

On the Relationship Between L2 Literacy (Reading and Writing) and Identity Processing Styles of Iranian Advanced EFL Learners

Seyyed Ayatollah Razmjoo
Shiraz University
arazmjoo@rose.shirazu.ac.ir

Mohammad Ali Izadpanah
Shiraz University
m.a.izadpanah@gmail.com

Abstract

The present study investigated any probable relationship between the identity processing styles and L2 literacy of advanced Persian EFL learners. The participants included 160 (female = 109, male = 51) advanced EFL Iranian learners. The instruments used included a simulation of the TOEFL iBT test, measuring the participants' L2 literacy-related proficiency, reading, and writing, and the identity style inventory (ISI-4), measuring the learners' identity styles. The results indicated that identity processing style plays a role in L2 literacy-related proficiency. A small positive relationship among the informational processing style and L2 literacy and L2 writing was found, whereas normative style weakly and negatively correlated with these components, and none seem to be able to significantly predict the success or failure of an individual in terms of overall L2 literacy. With respect to these results, this study proffers integration of identity survey to the EFL educational systems in order to help educators and instructors teach L2 literacy-related proficiency more effectively.

Keywords: Identity Processing Styles; Informational Style; Normative Style; Diffuse-Avoidant Style; L2 Literacy

1. Introduction

The notion of identity is simply an inquiry into who human beings truly are. As a major concept in psychology, it is one of the most commonly and universally studied underlying constructs of the human mind studied in the social

sciences (Brubaker & Cooper, 2000; Côté, 2006). It is believed to have a huge impact on almost every aspect of human psychological and social growth. Learning a new language, on the other hand, is found to have a profound influence on reshaping our mental pictures and our conceptions of who we really are. Many studies have focused on identity itself, types or styles of identity, identity formation, and identity processing styles (Berzonsky & Adams, 1999; Duriez, et al., 2004; Marcia, 1993; Soenens, et al., 2005). Identity formation, in this regard, is a continual interaction between the self-awareness and contextual variables which are mostly detectable in adolescence and might last up to the middle ages. Identity formation is one of the major developmental challenges that adolescent and young adults must negotiate (Erikson, 1968; Luyckx, et al., 2008; Marcia, 1993; Nurmi, Poole, & Seginer, 1995).

Inspired by Erikson's theory of identity development (1968), Marcia (1966, 1980) proposed an identity status paradigm. Marcia theorized that individuals initiate the identity formation in a state of diffusion and move toward a process of exploration until commitment can be made to an option or set of options as a primary part of the self. He demarcated exploration from commitment as the degree to which an individual is willing to invest energy and effort in an individualized pursuit for different beliefs, values, and goals; consequently, commitment was defined as the adherence to a set of principles, goals, and beliefs. In other words, exploration is the moment-by-moment process of arriving at a stable sense of self, whereas commitment is the individual sense of adherence to this product. Therefore, exploration seems to be process-oriented, whereas commitment is product-oriented. Marcia's classification is constructed upon degree of individual attendance to these two concepts. Statuses are transitory steps presumed to occur in the development of identity from one stage to the next (Schwartz, Mullis, & Dunham, 1998). These four statuses are diffusion, foreclosure, moratorium, and achievement.

Vygotskian sociocultural theory in which we are found not to act directly upon the world rather do so via a mediated activity states that various cultural

artifacts (e.g., language) put emphasis on the role of language in mapping out how we see our existence in the world around us (Vygotsky, 1978, 1987). Therefore, if identity formation is fed by our perception of the world around us, it will be essential then to highlight the prominence of the pivotal role language might play in identity processing styles. Linguistic competencies, therefore, are supposed to have an impact on individual's identity. It is actually language that permits human beings to build their own world and identity. Menard-Warwick (2005) argues that, "learning a language or taking on new literacies in a particular context has consequences for the identities of its users" (p. 254). Hence, "an investment in the target language is also an investment in a learner's own social identity" (Norton, 1995, p. 18). Norton puts it best when he refers to the role of language as "constitutive of and constituted by a language learner's social identity" (p. 13).

