The Correlation between Personality and Gender in Second Language Acquisition: A Case Study

Magdalena Trinder, The University of Rzeszow, Poland

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Abstract

Whilst it has been long accepted that personality plays a pivotal role in successful Second Language Acquisition, the role of gender remains somewhat shrouded in mystery. It remains impossible to examine the influence of each factor in isolation; however, it is the contention of the author that pairs of factors may be analysed in conjunction in order to determine the extent to which gender has any influence on the acquisition process. Using a novel approach to the collection of research results on test groups, it is the intention of the author to examine if it is at all possible to draw conclusions as to the extent to which gender plays a role in language learning. The article will briefly discuss the theoretical background before describing the research methodology. Finally, an attempt will be made to analyse the results and frame any tentative conclusions.

Keywords: Second Language Acquisition, gender, personality



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Introduction

In his book *Men Are from Mars, Women Are from Venus*, John Gray indicates that males and females are divided by fundamental psychological differences, which lay at the root of the vast majority of dysfunctional relationships. This fundamental gender difference has provoked a wide variety of scientific interest as to how the perceived differences between males and females might be defined and attributed. In the world of Second Language Acquisition (henceforth SLA) the question of the role of gender in the success of the acquisition process is somewhat neglected. The following paper presents a narrow part of a much broader doctoral research programme into the question of whether it is at all possible to ascertain a relationship between gender and language acquisition. Here, the fundamental question posed is based on the question of personality, and how personality might be related to gender, with the explicit intention of attempting to see if it is possible to isolate gender as an individual factor in SLA, or whether gender in and of itself will determine other factors which do have a clear influence on the language learning process.¹

First, a brief overview of the existing state of research into the influence of personality and gender on SLA will be set out, before turning our attention to the current case study. Here, the research methodology will first be outlined, before a presentation of the results and discussion of the implications and conclusions to be drawn.

Theoretical Background

The case for the influence of personality on learning in general dates back to the pioneering work of psychologist Hans Eysenck,² who, in short, stated that there are two basic psychological types – introvert and extrovert – and that there are fundamental brain differences which are observable in the two which result in differing memory functions. The conclusion that he forwarded was that introverts have an advanced long term memory capacity, while extroverts remember things in the short term which, in part, goes towards the explanation as to why extroverts are more communicative, but introverts seem to achieve better results in more academic studies. What is most interesting about the foundations laid by Eysenck is that he has prompted a wide variety of scientific investigation into the effects of personality on SLA, which have provided completely inconclusive results.

To exemplify, Peter Skehan (1989), in his discussion of the role of introversion and extroversion in SLA, lists the theoretical assumptions of some of the leading lights of SLA theory (such as Krashen, Long and Swain), who all assume that extroversion must have some basic influence on the quality of input as extroverts are more social. Subsequently, he then discusses the results of a number of empirical experiments designed to test these basic ideas, which show a remarkable lack of homogeneity in their conclusions. To provide three examples here, Skehan cites the results of

¹ Despite some taxonomical debate, in this paper the terms 'language acquisition' and 'language learning' will be used interchangeably.

² Starting in the mid-1950s and continuing up to the mid-1980s, Hans Eysenck developed a series of hypothesis regarding human psychology and its implicit effects on the subject's ability to learn. Two of his more influential works in this field include *The Biological Basis of Personality* (1967) and *Personality and Individual Differences* (1985).

experiments by Rossier (1976) which found a correlation between extroversion and oral fluency; Smart et al. (1970), which found no relationship at all between extroversion and college achievement; and Chastain (1975) who found correlation in some areas between sociability and achievement, but not in all. The conclusion here must be that, as Skehan (1989) himself points out, there is insufficient evidence to support the view that extroversion does play a significant role in language learning, unless one takes into account the relationship between sociability and oral fluency. Introversion, on the other hand, has been documented on a number of occasions to have a clear relationship with academic performance, one such example being the research conducted by Entwistle and Entwistle (1970), which indicated that introversion played a more significant role than good study practices in academic achievement among British University students. The problem with introversion is that it has proven to be less attractive to researchers in SLA, because of the perceived connection between output (especially oral production) and extroversion. At this point, it is necessary to refer to the work of Dewaele and Furnham (1999) who indicate that 'there may be a trade-off between speed and accuracy [in the fluency of oral production], such that the extravert's oral production speed is at the cost of lesser accuracy. This leads one to pause for thought, and consider just what it is that is being examined: when a researcher refers to fluency, the question that should be posed is to what extent fluency is a measure of linguistic competence? The obvious response is that fluency without accuracy and should not be taken as a measure of the level of achievement of a language learner. If a student were to take a test and speak fluently, but incomprehensibly, the student would surely fail the test. Whereas if a student speaks with greater difficulty but their accuracy is sufficient to convey their intended meaning, they would achieve a positive grade. The conclusion here is that using fluency alone as a measure of linguistic competence is erroneous. Of course, there exists a clear argument that language is a practical tool of communication, and that one can only be a true master of a language when one can use it freely and fluently, but from an empirical perspective, it is more difficult to agree upon a cogent set of rules that would allow for an easy classification of linguistic competence based upon oral output. This lack of harmony results from the fact that the reception of oral output remains a highly subjective activity, as each individual pays attention to different aspects, such as accuracy, fluency, pronunciation, the coherence of the utterance and so on. When, on the other hand, one analyses more objective tests of language competence, such as reading, listening and grammar tests, one can see that the research carried out in this field tends towards the predominance of introverted learners (see, for example, the results of tests conducted by Carrell, Prince and Astika, (1996)).

