## **Self-Efficacy and IPS: An empirical study**

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The fact that some learners learn language more successfully than others who are at the same level of aptitude and capabilities is inevitable. To understand why, the researcher has focused her attention on individual differences among learners. The ones that have been taken into account in this study are namely called selfefficacy and identity processing styles and the relationship between them in EFL learners. In addition, the difference between the identity processing styles among male and female participants is investigated. A group of 20 MA students from the Ontario College of Teachers, Canada participated in the study. Quantitative data were collected through two questionnaires namely the Revised Identity Style Inventory (ISI-4) which was developed by Berzonsky et al. (2011) and a general self-efficacy scale. Getting benefit of SPSS, the researcher first coded and then analyzed the data were coded. In order to determine the relationship between Canadian EFL learners' identity style and self-efficacy, the Spearman's rank order correlation formula was used. Secondly, to show the existence of a significant difference between the identity processing styles of male and female participants of the study, the Mann-Whitney U test was run. Statistical analyses indicated that there was a meaningful relationship between self-efficacy and identity processing styles among Canadian EFL learners and no difference was seen between the identity processing styles of both groups of male and female participants of the study.

**Keywords:** self-efficacy beliefs, Identity processing styles, Canadian Learners

#### 1. Introduction

There is a bulk of research on individual differences in foreign language learning. Individual differences hold a wide range of domains including learners' beliefs, learning strategies, identity styles, age and motivation. Researches indicate that success in language learning can be predicted through individual differences (Al Shalabi & Salmani Nodoushan, 2009; Georghiades, 2004; Karami & Salmani Nodoushan, 2011; 2014; Nemati, Salmani Nodoushan & Ashrafzadeh, 2010; Omaggio Hadley, 2003; Rand, 2005; Salmani Nodoushan, 2003; 2006a,b,c; Salmani Nodoushan & Daftarifard, 2011). Foreign language learners enjoy the presence of lots of differences in their pace of learning and the ways they develop their skills (Dörnyei, 2005; Sawyer & Ranta, 2001).

Identity processing styles refer to the socio-cognitive strategies utilized by adolescents to assist with managing problems, decision-making and the processing of information relevant to self when establishing an identity (Berzonsky, 1989). Individuals will demonstrate an inclination towards one of the identity processing styles when partaking in or evading activities relevant to forming and sustaining an identity (Berzonsky, 2008).

A sense of meaningfulness and orientation in individuals can be created by an identity structure which is well formed and coherent. It will consequently help the individuals with decision-making, problem-solving, and effectively coping with everyday life needs and also adapting to new environments (Berzonsky & Cook, 2005; Salmani Nodoushan, 2007a,b). Due to experiences resulted from appropriate social exposures, personal identity formation in adolescence can happen over time and adolescents should be able to recognize the self and

separate it from the others to ensure a mental balance. What is unique to human being is identity which is usually followed by self-efficacy (Salmani Nodoushan, 2007c,d; 2015).

Self-efficacy in its turn can be described as the extent or strength of one's belief in one's own ability to complete tasks and reach goals. It influences every area of human attempt. If a person determines his beliefs regarding his or her power to influence situations, self-efficacy can influence both the power an individual actually has to confront challenges skillfully and the alternatives a person is most probable to have. Thus it is a more stable predicator of behavior and success than any other related variables and it is the most effective parameter in human agency which holds a powerful role in decision making (Bandura, 1997; Salmani Nodoushan, 2007e,f; 2008a,b). Among all constructs learning new skills and performing those in authentic situations are far more related to self-efficacy beliefs and what helps us explain the reason of why people's behaviors are different when they have similar knowledge is actually self-efficacy (Berzonsky, 2008; Salmani Nodoushan, 2008c,d,e).

A lot of empirical studies have been done on identity processing styles and self-efficacy in isolation but little has been done on the relationship between them, specifically in Canadian EFL context. Because of great need to explore such interrelationship, this research is to investigate the presence of such a relationship between identity processing styles and self-efficacy among Canadian advanced EFL learners.

