



UNIVERSITI PUTRA MALAYSIA

***RELATIONSHIP BETWEEN INTROVERSION/EXTRAVERSION AND L2
READING PROFICIENCY OF ARAB UNDERGRADUATES***

MEDJEDEL KHAOULA

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By

MEDJEDEL KHAOULA

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfillment of the Requirements for the Degree of Master of Arts**

October 2016

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the Degree of Master of Arts

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October 2016

Chairman : Associate Professor Wong Bee Eng, PhD
Faculty : Modern Languages and Communication

Personality types have a great influence on our lifestyle, attitudes and preferences, as well as our way of learning and academic performance. In the literature, research on introversion/extraversion correlation to reading is insufficient and exposed contradicted findings as well. Therefore, this study tries to draw conclusions about the relationship between introversion/extraversion and L2 reading proficiency for Arab undergraduates. And the key issue that has to be considered in this study is investigating which function pair that represent the mental functions (NT, NF, SF or ST) of introversion/extraversion performs the highest reading proficiency score. The present study examines personality types of L1 Arab undergraduates who are ESL learners. Next, the learners' reading proficiency levels in English were associated with their personality types. Further, the function pairs of both introverts and extraverts that contribute to the highest score of L2 reading proficiency were determined for the learners. This study is anchored on three main theories. From a psychological perspective, Carl Jung's theory (1923) of Psychological Types which is based on natural preference, is adopted. The theory further posits that these preferences, when used properly, lead to competence and success in the field of education. In addition, Hans Eysenck's (1967) approach of the biological basis of personality gives a physiological explanation that guides introversion/extraversion preferences. With regard to reading, David Rumelhart's (1977) interactive model of reading comprehension is adopted to explain the process of reading comprehension and hence, reading proficiency. This model claims that reading includes the use of both higher mental operation and the lower text processing. Participants for the study were randomly selected from the College of Business Administration in Taibah University, Saudi Arabia. Two instruments were used to collect the required data for the study. The first was the Myers-Briggs Type Indicator (MBTI), a self-report questionnaire that helped the participants to determine their personal qualities. The MBTI contains four bipolar dimensions that classify people as either extravert or introvert, thinking or feeling, sensing or intuitive, and judging or perceiving. The second instrument was an English reading test (TOEIC Bridge), which was used to determine the reading proficiency level of the ESL learners. In this test, learners used their knowledge of English grammar, usage, vocabulary as well as reading skills to answer

the questions. The data from the reading component of the test was used for the study to find the association between the learners' reading proficiency in English and their personality type. The collected data was used to address the following research questions: a) Which is the most dominant personality type among L1 Arab undergraduates? b) What is the relationship between students' introversion and extraversion and their L2 reading proficiency? and c) What are the function pairs of introverted and extraverted types that represented the highest scores of L2 reading proficiency? The findings of the study showed that introversion is the dominant personality type among business ESL undergraduates. Also, no statistically significant relationship between introversion/extraversion and reading proficiency was found. However, the highest reading scores were accompanied with NT and NF function pairs.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sastera

HUBUNGAN ANTARA INTROVERSI/EKSTRAVERSI DAN KECEKAPAN MEMBACA L2 DALAM KALANGAN PRASISWAZAH ARAB

Oleh

MEDJEDEL KHAOULA

Oktober 2016

Pengerusi : Profesor Madya Wong Bee Eng, PhD
Fakulti : Bahasa Moden dan Komunikasi

