Accessibility Enhanced by Sound and Haptics

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The Accessibility Enhanced by Sound and Haptics (AESH) project is designed to evaluate and enhance accessibility features within home gaming consoles using enhanced sound, audible feedback, and tactile feedback by investigating the accessibility features presented would allow the Xbox One to enhance its accessibility feature, hence adaptive feedback was considered extremely helpful in acknowledging cursor movement. The combination of haptics and narrative proved helpful. Lowered stress in user satisfaction. Further research is needed to determine if these feedback patterns are effective across different user populations.

For users that are hard-of-sight, audio and tactile-based feedback are the primary forms of accommodation. This can be seen with portable audio devices providing descriptions in museums, libraries, and a wide range of other devices. This type of feedback was evaluated using a combination of classical and operant conditioning. A large number of participants were tested in presentation with general Xbox One home screen interactions. The additional features presented would allow the Xbox One to enhance its accessibility feature, hence adaptive feedback was considered extremely helpful in acknowledging cursor movement. Lowered stress in user satisfaction. Further research is needed to determine if these feedback patterns are effective across different user populations.