Personality plays a major role in influencing human behaviour (Eysenck, 1994). Intelligence has similarly been shown to influence everyday competence (e.g., accomplishing daily tasks like banking (Gottfredson, 1997)), academic and job performance (e.g., Schmidt & Hunter, 1998), and various important social characteristics (e.g., socioeconomic status; Jensen, 1998). It is thus surprising that research investigating the effect of intelligence and personality on second language (L2) acquisition has been limited compared to work on other individual differences (e.g., motivation). The present study fills this gap by examining the role of intelligence and the Big Five personality traits (extraversion, conscientiousness, agreeableness, openness to experience, neuroticism; e.g., McCrae & Costa, 2003) in English-speaking learners' acquisition of French fluency. The high degree of inter-learner variability observed in the mastery of L2 fluency is due to the complexity of this phenomenon, which is conditioned by several variables, many of which correlate with both intelligence (e.g., working memory capacity) and personality traits (e.g., amount of input received and output produced; short-term memory capacity and language anxiety).

This study addresses five lacunae in previous research. First, although intelligence has received much attention in psychology and correlates with various basic cognitive tasks (e.g., Deary, 2000), L2 fluency studies have largely ignored its potential influence. Second, personality research has looked almost exclusively at the effect of extraversion on L2 fluency (e.g., Dewaele & Furnham, 2000), neglecting the other four personality variables. Third, some researchers suggest that the knowledge required for L1 and L2 fluency differs (e.g., Towell & Dewaele, 2005), while others propose that learners who are more fluent in their L1 may also be more fluent in their L2 (Raupach, 1980; Groenhout, Schoonen & Hulstijn, 2015; Tracy-Ventura & Huensch, 2016). It is therefore integral that fluency be studied in both languages to control for the possibility that fluency is stable cross-linguistically. Fourth, previous studies have not looked at language production in depth; fluency has rather been operationalized superficially. For example, Dewaele & Furnham (2000) only included 'er' among their learners' hesitations, ignoring pauses, fillers, and other hesitation markers. Finally, previous L2 fluency studies have not effectively controlled for learner variables (e.g., known languages, proficiency). For example, Ghapanchi, Khajavy and Asadpour (2011) used learners' self-evaluations as a measure of proficiency.

We discuss a study designed to address these weaknesses by examining the influence of intelligence, personality and L1 fluency on the spoken L2 fluency of 100 low-advanced learners using standardized proficiency tests and 6 temporal/hesitation measures of fluency (i. speech rate; speech runs that are ii. hesitation-free, iii. filler-free, iv. fluent, v. repetition-free, and vi. grammatical-repair-free; Freed, Segalowitz & Dewey, 2004). Two elicited production tasks serve to obtain four, two-minute L1 and L2 speech samples from each participant in order to investigate the potential influence of L1 fluency on L2 fluency. The first task, a repetition task, challenges learners' working memory capacity, which may play a key role in on-line processing (Towell & Dewaele, 2005), by requiring them to invert then repeat a long fronted sentence (e.g., *Every morning in the winter, I have to shovel the driveway*. → *I have to shovel the driveway every morning in the winter.*). In the second task, participants describe the action unfolding in a six-frame cartoon. The latter task differs from the former in that syntax and vocabulary are not provided and it therefore requires learners to draw on the conceptualizer (the general knowledge component in which messages are generated; Levelt, 1989) to develop the message content. Personality is measured using the Big Five Aspect Scale Test (DeYoung, Quilty & Peterson, 2007). Finally, Raven's Progressive Matrices (Raven, Raven & Court, 2004) measure intelligence. Data is analyzed via multiple regressions.

References

Deary, I. J. (2000). *Looking down on human intelligence: From psychometrics to the brain*. Oxford, England: Oxford University Press.

De Jong, N., Groenhout, R., Schoonen, R., & Hulstijn, J. (2015). Second language fluency: Speaking style or proficiency? Correcting measures of second language fluency for first language behavior. *Applied Psycholinguistics*, *36*, 223-243.

Dewaele, J.-M., & Furnham, A. (2000). Personality and speech production: A pilot study of second language learners. *Personality and Individual Differences, 28*, 355 -365.

DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: Ten aspects of the Big Five. *Journal of Personality and Social Psychology*, *93*, 880–896.

Eysenck, H. J. (1994). Neuroticism and the illusion of mental health. *American Psychologist, 49*, 971–972.

Freed, B. F., Segalowitz, N., & Dewey, D. P. (2004). Context of learning and second language fluency in French. *Studies in Second Language Acquisition*, *26*, 275–301.

Ghapanchi, Z., Khajavy, G. H., & Assadpour, S. F. (2011). L2 motivation and personality as predictors of the second language proficiency: Role of the big five traits and L2 motivational self system. *Canadian Social Science, 7*(6), 148-155.

Gottfredson, L. S. (1997). Why *g* matters: The complexity of everyday life. *Intelligence, 24,* 79–132.

Jensen, A. R. (1998). *The g factor: The science of mental ability*. Westport, CT: Praeger/Greenwood.

McCrae, R. R., & Costa, P. T. (2003). *Personality in adulthood: A five-factor theory perspective* (2nd ed.). New York: Guilford Press.

Raupach, M. (1980). Temporal variables in first and second language speech production. In H. W. Dechert & M. Raupach (eds.), *Temporal variables in speech: Studies in honour of Frieda Goldman-Eisler* (p. 263-270). Berlin: Mouton de Gruyter.

Raven, J., Raven, J. C., & Court, J. H. (2004). *Manual for Raven's Progressive Matrices and Vocabulary Scales*. Section 3: The Standard Progressive Matrices. San Antonio, TX: Harcourt Assessment.

Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin, 124,* 262–274.

Towell, R., & Dewaele, J.-M. (2005). The role of psycholinguistic factors in the development of fluency. In J.-M. Dewaele (ed.), *Focus on French as a foreign language* (p. 210-239). Clevedon, R.-U.: Multilingual Matters.

Tracy-Ventura, N., & Huensch, A. (2016, April). *Measuring L2 fluency: Is L1 fluency data necessary?* Paper presented at the annual conference of the American Association of Applied Linguistics, Orlando, FLA.

Wechsler, D. (1981). *Manual for the Wechsler Adult Intelligence Scale – Revised*. Psychological Corporation, New York.