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Intrapersonal Communication and Listening Goals: An Examination of Attributes and Functions of Imagined Interactions and Active-Empathic Listening Behaviors

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Intrapersonal Communication and Listening Goals: An Examination of Attributes and Functions of Imagined Interactions and Active-Empathic Listening Behaviors

Andrea J. Vickery, Shaughan A. Keaton, & Graham D. Bodie

Using data from 485 college student participants, this study investigated relations among mental representations of conversations and reported tendencies towards active-empathic listening (AEL). Results showed that low usage of imagined interactions (IIs) for rehearsal and self-understanding and high usage of IIs as compensation were associated with lower reported active-empathic responding. In describing IIs, low levels of proactivity and variety were associated with lower reported AEL processing and responding, suggesting individuals who do not engage in IIs before conversations or imagine a variety of potential conversations to gain understanding do not report engaging in behaviors that act to acknowledge partners in conversation. The primary contribution of these findings is to forward an empirical integration of social cognitive and listening research and theory.

Although connections between social cognition and listening have been noted for over two decades (e.g., Goss, 1982, 1996; Roberts & Watson, 1989), these literatures have been derived almost exclusively in isolation (King, 2008; Wolvin, 2010). Early attempts to provide social cognitive explanations of listening were often met by

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criticisms that conceptualizing listening as a facet of social information processing was too simplistic and failed to specify how listening was distinct from other processes such as memory (e.g., Kelley, 1965, 1967). Indeed, later attempts to disentangle listening from other intrapersonal phenomena produced open questions that remain unanswered, such as the distinction between listening and related cognitive constructs like memory and verbal recall (Bostrom, 1996; Thomas & Levine, 1994).

Recently, however, both theoretical statements about (e.g., Burleson, 2011) and empirical investigations into (e.g., Imhof, 2001; Janusik, 2007; Janusik & Keaton, 2011) relations among social cognitive processes and listening provide newfound hope of King's (2008) call for integration between these bodies of literature. In his words, "social cognition research can provide the conceptual depth lacking in the field of listening, and listening can provide the real-world contexts sorely needed in social cognitive research" (p. 2720). Thus, our project explores how imagined interactions (IIs), "a process of social cognition whereby actors imagine themselves in anticipated or recently recalled interaction with others" (Honeycutt, Zagacki, & Edwards, 1989, p. 168), provide "a framework for monitoring one's listening behavior" (Wolvin, 1989, p. 508). In service of this aim, we briefly review behaviors that most readily signal competent listening and how they might be appropriately monitored through the lens of Imagined Interactions Theory. We then outline a study that investigates the bivariate and multivariate relationships among these two constructs.

Active-Empathic Listening

When done competently, listening connotes appreciation of and interest in another and serves to contribute to individual and relational health and well-being (Bodie, 2012). Capturing the essence of competent listening is active-empathic listening (AEL), which describes conversational listening in three stages: *sensing*, *processing*, and *responding* (Bodie, 2011; Drollinger, Comer, & Warrington, 2006). Sensing refers to listening behaviors that signal attention to explicit and implicit information generated when another individual is speaking. Processing includes behaviors such as synthesizing conversational information and remembering conversational fragments to enable construction of a narrative whole. Finally, responding includes asking questions for clarification and using verbal and nonverbal means to indicate attention.

For each set of behaviors, activity and empathy can vary. Activity is the degree to which the listener is engaged and attentive to what the other is saying and doing and manifests in variability in synthesizing or remembering conversational details as well as various verbal and nonverbal signals related to attentiveness (e.g., eye contact). Although numerous types of empathy exist, the empathic element of AEL is defined in line with Rogers (1959) as "the ability to perceive the internal frame of reference of another with accuracy, and with the emotional components and meanings . . . as if one were the other person" (p. 210). This definition primarily taps empathic tendencies in listening that align with perspective taking, a skill shown to increase when individuals engage in various types of internal dialogue both prior to and in rehearsal of conversations.

Imagined Interactions

Much like how perspective taking is the ability to put oneself in another's figurative shoes, imagined interactions (IIs) refer to "a process of social cognition whereby individuals *imagine* and therefore *indirectly experience themselves in* anticipated or past communicative encounters with others" (Honeycutt, 2008, p. 77, emphases added). IIs are manifest in individual cognition whereby individuals attempt to simulate real-life conversations with others, described as serving six functions and vary as a function of eight attributes.