In spite of the importance of language and language learning in identity formation, and literacy as half of the story, very few studies have actively and exhaustively engaged in mapping out the relationship between L2 literacy and identity processing style. Most studies conducted so far on the relationship between L2 literacy and identity seem not to give much attention to the probable relationship between literacy related proficiency and identity processing styles. Instead, they concentrate on analyzing the writing and reading activities using discourse analysis (Barton & Hamilton, 1998; Barton & Ivanic, 1991). Few L2 literacy researchers have been interested in exploring identity processing style and its relationship with different aspects of literacy. Most of the studies seem to have investigated identity as a product rather than a process from a discursive point of view (e.g., Gee, 1996; Ivanič, 1998; Norton, 2000). For these sorts of studies, "discourse is a sort of identity kit which comes complete with the appropriate costume and instructions on how to act, talk, and often write, so as to take on a particular social role that others will recognize" (Gee, 1996, p. 127). Therefore, putting discourse studies on the issue aside, the possible relationship between identity and literacy has largely gone unnoticed up to now. Razmjoo and Neissi (2010) were among very few researchers who cared to explore the relationship between language proficiency and identity processing style. However, they just focused on components like grammar and

vocabulary and the skill of reading. Thus, there seems to be a clear need to increase research knowledge of the relationship between identity processing styles and literacy related proficiency.

With these in mind, the chief research questions this study cares to answer are listed as follows:

1. Is there any significant relationship between L2 literacy, reading, writing, and identity processing styles of the Iranian EFL learners?
2. Which one of identity processing styles is the best predictor of the literacy components (reading or writing)?
3. Is there any significant difference between females and males' literacy, reading ability, writing ability, and identity processing style?

1.1 Identity Status Paradigm

As stated in the previous section based on Marcia's classification, there are four statuses that can be considered as transitory steps occurring in the development of one's identity from one stage to the next (Schwartz, Mullis, & Dunham, 1998). Based on this classification, individuals who have already achieved a steady identity status after exploring their alternatives are in the achievement status. They benefit from both criteria, i.e. exploration and commitment. Moratorium is related to those who examine their options but they have not decided to commit to a specified status yet. Foreclosure status, in which individuals are standing closer to commitment rather than exploration, is limited in terms of self-exploration. In other words, they seem to be forced to commit to an identity which they are not willing to explore by themselves. Diffusion status individuals are those who neither explore their alternatives nor commit to a received identity from an external part. In other words, they are overwhelmed in a laborious task of identity formation. You can assume achievement and diffusion are two sides of an extreme in the Eriksonin identity continuum, Identity versus Role Confusion. In this respect, diffusion is considered to have the lowest and achievement has the highest status (Marcia, et al., 1993).

1.2 Berzonsky's Social-Cognitive Identity Processing Inventory

For more than forty years, Marcia's (1966) identity status paradigm has been utilized in most investigations on Eriksonian identity formation (Berzonsky & Adams, 1999). This paradigm has been challenged for some reasons by some experts. For one, it seemed to pay too much attention just to the outcomes of the process of identity growth. That is, it describes identity mainly in terms of enduring outcomes and stable, dispositional characteristics (Berzonsky, 1998, 1990; Côté & Levine, 1988). Berzonsky (1998) questioned whether individuals classified into one of the four statuses respond distinctively in theoretically-expected ways. He (1990) also distinguished three identity processing styles referring to the strategies that individuals choose in approaching or avoiding the constructing and reconstructing of a sense of identity (Berzonsky & Adams, 1999; Soenens, et al., 2005). His model divides identity processing styles into three styles, information-oriented, normative, and diffuse-avoidant styles, which are based upon the social-cognitive processes each individual may use to solve personal problems, make decisions, and process identity-relevant information. These identity styles are explained below.

1.2.1 Informational-Oriented

Such individuals are those who skeptically question who they are and evaluate the information they have received from context. In general, they seem to hang more to operate self-exploration. This style has been found to have characteristics of self-exploring individuals who are classified as identity achieved or moratoriums according to Marcia's (1966) criteria (Berzonsky & Neimeyer, 1994; Streitmatter, 1993). These individuals are doubtful about how they view themselves in a way that they postpone judgment until they can process and evaluate the relevant information (Berzonsky, 1990). An Informational identity orientation has been positively associated with self-reflection, problem-focused coping efforts, a rational epistemic style, a high need for cognition, cognitive complexity, planful decision making, conscientiousness, experiential openness, and identity achievement (Berzonsky, 1990; Berzonsky & Kuk, 2000; Berzonsky & Neimeyer, 1994; Berzonsky & Sullivan, 1992; Dollinger, 1995; Streitmatter, 1993). They can be seen as scientific self-theorists who are willing to learn new things

about themselves (Berzonsky, 2011, as cited in Schwartz, et al., 2011). They are thirsty to update their perception of who they really are, to define themselves by their values and goals, and to make the best use of identity formation opportunities (Berzonsky, Macek, & Nurmi, 2003; Lutwak, Ferrari, & Cheek, 1998). Their style is found to associate with traits such as motivation, adaptive regulation, openness, independence, and autonomy rather than security and tradition, often transcending selfish interests (Berzonsky, 1990; Berzonsky, et al., 2011; Duriez, et al., 2004).