Jenis personaliti mempunyai pengaruh yang besar ke atas gaya hidup, sikap dan keutamaan, di samping cara pembelajaran dan prestasi akademik seseorang. Dalam sorotan kajian, penyelidikan tentang korelasi introversi/ekstraversi terhadap membaca adalah tidak mencukupi dan menggambarkan dapatan yang berkontradik juga. Oleh sebab itu, kajian ini diharap dapat menarik beberapa kesimpulan tentang hubungan antara introversi/ekstraversi dan kecekapan membaca L2 bagi prasiswazah Arab. Isu utama yang diambil kira dalam kajian ini adalah untuk menyelidiki fungsi pasangan manakah yang mewakili fungsi mental (NT, NF, SF atau ST) introversi/ekstraversi yang menunjukkan skor kecekapan membaca yang paling tinggi. Kajian ini meneliti jenis personaliti prasiswazah L 1 Arab yang merupakan pelajar ESL. Seterusnya, tahap kecekapan membaca mereka dalam bahasa Inggeris dikaitkan dengan jenis personaliti mereka. Tambahan lagi, fungsi pasangan kedua-dua introvert dan ekstravert yang menyumbang pada skor tertinggi kecekapan membaca L2 telah ditentukan bagi pelajar tersebut. Dari perspektif psikologikal, teori Jenis Psikologikal Carl Jung (1923) yang berdasarkan keutamaan semula jadi telah diterima pakai. Teori ini selanjutnya menunjukkan bahawa keutamaan tersebut, sekiranya digunakan sebaik-baiknya, membawa pada kompetensi dan kejayaan dalam bidang pendidikan. Di samping itu, pendekatan asas biologikal personaliti Hans Eysenck (1967) memberikan penjelasan fisiologikal yang membawa kepada keutamaan introversi/ekstraversi. Berkaitan dengan membaca, model interaktif pemahaman membaca David Rumelhart (1977) telah diguna pakai bagi menjelaskan proses pemahaman membaca dan juga, kecekapan membaca. Model ini memperuntukkan bahawa membaca termasuk penggunaan kedua-dua operasi mental dan juga pemprosesan teks bawah. Responden bagi kajian ini telah dipilih secara rawak dari Kolej Pentadbiran Perniagaan di Universiti Taibah, Arab Saudi. Dua instrumen telah digunakan untuk mengumpul data bagi kajian ini. Pertama ialah Indikator Jenis Myers-Briggs (MBTI), soal selidik swalaporan yang membantu responden untuk menentukan kualiti personal mereka. MBTI mengandungi empat dimensi bipolar yang mengklasifikasikan manusia sebagai sama ada ekstravert atau introvert, pemikir atau perasa, sensitif atau intuitif, dan penilai atau penanggap. Instrumen kedua ialah ujian membaca bahasa Inggeris (TOEIC Bridge), yang digunakan

untuk menentukan tahap kecekapan membaca pelajar ESL. Dalam ujian ini, pelajar menggunakan pengetahuan tatabahasa, penggunaan, kosa kata bahasa Inggeris mereka di samping kemahiran membaca bagi menjawab soalan. Data komponen membaca dari ujian telah digunakan dalam kajian ini untuk melihat perkaitan antara kecekapan membaca pelajar dalam bahasa Inggeris dan jenis personaliti mereka. Data yang dikumpul telah digunakan untuk menjawab soalan penyelidikan berikut: a) Jenis personaliti manakah yang lebih dominan dalam kalangan prasiswazah L1 Arab ? b) Apakah hubungan antara introversi dan ekstraversi pelajar dan kecekapan membaca L2 mereka c) Apakah fungsi pasangan jenis introvert dan ekstravert yang mewakili skor tertinggi kecekapan membaca L2? Dapatan kajian ini menunjukkan bahawa introversi merupakan jenis personaliti yang dominan dalam kalangan prasiswa ESL perniagaan. Di samping itu, tidak terdapat hubungan yang signifikan secara statistik antara introversi/ekstraversi dan kecekapan membaca. Walau bagaimanapun, skor membaca tertinggi didapati disertai dengan fungsi pasangan NT dan NF.

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I certify that a Thesis Examination Committee has met on 25 October 2016 to conduct the final examination of Medjedel Khaoula on her thesis entitled "Relationship between Introversion/Extraversion and L2 Reading Proficiency of Arab Undergraduates" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Arts.