Functions of IIs

Past research has identified six distinct functions of IIs, or principal purposes for which an individual engages in internal conversations. Those functions include rehearsal, self-understanding, catharsis, compensation, relational maintenance, and conflict management. *Rehearsal* refers to engaging in IIs to plan upcoming communicative encounters and conversations. IIs can also be used to engage in *self-understanding* or to "uncover opposing and different aspects of the self" (Honeycutt, 2003, p. 43), and for *catharsis* to relieve existing tension or to reduce uncertainty about another's actions. When functioning in a mode of *compensation*, IIs serve as a replacement for actual interactions, and, when functioning as *relational maintenance*, IIs serve to create and shape a relationship's development through imagined conversations with relational partners. Finally, in *conflict-linkage* IIs, individuals "relive prior arguments as well as prepare for new conflict episodes" (Honeycutt, 2010, p. 6).

These functions demonstrate widespread usage of IIs and involvement of intrapersonal communication processes in imagining conversations and communicative encounters. In imagined interactions, we actively "stylize our own intrapersonal anticipations, expectations, predictions, projections" (Bruneau, 1989, p. 69), meaning any combination of functions is possible and may influence both imagined and actual conversational behaviors (Bodie, Honeycutt, & Vickery, 2013). In a similar manner, components of AEL form a multidimensional space of enacted listening behaviors, which are likely tied to how we imagine ourselves behaving in conversations.

Although sensing, processing, and responding behaviors might be related to each II function, it seems most likely that predispositions towards particular listening behaviors are more clearly related to certain functions through which individuals can actively engage in imagining conversations mirroring actual communicative encounters. Based on prior II research, there appear to be many opportunities where imagined interactions may relate to tendencies towards particular AEL behaviors. Allen and Honeycutt (1997) found that individuals instructed to engage in rehearsal IIs prior to interaction used fewer object adaptors in the subsequent interaction, seemingly preparing individuals for an upcoming conversation and resulting in more appropriate nonverbal behaviors such as head nods (i.e., AEL responding). IIs focused on self-understanding may include visualizations of conversational partners'

verbal and nonverbal statements and searches for implied meanings (i.e., AEL sensing). When recalling prior interactions and planning for future interactions, individuals may develop cognitive scripts for their expected conversational dialogue, including summarizing points made by conversational partners (i.e., AEL processing) or what questions listeners will ask (i.e., AEL responding) in the actual conversation. Additionally, IIs that maintain or compensate for actual conversations with close relational partners may also include sensing feelings or underlying meanings (i.e., AEL sensing) or imagining nonverbal responses acknowledging the other (i.e., AEL responding). As a result, it stands to reason that individuals who engage in IIs to plan for upcoming conversations and/or to compensate for a lack of actual contact will also report a greater likelihood of engaging in specific and appropriate listening behaviors. Admittedly, these potential connections focus only on particular and inductively derived associations between specific functions and specific AEL responses. In order to fully investigate the potential relationship between II functions and AEL, the following research question is posited:

RQ₁: How are the functions of imagined interactions associated with active-empathic listening?

Like research on IIs and message planning, we expect to find similar relationships between various functions of IIs and conversation-based behavioral tendencies of AEL.

Attributes of IIs

In addition to serving various functions, IIs are described as exhibiting patterns of variability along eight primary attributes, namely timing (which includes proactivity and retroactivity), specificity, discrepancy, frequency, variety, self-dominance, and valence. Timing of IIs may be *proactive*, occurring before a conversational encounter, or *retroactive*, occurring after conversational encounters. IIs can also be more or less *specific* in their amount of detail, description, and dialogue. While vague IIs leave only general impressions, more specific IIs imagine exact conversational dialogue and include details of conversational partners' behaviors as well as precise conversational backgrounds or settings. IIs may also be more or less *discrepant* from actual encounters, and occurrences of IIs may be more or less *frequent*, where an individual experiences many or very few IIs. IIs may also reflect *variety*, when conversations are imagined with different partners over various subjects, and *self-dominant*, when actors do the majority of speaking in imagined conversations. Finally, IIs may be either positively or negatively *valenced*, representing "the degree of emotional affect produced while having the II" (Honeycutt, 2003, p. 23) and, thus, characterized by positive or negative affect.

Similar to potential interrelationships of II functions, there are patterns of variability with respect to II attributes likely associated with AEL. Most notably, self-dominance may share an interrelationship with AEL: Individuals who frequently dominate imagined conversations may do the same in actual conversations, resulting in lower sensing, processing, and responding behaviors. When IIs are highly specific, imagined dialogue may contain references to feelings or underlying meaning

(i.e., AEL sensing). As a final illustrative example, the timing of IIs may be related AEL. In IIs occurring proactively or retroactively, individuals may summarize points of agreement or disagreement (i.e., AEL processing) or focus on feelings or meanings (i.e., AEL sensing) and then apply these intrapersonal behaviors interpersonally. The second and final research question of the present study is posited to investigate these warranted speculations:

RQ₂: How are imagined interaction attributes associated with active-empathic listening?