1.2.2 Diffuse-Avoidant

The second style is typical of individuals who are not willing at all to put themselves into decisional situations. What defines these individuals is their reluctance to confront identity conflicts and issues (Berzonsky, 2011, as cited in Schwartz, et al., 2011). They engage in strategic attempts to avoid, or at least obscure, potentially negative self-diagnostic information (Berzonsky & Ferrari, 2009). Deployment of a diffuse/avoidant identity orientation has been found to be positively associated with avoidant coping, efforts to excuse or rationalize negative performances, impression management, limited commitment, an external locus of control (self-handicapping), other-directedness, and maladaptive decisional strategies including predecisional procrastination and avoidance and postdecisional rationalization and excuse making, and on the other hand, negatively correlated with self-reflection, conscientiousness, and cognitive persistence (Berzonsky, 1990; Berzonsky & Ferrari, 1996; Dollinger, 1995). Adopting an ad hoc approach, they take a totally situation-specific approach to self-theorizing constructs with limited overall unity (Berzonsky, 1989b). A diffuse-avoidant style is also associated with emotion-focused avoidant coping (Berzonsky, 1992; Berzonsky & Ferrari, 1996; Soenens, Duriez & Goossens, 2005). With this in mind, they seem to be highly correlated with diffusion in Marcia's paradigm.

1.2.3 Normative Processing Style

These individuals are extremely tied up in norms which, in most cases, are not their own. These individuals have a rather low tolerance of ambiguity and a high need to maintain structure and cognitive closure (Berzonsky, 1990). This style

to self-construction is associated with a foreclosed identity status which is composed of firm goals commitments, change-resistant self-constructs and a strong desire for structure (Berzonsky, 1989b, 2004). These individuals, therefore, tend to resort to other's prescriptions to form their theories of self. This style of identity formation is associated negatively with being open to challenging and alternative values and actions, whereas it is positively associated with a need for cognitive closure (Berzonsky, 1990; Duriez, et al., 2004; Soenens, et al., 2005). Commitment to other's norms is what puts these individuals into foreclosure style in Marcia's paradigm.

1.3 Literacy

Whereas the ability to read and write in a language might simply denote the term *literacy*, it does not seem to be an agreed-upon concept. There are plenty of definitions for literacy such as the simplistic definitions like the ability to read and write (code and decode), or more complex definitions like the ability to function in reading and writing in everyday events to realize how language and ideology act through written texts or finally more individualistic definitions like being able to appropriate written language for one's own creative and personal needs (e.g., Gee, 1996; Murray, 2005; Street, 1995). In a study conducted for the National Reading Council, literacy has been defined as "the ability to respond to practical tasks of daily life" (Harris & Associates, 1973, cited in Heath, 1986, p. 15). According to Heath (1986), "public schools see literacy as an individual accomplishment measured by psychometric scales of reading ability" (p. 15). Snow (1992), on the other hand, indicates that most literacy research has been focusing on psychometric and linguistic aspects rather than sociocultural aspects, such as group membership and attitude, which are quite decisive factors in literacy. What she implies, therefore, is that literacy is more of a social practice rather than an individualized skill.

A plenty of studies indicated that Informational style is associated with desirable characteristics for learning a new language such as self-reflection, cognitive complexity, planful decision making process, and experiential openness

(Berzonsky, 1990; Berzonsky & Kuk, 2000; Berzonsky & Neimeyer, 1994; Dollinger, 1995; Streitmatter, 1993). A number of studies also indicate that the diffuse/avoidant style relates to undesirable features for learning a new language such as avoidant coping, efforts to excuse or rationalize negative performances, limited commitment, an external locus of control (self-handicapping), other-directedness, excuse making, and on the other hand, negatively correlated with self-reflection, conscientiousness, and cognitive persistence (Berzonsky, 1990; Berzonsky & Ferrari, 1996; Dollinger, 1995).

2. The Present Study

Whereas none of the abovementioned studies seemed to focus primarily on identity development and L2 literacy, the primary purpose of the present study was to investigate whether there is any relationship between identity processing styles and L2 literacy of learners of English as a foreign language. In addition to this general aim, the second goal was to examine how identity processing styles can best predict literacy components (i.e. reading and writing). The present study also explored whether there is any significant difference between females and males' literacy, reading ability, writing ability, and identity processing style.