Members of the Thesis Examination Committee were as follows:

Wan Roselezam binti Wan Yahya, PhD

Associate Professor
Faculty of Modern Languages and Communication
Universiti Putra Malaysia
(Chairman)

Rosli bin Talif, PhD

Associate Professor
Faculty of Modern Languages and Communication
Universiti Putra Malaysia
(Internal Examiner)

Khazriyati Salehuddin, PhD

Associate Professor
Universiti Kebangsaan Malaysia
Malaysia
(External Examiner)



NOR AINI AB. SHUKOR, PhD
Professor and Deputy Dean
School of Graduate Studies
Universiti Putra Malaysia

Date: 27 December 2016

This thesis was submitted to the Senate of the Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Master of Arts. The members of the Supervisory Committee were as follows:

Wong Bee Eng, PhD

Associate Professor
Faculty of Modern Languages and Communication
Universiti Putra Malaysia
(Chairman)

Pabiyah Hajimaming @ Pabiyah Toklubok, PhD

Senior Lecturer
Faculty of Modern Languages and Communication
Universiti Putra Malaysia
(Member)

ROBIAH BINTI YUNUS, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:

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Name and Matric No.: Medjedel Khaoula, GS 41054

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Signature: _____

Name of Chairman
of Supervisory
Committee:

Associate Professor Dr. Wong Bee Eng

Signature: _____

Name of Member
of Supervisory
Committee:

Dr. Pabiyah Hajimaming @ Pabiyah Toklubok

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LIST OF ABBREVIATIONS

MBTI	The Myers and Briggs Type Indicator
I	Introversion
E	Extraversion
S	Sensing
N	iNtuitive
T	Thinking
J	Judging
TOEIC	The Test of English for International Communication
L1	First/native Language
L2	Second/acquired Language

CHAPTER 1

INTRODUCTION

1.1 Preamble

This chapter presents the research background of the study. First, it introduces an overview of personality types and literacy as a part of language learning. Next, the main theories that underpin this research will be briefly outlined. Then, the problem statement, aim and objectives and the research questions are espoused. Finally, the significance of the study is discussed.

1.2 Background of the Study

Personality is a set of qualities that reflects *what* people say, *how* they do and what they do as a way of putting “a unique stamp on their action” (Carver & Scheier, 2012, p.2). The American psychologist Allport (1961) defined personality as “a dynamic organization, inside the person, of psychophysical systems that create the person’s characteristic patterns of behaviour, thoughts, and feelings” (Carver & Scheier, 2012, p.4). Modern psychological study of personality flourished throughout the early decades of the 20th century basing its essence on the three 19th century intellectual themes: individualism, the unconscious, and the huge emphasis on measurement. Despite the inconsistency between the three themes, those themes constructed the field of personality psychology.

Individualism emphasised the importance and uniqueness of individuals. Burckhardt (as cited in Barenbaum & Winter, 2008, p.2) confirmed that people in the middle ages recognised themselves "only as a member of a race, people, party, family, or corporation - only through some general category" (Burckhardt, 1954, p.101) and only after the Renaissance, people started to consider themselves as Individuals.

The concept of Unconsciousness was the next to emerge as a revolution against the concept of the ‘Age of Reason’ of the 18th century. The Unconscious was subsequently distinctly addressed in the literature of personality psychology integrated with Freud’s internal debate (id) concepts. Today, the unconscious is thought to be an implicit but crucial part of many important processes that lead to the realisation of consciousness (Nisbett & Wilson, 1977; Bargh, 1982; Kihlstrom, 1990; Greenwald & Banaji, 1995). Yet, an absolute concentration on the unconscious may provoke negligence or underestimation of the explicit behaviour and rational planning (Cantor & Zirkl, 1990). Personality psychology followed the steps of exact sciences that were popular in the 19th century in emphasising on measurement. The scientist and statistician Galton (as cited in Barenbaum & Winter, 2008, p.3) proclaimed that “The character which shapes our conduct is a definite and durable 'something,' and therefore ... it is reasonable to attempt to measure it" (Galton, 1884, p.179). Furthermore, Thomdike (1914) argued that “if a thing exists, it exists in some *amount*; and if it exists in some amount, it can be