There may be other connections not immediately apparent, warranting a general research question rather than specific hypotheses that would inherently limit the aims and goals of the present project.

Summary of Current Study Goals

Research on IIs has found that proactive imagining of conversations leads to more competent message planning and execution, thus suggesting a corollary prediction with respect to how listeners typically report sensing, processing, and responding in conversation. The primary purpose of this investigation is to examine how II features are related to AEL in order to learn how the use of particular features of IIs relate to tendencies to engage in effective conversational goals including engaging actively and empathically with others. As part of this primary goal, it is also important to consider that engaging in IIs, as well as engaging in sensing, processing, and responding behaviors, represents general tendencies or dispositions. For instance, discrepant IIs are associated with communication apprehension (Honeycutt, Choi, & DeBerry, 2009), while AEL has been found related to reported social expressivity, social sensitivity, and social adeptness (Gearhart & Bodie, 2011); there is also some support for the conceptualization of AEL as a relatively stable trait-like disposition (Bodie, Gearhart, Denham, & Vickery, 2013), suggesting the reported II features and conversational behavior represented in AEL may represent general dispositions towards conversation, and the tendency to engage in both behaviors may result in more effective conversational goal management.

The two research questions focus on exploring the associations between II functions and AEL (RQ₁) and II attributes and AEL (RQ₂). Due to the multidimensional nature of IIs and listening, the bivariate and multivariate relationships between each AEL subscale and each function and attribute of imagined interactions will be investigated using zero-order and canonical correlation analyses as an initial investigation into these associations.

Methods

Participants

Students choosing to participate in this study (one among many posted on an electronic bulletin board) reported to a campus computer lab and were supervised

by a research assistant as they completed an electronic survey. The survey first displayed a human-subjects statement to comply with university Institutional Review Board protocol; students then completed various measures, only two of which are applicable to this study. Student earned a modest amount of course research credit (1.5%) for their participation.

Respondents ($N = 485$) represented primarily female ($n = 322$, 66.4%; 1 missing) undergraduates who ranged in age from 18 to 53 ($M = 20.3$, $SD = 3.21$). In voluntary reporting of racial identity, participants predominantly reported White/Caucasian (78.4%), followed by Black/African American (12.2%), Asian (3.7%), Latino (2.7%), Middle Eastern (0.6%), Native American (0.8%), and Other (1.6%). Participants were recruited from lower division Communication Studies courses at the university, though the majority was not from the department ($n = 401$; 82.7%); only a small proportion represented department majors ($n = 43$; 8.9%) and minors ($n = 40$; 8.2%). All academic years were represented in the sample, including Freshman (14.8%), Sophomore (37.5%), Junior (28.5%), Senior (17.9%), Graduate (0.4%), and Other (0.8%).

Measures

Survey instruments utilized in this study are described below along with confirmatory factor analysis (CFA) information as tests for construct validity (Levine, 2005). Table 1 provides all zero-order correlations with estimates of internal consistency (Cronbach's alpha) located on the diagonal.

Active-empathic listening scale

The Active-Empathic Listening Scale (AELS; Bodie, 2011) consists of 11 items, each scaled using 7 points (1 = *Never to Almost Never True*, 7 = *Always or Almost Always True*; midpoint = *Occasionally True*). This instrument consists of three subscales: Four items measure sensing (e.g., "I listen for more than the spoken word"), three items measure processing (e.g., "I keep track of points others make"), and four items measure responding (e.g., "I assure others that I am listening by using verbal acknowledgements"). In prior work, the AELS has exhibited a high degree of test-retest reliability (Bodie, Gearhart, et al., 2013, Study 1) and was properly correlated with operationally similar measures (Bodie, 2011; Gearhart & Bodie, 2011). In addition, individuals scoring higher in trait AEL were also found to make sharper distinctions between situations that varied in their putative need for activity and empathy (Bodie, Gearhart, et al., 2013, Study 2).

Less than 0.007% of the total possible responses across all 11 items were incomplete or missing. Missing values were replaced with the mean score for that item. A second-order measurement model was deemed acceptable, $\chi^2(41) = 122.77$, $p < .000$, CFI = .96, SRMR = .04, RMSEA = .06 (90% CI: .05, .07). The reliabilities for each AEL subscale are reported in Table 1. Combined, our present findings contribute to the validity profile of the AELS by providing further support for the structural validity of a three-factor model.