3. Method

3.1 Participants

The participants were 160 advanced Iranian language learners studying at Shiraz University Language Center (SULC). They ranged from 20 to 29 years of age (mean = 25.4 years); 109 of whom (68%) were female, 51 (32%) were male. They all voluntarily took part in the study and filled out the questionnaires. Persian was the mother tongue of all the participants.

3.2 Measures

3.2.1 Identity Style Inventory

The Identity Style Inventory (ISI-4; Berzonsky, 2007) was employed to assess the identity processing styles of the participants. With the Likert scale ranging from 1 (*not at all like me*) to 5 (*very much like me*), the participants' identity types were assessed. The ISI-4 comprises 33 items in four style scales: (1)

diffuse-avoidant-style scale (nine items: e.g., “I’m not really thinking about my future now; it’s still a long way off”); (2) normative-style scale (eight items: e.g., (“I prefer to deal with situations where I can rely on social norms and standards”); (3) The informational-style scale (seven items: e.g., (“I’ve spent a great deal of time thinking seriously about what I should do with my life”)) (4) The commitment-style scale (nine items: e.g., (“I am emotionally involved and committed to specific values and ideals”). Items related to commitment subscale were discarded. Because Persian was the native language of the participants, the Persian translation version of the questionnaire (Razmjoo & Neissi, 2010) was employed to make sure that the study was not subject to any misinterpretations caused by the participants’ misinterpretation of the items. The translated version had been handed to two psychology professors to check the consistency in meaning and readability and was back-translated with the assistance of professors from the English Language Department at Shiraz University. Alpha reliability estimate was $\alpha = .701$ and convergent validity and psychometric been provided in Berzonsky (1990, 2003).

3.2.2 Reading and Writing Sections of Kaplan Internet-Based TOEFL Sample Test

L2 literacy-related proficiency of the participants was measured by the Reading and Writing sections of the TOEFL iBT. Kaplan Internet-based TOEFL sample test (Version. 1.0) software was selected based on similarity and difficulty level to be the closest simulation to the official TOEFL. The software has four practice tests in which four sections of Reading, Listening, Speaking, and Writing are included. The Reading and Writing sections of were selected. In the reading section, the test takers had 60 min to go through the three reading passages and the 39 reading comprehension questions. The Writing section encompassed 1 integrated task and 1 independent task. In the integrated task, the participants were supposed to read a passage and listen to a lecture and based on the input from Reading and Listening parts, they were expected to summarize the main points. In the independent task, the testees wrote their essays expressing their own beliefs without referring to any given texts or the listening section.

3.3 Procedure

The participants took part in the study based on their willingness to check their proficiency through the TOEFL iBT test. First of all, a Persian translation of Identity Style Inventory (ISI-4) was distributed by the researchers among the participants to collect the required data on the participants' identity processing style. A brief verbal explanation of the project was given by researchers. To arrive at the L2 literacy level of the participants, a simulation of TOEFL iBT was administered via computer in the Computer Center of Shiraz University, English Language Department.

4. Results

4.1 Descriptive Statistics

As Table 1 shows, the mean of the Literacy score is 32.8 out of 60. The scores show that the participants' literacy level is not quite high. However, the mean indicating writing ability (18.1) is higher than reading (14.7) which holds a bigger share of the total literacy score in comparison with reading. The standard deviation of the scores was 3.66 for reading, 5.48 for writing, and 7.76 for literacy meaning that participants were more homogeneous as far as the reading section is concerned. The standard deviation of the literacy scores for the male participants is 9.01 which revealed the great magnitude of heterogeneity due to either the low number of male participants or the vast differences that existed in terms of their literacy-related proficiency:

Table 1. *Descriptive Statistics for the Identity Style and L2 Literacy*

Measure	Total sample (<i>N</i> = 160)		Male (<i>n</i> = 51)		Female (<i>n</i> = 109)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Identity Style Inventory						
Informational	28.02	4.08	28.35	3.29	27.87	4.41
Normative	21.21	4.73	21.39	4.85	21.12	4.69
Diffuse-Avoidant	20.62	4.15	20.54	4.54	20.66	3.98
Literacy						
Reading Ability	14.71	3.66	15.76	4.67	14.22	2.98
Writing Ability	18.15	5.48	19.19	5.77	17.66	5.29
Literacy Overall	32.80	7.76	34.96	9.01	31.79	6.922