measured'' (p.141, as cited in Barenbaum & Winter, 2008, p.3). Since then, the concern for personality assessment has progressed and a number of personality tests have been formalised to measure traits of personality. The notion of *trait* has been applied as a reference to the correlated expressive and stylistic types of behaviour (Winter et al., 1998, pp. 232-233). Today, personality assessment tools that have been developed involve “ratings” and “behaviour observations” (Barenbaum & Winter, 2008, p.3).

According to Jung’s theory, which will be discussed in detail later, each individual has a *natural preference*, that when used preferably, usually “succeeds better and feel[s] more competent, natural and dynamic” (Behaz & Djoudi, 2012, p.136). Jung’s Psychological Types theory proposed six types in which individuals differ and categorised them into three groups: attitudes (extraversion and introversion), perceptual functions (intuition and sensing), and judgmental functions (thinking and feeling). Extraversion/introversion attitudes label individuals’ mind-sets in dealing with others. An extravert is outgoing, concerned about people and environment, whereas, introverted interests are internally focused. Regarding perceiving preferences, an intuitive person is likely to perceive stimuli comprehensively, concentrating on meaning rather than details, while a sensing individual observes information realistically and accurately. The Judgment or understanding of perceived stimuli is embodied in two ways; thinking individuals are likely to be impersonal, logical and analytical, whereas feeling people are grounded more on values than logic (Sternberg & Grigorenko, 1997).

Introversion and extraversion are the most common and widely used types. Introverts focus on their own inner world, whereas extraverts prefer to focus on the outer world.

An extravert, for Richards and Schmidt (2002), is “a person whose conscious interests and energies are more often directed outwards [to] other people and events than towards the person themselves and their own inner experience”, while an introvert is seen as “a person who tends to avoid social contact with others and is often preoccupied with his or her inner feelings, thoughts and experiences” (p.213). Contrary to what is common, introversion is not associated with psychological problems, anti-social personality disorder, or social phobia (Helgoe, 2013; Pennington, 2012). Neither does this mean that someone is insane or a criminal (Cain, 2012b).

However, introverts are mostly sensitive (Aron & Aron, 1997). In fact, 70% of highly sensitive people tend to be introverts (Aron, 1997) and they are less expected to be narcissistic (Dembling, 2012). Most introverts are passionate about their values, empathetic and even good leaders and they are more likely to maintain healthy lifestyles (Pennington, 2012). Jung once wrote: “They [introverts] are living evidence that this rich and varied world with its overflowing and intoxicating life is not purely external, but also exists within” (as cited in Aron & Aron, 1997, p.100). In most cases, people confuse shyness with introversion; shyness is more a fear of social judgment while introversion, as noted previously, puts emphasis on the “me time” to recharge. Introverts become immersed in their inner world and run the risk of losing touch with their surroundings or with their outer world. They also tend to be introspective and keep their social circle limited (Cain, 2012a). In the same token, Henjum (1982) described two

distinct types of introverts: Type A introverts are able to collaborate and work well with others, and are self-actualised but reserved. Type B introverts are more timid and shy and they tend to avoid confronting society.

Extraversion, on the other hand, is the most widely researched construct in personality psychology. Extraversion is associated with social engagement, positive emotion, and life satisfaction (Ashton, Lee, & Paunonen, 2002; John & Srivastava, 1999). An extravert prefers getting energy from lively involvement in events and engaging in different activities, moving from one action to another. Extraverts like to be around people and to energise other people. In general, an extravert is seen as “outgoing” or as a “people person” who feels comfortable in groups and like working in them, he or she is sociable and is someone who acts before thinking (Martin, 1997).