### 2. Literature Review

Identity processing styles encompass various processes that individuals can get benefit of to clarify and refine their identity, goals, purpose, values, qualities, and interests (Berzonsky, 2008).

To understand the nature and structure of identity, researchers have classified it into different categories. Marcia's model (1966) identity is classified into four distinct steps: achievement, moratorium, foreclosure, and diffusion. An identity achievement or a true sense of identity refers to individuals who have already achieved a steady identity status after exploring their alternatives. Moratoriums refer to individuals who have examined their options but have not decided to commit to a specific status. Although, moratorium period may seem confusing and difficult to tolerate, many psychologists find it essential before forming an identity achievement. The next step is a foreclosure identity which refers to individuals who think they know who they are while they haven't explored their ideas yet. In fact, they try to imitate identity achievement but it is not a true sense of identity. For example, they may simply adopt their parents, close relatives, or admire friends' identity without exploring other options actively. The final step includes a diffusion identity which refers to individuals who neither have explored their alternatives nor are willing to commit to a received identity from an external part. They are overwhelmed in the lengthy process of identity formation. Comparing different types of identity, teenagers and children are often in a state of identity diffusion in different aspects such as religious, occupation, or culture.

Three identity styles have been introduced by Berzonsky (1989) are namely; informational, normative, and diffuse/avoidant to integrate a cognitive view to the research on identity status. Individuals using an informational style would tend to take an active problem-solving perspective to identity relevant information (Al Shalabi & Salmani Nodoushan, 2009; Nemati, Salmani Nodoushan & Ashrafzadeh, 2010; Salmani Nodoushan, 2009a,b,c,d,e). They seem to be good decision makers because of having more hangers about self-exploration. This group would be grouped into Marcia's achievement or halt. Individuals who use a normative style would tend to adopt social norms that are valued by learned others. Such identity types extremely follow the norms which, in most cases, are not their own. These individuals resort

to what others determine for them; and the last one is a diffuse/avoidant style which is composed of a group of individuals who completely avoid placing themselves in situations in which they are forced to make a decision. Avoidant coping, self-handicapping, other-directedness, and maladaptive decisional strategies are all positively associated with a diffuse/avoidant orientation, while being negatively correlated with self-reflection, conscientiousness, and cognitive persistence (Al Shalabi & Salmani Nodoushan, 2009; Nemati, Salmani Nodoushan & Ashrafzadeh, 2010; Salmani Nodoushan, 2010a,b,c; 2011a,b,c; 2012a,b).

Abdi Zarrin et al. (2010) investigated the relationship between identity styles and female students' psychological well-being and concluded that the there was a positive significant relationship between information and normative identity style with psychological well-being and commitment (p<0.01). They also came to a negative significant relationship between and avoidant/diffuse identity styles and psychological well-being and identity commitment (p<0.05). The relationship between identity styles and academic self-efficacy has been investigated by Hejazi and Fartash (2006) through identity commitment. They came to this conclusion that identity processing styles influenced academic self-efficacy through identity commitment. Additionally, identity processing styles had a direct significant effect on commitment and identity commitment had a direct significant effect on academic self-efficacy.

Nurmi et al. (1997) investigated interrelationships among self-esteem, depression and identity processing styles with Finnish and American students. It was found that students who reported higher levels of self-esteem were Informational- and Normative-oriented, unlike diffuse- avoidant students who displayed higher levels of depressive symptomatology. Berzonsky and Cook (2005) indicated that students with information style compared to students with normative and diffuse identity styles reported higher scores on measures of academic autonomy, self-efficacy, effective life management skills, respect and tolerance of different people, establishing intimate relationships, emotional independence and self-confidence. Also students with diffuse identity style compared to students with information and normative identity styles showed higher scores on measures of academic goals, realism, long-term plans for life, stable goals and relations with peers. In addition, the results showed that students with information identity compared to students with diffuse style reported higher scores in lifestyle. This supported claims made by Al Shalabi and Salmani Nodoushan (2009) and Salmani Nodoushan (2013; 2014a,b).