Table 1 Reliability Estimates and Zero-Order Correlations among AEL and II Features

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Sensing	.76																
2. Processing	.58**	.67															
3. Responding	.61**	.63**	.80														
4. Catharsis	.17**	.15**	.18**	.49													
5. Compensation	-.09*	-.05	-.15*	.27***	.78												
6. Conflict-Linkage	.22***	.26**	.30**	.43***	.13*	.21											
7. Relational Maintenance	.16**	.16**	.14*	.46**	.44**	.40***	.69										
8. Rehearsal	.25***	.30**	.35***	.50**	.02	.55***	.33***	.79									
9. Self-Understanding	.28***	.26**	.32***	.52***	.16***	.56***	.51***	.65***	.70								
10. Discrepancy	.11*	.04	.04	.18***	.21***	.19***	.17***	.13**	.14**	.78							
11. Frequency	.21**	.15**	.18**	.46**	.23**	.40**	.52**	.47**	.51**	.24**	.83						
12. Proactivity	.27***	.29**	.32***	.45***	.07	.49***	.35***	.74***	.54***	.15***	.49***	.81					
13. Retroactivity	.26**	.26**	.28**	.40**	.13*	.50***	.44***	.63***	.55***	.20***	.60***	.65***	.76				
14. Self-Dominance	.17***	.15**	.20***	.33***	.12*	.36***	.27***	.38***	.40***	.26***	.40***	.30***	.33***	.70			
15. Specificity	.26***	.26**	.25**	.38***	.19***	.40***	.38***	.47***	.50***	.23***	.51***	.48***	.50***	.37***	.65		
16. Valence	.13***	.16***	.18***	.39***	.21***	.24***	.41***	.34***	.35***	.16**	.39***	.33***	.42***	.14*	.38***	.79	
17. Variety	.18***	.21***	.26***	.40***	.21***	.32***	.40***	.42***	.42***	.17***	.49***	.38***	.40***	.25***	.43***	.39***	.64

Note. Reliability estimates (Cronbach's alpha) are italicized and placed on the diagonal.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Survey of imagined interactions

The short form Survey of Imagined Interactions (SII; Honeycutt, 2010) was administered. The current version of the SII has developed over the course of 30 years based on the best available tests of construct, convergent, and divergent validity. This scale contains 65 questions about functions and attributes of participants' IIs with 7-point Likert scaling. These 65 questions represent approximately three to five questions for each function, with examples such as the following: "Imagined Interactions help me relieve tensions and stress" (catharsis); "My Imagined Interactions usually involve conflicts or arguments" (conflict); "Imagined Interactions can be used to substitute for real conversations with a person" (compensation); "Imagined Interactions help keep relationships alive" (relational maintenance); "Imagined Interaction helps me plan what I am going to say for an anticipated encounter" (rehearsal); "Imagined Interactions help me understand myself better" (self-understanding). Similarly, there are between four to five questions for each attribute, with examples including the following: "I have Imagined Interactions many times throughout the week" (frequency); "In my real conversations, I am very different than in my imagined ones" (discrepancy); "I often have Imagined Interactions before interacting with someone of importance" (proactivity); "I often think about prior conversations that I have participated in" (retroactivity); "I talk a lot in my Imagined Interactions" (self-dominance); "When I have Imagined Interactions, they tend to be detailed and well developed" (specificity); "I enjoy most of my Imagined Interactions" (valence); "Many of my Imagined Interactions are with different people" (variety). Less than 0.002% of the total possible responses across all 65 items were incomplete or missing. Missing values were replaced with the mean score for that item. Two separate measurement models were generated to represent the functions and attributes of IIs.

II functions

After removing six reverse-coded items representing compensation, catharsis, and conflict-linkage functions, a six-factor correlated measurement model achieved adequate fit, $\chi^2(120) = 266.30$, $p < .001$, CFI = .95, SRMR = .05, RMSEA = .05 (90% CI: .04, .06). Eighteen total items remained, with subscales containing two to four items measuring six functions of imagined interactions. The final measurement model contributes to the validity profile of the SII, particularly in regards to the statistical validity for a six-factor model of correlated II functions and support for the content validity by representing all six II functions. The reliabilities for each II function subscale are summarized in Table 1.

II attributes

After removing 10 reverse-coded items representing the frequency, proactivity, discrepancy, variety, specificity, and self-dominance dimensions, the fit of the eight-factor correlated measurement model was adequate, $\chi^2(224) = 349.64$, $p < .001$, CFI = .97, SRMR = .05, RMSEA = .03 (90% CI: .03, .04). Twenty-four total items

remained, with subscales containing two to four items measuring eight attributes of imagined interactions. Similarly, the final measurement model for II attributes also provides statistical and content validity for the II attributes. The reliabilities for each II attribute subscale are summarized in Table 1.