Introversion and extraversion attract people’s attention in all fields but they “start to lose their dynamic roots” as we start to “see ourselves as introverted OR extraverted, rather than as a creative, evolving combination of the two” (Helgoe, 2013, p.19).

According to Myers-Briggs and Myers (1993), introverts and extraverts complete each other, yet they are quite different. Cain (2012b) claimed that “the most effective teams are composed of a healthy mix of introverts and extraverts” (p.93). An introvert is more subjective, reserved, questioning, and someone who lives when he/she understands. An extravert, on the other hand, is more objective, relaxed, comfortable, and someone who lives to understand. In general, introverts seek to understand the meaning while extraverts seek sensory stimulation (Pennington, 2012). Introverts are seen to be more reflective (Kolb, 1984), while extraverts are more active (Silver, Strong, & Perini, 2000).

Jung (1971) declared that in order to adapt, a person has the ability to change from one situation to another and he or she generally grows more introverted as he/she ages. However, Kolb (1984) referred to the stability of the personality type when he stated that “several longitudinal studies have shown introversion/extraversion to be one of the most stable characteristics of personality from childhood to old age” (p.76). According to Little’s “Free Trait Theory” of Personality (2014a), individuals can adopt different personality characteristics for short periods of time. However, it is not only an exhausting and energetic process, but people will also have a difficult time acquiring traits that are different from their own. Little (2014b) illustrated the obvious contradictions in the extraversion/introversion debate by giving the example of how Barack Obama, although an introvert, can yet amaze large audiences with his speeches. This is due to the self-monitoring trait which is a separate trait that helps individuals to change their persona to fit the demands of a certain situation, even if it involves going against natural tendencies. Most importantly, self-monitoring can be smoother if someone is acting in accordance with deep beliefs.

Personality psychology has been applied to different fields such as the economy, computer sciences and engineering, yet personality is mostly addressed in education and all aspects of learning, including literacy. Concerning language learning and since

personality types are “those aspects of an individual’s behaviour, attitudes, beliefs, thoughts, actions, and feelings which are seen as typical and distinctive of that person and recognized as such by that person and others” (Richards & Schmidt, 2002, p.395), Ehrman & Oxford (1989) believed that each of those aspects and preferences that compose a psychological type has its own properties and commitments when it comes to language learning. Thus, theoreticians in personality research field attempted to analyse linguistic behaviour at a universal level; however, they did not explain linguistic subsystems in detail. Psycholinguists and sociolinguists were also puzzled by the diversity of theories in the field of personality research (Dewaele & Furnham., 1999).

Literacy, according to Williams (2004), can be categorised as “narrow” and “broad” literacy. The narrowed traditional definition is identified by the standard dictionary as “the ability to read and write.” The focal point of this definition is individual abilities. Thus, many theories of reading and writing observed “reading as comprehension, and writing as composition, in both first and additional languages”. A broad perception of literacy emerged as a part of an intellectual movement in the 1980s that shifted the emphasis from individualism, which was proposed by the earlier psychological approaches, towards socialism. Overall, the broad viewpoint of literacy focuses on the values and senses of “literate behaviour in social contexts”. Even though it advocates a critical outlook, literacy is suitable for the communicative competence concept (p.23).

In 1978, Niaman and many other researchers covered the “Good Language Learner” (GLL) concept to display the characteristics that contribute to the effectiveness of language learning. Therefore, integrating reading into language learning sounds reasonable if the ‘Good and Poor Readers’ are considered, and it answers the question “why some readers outperform others as good readers?” (As cited in Sadeghi et al., 2012, p.120).

As a rule, readers who achieve good grades in reading tasks are possibly improving their reading abilities, whereas readers who score poor grades in reading tasks are more likely to promote negative reading competency beliefs (Medford & McGeown, 2012). Overall, since the personality types of individuals have a great influence on their lifestyles, attitudes and preferences, it is logical to observe the salient impact of personality traits on their academic performance.