Knafo and Shwartz (2004) investigate the relationship between identity processing styles and parent child value congruence in adolescence. Their main question was if identity exploration and commitment are related to accuracy of perception and acceptance of parental values. Participants in the two high commitment statuses, achievement and foreclosure, were found to be more accepting of the values they perceived their parents to hold. While the four identity statuses were found not to differ in the level of parent child value congruence. Self-efficacy is another variable which has an important role in learning a foreign language which is a key element of social cognitive theory and refers to "beliefs in one,,s abilities to organize and perform the courses of action needed to produce given achievements" (Bandura, 1997, p. 3). Learners' beliefs in their abilities greatly influence their performance to the extent that these beliefs can predict their performance far better than their actual ability (Bandura, 1997; Schunk, 1991).

Mastery experience, vicarious experience, social persuasion, and physiological states are four sources introduced by Bandura (1997) which he claims can affect the self-efficacy beliefs. Success in accomplishing a task is all associated with high self-efficacy; therefore people who have experienced past successes feel that these experiences have played a major part in improving their self-efficacy beliefs. Even observing friends and peers successful performance of a task leads to positive beliefs about one's own capabilities in performing the task which in turn can enhance the person's self-efficacy. Two other factors affecting self-efficacy are encouragement and positive feedback. Learners develop high self-efficacy regarding a particular task when mentors, advisors, or superiors who are valued for their expertise in that particular field assessed provide them with required encouragements. On the other hand factors like fatigue and anxiety can also affect self-efficacy. It is widely believed that low anxiety during a task performance cause a learner feel at ease and tends to perceive the situation as pleasant, which in turn strengthens his/her self-efficacy beliefs.

Marsh (1990) maintains that self-efficacy can be shaped through experience with environment and interpretations of it. It starts to develop when we are at low ages and gradually learn to identify a self as different from others. Incorporating beliefs, attitudes and memories, we can affect new experience and ideas by the previously existing concept of who we are and by our need to keep this fragile self-safe. Moreover, evaluations from significant others, reinforcements, and attributions for one's behavior are among the factor specifically influencing one's concept of self.

Self-efficacy is task-specific and differs from context to context. Bandura (1986) posited "various ways are required to assess self-efficacy when tasks vary because assessment of self-efficacy is task-specific. Therefore, self-efficacy needs to be measured specifically rather than generally."

Due to the fact that language learning totally differs from other sorts of learning (Williams, 1994), more attention has to be paid to how learners develop self-efficacy and what factors affect their self-efficacy in second/foreign language contexts.

To Carmichael and Taylor (2005) self-efficacy is a salient element influencing learners' interest, persistence, extent of effort students invest in learning, the goals they choose to pursue and their use of self-regulated strategies in performing a task.

In order to answer the question "why some learners learn language more successfully than others, with almost the same aptitude and capabilities", the researcher has paid lots of attention on the learners' individual differences such as self-efficacy and identity processing styles. The present study is devoted to generally investigate the relationship between identity processing styles and self-efficacy beliefs of Canadian EFL learners. More specifically, it focuses on the role of gender to probe the probable differences between male and female Canadian EFL learners in their identity processing styles. The study answers these questions:

- Q1: Is there any relationship between identity processing styles and self-efficacy of Canadian EFL learners?
- Q2: Is there any difference between identity processing styles of Canadian male and female EFL learners?

## 3. Methodology

# 3.1. Participants

Twenty MA advanced students (10 males and 10 females) majoring in English Language Teaching from Ontario College of Teachers, Canada, were randomly selected to participate in the current study. Their age ranged between 25 and 35.

