This study was designed with three main purposes; to compare (a) the effects of two listening conditions on error detection accuracy, (b) error detection responses for rhythm errors and note errors, and (c) the influences of texture on error detection accuracy. Undergraduate music education students (n = 18) listened to purposefully incorrect performances of band literature in two formats, on recordings and while conducting a live ensemble. Note and rhythm errors were inserted into the musical excerpts to investigate responses to different types of errors. Half of the excerpts were played by the full ensemble and half by a single section. Participants served as their own controls by completing the error detection tasks under all conditions.

Results indicated that participants were significantly more successful in identifying errors in the recording condition than in the conducting condition. A significant interaction existed between the error type (note or rhythm) and the ensemble texture (single section or full ensemble). Participants more accurately identified rhythm errors in the single section texture, and diagnosed note errors more successfully in the full ensemble excerpts.