

## Comparison of Emotional Intelligence, Self-Esteem, and Aggression in Monolinguals and Bilinguals

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The present study aimed to examine possible differences in emotional intelligence (EI), self-esteem, and aggression in mono- and bilinguals. A total of 260 undergraduate students (130 monolinguals and 130 bilinguals) from Azar baijan Shahid Madani University were randomly selected. The students responded to Bradbury & Graves EI, Coopersmith Self-esteem, and Aggression Questionnaires. The data were analyzed by MANOVA method. The results showed significant difference in aggression between the two groups of monolinguals and bilinguals ( $P < .05$ ). Monolinguals, however, achieved higher scores on aggression than bilinguals. The results of the present study confirm that bilinguals can achieve to higher goals due to their ability to interact in two different situations, and exhibit lesser aggression in their social interactions.

**Keywords:** emotional intelligence, self-esteem, aggression, monolingual, bilingual

Emotional Intelligence (EI), as a part of personality, is one of the effective variables in social communications, in which the personality provides a context that EI operates. Bradbry and Graves (2005) has defined EI as the ability of individuals to recognize, understand, and adjust emotions and deploy them in their lives. In fact, EI is considered as an emotional asset. Mayer, Salovey, and Caruso (2002) have also described it as a type of intelligence that includes attending to one's own and others' emotions, discriminating among people, and using this information to conduct one's thoughts and actions.

According to the literature, there is a strong negative relationship between EI and aggression, and EI and anxiety in adults and adolescents, and a moderate relationship between EI and self-esteem in adolescents (Biabangard, 2007; Munsawaengsub, Yimklib, Nanthamongkolchai, & Apinanthavech, 2009; Fathi Ashtiani & Dastani, 2009; Ghoreyshi Rad, 2012; Bjorkqvist, Osterman, & Kaukiainen, 2000). Additionally, EI has a relationship with self-esteem and academic progress (Hasanvand & khaledian, 2012). The ability to understand and adjust emotions and emotional knowledge is essential for mental and emotional growth of individuals (Yun Dia & Sternberg, 2004). It would further result in emotional support and social confirmation, which in return would lead to increase in self-esteem. Meanwhile, there are some negative views asserting that EI is associated with a wide range of psychological disorders, which are classified as psychopathology (Toppelberg, Mederano, Liana Pena, & Nieto, 2002). A recent longitudinal research, however, suggests that the trait EI does not predict future psychopathology in preadolescents when the baseline psychopathology is taken into account (Williams, Daley, Burnside, & Hammond-Rowley, 2010).

The management of emotions, as an element of EI, is the ability to control anger and aggression. The aggression intended to inflict pain or damage is defined as the psychological damage or personal damage in which the intention of the aggressor is the important point of the aggressive behavior. The two types of aggression, therefore, can be categorized as instrumental aggression and hostile aggression. Hostile aggression is referred to a wide range of behaviors including physical or verbal, active or inactive, and direct or indirect, which stem from feelings of anger and intend to hurt someone. In contrast, instrumental aggression is referred to the behavior to achieve a goal other than causing pain (Fanaee, 2008).

According to Vigotsky's theory, language is an important means of social interactions and a tool for planning and supervising the behavior of

people in a self-reflexive way (Seyfe, 2008). Self-esteem, on the other hand, is a term showing an individual's ability to develop successful social interactions. Therefore, language is an influential factor to reflect the EI, self-esteem, and aggressive behavior.

Language is the instrument of the folk to express themselves and consists of both grammatical rules and spoken sounds. In other words, it is a communicative tool created for all the mental activities. Mother tongue is the first language learnt by an individual to speak, grow, comprehend the cultural and social elements of the surroundings, and acquires identity. In many countries including Iran, children are educated in a language other than their mother tongue; a language that is spoken throughout the country and has different phonetic, grammatical and vocabulary systems. This is how bilingualism comes into existence (Kata and Joiner, 2002); controversial discussions, however, run around it. Some researchers claim that bilingualism is a negative phenomenon with detrimental effects on bilinguals (Toppelberg et al., 2002). Recent studies have moved the balance in favor of bilingualism and its positive effects on cognitive, personality, and educational developments (Al-Amri, 2013). It facilitates learning a new language and these children are more motivated in school and are often ahead of other classmates, especially in intellectual development. (Grosjean, 1982). Additionally, there is a link between bilingualism and the ability to reason about mental states (Millett, 2010).

