



## THE RELATIONSHIP BETWEEN PHONOLOGICAL AWARENESS AND MUSIC APTITUDE

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### ABSTRACT

Previous research studies have pointed to connections between language development and musical development (Dege&Schwarzer, 2011; Forgeard, Schlaug, Norton, Rosam, Iyengar, et al., 2008; Moritz, Yampolsky, Papadelis, Thomson, & Wolf, 2013; Tierney & Kraus, 2013). The purpose of the present study was to discover the relationship between phonological awareness and music aptitude. To examine this relationship, The Phonological Awareness Test 2 (PAT-2) (Robertson & Salter, 2007) and the Intermediate Measure of Music Audiation (IMMA) (Gordon, 1986) were administered to students in two second-grade classes in a rural elementary school in Pennsylvania. Prior to formal testing, a trained specialist administered an individual hearing screening to each participant. Speech-language specialists administered the PAT-2 individually to participants and scored the measure. The primary researcher (a music specialist) administered the IMMA to participants in groups and scored the measure. Student scores on the two measures were analyzed using t-tests to determine mean differences between groups, Pearson product-moment correlations to examine existing relationships, and linear regressions to establish the predicative potential of IMMA scores for PAT-2 scores. Findings from this study indicate a strong positive relationship exists between PAT-2 standardized composite scores and IMMA raw composite scores ( $r = .541$ ,  $p = .025$ ) as well as IMMA raw tonal subtest scores ( $r = .526$ ,  $p = .03$ ). A linear regression helped the researcher determine IMMA raw tonal subtest scores were reasonable predictors of PAT-2 standardized composite scores ( $R^2 = .277$ ,  $F(1, 15) = 5.742$ ,  $p = .03$ ). A stepwise linear regression helped determine IMMA raw composite scores were reasonable predictors of PAT-2 standardized composite scores ( $R^2 = .293$ ,  $F(1,15) = 6.207$ ,  $p = .025$ ) and slightly better predictors than IMMA raw tonal subtest scores. The predictive potential of IMMA scores for PAT-2 scores seems to indicate improving music aptitude early in life may naturally improve phonological awareness – a foundational skill that may affect students' literacy throughout their lives (Bauman-Waengler, 2012). Results may provide support that musical practices taking place in music classrooms support phonological awareness. [The author can be reached at [MaraCulp@gmail.com](mailto:MaraCulp@gmail.com) ]