4.2 Identity Style and L2 Literacy

As indicated in Table 2, although the informational style was positively associated with L2 literacy, the magnitude of the correlation was quite weak ($r = .20$). As presented in Table 2, there was a small positive correlation between informational processing style and L2 literacy, $r = .209$, $n = 160$, $p < .008$, with high levels of informational style associated to high levels of L2 literacy. There was also a small negative relationship between normative type and L2 literacy, $r = -.204$, $n = 160$, $p < .01$, revealing that with higher levels of normative there would be lower levels of L2 literacy. There was no significant relationship between diffuse-avoidant style and L2 literacy. The magnitude of the correlations was based on the classification of Cohen (1988, as cited in Pallant, 2007) regarding the strength of correlation.

4.3 Identity Style and Components of L2 Literacy (Reading and Writing)

As indicated in Table 2, there was no significant relationship between informational and L2 reading ability. There was, however, a small negative relationship between normative type and L2 reading ability ($r = -.163$, $n = 160$, $p < .043$) revealing that with higher levels of normative there are lower levels of L2 reading ability and vice versa. There was no significant relationship between diffuse-avoidant and L2 reading ability.

In regard to writing ability, there was a small positive relationship between informational processing style and L2 writing ability, $r = .262$, $n = 160$, $p < .001$, meaning that with high levels of informational style there can be high levels of L2 writing ability. Normative style was also found to be weakly correlated with the writing ability ($r = .174$, $n = 160$, $p < .027$) indicating that with high levels of normative style there would be high levels of L2 writing ability. Diffuse-avoidant styles, however, did not correlate with L2 writing ability. The magnitude of the correlations for reading and writing was reported based on the classification of Cohen regarding the strength of correlation (1988) as cited in Pallant (2007). According to these guidelines correlations between 0.10 and 0.29 should be considered weak:

Table 2. *Pearson Correlations Analysis Among the Identity Styles Inventory and L2 Literacy and Its Components*

Identity Subscales	L2 Literacy and Its Components		
	L2 Literacy Overall	Reading	Writing
Informational	.209**	.029	.262**
Normative	-.204**	-.160*	-.174*
Diffuse	-.051	.039	-.106

* $p < .05$.

** $p < .01$.

4.4 Regression Analysis

A stepwise multiple regression analyses was conducted to detect which identity processing type could predict L2 literacy (reading and writing) or literacy in total. For the multiple regression, there were an overall of the three predictor variables. As presented in Table 3, all of the identity processing styles were significant predictors of overall L2 literacy except diffuse-avoidant. Total L2 literacy variance, explained by the identity subscales, was 9% of which the normative has the largest predicative portion (4%). For the Reading section, scores on all the three identity styles accounted for just 03% and normative style could explain 02% of total variance at the $p = .02$, respectively. The whole model failed to be significant ($p = .12$). The largest proportion of prediction was for identity styles in writing (10%) of which informational accounted for %06 of the variance. normative style, on the other hand, accounted for 3% of the variance:

Table 3. *Multiple Regressions Analysis on Identity Processing Types and Literacy Components*

Identity Styles	R2	Beta	t	p	F	p	R2 Total
Prediction of Total L2 Literacy							
Informational	0.04	.225	2.936	.04	5.256	.002	.09
Normative	.041	-.228	-2.834	.005			
Diffuse-Avoidant	.003	.033	.414	0.67			
Prediction of Reading Ability							
Informational	.001	.048	.604	.54	1.97	.12	.037
Normative	.026	-.195	-2.35	.02			
Diffuse-Avoidant	.002	.122	1.231	.22			
Prediction of Writing Ability							
Informational	.069	2.72	3.57	0	6.191	.001	.106
Normative	.03	-.182	-2.273	.024			
Diffuse-Avoidant	.011	-.033	-.411	-.68			

4.5 Sex Differences

To assess the differences between the male and female participants, independent samples *t* tests were employed. As shown in Table 4, a significant sex difference was observed between the reading mean scores for the females ($M = 14.22$, $SD = 2.98$) and males ($M = 15.76$, $SD = 4.67$); $t = 2.184$, $p = .035$ (two-tailed). Regarding the male's higher mean in reading, the male participants were better in L2 reading ability in comparison with their female counterparts. However, the male and female participants performed the same on the writing section of the test. In the case of L2 literacy, a significant sex difference was also observed between means of literacy scores for the females ($M = 31.79$, $SD = 6.92$) and males ($M = 34.96$, $SD = 9.01$); $t = 2.17$, $p = .029$. Male participants, based on their higher mean score, seemed to have higher levels of L2 literacy. All the three identity styles mean scores failed to make any significant difference among the different identity subscales meaning that there is no significance difference regarding the issue of gender:

