of an interactional partner.

First, individuals who are more active and empathic as they listen should also be viewed as more appropriate and effective in a conversation that requires skill in AEL. Conversational "appropriateness refers to the extent to which a communicative performance is judged legitimate within a given context" (Spitzberg & Cupach, 2002, p. 581), whereas effectiveness is defined as the accomplishment of "preferred outcomes" (p. 580). Together, effectiveness and appropriateness are two of the most important criteria used to assess communicative competence (Spitzberg & Cupach, 1984). Second, high AELs should also be viewed as more nonverbally immediate. Indeed, textbook treatments of active listening focus heavily on the behavioral manifestations of AEL, and these behaviors are generally framed in the language of nonverbal immediacy (e.g., Adler, Rosenfeld, & Proctor, 2006). Nonverbal immediacy refers to behaviors such as touch, eye contact, and smiling that signal warmth, involvement, and affiliation (Andersen & Andersen, 2005).

Method

Participants. College student participants (N=217; 106 men and 111 women) reported an average age of 20.51 (SD=2.22; range = 18–43) and were of various class

ranks: Freshman (n=48), Sophomore (n=78), Junior (n=29), Senior (n=58), Graduate (n=1), and non-degree seeking (n=1). Although participants were primarily Caucasian (82.9%), other ethnicities were represented including African American (n=26), Hispanic (n=8), Asian (n=6), Latino (n=3), Native American (n=2), and Pacific Islander (n=2). The courses from which the sample was drawn serve several academic areas of study. Thus, participants represented Business (n = 84), Arts and Sciences (n = 53), Engineering (n = 25), Agriculture (n = 20), Education (n = 16), Basic Sciences (n=12), Mass Communication (n=9), and Veterinary Medicine (n=7); other schools and colleges represented 1% or less of participants.

Procedures

During the Spring semester of 2009, participants reported to a computer lab in groups of up to 20, provided informed consent per IRB protocol, and were randomly assigned to complete a computer-based survey that had them "think of the last person with whom you interacted that you considered a good/bad listener." After describing either a good (n=117) or bad (n=100) listener, participants completed several measures assessing that individuals communication and listening mannerisms. Participants took an average of 20 min to complete the study and were rewarded partial fulfillment of a course research requirement for their participation.

Measures

Although several potential measures exist to help validate the AELS-Other-Report (AELS–OR), we limited scales to those that (a) are most closely related to the conversational setting, and (b) have been validated for use when reporting on another person.

AEL. The AELS was slightly modified so that instructions asked participants to "read each statement and indicate how frequently you perceive it is true about the good/bad listener you described." Each item was prefaced with "the good/bad listener I described" and assessed the same 7-point scale used in Study 1.

Validation items. The Nonverbal Immediacy Scale-Observer Report developed by Richmond, McCroskey, and Johnson (2003) asked respondents to describe a target person on 26 items (e.g., "He/she uses her/his hands and arms to gesture while talking to people") using a 5-point scale ranging from 1 (never) to 5 (very often). The scale achieved excellent reliability ($\alpha = .94$). Two scales developed by Spitzberg and Canary (1985) and validated for use as other-report scales (Canary & Spitzberg, 1987) were used to measure the degree to which the good or bad listener a participant described was generally seen as appropriate and effective during conversation. Each scale consists of 20 items and uses a 7-point Likert scale. Based on recommendations by Rubin (1994), all items were submitted to a common (principle axis) factor analysis with varimax rotation. Results suggested interpretation of two factors that explained a cumulative 56.13% of the item variance. The first factor contained nine items, all of which were drawn from the original appropriateness scale (α = .93); the second factor contained seven of the original effectiveness items (α = .93). These variables were highly correlated: r = .72, p < .001.

Results

CFA procedures were used to assess the factor structure of the AELS–OR. Based on recommendations by Hu et al. (1992), the study was sufficiently powered to assess model fit and provide parameter estimates. In addition, data was submitted to correlational and discriminant function analysis (DFA) procedures. With alpha set at .05 and 217 participants, power (for the correlational data) was .43 to detect small effects (r=.10) and above .99 for medium (r=.30) and large (r=.50) effects. Power for the DFA was .15 to detect small effects, .95 to detect medium effects, and above .99 for large effects.