1.3 Theoretical Framework of the Study

This research is grounded on three main theories: Carl Jung’s (1923) psychological types theory or model of typology; Hans Eysenck’s (1967) approach to biological basis of personality; and Rumelhart’s (1977) interactive model of reading comprehension.

Among the several models of personality types, Jung’s theory of psychological types is the most well-known. The Swiss psychiatrist and psychotherapist Carl G Jung was the first to describe personality attitudes in 1921. The basic assumption of Jung’s theory is that each person is special in his/her way of understanding the surrounding world and

deriving energy that creates uniqueness. In 1942, Katharine Cook Briggs and her daughter Isabel Briggs Myers developed the Myers and Briggs Type Indicator (MBTI) which applied Jung's theory of personality types. The MBTI is a self-report questionnaire that makes it easy for people to understand their potential qualities. MBTI assesses personality in four separate scales: Extraversion versus Introversion, Sensing versus Intuition, Thinking versus Feeling, and Judging versus Perceiving (Rushton et al., 2007). The MBTI four-letter formula (type dynamics) offers a short description of the correlation of the four processes. The first and the last letters (E/I, J/P) represent the attitudes and orientations that involve interaction with the world. The two middle letters (NT, NF, ST, and SF) are called function pairs as they represent the mental functions based on the brain's work ("The Myers & Briggs Foundation", 2016). Jung's approach to personality was considered to be significant in the initial development of personality psychology. However, most of the related research of Jung emphasises on his explanations of personality types. The Myers-Briggs Type Indicator (MBTI; Myers, 1962) is the most commonly used measure of Jung's personality types and is frequently used by school counsellors to point students toward fulfilling opportunities of their studies. In recent times, researchers have extended work on the practicality of Jungian personality types by considering the role of types in the way people cope with their personal investments and the type of careers they embark on (Feist & Feist, 2009).

Eysenck further gave more biological-based explanations to the introversion/extraversion dimension. His arousal theory offers a physiological clarification of extraversion regarding the cortical arousal through the ascending reticular activating system (ARAS). Activating the ARAS irritates the cerebral cortex to provide higher cortical arousal. Due to the dissimilar levels of ARAS activity, "introverts are characterized by higher levels of activity than extraverts and so are chronically more cortically aroused than extraverts" (Eysenck & Eysenck, 1985, p.197). As a result, introverts and extraverts behave differently and thus, learn differently.

Regarding reading comprehension, Rumelhart's (1977) interactive model proposes that a pattern is created based on information delivered simultaneously from several sources. This model insists that reading includes the use of both higher mental operation and the lower text processing. In other terms, both bottom-up and top-down approaches are essential fundamentals for completing the reading tasks.

1.4 Statement of the Problem

Understanding personality is crucial as it determines the rationale behind contradictions in terms of identity and consideration of differences in performances and practice (Roth, 2012).

As noted previously, Jung's theory of psychological types (1971) does not only refer to the two mutually exclusive attitudes – extraversion and introversion where every human is energised either by the external world as an extravert or the internal world as an introvert – it also describes the personality functions demonstrated in thinking, feeling, sensation and intuition. Eventually, Introversion/extraversion types were eventually

categorised into eight groups: (a) introverted sensors, (b) introverted intuition, (c) introverted thinkers, (d) introverted feelers, (e) extraverted sensors, (f) extraverted intuition, (g) extraverted thinkers, and (h) extraverted feelers.

Later, Myers added perceiving/judging dichotomies that have been linked to introversion/extraversion dichotomies (Spoto, 1995). An individual goes through the process of judging and perceiving when dealing with the outer world (Myers & McCaulley, 1985).

In the learning domain, each personality type learns in a different way. In fact, studies have suggested that introverts should be more advanced in tasks that demand the consciousness of knowledge rather than in calculative problem-solving activities, whether the demand is direct or indirect. This hypothesis has been supported by many researchers such as Robinson (1985, 1986) and Himmelweit (1945, 1946) (as cited in Robinson et al., 1994). Barrett and Eysenck (1992) further claimed that introverts achieve somewhat higher scores on the verbal compared to performance subtests of the Wechsler Adult Intelligence Scale (WAIS) while the opposite situation is true for extraverts.