Table 4. *Independent-Samples t Tests Between Males and Females Regarding Identity Style Scales, L2 Literacy, Reading, and Writing*

Variable	Female ($n = 109$)		Male ($n = 51$)		<i>t</i>	<i>Sig.</i>	
	<i>SD</i>		<i>SD</i>				
<u>Identity Style Inventory</u>							
Informational	27.87	4.41	28.35	3.29	0.693	0.489	
Normative	21.12	4.69	21.39	4.85	0.328	0.744	
Diffuse-Avoidant	20.66	3.98	20.54	4.54	-0.158	0.875	
<u>Literacy</u>							
Reading Ability	14.22	2.98	15.76	4.67	2.184	0.035	0.011
Writing Ability	17.66	5.29	19.19	5.77	1.66	0.099	
Literacy Overall	31.79	6.922	34.96	9.01	2.17	0.029	0.039

5. Discussion

Descriptive statistics showed that the males' scores are higher in reading and writing, and therefore in L2 literacy. This may be due to their high scores in the writing section. Standard deviation of the whole sample for literacy pointed to the participants' heterogeneity, especially for the males' L2 literacy overall score (9.01).

5.1 Identity Styles and L2 Literacy

Regarding the relationship between identity processing style and literacy, the results showed that there is a weak positive relationship between informational processing style of identity processing and L2 literacy ($r = 2.9$). This suggests that success in gaining high levels of L2 literacy is positively associated with the use of an Informational style. This finding is in line with the identity processing inventory literature in which individuals scoring higher on the Informational style scale have been overachievers in academic skills and more adaptive in transitioning into academic university life (Berzonsky & Kuk, 2000; Razmjoo & Neissi, 2010). Kaplan and Flum (2010) argued that informational-oriented learner is more likely to go beyond learning the material, to engage in reflection on the self-transformation occurring through task-engagement. The positive association of L2 literacy and use of an informational style might be due to this appetite to learn beyond the given task. Because individuals with a normative identity have been found to have a high need for structure on how to do a task (Berzonsky, 1994; Berzonsky & Kinney, 1995). The negative association of normative style and L2 literacy can be possibly justified by their lack of familiarity with the TOEFL iBT. There was also no significant relationship between diffuse-avoidant and L2 literacy.

In terms of the relationship between identity styles and writing, there was a weak positive relationship between Informational processing style and L2 writing ability ($r = .262$). This positive relationship could be linked to informationals' self-reflection, conscientiousness, and planful decision making process which are quite effective features for a L2 writer to be successful. They are believed to postpone judgment until they are able to process and evaluate the relevant information

(Berzonsky, 1990). This meticulous decision making process among Informational individuals might help them in planning, outlining, drafting, revising, and consequently arriving at an essay which is more organized and well-written.

L2 literacy was positively predicted by identity processing styles which accounted for 9% of alterations. The largest portion of prediction for writing in which informational was the best predictor (6%). Normative could only predict 4% for the L2 overall literacy. According to the results, identity processing subscales would be stronger in accounting for writing ability than for reading comprehension and L2 overall literacy. Diffuse-avoidant, on the other hand, failed to be correlated with each of the literacy components and consequently the overall literacy itself suggesting that this identity style is not able to predict any variance in L2 literacy. The results of the regression analysis indicated that Informational individuals are predicted to be more successful in L2 literacy and especially in L2 writing ability which support the findings of Berzonsky (2004), Razmjoo and Neissi (2010), and Berzonsky and Kuk (2000, 2005).

5.2 Identity Styles, L2 Literacy, and Gender

The results on the issue of sex differences, L2 Literacy, and identity processing styles indicated that a significant sex difference exists between the means of literacy scores implying the males' literacy is higher than their female counterparts. A significant sex difference was also observed between the means of the reading scores suggesting the males' L2 reading ability was higher. However, the male and female participants seemed to fail to make any difference in L2 writing ability which was in line with Razmjoo's (2010) findings.