Results

With a sample size of 485 and $\alpha = .05$, power to detect bivariate relationships was .78 for small effects ($r = .10$) and in excess of .99 for both moderate ($r = .30$) and large effects ($r = .50$), making Type-II error unlikely. Bivariate and multivariate correlational analyses results are presented to fully explore both research questions.

An examination of zero-order correlations between AEL subscales (sensing, processing, responding) and II functions and attributes (Table 1) provides initial evidence for the associations between II features and AEL. In response to RQ₁, 17 (or 94.4%) of the 18 bivariate correlation coefficients between the II functions and sensing, processing, and responding behaviors are statistically significant. There are positive correlations between five of the six II functions and active-empathic sensing, processing, and responding. These five II functions with positive associations to AEL include catharsis, conflict-linkage rehearsal, relational maintenance, and self-understanding, with the greatest effect sizes between the use of IIs for rehearsal and increased reported active-empathic responding ($r = .35$, $r^2 = .13$), as well as IIs used for self-understanding and increased reported active-empathic responding ($r = .32$; $r^2 = .10$). The remaining 15 bivariate relationships explain less than 10% of the shared variance between II functions and AEL. One exception to this general pattern is observed in the relationship between compensatory IIs, which function to compensate for actual interactions, and active-empathic sensing, processing, and responding. The relationship between compensation and active-empathic sensing and responding tendencies are negative, while the association between compensation and processing is statistically equal to zero.

In response to RQ₂, similar patterns emerge between II attributes and active-empathic sensing, processing, and responding, with 22 of the 24 (91.7%) bivariate correlation coefficients sharing small-to-moderate positive associations. Of the 22 significant bivariate correlations, only one explained greater than 10% of the shared variance. IIs high in proactivity are associated with greater reports of active-empathic responding ($r = .32$; $r^2 = .10$). The only II attribute to reflect a different pattern is II discrepancy, which captures the degree of difference between imagined conversations and actual conversations. While the relation between II characteristic of discrepancy and active-empathic sensing is small and positive, relations between discrepancy and AEL active-empathic processing and responding are statistically equal to zero.

To provide further insight into the two research questions exploring the relations among active-empathic listening and II functions and attributes, three separate multivariate (canonical) correlation models were estimated. The first analysis explored the dimensions of AEL and II functions, the second analysis explored the dimensions

of AEL and II attributes, and the final model included AEL and both II functions and attributes. In all models, there were no variables excluded due to multicollinearity. Canonical loadings for the three models are reported in Tables 2–4.

For the AEL and II function model, there was one significant root, $\Lambda = .79$, $F(18, 1346.82) = 6.61$, $p < .001$, revealing that the sets of variables have a moderate association, $r = .44$, $r^2 = .19$. All variables result in correlations above .30 in the first model. In the vector of the first root, lower reported usage of IIs for rehearsal, conflict-linkage, and self-understanding are associated with lower scores on reported AEL; 90.74% of the cumulative variance between the variable sets is accounted for in the significant canonical root. In response to the first research question, lower reported usage of IIs for the particular functions of rehearsal, conflict-linkage, and self-understanding is associated with a decreased tendency to report engaging in active-empathic behaviors.

For the AEL and II attribute model, one significant canonical correlation root was obtained. The significant root, $\Lambda = .81$, $F(24, 1375.35) = 4.42$, $p < .001$, revealed that the sets of variables were moderately correlated, canonical $r = .41$, $r^2 = .16$, with all variables resulting in correlations above .30 except for the attribute of discrepancy. In the vector of this significant root, lower reported levels of the II attributes of proactivity, retroactivity, and specificity are associated with lower reported scores

Table 2 Correlations and Standardized Canonical Correlation Coefficients: AEL and II Functions

Variables	First canonical root	
	Correlation	Coefficient
Active-Empathic Listening		
AEL Sensing	−.75	−.18
AEL Processing	−.77	−.20
AEL Responding	−.97	−.74
Percent of Variance		.13
Redundancy		.69
Imagined Interactions Functions		
Catharsis	−.43	.03
Compensation	.30	.47
Conflict-Linkage	−.71	−.30
Rehearsal	−.83	−.42
Relational Maintenance	−.37	−.17
Self-Understanding	−.76	−.32
Percent of Variance		.36
Redundancy		.07
Canonical Correlation		.44

Note. Canonical loadings higher than .300 are in boldface.