#### 3.2. Instruments

Data collection instruments included two sets of questionnaires; the Revised Identity Style Inventory (ISI-4) developed by Berzonsky et al. (2011) and a general self-efficacy scale.

According to Berzonsky (2011): "Identity styles are operationally defined by a self-report Identity Style Inventory (ISI: Berzonsky, 1989b, 1992). The Inventory has been found to have adequate psychometric properties (Berzonsky, 1992, 2004). Internal reliabilities of the scales generally range from 60. to 80., although translated versions, especially of the normative scale, have in some cases been lower (see Berzonsky, in press). The ISI or translated versions have been used in more than 15 different cultural contexts or countries."

Therefore for measuring identity processing styles of participants, the Revised Identity Style Inventory (ISI-4) developed by Berzonsky et al. (2011) was used. Though it is noteworthy that Berzonsky's process model pays to the reciprocal influence of the individual and the environment; while description of a person's actual identity is not allowed. The Revised ISI consisted of 40 items ranging from 1-5 (not at all like me- very much like me) to describe types of identity such as informational style (10 items), normative style (9 items), diffuse-avoidant style (12 items), and Commitment items which are not applied in this study (Berzonsky et al., 2011). The Cronbach alpha reliability used for checking the internal consistency was .70 which is considered to be an acceptable index (Pallant, 2007).

The general self-efficacy scale had originally been developed by Nezami, Schwarzer, and Jerusalem (1996), and it was used so as to assess the participants' self-efficacy and self-beliefs. The scale consists of 10 items. Learners were asked to report on a scale of one to four. The choices ranged from not at all true to exactly true. To determine the reliability of the scale and to analyze its construct validity, Cronbach's alpha and a principle component analysis were consequently taken into account. The Cronbach alpha coefficient for the scale was 0.78 which is considered to be an acceptable index.

## 3.3. Procedure

As was mentioned above, 20 students in Ontario College of Teachers participated in this investigation. They took part in this study during their regularly–scheduled class period. Before distributing the questionnaires, the researcher informed them of the purpose of the study, explained to them how they were required to fill out the instruments, and clarified the importance of the results of the study, so that the participants would complete the questionnaires attentively and accurately. The researcher allocated them 5 minutes to ask any questions they had in order to prevent any misunderstanding. After this introduction which took about 10 minutes, first, the ISI questionnaire was administered. Then, the general self-efficacy scale was distributed among the students. During the administration, the researcher circulated in the class among the students, answering their problems and guiding them in filling out the questionnaires. The whole process took about 30 minutes.

### 4. Results

After collecting the completed questionnaires, all the data were coded and then analyzed through SPSS version 20 (IBM Corp., Released 2011). Firstly, the Spearman's rank order correlation formula was used in order to determine the relationship between Canadian EFL learners' identity style and self-efficacy. Secondly, the Mann-Whitney U test was run in order to show the existence of a significant difference between the identity processing styles of male and female participants of the study.

Research question 1: Is there any relationship between identity processing styles and self-efficacy of Canadian EFL learners?

For the above-mentioned research question, a null hypothesis was formulated.

NH1: There is no relationship between identity processing styles and self-efficacy of Canadian EFL learners.

Since the data was of an ordinal type, the Spearman's rank order correlation formula was used.

Table 1: Result of the Spearman's rank order correlation

			Identity	Self-efficacy
Spearman's rho	Identity	Correlation Coefficient	1.000	.651**
		Sig. (2-tailed)	<del>55</del> 84	.002
		N	20	20
	Self-efficacy	Correlation Coefficient	.651**	1.000
		Sig. (2-tailed)	.002	(42)
		N	20	20

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

The Spearman's Rank Order correlation was run to determine the relationship between Canadian EFL learners' identity style and self-efficacy. There was a moderately strong, positive correlation between the two variables which was also statistically significant (rs (18) = .651, p = .002). Thus, it could be concluded that the null-hypothesis which was "There is no relationship between identity processing styles and self-efficacy of Canadian EFL learners" was rejected, meaning that in this particular case Canadian EFL learners' identity processing styles and self-efficacy were related to each other.