To summarise, it would appear that it is possible to conclude that personality does play an important role in SLA, but some of the research to date lacks a clearly defined understanding of what exactly is being measured, and that the results of many tests remain either contradictory or, at best, inconclusive. Part of the problem here, as suggested by Hummel (2014: 208) is that '[...] there are many other background variables that need to be taken into consideration in interpreting research, [...]'. This fact leads us to the conclusion that one cannot simply test in isolation the effects of personality on SLA. Secondly, one must be careful about what one defines as

³ Ouoted from Hummel (2014: 207).

language competence because, in all probability, when one refers to a garrulous and inaccurate speaker as competent, one is erroneous.

Moving on to the question of gender in SLA, one is first of all struck by the relative lack of interest shown in the subject. There have been a number of attempts to define the use of language of the learner on the basis of gender - defining so-called communication strategies - by such luminaries as Bacon (1992) or Maubach and Morgan (2001) who indicated that males and females adopt different communication strategies, with males being more inclined to risk-taking and spontaneity. Equally, a number of studies have focussed on those gender differences which are imposed by a given society or culture, with Ellis (1994: 204) clearly indicating that '[...] Asian men in Britain generally attain higher levels of proficiency in L2 English than do Asian women for the simple reason that their jobs bring them into contact with the majority English speaking group, while women are often "enclosed" in the home. This aside, there is little in the way of conclusive evidence that gender plays a role in the success of SLA. Some studies report, as previously mentioned, differences in communication strategies, or the recorded output of L2 users, but these reports simply reflect natural differences in L1 usage. In terms of actual achievement, a study by Piasecka (2010) confirms work carried out previously by such researchers as Kimura (2006)⁴ who indicate that females have better achievement in such skills as reading, spelling and grammar tests. Somewhat contradictorily, the national results of the United Kingdom A' Level tests for 2013 show that, despite the much larger number of females taking French and German as an examination subject at the age of 18, the actual pass rate of Grade A and B is slightly higher for males.⁵ Consequently, it would appear to be the case that there is no clearly documented correlation between gender and achievement in SLA.

To round off the discussion on Gender and Personality, it makes sense to analyse the research which has been conducted into this field, and one need look no further than the work of Del Guidice et al. (2012) to see that there are clear differences along gender lines when it comes to personality. The largest areas of difference came in terms of sensitivity and aggression when the research team utilised a sixteen personality factor questionnaire based on the research of Raymond Cattell. With the fact that aggression is one of the key predicators of extroversion, one would expect to find that males were, in general, more extroverted than females, whereas, there is, in fact, limited information available to corroborate this theoretical assumption.

In conclusion, one might say that the research to date indicates that, from the point of view of SLA, there is clear evidence that personality has some influence on the success of the process, but it is unclear exactly to what extent this influence occurs. Equally, gender is likely to play some part, especially when one takes into consideration the current line of thinking that gender is a purely social construct, and that a female's behaviour is largely dictated by the imposition of 'social norms'. What is interesting is the basic question: to what extent the gender of language learners and their personality go hand in hand? Furthermore, if there is no clear link between gender and personality, then is it at all possible to isolate these two factors in order to

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⁴ The research here is quoted from Piasecka (2010).

The information here is obtained from the official exam reports of the Joint Council for Qualifications, which is a membership organization of the seven largest exam certificate boards of the United Kingdom. Its home address is: http://www.jcq.org.uk/.

examine their influence independently? The remaining part of this paper shall attempt to answer the first of these two questions.

Methodology

In this section, following a brief introduction of the subjects of the case study, the method of data collection, and the survey used in order to ascertain the personality types of the participants will be discussed.

