PSYCHOLINGUISTIC DETERMINANTS OF TIMED OBJECT NAMING IN THAI

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In this study, we report normative data by native Thai speakers for name agreement, image agreement, category agreement, object familiarity, visual complexity, age of acquisition in addition to values for word length, word frequency, and object naming latency for 332 high quality colour photographs of common objects from the Bank of Standardized Stimuli (BOSS; Brodeur, Dionne-Dostie, Montreuil, & Lepage, 2010). Thirty-two participants from Chulalongkorn University in Bangkok, Thailand, performed a speeded object naming task with naming latency measured using a voice-activated response box. We assessed the contribution of the eight predictor variables on object naming times using multiple regression analysis and found independent effects of the following psycholinguistic variables: name agreement, image agreement, age of acquisition, word frequency, object familiarity, and category agreement. Jointly these variables accounted for just under 50% of the overall object naming variance.

Previous studies have routinely identified name agreement, image agreement, age of acquisition, and word frequency as major determinants of picture naming speed; a consistent pattern obtained across multiple languages (e.g., Alario et al., 2004; Bakhtiar, Nilipour, & Weekes, 2013; Bonin, Peereman, Malardier, Méot, & Chalard, 2003; Cuetos, Ellis, & Alvarez, 1999; Snodgrass & Yuditsky, 1996). While the current findings reveal that the same psycholinguistic properties are predictive of naming in Thai, they extend this work by showing that the same properties also underlie naming with more ecologically-valid stimuli than have been used previously (e.g., Snodgrass & Vanderwart, 1980). We interpret these findings in relation to current models of lexical access and picture naming, which posit that several distinct processing stages are selectively influenced by specific psycholinguistic variables during the speech production process.

Overall, our findings support the use of the BOSS as a valid and ecological alternative image database, especially, but not exclusively, for Thai-speaking populations. We anticipate that the Thai normative data will be useful for investigations of language processing in normal Thai speakers as well as patients with acquired or developmental language disorders such as aphasia and dyslexia.