From a second language learning viewpoint, the same argument proposes that extraverts should better accomplish spontaneous oral performance tests while introverts should perform well in written tests as those tests assess the knowledge of language that is attainable through conscious processes (Robinson et al., 1994). This hypothesis is also supported by Busch (1982) who reported that extraverted males have greater oral scores and introverts tend to have better scores in reading and grammar tasks. Busch's research also indicated that extraverts may be less adept than introverts at written performance. Lau and Cheung (1988) further claimed that since reading is a solitary activity, it mostly attracts introverts more than extraverts.

Even functional types (thinking, feeling, sensing and intuition) differ in the manner of learning. Myers and Myers (1980) claimed that introverted intuitive types have higher academic giftedness. Sak (2004) also confirmed that most gifted adolescents are perceptive types. Further, intuitive learners are more likely to apply abstract principles of language and feel comfortable predicting and guessing, whereas sensing students are possibly less creative. Thinkers are more gifted in analysing language data and dealing with details than feelers who are less likely to use guessing and compensation strategies such as rephrasing (Sharp, 2002; Sharp 2004).

In fact, different studies (for example, Naiman, Frohlich, Stern, & Todesco, 1978; Busch, 1982; Robinson, 1985, 1986; Ehrman, 2008; Wakamoto, 2009). Sadeghi et al., 2012 (among many others) have investigated the relationship between personality types and language learning. Yet, existing literature offers contradictory findings about which personality type performed better in the different language tasks.

Moreover, some of those studies that attempted to explain the relationship between personality and language learning portrayed extraversion as the master type in language learning, and neglected introversion. Even when examining introversion, most of the former research gave little concern to observing and elaborating the different types offered in the MBTI; more specifically, to function pairs.

With regard to literacy, only a limited number of studies, such as DiTiberio and Jensen (2007); Ellis (2004) and Sak (2004), examined the correlation between literacy (in terms of reading and writing) and personality. In fact, psychologists have only recently started to pay attention to reading as an aspect of personality (Dollinger, 2015). All the above reasons offer a foundation for the present study.

There is currently insufficient literature on the correlation between introversion/extraversion and reading, especially with regard to studies on L1 Arabic learners. In fact, most of studies that examined reading ability in English with L1 Arabic learners of L2 English have focused on external factors. For instance, Al-Nafisah, (2011) investigated learners' reading strategies, while Bataineh and Al-Barakat (2005) examined reading interests of and material sources available to Arab learners. Literature on internal aspects such as personality have so far, not been conclusive. Therefore, this study tries to draw conclusions about the relationship between introversion/extraversion and the L2 reading proficiency of Arab undergraduates. The key issue to be considered in this study is to investigate which function pair that represents the mental functions (NT, NF, SF or ST) of introversion/extraversion achieves the highest reading proficiency score.

1.5 Aim and Objectives of Study

This study will attempt to investigate the relationship between introversion/extraversion and the L2 reading proficiency of L1 Arabic learners, and then compare the different introversion/extraversion types that gained the highest scores in a reading test.

This study will specifically examine the effect of personality types, (introversion and extraversion) on reading proficiency levels of undergraduate students and correlate their introversion/extraversion types to L2 reading proficiency. Based on the statement of the problem, the following objectives are formulated for the study:

1. To analyse personality traits of L1 Arab undergraduates;
2. To examine students' reading proficiency levels in English (L2) and associate their reading proficiency with introversion and extraversion; and
3. To determine the function pairs of introverts and extraverts that contribute to the highest result of L2 reading proficiency.

1.6 Research Questions

The study will address the following research questions which are formulated based on the objectives above:

1. Which is the most dominant personality type among Arab undergraduates?
2. Compared to extraversion, what is the relationship between students' introversion and their L2 reading proficiency?
3. What are the function pairs of introverted and extraverted types that represent the highest scores of L2 reading proficiency?