Overall, the findings seemed to be in line with the literature in which individuals with informational processing style are more successful in learning and activities that demand higher cognitive complexity. Regarding the scores of individuals with a normative style on the writing section, the findings are also consistent with earlier research in which normative students are focused, and structure dependent (Berzonsky & Kinney, 1995; Dollinger, 1995). On the other hand, Berzonsky and Kuk (2005) argued that although students with a normative

style of identity may function well in well-structured educational settings their lack of academic autonomy may place them at a disadvantage in more open-ended situations where they have to manage their time and monitor their behavior. In line with their arguments, this study also found that normative individuals were rather slow in time management and skills monitoring especially where the writing section of the TOEFL is concerned. The present findings also suggested that individuals with a diffuse-avoidant style may not function as well as normative and informational individuals in terms of L2 literacy and its related subcomponents. A diffuse-avoidant style was found to be associated with weak commitments, an external locus of control, and self-handicapping (Berzonsky & Ferrari, 2009). Likewise, diffuse-avoidant individuals in this study failed to score higher than their normative and informational counterparts. This might be due to their negative self-image, late decision making, and potentially negative self-diagnostic information (Berzonsky & Ferrari, 2009).

Although L2 proficiency has been defined differently by different researchers, there has been no agreed upon agreement as to what construct this notion refers to (Lee & Schallert, 1996). Literacy, on the other hand, is defined in the simplest term as “learning to read and write. Literacy is perceived to be a major task for the student and a notable feature of acculturation into mainstream culture” (DeStefano, 1984, p. 157). Putting aside the oral aspects of mastery over a language, the significance of the written skills, the components of literacy, is undeniable. This significance is to such an extent that it is usually used to be synonymous with the whole concept of L2 proficiency. Individuals are often considered to be proficient in one language if they score high on writing and reading. In conclusion, the notions of Literacy and proficiency could be interchangeably used to refer to mastery over one language.

References

- Berzonsky, M. D. (1989a). Identity style: Conceptualization and measurement. *Journal of Adolescent Research, 4*, 267-281.
- Berzonsky, M. D. (1989b). The self as a theorist: Individual differences in identity formation. *International Journal of Personal Construct Psychology, 2*, 363-376.
- Berzonsky, M. D. (1990). Self-construction over the life span: A process perspective on identity formation. In Neimeyer, G. J. and Neimeyer, R. A. (Eds.), *Advances in personal construct psychology* (Vol. 1, pp. 156-186). Greenwich, CT: JAI Press.
- Berzonsky, M. D. (1992). Identity style and coping strategies. *Journal of Personality, 60*, 76-80.
- Berzonsky, M. D. (1994). Individual differences in self-construction: The role of constructivist epistemological assumptions. *Journal of Constructivist Psychology, 7*, 263-281.
- Berzonsky, M. D. (1998). A self-regulatory model of identity development. In Adaptational processes and mechanisms in human development. Symposium conducted at the Biennial meetings of the *International Society for the Study of Behavioral Development*, Bern, Switzerland.
- Berzonsky, M. D. (2004). Identity processing style, self-construction, and personal epistemic assumptions: A social-cognitive perspective. *European Journal of Developmental Psychology, 1*, 303-315.
- Berzonsky, M. D. (2011). A social-cognitive perspective on identity construction. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles, (Eds.), *Handbook of identity theory and research* (pp. 55-76). New York: Springer.
- Berzonsky, M. D., & Adams, G. R. (1999). Re-evaluating the identity status paradigm: Still useful after 35 years. *Developmental Review, 19*, 557-590.

- Berzonsky, M. D., Cieciuch, J. B., & Soenens, B. (2011). The how and what of identity formation: Associations between identity styles and value orientations. *Personality and Individual Differences, 50*, 295-299.
- Berzonsky, M. D., & Ferrari, J. R. (1996). Identity orientation and decisional strategies. *Personality and Individual Differences, 20*, 597-606.
- Berzonsky, M. D., & Ferrari, J. R. (2009). A Diffuse-Avoidant identity processing style: Strategic avoidance or self-confusion? *Identity: An International Journal of Theory and Research, 9*, 145-158.
- Berzonsky, M. D., & Kinney, A. (1995). *Identity style and need for cognitive closure*. Paper presented at the Society for Research on Identity Formation, Dog Island, FL.
- Berzonsky, M. D., & Kuk, L. S. (2000). Identity status, identity processing style, and the transition to university. *Journal of Adolescent Research, 15*, 81-98.
- Berzonsky, M. D., & Kuk, L. (2005). Identity style, psychosocial maturity, and academic performance. *Personality and Individual Differences, 39*, 235-247.
- Berzonsky, M. D., Macek, P., & Nurmi, J. -E. (2003). Interrelationships among identity process, content, and structure: A cross-cultural investigation. *Journal of Adolescent Research, 18*, 112-130.
- Berzonsky, M. D. & Neimeyer, G. J. (1994). Ego identity status and identity processing orientation: The moderating role of commitment. *Journal of Research in Personality, 28*, 425-435.
- Berzonsky, M. D., & Sullivan, C. (1992). Social-cognitive aspects of identity style: Need for cognition, experiential openness, and introspection. *Journal of Adolescent Research, 7*, 140-155.
- Brubaker, R., & Cooper, F. (2000). Beyond "identity". *Theory and Society, 29*, 1-47.

