Individual differences in listener perceptions: personality or cognitive processing?

Research on sociolinguistic perceptions shows that speaker characteristics affect the way speech is evaluated (Campbell-Kibler 2011; Drager 2010; a.o.) and that listeners' broad demographic characteristics influence speech perception (Labov et al 2011; Preston 2010; a.o.). Beyond this, however, we know little about the effects of listener characteristics (i.e. individual differences) on sociolinguistic perception (e.g. cognitive processing style and personality). Wagner & Hesson (2014) and Buchstaller & Levon (2014) show that sociolinguistic perceptions depend on social and cognitive factors (specifically the ability to contextualize variation in sociolinguistically meaningful ways). Beyond cognitive processing style, however, little is known about what makes one individual’s interpretation of sociolinguistic input different than another’s. This paper extends the current trend to consider individual differences and their impact on linguistic behavior, specifically listener perceptions of discourse marker like (DML).

336 undergraduate students completed a likert scale perception task similar to Labov et al (2011). Participants heard eight audio clips, which differed only by DML frequency. For each clip, participants rated the speaker for professionalism, friendliness, and intelligence. Participants also completed a demographic survey, post task survey, and three domains (Openness to Experience, Agreeableness, and Conscientiousness) of the Revised NEO Personality Inventory (NEO-PI-R), which is used to measure the Big Five personality traits (John et al. 2008). Each domain consists of 60 questions, which assess 6 facets pertinent to their respective broader domain.

Overall, the broad personality domains were generally not significant. However, individual traits (or facets) were found to be significant. Surprisingly, the results countered expectations. For instance, as Emotionality scores increased, professionalism and intelligence ratings decreased. In other words, the more emotionally-sensitive you are, the harsher (more negative) your ratings of DML. Similar results were found for the Sympathy, Altruism, and Trust facets. These findings seem to contradict intuitions surrounding typical social behavior; we would predict that increased sympathy would lead to nicer (or more positive) ratings. However, if we interpret facets as representative of cognitive processing skills (like pragmatic language ability), the story begins to make sense: higher emotional sensitivity could reflect greater sensitivity to societally-based ideologies surrounding DML (e.g. DML is 'bad,' and even more DML is worse).

In personality research, measures like the NEO-PI-R have been shown to predict various social behaviors/tendencies. For instance, low agreeableness scores are associated with social rejection by peers (Newcomb et al. 1993), which seems intuitive. The present study predicted that linguistic perception would be among the set of behaviors intuitively predicted by differences in personality traits. However, the results were only interpretable when personality scores were considered to be reflective of cognitive processing skills rather than social behaviors/tendencies. As a result, we must question the extent to which behavioral norms like one’s general concern for other’s and tendency to tend to/anticipate the needs of others (i.e. Altruism) impact linguistic perception, or if they simply reflect abilities pertinent to cognitive processing (like sensitivity to a variable’s prestige or frequency), which have previously been shown to impact listener judgments.