Dimensionality of the AELS–OR. Data conformed to assumptions underlying multivariate techniques, and missing data constituted <5% of all data; thus, mean imputation was used to replace missing values (Tabachnick & Fidell, 2007). The final data were analyzed using AMOS 16.0. The second-order model fit the data well: χ^2 (41, N=217) = 96.40, p<.001; GFI = .93, AGFI = .89, CFI = .97, RMR = .086, and RMSEA = .07 (90% CI = .05, .09); all standardized residual covariances were below 2.58 in absolute value. No error terms were correlated to achieve model fit. Table 1 contains the factor loadings.

Factorial invariance analysis. To investigate whether the scale works equally well as a self-report and other-report version, a factorial invariance analysis was conducted using the multiple-groups analysis procedure within AMOS 16.0 (see Arbuckle, 2005, pp. 371-383; see also Byrne, 2001). Specifically, this multi-group invariance framework tests for equivalences across groups in logical order of nested comparisons of increasing restrictiveness: (a) first-order factor loadings (measurement weights), (b) second-order factor loadings (structural weights), (c) covariance of the second-order factor (structural covariances), (d) variance of the first-order residuals (structural residuals), and (e) error variance (measurement residuals). The baseline model (unconstrained) provided excellent fit statistics— $\gamma^2(82, N=217)=215.54$, p < .001; GFI = .94, AGFI = .91, CFI = .96, RMR = .075, and RMSEA = .05 (90%) CI = .04, .06)—indicating the second-order factor structure of the AELS is well-fitting across the two scale iterations. Moreover, the subsequent models constraining (a) the first-order factor weights to be equivalent (measurement weights), $\Delta \chi^2(8, N=217) = 20.42, p > .01$, and (b) the second-order factor weights to be equivalent (structural weights), $\Delta \gamma^2(2, N=217) = 1.37, p=.50$, did not produce appreciably worse fit statistics (Δ normed fit index, incremental fit index, relative fit index, and the Tucker-Lewis index; ps < .001 for both models). The invariance of the models did not, however, extend to the second-order factor covariance, the first-order residuals, or the individual item residuals.

orday 2				
Variable	CA	CE	NVI	
AELS–Sensing	.65**	.71**	.15***	
AELS-Processing	.53**	.69**	.17***	
AELS–Responding	.60**	.70**	.19*	
AELS-Total	.64**	.75**	.18*	

Correlations Among AELS and Relevant Constructs: Table 3 Study 2

Note. AELS = Active-Empathic Listening Scale; CA = conversational appropriateness; CE = conversational effectiveness; NVI = nonverbal immediacy. p < .01. p < .001. p < .001. p < .05.

Correlations with other scales. Bivariate relationships were computed among the AELS-OR subscales and those explained earlier. As seen in Table 3, the AELS-OR is positively correlated with all three validation measures. More important, the correlations between the AELS-OR subscales and total score and conversational appropriateness and effectiveness were much higher than those between the AELS-OR subscales and total score and nonverbal immediacy. This suggests that AEL shares less in common with nonverbal immediacy than with perceptions of individuals as appropriate and effective interlocutors.

As a follow-up, a DFA was conducted with condition (good or bad listener) as the dependent variable and the six scales as the independent variables.³ This analysis produced one significant discriminant function— $\Lambda = .404$, $\chi^2(6, N=217) = 192.14$, p < .001—that accounted for 59.6% of the total relationship between predictors and groups and 100% of the between-group variability (eigenvalue = 1.48, canonical correlation = .77). As expected, the unstandardized canonical discriminant functions evaluated at group means supported that this function discriminated between good (1.12) and bad (-1.31) listeners. Table 4 shows the descriptive statistics, standardized and unstandardized canonical discriminant function coefficients, and the structure coefficients. Based on the standardized canonical discriminant function coefficients, conversational appropriateness, although associated at the bivariate level with the discriminant function, did not provide a unique, controlled contribution for discriminating among good and bad listeners. Nonverbal immediacy was neither associated at the bivariate level nor was it a unique predictor of group membership. Conversational effectiveness and each AELS subscale were associated at the bivariate level and uniquely contributed to group discrimination. In an attempt to ascertain the predictive power of the IVs in classifying good and bad listeners, a classification analysis was run with specified prior probabilities. The analysis correctly classified 88.5% of cases.