It is well understood that several factors such as self-esteem can contribute to an acceptable personal adaptation and successful social communications. As a result, EI training is a positive factor to reduce aggression (Naghdi and Adib Rad, 2010). Quebbeman and Rozell (2002) found that people with higher EI are more likely to react normally and express less aggression against injustice than individuals with lower self-esteem. This is in accordance with the Ramazani and Abdollahi's research (2006), which confirms the reverse relationship of EI with aggression, aggressive traits, and internal or external expressions of aggression. Also,

EI has a significant relation with the anti-social factors, impulsiveness, and aggression. In a study focused on the effect of interactive verbal intelligence and the ability of self-adjustment (as one of the components of EI), it was shown that both components were related to less aggression, while, verbal intelligence led to more aggression in people who had little self-adjustment. Therefore, one can assume that there is a connection between emotional abilities and harmful behavior, and that the collaborative process among adolescents is important to boost their self-esteem and increase their EI (Rickelm, 2010).

A study among boxers, however, showed no significant relationship between self-esteem and physical aggression (Ozlem, Rodriguez, Walter, Yuichi, & Wright, 2007; Esturgo-Deu and Sala-Roca, 2010), and there is a non-U-shape relationship between these two factors (Webster, 2007). The findings of the Bradshaw and Hazan's research (2006) also revealed a reverse relationship between respect to others and any kind of aggression. Sandstrom and Jordan (2008) found a direct relationship between assertive self-esteem and aggression, provided a low level of implicit self-esteem. They also showed that while the relationship between self-esteem and aggression is dynamic and inconsistent, it is dependent on meditative variables such as instability of self-esteem and various kinds of expressed aggression. Locke (2009), Kata and Joiner (2002), and Parker, Summerfield, Hogan, & Majeski, (2004) also pointed out that self-esteem has reverse effects on aggression and acts like a bilateral inhibitor. Self-enthusiasm (defined as positive attributes to oneself) predicts less aggression and is the mediator between self-esteem and aggression (Bradshaw and Hazan, 2006; Sandstrom & Jordan, 2008; Locke, 2009). Certainly, the level of self-enthusiasm and self-esteem can account for these effects. Another research showed that juveniles who had low self-esteem displayed more delinquency and aggression in adulthood compared to those with higher self-esteem (Locke, 2009; Trzesniewski, Donnellan, Moffitt, Robins, Poulton, & Caspi, 2006).

There is limited evidence in the literature regarding self-esteem and aggression in monolinguals and bilinguals. The findings of Toppelberg et al. (2002) showed close ties between poor language skills and emotional/behavioral problems. Sampath (2005) and Ozlem, et al. (2007) concluded that when children have a higher level of second language proficiency, they perform better on verbal intelligence. Hasanv and Khaledian (2012) found that in Kurdish bilinguals the levels of second language proficiency and the range of information possessing, give them a problem solving ability and better social adjustment. Also, Grabovac (2010) showed that bilinguals rated emotionally positive words more positively, and emotionally negative words more negatively than monolinguals. In addition, the bilingual group was better in noticing and understanding emotions. However, we can find a number of studies that confirms the positive views towards bilingualism and personality development. For example, Appel and Muysken (1987) concluded that bilingualism does not seem to have negative effects on the children's personality.

Also, the research by Bialystok (2010) showed that bilingualism has a significant impact on children's ability. Such advantages of bilingualism persist across the lifespan and are related to its positive effects on not only personality and cognitive development but also educational development (Bialystok & Viswanathan, 2009).

Language is an effective factor in the expansion of the three components of EI, self-esteem and aggression. Due to a lack of enough evidence in the literature, and language diversity in Iran, the present study aimed to compare EI, self-esteem and aggression in monolinguals and bilinguals to highlight differences among them considering the interpersonal communication.

## Method

### Participants

The statistical population consisted of all of the mono- and bilingual undergraduate students in Azarbaijan Shahid Madani University, in academic year of 2011-12. A total of 260 students (130 monolinguals and 130 bilinguals) were randomly selected from the faculties of psychology, literature and religions and they responded to Bradbury & Graves EI, Coopersmith Self-esteem, & Aggression Questionnaires. Finally, a total of 211 completed questionnaires without missing data (82 monolinguals and 129 bilinguals) were used for data analysis. They were analyzed by MANOVA method using SPSS software, version 20 (SPSS Inc., Chicago, IL). The subjects consciously consented to participate in the survey with confidentiality of their information.

