**Introduction**

Hearing aid (HA) success is commonly assessed in terms of HA uptake, use, benefit, and satisfaction in daily living. These outcomes can only be assessed in later stages of an individual’s hearing health journey. For those in earlier stages, perceived readiness to pursue hearing healthcare could be used as an indicator of progress towards positive hearing health outcomes. The present study explores whether some reported patient traits are predictors of later indicators of HA success (self-efficacy, personality, and affective states) also predict readiness to pursue hearing intervention. We further explored the relative impacts of modifiable patient traits on the relationship between perceived hearing difficulties and readiness to pursue intervention using moderation/mediation analyses.

This research also examined whether adults with hearing loss respond differently to surveys about their self-efficacy, personality traits, and affective states when they were assessed “in general” and in hearing-related situations.

**Method**

**Design:** Cross-sectional descriptive survey administered using the Qualtrics online survey software.

**Participants:**
62 adults (43 females) aged 20-80 years (M = 70.3), with self-reported adult-onset hearing loss and no previous experience with hearing aids.

**Predictor Variables:**
- **Hearing Handicap:** The Hearing Handicap Inventory for Adults/Elderly (HHIA/E; Ventry & Weinstein, 1982).
- **General Measures:** Participants were asked to respond to self-report measures based on their perceptions of themselves “in general”.
- **Self-efficacy:** The General Self-efficacy Scale (GSE; Schwarzer & Jerusalem, 1995) was used to assess confidence in completing general tasks effectively.
- **Personality:** The International Mini Markers (IMM; Thompson, 2008) was used to assess the Big Five personality traits.
- **Affective states:** The Positive and Negative Affective Schedule – Short Form (PANAS-SF; Watson et al., 1988) was used to assess participants’ emotions and feelings.

**Situation-dependent measures:** Participants were asked to describe themselves while considering their experiences related to their hearing and hearing health.
- **Self-efficacy:** The Measure of Audiologic Rehabilitation Self-efficacy for Hearing Aids (MARS-HA; West & Smith, 2007) was used to assess self-efficacy for hearing aid use.
- **Personality:** Participants responded to the IMM while considering attributes in hearing-related situations.
- **Affective states:** The participants listened to 4 vignettes describing different listening situations (At a social event, Asking directions, At a doctor’s appointment, & At home) and completed the PANAS-SF for each listening situation.

**Dependent Variable:**
- **Readiness to Change:** The modified University of Rhode Island Change Assessment (URICA; Laplante-Levesque et al., 2013) was used to assess participants’ readiness to pursue a hearing intervention.

**Results and Discussion**

Q.1. When traits were assessed with general and listening situation specific measures, did adults with hearing loss report different:

- **Self-efficacy?** Yes.
- **Personality? No.**
- **Affective States? Yes.**

Q.2a. Did these patient traits predict readiness to pursue audiologic intervention? Yes, but significant predictors varied.
- Both models A and B were able to explain a significant amount of variance in readiness to pursue hearing help (Model A R² = .58, Model B R² = .64%). In both models, individuals with greater hearing handicap and who had their hearing loss for a shorter duration were more ready to pursue hearing help. When HASE was included in model A, having higher HASE and higher Agreeable personality trait scores also independently predicted readiness. When HASE was removed and affective states were considered in Model B, lower Conscientiousness personality trait scores added to the model. This trait has been shown to co-occur with negative emotions (Mill et al., 2018) and our participants reported more negative emotions in listening-related situations.

Q.2b. Did HASE and affective states have an impact on the relationship between perceived hearing handicap and readiness to pursue hearing help?
- Model A (Moderation analysis) demonstrated that the relationship between hearing handicap and readiness didn’t change as a function of HASE, when controlling for personality traits and duration of hearing loss.
- Model B (Mediation analyses) demonstrated that the relationship between hearing handicap and readiness could not be explained by their relationships with affective states, when controlling for personality traits and duration of hearing loss.

**Conclusion**

This study confirms that self-efficacy, certain personality traits, and duration of hearing loss are important variables that motivate people toward or away from becoming successful in their hearing health journey. This study also suggests that context-specific measures of these traits are not required to accurately assess the impact of these characteristics in the early stages of the hearing health journey. Future research should explore the associations among these patient traits and their impact on success at different stages of the hearing health journey to determine if an assessment of these factors is warranted.