Discussion

Study 2 was conducted to determine the validity of using the AELS as an other-report measure (i.e., the AELS-OR). Results from the second-order CFA supported AEL as a

Table 4 Descriptive Statistics—Coefficients From Discriminant Function Analysis Classifying Good and Bad Listeners on Basis of Other-Report Measures

DV	Good/Bad listener	M	SD	Standardized coefficient	Unstandardized coefficient	Structure coefficient
CA	_	_	_	.02	.02	.54
	Good	5.28	1.12			
	Bad	3.78	1.17			
CE	_	_	_	.39	.38	.76
	Good	5.65	0.90			
	Bad	3.75	1.15			
AELS–Sensing	_	_	_	.35	.38	.83
	Good	4.91	0.93			
	Bad	3.05	0.91			
AELS-Processing	_	_	_	.29	.31	.80
	Good	5.05	0.93			
	Bad	3.26	0.91			
AELS–Responding	_	_	_	.21	.21	.80
	Good	5.29	0.98			
	Bad	3.31	1.07			
NVI	_	_	_	.00	.00	.07
	Good	74.23	5.92			
	Bad	73.16	7.35			

Note. $DV = discriminant \ validity; CA = conversational appropriateness; CE = conversational effectiveness; AELS = Active-Empathic Listening Scale; <math>NVI = nonverbal \ immediacy$.

higher-order construct and three lower-order factors of sensing, processing, and responding in the assessment of a recent conversational partner and his or her AEL in that conversation. In addition, all factor loadings were high ($\lambda > .60$), and the reliability estimates were all adequate, with the total scale alpha above .90. Moreover, the factorial invariance analysis suggested the equivalence of the AELS and the AELS–OR.

Correlational analysis further supports the construct validity of the AELS–OR. Specifically, all aspects of the AELS–OR were positively associated with conversational appropriateness, conversational effectiveness, and nonverbal immediacy. Comparison of structure coefficients and standardized coefficients presented in Table 4 seems to indicate that each aspect of AEL, as well as conversational effectiveness, are strongly related to good and bad listening at the bivarite level and contribute unique predictive power to discriminating between these groups when other variables are controlled. Conversational appropriateness, however, is less associated with good and bad listening. This result makes sense upon inspection of individual items comprising the appropriateness and effectiveness scales. Specifically, there are several items on the effectiveness scale that tap notions of effective listening (e.g., "I just let the other person talk most of the time," and "She/He dominates our conversations").

Thus, the relationship between AEL and conversational effectiveness is likely a function of both conceptual and operational overlap. Moreover, the analysis presented in Endnote 4, which reports results using the AELS-OR total scale as opposed to the individual subscales, suggests that AEL as a broad concept does the best job discriminating among good and bad listeners. This is what would be expected of a scale that measures listening in a more direct and nuanced way than what is done with the effectiveness measure. It may be that the lower reliability coefficients of the individual subscales attenuates the relationship between those concepts and the function discriminating good and bad listening. Because the effectiveness scale achieved high reliability, there is less attenuation; and when placed in a multivariate analysis with scales that have significantly lower reliability, it tends to capture more variability because of this.

Finally, nonverbal immediacy seems relatively unimportant in the distinction between good and bad listeners. This seems somewhat surprising given the emphasis in the academic literature on nonverbal behavior and its importance to perceptions of listening (Bodie & Jones, in press; Jones, 2011). This finding should be explored further in future research. Moreover, it appears that other aspects of AEL (aspects other than nonverbal displays of responding) are important for future research—that is, although the correlation results suggested that active-empathic listeners also are seen as somewhat more immediate, immediacy does not seem to be the most important determinant of whether a conversational partner comes away from an interaction with the impression that his or her partner was a good or bad listener. Questions such as the degree to which nonverbal immediacy signals listening competency and the degree to which competence in listening can leave impressions of overall communicative competence and social skill certainly deserve our empirical attention (and not just our theoretical musings).