### Instruments

*Bradbury & Graves EI questionnaire.* This questionnaire was designed by Bradbury and Graves in 1992 (2005), which has 28 statements to assess EI. Each item consists of the choice options of 1) Never, 2) Rarely, 3) Frequently, 4) Sometimes, 5) Almost always, and 6) Always. The sub-measures of this questionnaire include: self-awareness (6 items), self-management (9 items), social-awareness (5 items), and relationship management (8 items). The validity of this questionnaire was achieved: self-awareness .73, self-management .87, social-awareness .78, relationship management .76, and EI .90. The validity for the whole questionnaire was achieved using Cronbach's alpha ( $=.88$ ), and the correlative coefficient ( $= .68$ ), which is significant at .99 (Bradbury & Graves, 2005).

*Coopersmith self-esteem questionnaire.* This personality test includes 58 statements with "Yes" or "No" choice options. It includes: general (26 items), social (8 items), familial (8 items), educational-occupational (8 items), and lie detector (8 items) sub-measures. The score of each sub-

measurement and the total score make it possible to determine the field in which people have a positive self-image. The scoring was based on 0 to 1 (i.e., in some items “Yes” was scored as 1 and “No” was scored as 0, and vice versa in some other items). Studies show that the validity and reliability of this test is acceptable. Herze and Gullone (1999) reported an alpha coefficient of .88. Edmondson et al. (2006) reported internal coefficients of .86 to .90. The validity coefficients of its Persian version are also reported to be .86 and .90, and the internal coefficient varies between .89 and .83 in different studies. Poorshafeie reported a coefficient of .87 using the split-half method. Studies have provided convergent validities between Coopersmith and Eisnek of .80 and .78. The validity coefficients of the test have been reported as of .90 for girls, and .92 for boys using the test-retest method (Abolghasemi & Narimani, 2005).

*Aggression questionnaire:* Williams, Daley, Burnside, & Hammond-Rowley, 1996; Abolghasemi & Narimani, 2005) designed it based on Buss and Pery’s aggression questionnaire (1992). It has 26 statements, which are being scored by the scale of 1) Never, 2) Rarely, 3) Frequently, 4) Sometimes, 5) Almost always, and 6) Always. It evaluates two components of physical aggression/anger and verbal aggression/hostility. Total coefficient, and correlative coefficient are reported as of .72- .80, and .79 ( $P < .01$ ), respectively. According to a local investigation (Abolghasemi & Narimani, 2005), the correlation coefficients of the anger component, and hostility component with the anger scale are found to be .73, and 0.74 ( $P < .01$ ), respectively.

## **Results**

The descriptive findings of the present study revealed that the average age of the subjects was 21.75 years old, ranging from 18 to 29. The study comprised 39% monolinguals and 61% bilinguals.

First, we evaluated homogeneity of variance to perform MANOVA test. Box’s test result of 5.57 ( $F=913$ ,  $P=.484$ ) showed that the covariance

matrices are equal. Additionally, statistically significant Levene's test results for aggression, self-esteem, and EI showed equality of covariance ( $P > .05$ ). Based on these, we evaluated differences of related variables between the mono- and bilingual groups, which represents a significant difference for Wilks' lambda value and other variables within the model ( $P < .05$ ). The results show a significant difference of aggression between the two groups ( $P < .05$ ). The means of the aggression revealed that monolinguals have more aggression than bilinguals. There were non-significant findings for EI and self-esteem in the two groups. Tables 1 to 3 show the findings of the study.

**Table 1**  
**Levene's Test of Equality of Error Variances**

	F	Df1	Df2	Sig.
Aggression	.891	1	208	.346
Self-esteem	.003	1	208	.956
Emotional Intelligence	.497	1	208	.482

**Table 2**  
**Multivariate Test**

Effect	Value	F	Df	Error Df	Sig.	Partial Eta Squared
Language Pillai's Trace	.043	3.122	3.000	206.000	.027	.043
Wilks' Lambda	.957	3.122	3.000	206.000	.027	.043
Hotelling's Trace	.045	3.122	3.000	206.000	.027	.043
Roy's Largest Root	.045	3.122	3.000	206.000	.027	.043