- Côté, J. E. (2006). Identity studies: How close are we to establishing a social science of identity? An appraisal of the field. *Identity: An International Journal of Theory and Research*, 6, 3-25.
- Côté, J. E., & Levine, C. (1988). A critical examination of the ego identity status paradigm. *Developmental Review*, 8, 147-184.
- Dollinger, S. M. C. (1995). Identity styles and the five-factor model of personality. *Journal of Research in Personality*, 29, 475-479.
- Duriez, B., Soenens, B., & Beyers, W. (2004). Personality, identity styles, and religiosity: An integrative study among late adolescents in Flanders (Belgium). *Journal of Personality*, 72, 877-910.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.
- Gee, J. P. (1996). *Social linguistics and literacies: Ideology in discourses* (2nd ed.). London: Taylor & Francis.
- Harris, L., & Associates, (1973). The Harris survey yearbook of public opinion. In Heath, S. B. (Eds.), *Critical factors in literacy development* (pp. 107-129). New York: Cambridge University Press.
- Heath, S. B. (1986). Critical factors in literacy development. In S. de Castell, A. Luke, & K. Egan (Eds.), *Literacy, society, and schooling* (pp. 209-229). New York: Cambridge University Press.
- Kaplan, A., & Flum, H. (2010). Achievement goal orientations and identity formation styles. *Educational Research review*, 5, 50-67.
- Lutwak, N., Ferrari, J. R., & Cheek, J. M. (1998). Shame, guilt, and identity in men and women: The role of identity orientation and processing style in moral affects. *Personality and Individual Differences*, 25, 1027-1036.
- Luyckx, K., Soenens, B., Goossens, L., Beckx, K., & Wouters, S. (2008). Identity exploration and commitment in late adolescence: Correlates of perfectionism and mediating mechanisms on the pathway to wellbeing. *Journal of Social and Clinical Psychology*, 27, 336-361.

- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3, 551-558.
- Marcia, J. E. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology* (pp. 159-187). New York: Wiley.
- Marcia, J. E. (1993). The status of the statuses: Research review. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), *Identity: A handbook for psychosocial research* (pp. 22-41). New York: Springer-Verlag.
- Murray, D. E. (2005). Technologies for second language literacy. *Annual Review of Applied Linguistics*, 25, 188-201.
- Nurmi, J.-E., Poole, M. E., & Seginer, R. (1995). Tracks and transitions: A comparison of adolescent future-oriented goals, explorations, and commitments in Australia, Israel, and Finland. *International Journal of Psychology*, 30, 355-375.
- Razmjoo, S. A. (2010). Language and identity in the Iranian context: the impact of identity aspects on EFL learners' achievement. *Journal of Teaching Language Skills*, 3, 51-58.
- Razmjoo, S. A., Neissi, S. (2010). Identity processing styles and language proficiency among Persian learners of English as a foreign language. *Psychological Reports*, 107, 3, 822-832
- Schwartz, S. J., Mullis, R. L., & Dunham, R. M. (1998). Effects of authoritative structure in the measurement of identity formation: Individual computer-managed versus group paper-and-pencil testing. *Computer in Human Behavior*, 14, 239-248.
- Snow, C. (1992). Perspectives on second-language development: Implications for bilingual education. *Educational Researcher*, 21(2), 16-19.

- Soenens, B., Berzonsky, M. D., Vansteenkiste, M., Beyers, W., & Goossens, L. (2005). Identity styles and causality orientations: In search of the motivational underpinnings of the identity exploration process. *European Journal of Personality, 19*, 427-442.
- Street, B. (1995). *Social literacies: Critical approaches to literacy development, ethnography, and education*. London: Longman.
- Streitmatter, J. (1993). Identity status and identity style: A replication study. *Journal of Adolescence, 16*, 211-215.