Conclusion

Listening is considered a core competency for successful interaction not only by the self-proclaimed self-help gurus, but also by scholars of human communication. Unfortunately, the empirical support for many of the extant claims about the importance of listening is lacking. One reason for this lacuna is the lack of valid measures of listening in its many forms. The purpose of this study was to begin filling this methodological gap by providing validity evidence for a scale that assesses AEL.

Based on a conceptual analysis of listening definitions, the AELS was originally developed in the realm of salesperson effectiveness and performance. Although salespersons establish and maintain interpersonal relationships with their clients, the assumption that a scale developed in one context is directly transferable to another is certainly suspect. This study supports the use of the AELS as a general self-report measure of AEL, as well as a measure that can be used to report on other individuals who may exhibit behaviors of good or bad listening within a particular conversation or context. Each study reported earlier found evidence of a stable factor structure through the analysis of a second-order factor model that showed AEL is a higher-order construct consisting of three lower-order factors—namely, sensing, processing, and responding. Furthermore, a subsequent factorial invariance analysis suggested that the scale is invariant at the level of first- and second-order factor loadings.

Study 1 found AEL is related to the degree to which individuals are generally involved in and sensitive to aspects of conversation, supporting the construct validity of the activity component of AEL. In addition, the first study also found support for the validity of the empathic dimension of the AELS by linking it to three components of empathic concern. Study 2 found AEL associated with conversational effectiveness and appropriateness, as well as the nonverbal immediacy of a recent conversational partner. In terms of discriminating among good and bad listeners, a DFA found that conversational effectiveness and the three AELS subscales provided unique information that enabled the successful classification of nearly 90% of conversational partners as their behavior applied to good and bad listening. When the AELS—OR total score was analyzed, results found AEL was the most important contributor to discrimination among good and bad listeners, with conversational effectiveness also providing a unique contribution to group classification.

Of course, for communication researchers, scale validation is more a means to an end than an end in and of itself. Now that a scale exists to measure AEL, the crucial task is to go about conducting research to discover what specific behaviors and traits are indicative of AEL. Moreover, research using this scale should attempt to uncover the outcomes of engaging in such listening such as relational satisfaction and individual health and well-being to support notions found in a variety of theoretical perspectives of human communication and in a variety of textbooks and popular press treatments of listening (see Bodie, 2010, 2011). Not only is scale development a means to a larger end, it should also be noted that validity is an ongoing process. Certainly, additional validity data would be useful, and further scale refinement may be necessary. For example, studies that seek to ascertain the degree to which AEL is related to communicative competence, general social skills, and personality factors thought to contribute to better and worse communication, in general, as well as during, for example, conflict, social support, and persuasion are certainly welcomed additions to the listening literature. Overall, the AELS should provide a useful tool for the assessment of different theoretical perspectives on listening, as well as establish an empirical base for the many myths (or unsubstantiated facts) that exist about listening, its importance in relationships, and its centrality to communicative competence.

Notes

- [1] It is important here that the studies contained in this article seek to provide validity evidence and not to establish validity, *per se* (Carmines & Zeller, 1979; Cronbach, 1971).
- [2] These data are not reported due to space considerations, but all relevant analyses are available from the author upon request.
- [3] The Active-Empathic Listening Scale-Other-Report (AELS-OR) total score was kept out of the model due to concerns of matrix singularity caused by multicolinearity. A separate

discriminant function analysis was run with the AELS-OR total score in place of the three subscales. This analysis produced equivalent multivariate results— $\Lambda = .406$, $\chi^2(4,$ N=217) = 192.13, p < .001—and suggested that conversational effectiveness and the AELS-OR total score contributed unique variance to discrimination among groups, whereas conversational appropriateness (.023) and nonverbal immediacy (-.003) did not. Moreover, the AELS total score had a standardized canonical discriminant function coefficient nearly two times that of the coefficient for conversational effectiveness (.736 vs. .389) suggesting, as expected, that active-empathetic listening better discriminates among good and bad listeners than conversational effectiveness. The classification analysis using the AELS total score mirrored that obtained using the subscales.

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