1.7 Significance of the Study

The issue that most schools today face is that the schools are designed for left-brained extraverts (Laney, 2005). As Galagan (2012) further added, "A disproportionately high number of very creative people are introverts ... but schools and workplaces make it difficult for people to find time and space" (p.28). For example, the group work enforcement at schools might be physically and mentally painful for introverts (Pennington, 2012). Cain (2012a) referred to some successful introverted writers, artists, thinkers and leaders like Eleanor Roosevelt, Warren Buffet, Gandhi, Rosa Parks, Bill Gates, Barbra Streisand, T.S. Eliot, Al Gore, and many others. Cain (2012b) further added that "some of our greatest ideas, art, and inventions from the theory of evolution to Van Gogh's sunflowers to the personal computer — came from quiet and cerebral people" (p.5). Therefore, "why would we not want more people like this?" and "why would we want to stifle individuals like this?" (Lawrence, 2014, p.23).

Brown (1973) called for the need to search for interdisciplinary solutions to solve language learning problems and suggested the key role of psychology awareness. Brown also emphasised the necessity of examining human personality as an instrument that provides answers to language learning problems in a class full of different personalities.

In schools, some 'quiet' students may be unprepared for class, or disengaged, but some of them may also be introverted personality holders who choose to observe and then reflect, or to think and speak later. In other words, introverted students need time to set and connect opinions, which refers back to valid biological reasons (Laney, 2002). As a consequence, group work (collaborative learning) is less likely to suit introverts as they enjoy individual work, but will more likely fit extraverts who enjoy cooperative work (Sternberg, 1999). In particular, Myers and McCaulley (1985) claimed that intuitive-introverts favour self-paced learning such as project-based learning where they can create and broaden their own work (Sternberg 1999; Sternberg & Grigorenko, 2000).

In contrast, extraverted students tend to appreciate working on group projects, presentations, debates and welcome opportunities to have the spotlight centred on them in the classroom (Wilson, 2013). Extraverts learn better through direct experiences and their ideas come from outside sources. Extraverts add energy and verbal enthusiasm to a classroom. They can inspire and encourage their classmates and when their energy is

properly directed, they are able to be excellent group leaders as they are not afraid to speak their minds. However, most extraverted students struggle when it comes to quieter, lonesome tasks like reading, research and writing (Levy, 2014).

Building on Sak's (2004) proposition of the usefulness of the variety of teaching methods instead of relying on a single method where the chance of excluding certain students is higher, the adjustment of teaching-learning strategies based on personality types may lead to learning improvement. This study aims to investigate the influence of personality types on language learning and, in particular, on reading proficiency. This will help language instructors to better understand the needs of their learners according to their own character traits rather than imposing a limited style that is not adequate or forcing them to act out of character.

Most notably, teachers should not attempt to force their introverted students to turn into extraverts. An introvert's independence, quiet thinking and the contentment of being comfortable with himself or herself should be praised and cultivated.

Teachers are advised to remember that a well-balanced classroom is desired. This can only be achieved by giving suitable opportunities to all personalities which will lead to an effective and supportive classroom environment.

1.8 Chapter Summary

In conclusion, this chapter displayed the research background of the study followed by an overview of personality types and language learning, supported by the main theories in the field. Next, the problem statement was highlighted, supported by the objectives and research questions. Finally, the significance of the study was discussed.

1.9 Thesis Plan

This thesis has five chapters. The first chapter serves as the introduction to the research concept, theories under consideration and other issues pertinent to the study. The second chapter is devoted to covering a review of existing literature on personality psychology interrelated with language learning and reading, covering the main theories and introducing the research framework and hypotheses. The next chapter (Chapter Three) presents the research methodology and data analysis procedures. Chapter Four will cover the results, interpretation and discussion. The last chapter (Chapter Five) offers conclusions, including implications and future research suggestions.

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