Table 3 Correlations and Standardized Canonical Correlation Coefficients: AEL and II Attributes

Variables	First canonical root	
	Correlation	Coefficient
Active-Empathic Listening		
AEL Sensing	-.74	-.15
AEL Processing	-.85	-.39
AEL Responding	-.93	-.60
Percent of Variance		.12
Redundancy		.72
Imagined Interactions Attributes		
Discrepancy	-.14	.10
Frequency	-.49	.31
Proactivity	-.84	-.48
Retroactivity	-.76	-.29
Self-Dominance	-.51	-.24
Specificity	-.71	-.26
Valence	-.47	-.07
Variety	-.47	-.32
Percent of Variance		.37
Redundancy		.06
Canonical Correlation		.41

Note. Canonical loadings higher than .300 are in boldface.

for AEL; 84.35% of the cumulative variance between II attributes and AEL variables is accounted for in the significant canonical root. With regards to the second research question, greater frequency of IIs not connected to the timing of actual interactions and IIs low in specificity are associated with decreased tendencies to engage in active-empathic responding behaviors in conversation.

For the AEL and combined II feature model, one significant canonical correlation root was obtained. The significant root, $\Lambda = .73$, $F(42, 1389.08) = 3.79$, $p < .001$, revealed that the sets of variables were moderately correlated, canonical $r = .48$, $r^2 = .23$. All features except the II attribute of discrepancy and the II function of compensation reflect canonical correlations above .30. In the vector of this significant root, IIs with low descriptive qualities and low functions are associated with lower reported responding scores for AEL; 81.39% of the cumulative variance between the II features and AEL variables is accounted for in the significant canonical root. When viewed in conjunction with the other canonical correlation models, the combined II feature model provides evidence for an association between IIs featuring low levels of II features and lower reported tendencies to engage in active-empathic responding behaviors, contributing to the first research question.

Table 4 Correlations and Standardized Canonical Correlation Coefficients: AEL and all II Features

Variables	First canonical root	
	Correlation	Coefficient
Active-Empathic Listening		
AEL Sensing	−.73	−.15
AEL Processing	−.79	−.25
AEL Responding	−.97	−.72
Percent of Variance		.15
Redundancy		.69
Imagined Interactions Features		
Discrepancy (A)	−.12	.01
Frequency (A)	−.42	.23
Proactivity (A)	−.71	−.21
Retroactivity (A)	−.64	−.09
Self-Dominance (A)	−.44	−.13
Specificity (A)	−.59	−.18
Valence (A)	−.40	−.10
Variety (A)	−.55	−.27
Catharsis (F)	−.40	.08
Compensation (F)	.28	.46
Conflict (F)	−.66	−.23
Relational Maintenance (F)	−.35	−.09
Rehearsal (F)	−.77	.13
Self-Understanding (F)	−.70	−.23
Percent of Variance		.28
Redundancy		.06
Canonical Correlation		.64

Note. Canonical loadings higher than .300 are in boldface. (A) = II Attribute (F) = II function.

Discussion

With the interrelationship between intrapersonal communicative behavior and active-empathic conversational behavior previously recognized in both II and listening research, the purpose of this study was to provide empirical evidence of the association between features of IIs and reported tendencies to engage in AEL behaviors. Results from bivariate correlations suggest general support for the associations between AEL, II attributes, and II functions, while results from multivariate correlation analyses provide a complementary understanding of complexities of IIs in relation to reported tendencies towards particular AEL behaviors. In what follows, we examine bivariate and multivariate results separately for each research question

and then draw general implications for these findings on intrapersonal communication and listening research.

Zero-Order Correlation Results

First, in response to the first research question that focused on the association between II functions and AEL, a general positive pattern between II functions and reported AEL behaviors was observed across the bivariate correlations; in particular, 17 of the 18 bivariate correlation coefficients were statistically significant and positive. Thus, our results are in line with literature on IIs that reported associations between how people imagine and how they engage in conversation with others. There were indeed positive, moderate associations between five of the six II functions and the reported tendencies of sensing, processing, and responding listening behaviors in conversation with the strongest associations involving the rehearsal and self-understanding functions of IIs and increased reported AEL responding. And, while our methods preclude the ability to entertain the causal structure of these relations, it seems plausible that our results are suggestive that imagining conversations in particular ways may enhance not only communicative but also listening competence. Focusing on the function of self-understanding, there is a meaningful association between reported AEL responding behaviors and IIs that increase self-understanding as 10% of the variance between these variables was captured in the bivariate relationship. IIs functioning to increase self-understanding have been previously found to involve greater verbal imagery (Zagacki, Edwards, & Honeycutt, 1992), which captures the tendency to encode discourse, dialogue, and other linguistic elements in IIs (Honeycutt, 2003). If IIs used for self-understanding are likely to include verbal components, then individuals using self-understanding IIs may be better prepared to offer involved responses to conversational partners, leading to more competent interactions based on a predisposition towards seeking self-understanding from interactions. When considering these specific relations and the general positive pattern between II features and reported AEL behaviors, the bivariate correlations provide some initial evidence for an association between imagined conversations and actual conversations and how this association may be considered one component of perceived competency in listening actively and empathically. Unfortunately, our speculations have only minimal empirical backing as listening competence has been afforded much less attention in extant literature than its communicative counterpart. Thus, our results provide an empirical catalyst for others to begin making more substantive claims about the association between internal dialogue and overt listening behaviors.