The study had also another research question. The second research question of the study was:

Research question 2: Is there any difference between identity processing styles of Canadian male and female EFL learners?

For the above-mentioned research question, a null hypothesis was formulated.

NH2: There is no difference between identity processing styles of Canadian male and female EFL learners.

To answer this research question, the Mann-Whitney U test was run. Tables 2 and 3 below show the result.

Table 2: Ranks table of the identity scores for males and females

Male/Fema	le	N	Mean Rank	Sum of Ranks
Identity	male	10	11.05	110.50
	female	10	9.95	99.50
	Total	20		

Table 2 above shows the ranks table. As it can be seen, the mean rank of males and females were 11.05 and 9.95 respectively. Table 3 below shows the result of the actual Mann-Whitney U test.

*Table 3: Result of the Mann-Whitney U test for the comparison of males and females.* 

	Identity
Mann-Whitney U	44.500
Wilcoxon W	99.500
Z	420
Asymp. Sig. (2-tailed)	.675
Exact Sig. [2*(1-tailed Sig.)]	.684a
a. Not corrected for ties.	
b. Grouping Variable: Male/Female	

The Mann-Whitney U test was run to compare the mean scores of the males and females. As table 3 above shows, it can be concluded that there was not any significant difference between the mean scores of males and females (U = 44.50, p = .675 > 0.05). Therefore, the null hypothesis "There is no difference between identity processing styles of Canadian male and female EFL learners" is accepted.

The study shows that little attention has been paid on the relationship between identity processing styles and self-efficacy among Canadian learners of English and little research has investigated issues regarding the significant difference between the identity processing styles of male and female Canadian learners. The findings of the relationship between self-efficacy and identity processing styles scores obtained by English students on self-efficacy scale and ISI were related to each other. In other words, the results showed that students' scores on the General Self-efficacy Scale correlate significantly with their scores on ISI questionnaire. Therefore, findings of previous studies on relationship between self-efficacy and identity processing styles, which demonstrated a positive correlation between them, were replicated here (Leader, 2010). In addition, the results of this study showed that there was no significant difference of gender in identity processing styles of English learners. Since the samples are not enough, further studies are needed in order to generalize the result.

## 4. Conclusion

Identity formation is conceptualized in terms of a social-cognitive model that postulates stylistic differences in how people negotiate or manage to evade the challenge of constructing, maintaining, and/or reconstructing their sense of identity. The role that general rational and automatic cognitive processes and identity processing styles play in identity formation is considered. A coherent and stable sense of identity provides a frame of reference for interpreting experience and self-relevant information and for making decisions and solving personal problems. Identity also provides a basis for maintaining a sense of self-unity over time and space. Despite the inevitable flux of random events and fleeting changes people experience in the course of their daily lives, an integrated identity structure enables them to construe their lives as being unified and meaningful (Berzonsky, 2011). He put it as:

"The cognitive integration and transformation of representations provides a basis for envisioning future possibilities and acting with foresight: the hypothetical meta-representations or second order cognitive operations that emerge make it possible to think in a goal oriented fashion and hypothesize that "I am the person who will do that". (Berzonsky, 2011)

He also maintains having the cognitive wherewithal to recapture the past and to mentally envision future goals and outcomes is liberating in that it enables individuals to cognitively entertain possibilities and alternatives not presently being experienced. However specially during adolescence, these advanced cognitive resources, coupled with other pubertal, social and psychological changes can undermine the epistemological foundation upon which existing beliefs, goals and self-views have been built (Berzonsky, 2011).

To sum up, identity processing styles do not appear to be inherently good or bad. Personal effectiveness is considered to be an interactive function of individuals and environmental contexts.

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