The investigation was carried out in the 2013-2014 academic year in Poland on five groups, totalling 42 participants. Of the participants 25 were female and the remaining 17 were male. Three of the groups mentioned attended a private language school and were learning in order to pass a C1 level examination on the Common European Framework of Reference for Languages. These three groups were chosen for their remarkably high degree of homogeneity when it comes to the variety of variable factors which influence SLA and consisted of 23 participants of whom 12 were female and 11 male. They were all of a similar age, between 17 and 19, and all attended the Polish equivalent of Grammar School. Thus, it may be assumed that they have a similar level of motivation to participate in the extra-curricular course. Given that this was a fee-paying course, one might also reasonably assume that they come from a similar socio-economic background. Finally, given that pupils in secondary education in Poland have a choice as to their compulsory foreign language, one might venture the claim that they should all have appositive attitude to the language as they would always have the choice of studying an alternative language. Thus, the primary variables which could be observed and assessed in the groups were their learning style, personality and gender.

The remaining participants, a total of 19 students, attended the University of Rzeszow, studying in their first year for a Bachelor's Degree in English Philology. There were 13 females and 6 males (the discrepancy here is a common factor in language study at level in Poland, where the vast majority of graduates are female). The two groups were part-time, meaning that they had to attend classes and lectures on alternate weekends, and they had to pay a fee for their participation (in contrast to full-time students who study for free in state institutions). This allows us to suppose that they have a similar degree of motivation, and an equally positive attitude towards the language. The age range of the students was somewhat broader, ranging between 19 and 35, while it is not so plausible to assume a homogenous socio-economic background. Finally, there was a slightly lower level of harmony in terms of language level, as all of the participants were of the level B2 (in order to satisfy the minimum entry level requirements of the polish Ministry of Higher Education), but some of the students actually were of the level C1. However, one of the aims of the Practical English Course was to ensure the standardisation of the level of the participants. Consequently, one may assume, although with a lesser degree of certainty, that the main variables will be gender, personality and learning style.

The personality questionnaire chosen was the 16 personality factor questionnaire developed by Richard Stephenson (2013). This was chosen because of its statistically proven reliability, having been tested on over 12,000 subjects, with the test results matching favourably with other assessment tools. It was also easily available to use, and also readable and relatively uncomplicated for the students to comprehend. The

test itself contains 77 forced questions, meaning that the respondents have to give an answer 'A' or 'B'. The questions are designed in order to identify four 'bi-polar' psychological preferences based on the original work of Carl Jung. These pairs are as follows: extrovert, introvert; sensing, intuition; thinking, feeling; and judging, perception. The combination of these four preferences gives a possible sixteen personality types. As a result of the need for concision, a full discussion of the test will be omitted from the following, and we shall focus here on just the first of the pairs; namely the polarity of introversion/extroversion. The reason for this decision is based on the theoretical discussion which preceded this section, in which it was highlighted the fact that researchers into personality have tended to focus on the influences of introversion and extroversion.

Having chosen the questionnaire to be used, it was then prepared in a PowerPoint presentation, with the respondents using an Audience Response System in order to register their answers to each individual question. The main reasoning behind this was in order to maintain a sense of normality about the questionnaire. The ARS had been used from the beginning of the academic year in order to collect the mass of data to be used in monitoring the progress of the participants in reading and listening tests, thus, the system was familiar to the learners. In addition, it was felt that by using the ARS it would be possible to reduce the possibility of collusion amongst the subjects: as each participant has their own, unique response card, it was felt that there would be a much lower instance of people prompting each other. Equally, as the questionnaire was conducted in lockstep, there was no chance of early finishers putting pressure on those who took a longer time to complete their answers quickly in order to allow the lesson to progress. Finally, in order to maintain the veracity of the test, it was not announced to the students the real intention of the questionnaire, rather it was interwoven into a general lesson on the subject of personality. This was done in order to try to reduce the instance of respondents giving answers to the questions which they felt were what the researcher was looking for. The results generated were tabulated and will be discussed below.

⁶ For a full discussion of the Jungian 16 Type Personality Test used here, please refer to the handbook which accompanies the test, which can be accessed at http://richardstep.com.

⁷ It is the intention of the author to engage in a full discussion of the relationship between personality, learning style, gender and achievement in SLA in her pending doctoral thesis.

Results

The first thing that becomes obvious is that the sample group is more or less evenly split on the whole, as shown in the following table.