One particularly fruitful area for such work is based on our bivariate finding that went against the general pattern of positive associations between II functions and reported AEL. Compensation, or using IIs as a replacement for actual conversations, was negatively associated with AEL sensing and responding; its association with processing was also negative in direction, though not statistically significant. Recently, Bodie, Honeycutt, and Vickery (2013) reported that “the compensation function

might be a uniquely patterned use of IIs” (p. 176). Conceptually, compensation is the only II function describing imagined dialogue with someone with whom one is not able to actually communicate; the other functions are all based on uses of IIs to plan for or rehearse actual (or soon to be actual) conversations. From our data, it seems that use of IIs for compensatory purposes may negatively affect competence in listening. Such a relationship makes conceptual sense insofar as individuals who, for whatever reason, engage with relational partners in their minds have less phenomenal material from which to build up a level of competence. Compared to rehearsal or self-understanding IIs, compensatory IIs may not serve a practical function for improving communication behavior (though they may serve other important relational or communicative functions). Rehearsal and self-understanding IIs may simply better prepare individuals to enact competent affective and behavioral responses, while compensatory IIs function as enjoyable escapes that do not necessarily prepare individuals for upcoming conversations or help them understand past ones. Of course, the correlational nature of these data also leaves open the possibility that reduced skills in listening lead people to engage in more internal dialogue. This logic is consistent with other work on II Theory that has shown that individuals report using IIs for compensation to avoid particularly anxiety-provoking situations such as conflicts with close others (Honeycutt, 2008). Thus, an important goal of future work is to explore the causal direction of relations among various II functions and listening behaviors, especially how the general predisposition to engage in compensatory IIs may be influencing decreased frequency and ability to respond actively and empathically by asking questions or offering verbal acknowledgements in conversations.

The second research question examined the association between II attributes and AEL. The bivariate correlational analysis produced 22 positive and significant correlation coefficients. The strongest of these positive and moderate associations was between proactive IIs and reported AEL responding. Similar to the II functions, there was one attribute that was inconsistent and outside the observed pattern and, thus, is potentially intriguing for understanding conversation and competence. In particular, there was the lack of association between the discrepancy attribute and AEL processing and responding. These results may initially appear to be in direct contrast to the association between nondiscrepant IIs and communication competence (Honeycutt, Zagacki, & Edwards, 1992), but current results suggest a more nuanced approach to competency. Both the current study and prior findings relied on reported competency of participants, rather than direct manipulation of IIs and observed conversational behavior. Additionally, our results focus on specific abilities reflecting competency in conversation, including abilities to remember, summarize, and keep track of others’ points and those involving verbal and nonverbal acknowledgement. At the same time, positive relation between discrepancy and sensing suggests that when IIs are discrepant from actual conversation, this discrepancy may trigger slightly more sensitivity to others and how they feel—that is, when an actual conversation violates our expectations of it, that discrepancy might motivate us to pay more attention to our partner and what she or he has to say. Alternatively, increased

tendencies to be aware of others and how they feel may promote IIs that contain more detail, all of which cannot possibly be enacted in actual conversations. When considering the dispositional nature of IIs and AEL, a greater tendency towards engaging in IIs that do not match actual conversation may result in decreased predispositions towards AEL behaviors. These and other explanations for this relationship should promote additional scholarship, especially experimental research that can tease out myriad possible causal sequences between combined II features and AEL behaviors.

Canonical Correlation Results

To obtain a broader picture of patterns of association among II features and AEL components, three canonical correlation analyses were conducted, each of which produced a single canonical dimension. Interestingly, when inspected as a set, AEL responding seems to be driving associations, as it exhibited the consistently highest correlation coefficients in all three models. Because responding is the AEL component that most closely resembles behavior (i.e., what people do during interaction that is readily observable by others), this finding suggests a rather clear link between intrapersonal communication and reported listening behavior, not just two sides of the same internal coin.

The first canonical correlation analysis, between II functions and reported AEL, indicated that individuals who use IIs to compensate for actual conversations, while reporting less frequent use of IIs to rehearse for upcoming conversations, to prepare for or relive conflict, to experience catharsis, to maintain relationships, or to gain understanding report less active empathic responding. The strength of loadings for II functions were similar, suggesting that all three are contributing to shared associations with AEL responding. Perhaps this analysis suggests there is a crucial link between functional intrapersonal cognitive processes and competence in listening: When IIs are used to rehearse for actual upcoming talk as opposed to replacing that talk, individuals may gain advantages in their abilities and tendencies to respond appropriately. This observation seems especially salient to conflict, and the concomitant relation with self-understanding suggests that such an advantage is heightened when IIs also are used to reflect on individuals' behavioral preferences towards responding during interpersonal listening scenarios. Again, in exploring the first research question, the association between increased compensatory IIs and decreased reported AEL responding contributes to a greater understanding of which II functions are associated with particular aspects of AEL, providing additional understanding beyond bivariate relationships.

The second canonical correlation analysis focused on associations among II attributes and reported AEL. Examining the attributes together, a propensity to have less frequent IIs lacking in specificity, variety, proactivity, and retroactivity is associated with engaging in lower AEL processing and responding behaviors. Thus, it appears that to engage in competent listening behaviors, one does not necessarily have to engage in many IIs but perhaps in IIs that are strategically focused, specifically IIs that occur prior to interaction and that are varied with respect to topics and people. In

other words, individuals prepared for wide varieties of conversational settings in which enactment of attending to and acknowledging a conversational partner might occur may be subsequently more prepared to fully keep track and summarize points of agreement/disagreement and to engage in behaviors indicative of appreciation and interest, based on a tendency to imagine a variety of settings, partners, and content in their IIs. In addition to the findings for RQ_2 in the bivariate correlations, proactivity and variety emerged as attributes that are associated with reported AEL responding in particular.

The final canonical correlation analysis examined associations among all II features (attributes and functions) and reported AEL. Results indicated a propensity to engage in IIs with low levels of all II features is associated with lower reported AEL responding behaviors, a finding aligned with the other analyses. While compensatory IIs were below the traditional cutoff of .30, it is interesting to observe that the correlation again reflected a pattern discrepant from the other functions, suggesting that compensation may function differently than the other II functions when establishing patterns of reported behavior.

In general, implications for practice seem rather clear: Those who use imagined conversations to compensate for unavailable interactions instead of rehearsing for upcoming interactions are likely to display low AEL response behaviors, suggesting intrapersonal processes can be used not only to practice speaking but also to listen to another—especially when practicing important behaviors such as questioning and producing relevant commentary in ongoing dialogues (see Bodie, St. Cyr, Pence, Rold, & Honeycutt, 2012). Additionally, individuals who are prepared for multiple contingencies in conversations may be potentially advantaged as listeners, a finding aligned with research on conversational planning and its relationship to conversational competence (Allen & Honeycutt, 1997). Combined, these results provide initial empirical evidence of associations between intrapersonal representations of conversations and reported AEL behaviors, suggesting fruitful lines of future research.

Limitations and Conclusion

Although this study at the intersection of intrapersonal communication processes and listening yields interesting findings, it is limited by scope. It focused on two specific operational constructs: imagined interactions and active-empathic listening. There are limitations specific to the measurement of IIs in this study. In particular, there were two reverse-coded items from catharsis and three reverse-coded items from conflict-linkage that displayed high standardized residual covariance values and low standardized regression weights in the CFA model. By deleting these items, overall model fit was greatly improved, but two-item subscales for catharsis and compensation resulted in lower internal consistencies and (possibly) led to underpowered statistical tests. The larger picture of measurement consistency represents multiple assessments of fit, of which Cronbach's alpha is only one measure. Nevertheless, future work should consider revising the SII to mitigate concerns (see also Bodie, Honeycutt, & Vickery, 2013).

The nature of IIs and other intrapersonal communication necessitates individuals to self-report on their cognitive processes, but this same limitation does not necessarily apply to the operationalization of listening as a behavioral construct or to experimental manipulation of various II functions and attributes. The present findings result in an understanding of predispositions towards particular sensing, processing, and responding behaviors enacted in conversation, but not how these behaviors are enacted in conversations and how these conversations are evaluated as more or less effective in construing and managing goals. Future research could incorporate self-reported IIs with different manifestations capturing cognitive, affective, and behavioral dimensions of listening (Bodie, 2013). Likewise, others should engage in more time-consuming but potentially more rewarding work by manipulating various aspects of imagined talk to test causal relationship in relation to listening competence. Finally, future research may continue exploring how processes of listening and intrapersonal communication are entwined with different manifestations of intrapersonal activity.

Listening and intrapersonal communication are linked as internal processes designed to help process conversational experiences and continue to represent the experiences of an individual and how she or he processes social information and typically engages in particular conversational behaviors. Individuals' imagined conversations do share some associations with active and empathic conversational listening behavioral tendencies. This study supports similarities and hopefully contributes to renewed interest in the links between social cognitive and listening processes.

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