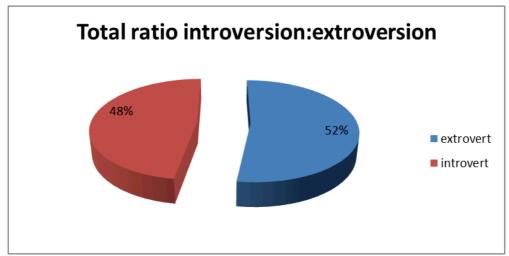


Table 1. Total ratio introversion: extroversion.

This is extremely encouraging as it comes within an acceptable margin of error⁸ for the 'standard population' as calculated by the Myers-Briggs Organisation, which calculated that there is a ratio of 49.3:50.7 being slightly in favour of introversion. When it comes to a breakdown along gender lines we are presented with the following two sets of results.

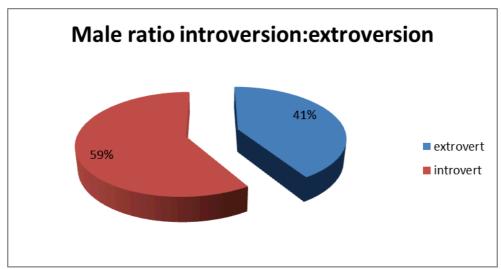


Table 2. Male ratio introversion: extroversion.

⁸ In this case, the exact margin of error is approximately 5.5% in both cases. This is quite reasonable considering the fact that the Myers-Briggs statistics are concerned with a prototypical American population. The most important thing here is the approximate 50-50 split, which is what one would hope to see. For the purpose of a benchmark score, the statistics obtained from the Myers-Briggs Organisation shall be used throughout.

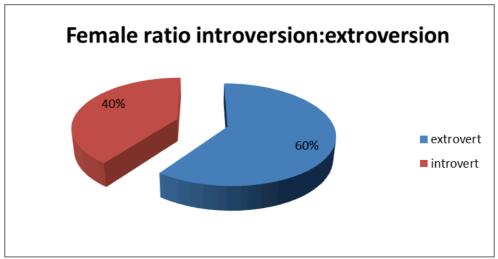


Table 3. Female ratio introversion: extroversion.

What is immediately obvious here is that there is a distinctive gender difference. The male ratio is almost 3:2 in favour of introversion, while the female ratio is 3:2 in the opposite direction. The first thing that is necessary to do here is to compare with the findings of Myers-Briggs. In males, the ratio is 45.9:54.1 in favour of introversion, while the female score is 52.5:47.5 in favour of extroversion. Therefore, the general biased is reflected in the results of the current study, although the extent of that biased with females showing a greater tendency to extroversion and males the opposite being somewhat more exaggerated than in the benchmark population sample.

Discussion and Conclusions

The first and most obvious thing that seems to be suggested by the results obtained is that males have a greater inclination to introversion, and females to extroversion, which runs contrary to many of the assumptions put forward in the scientific literature to date. So, returning to the neuroscientific work of Eysenck, on the assumption that extroverts have an enhanced short-term memory function, while introverts retain things in the longer-term, these results might go some way to explaining the academic results of males and females obtained in the A' Level examinations in the United Kingdom. What would be very interesting would be to analyse the age of results of personality tests against the development of gender equality in order to analyse to what extent the change of the socio-cultural position of females has influenced the perceived level of openness.

With this theoretical assumption about the achievement of males in more academic situations, the logical extension is that females should, on the basis of the results, be the greater communicators as they are the more open to social interaction. Consequently, they should benefit more from the social aspects of using language as a tool, and, on the basis of the Input Model of Krashen, be the better users of language with the greater level of communicative competence because of the greater levels of interaction.

There are a number of things which need to be stated at this point to mitigate any radical conclusions being drawn. The most obvious of these being the fact that this is a tiny sample group, with a slight imbalance in favour of the females. Secondly, this is

not a sample which covers the entire population spectrum. It is a group which is, in the main deliberately homogenous, so it fails to take into consideration any potential changes of personality with age. Equally, the group is highly educated, with all members either being actively involved in, or preparing for, academic life. There are, quite possibly, other reservations which may be expressed pertaining to the results revealed here, but the limitations of space also limit our scope for speculation.

What can be concluded here is that the results are sufficiently enticing to encourage further study on a much greater scale. It would be most interesting to test to what extent the results achieved here are anomalous. In addition, the next step would be to analyse the progress made in language acquisition during the academic year of the sample population to investigate any correlation between achievement and personality/gender. But that is for another paper, and one can only, at this moment, speculate that one would expect the introverted male population to obtain a higher average grade than the extroverted female population in the fields of listening and reading.

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