**Table 3**  
**Tests of Between-Subjects Effects**

Source	Dependent Variable	Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Aggression	1437.035 <sup>a</sup>	1	1437.035	5.767	.017	.027
	Self-Esteem	5.567 <sup>b</sup>	1	5.567	.538	.464	.003
	Emotional Intelligence	157.206 <sup>c</sup>	1	157.206	1.968	.162	.009
Intercept	Aggression	737694.997	1	737694.997	2960.342	.000	.934
	Self-Esteem	130291.167	1	130291.167	12602.234	.000	.984
	Emotional Intelligence	1052384.063	1	1052384.063	13175.056	.000	.984
Language	Aggression	1437.035	1	1437.035	5.767	.017	.027
	Self-Esteem	5.567	1	5.567	.538	.464	.003
	Emotional Intelligence	157.206	1	157.206	1.968	.162	.009
Error	Aggression	51832.032	208	249.192			
	Self-Esteem	2150.457	208	10.339			
	Emotional Intelligence	16614.417	208	79.877			
Total	Aggression	816004.000	210				
	Self-Esteem	139219.000	210				
	Emotional Intelligence	1133381.000	210				
Corrected Total	Aggression	53269.067	209				
	Self-Esteem	2156.024	209				
	Emotional Intelligence	16771.624	209				

## Discussion

The aim of this study was to answer this question: Do EI, self-esteem and aggression differ in mono- and bilinguals? In order to address this question, Azeri-Persian bilingual students were compared with Persian monolingual students. We observed a significant difference for aggression in benefit of monolinguals with the means comparable to the results from other studies by Al-Amri (2013), Grosjean (1982), & Millett (2010). Bilingualism has positive effects that facilitate learning a new language, increase EI and self-esteem and could contribute to an acceptable personal adaptation, successful social communication, and help individuals to reduce aggressive behaviors. Good language skills prevent while poor language skills cause or predispose to psychopathology. Such protective effects may be mediated by nonverbal skills (Toppelberg et al., 2002; Sampath, 2005).

A few other studies have shown similar results (Biabangard, 2007; Munsawaengsub et al., 2009; Fathi Ashtiani & Dastani, 2009; Ghoreyshi Rad, 2012; Bjorkqvist et al., 2000). Their findings show a strong negative relationship between EI and aggression or self-esteem in adolescents. As a probable cause, acquisition and implementation of EI and other social skills are a basis upon which interpersonal interactions are built. People who learn how to manage their interpersonal interactions and control their excitement and emotions can make better and stronger relationship with others and the society. They are very likely to develop a higher self-esteem and social confidence. Furthermore, they will display wiser social behavior and possess a better self-image; hence, they will evaluate, understand and accept their limitations and abilities in a better way. The findings of a study by Hasanvand et al. (2012) showed a valid and positive relationship between EI and self-esteem and that higher EI increases self-esteem. Furthermore, if people have the exciting capability, it would have an effective role in facing with everyday events, extending their insights, and providing a positive attitude toward facts and excitements. Therefore,

who has higher exciting skills and intelligence, would also have higher social support and self-satisfaction as a result of their higher self-esteem.

In the present study, the difference between each component of EI and self-esteem in the mono- and bilingual groups was not significant. These results are not in accordance with the others' findings (Munsawaengsub et al., 2009; Kata & Joiner, 2002). However, a higher EI would result in a better ability of coping with psychological pressures, controlling emotions, and effectively reacting against stimulating factors. It might be because people with higher emotional self-esteem and a higher ability to control their emotions would display less aggressive and hostile behaviors toward others. In other words, people who are more confident about their emotions have a better ability to manage and control events of their lives and exhibit less hostile and aggressive behaviors to achieve their goals (Yun Dai and Sternberg, 2004). This means that bilinguals, due to their ability to communicate in two different situations, could better know the feelings and emotions of people around them. Levels of second language proficiency and the range of information possessed by bilingual students give them the ability to solve problems (Sampath, 2005). There are close ties between poor language skills and emotional/behavioral problems. Since in Iran, Persian language is the official language, anyone mastering a different language is considered a bilingual. They are supposed to have exposure to two different cultures due to their symbiosis with Persian speakers. This would cause an expansion in social insight of bilinguals, hence, exhibiting a more social-awareness. Further studies are necessary to show whether these findings could be generalized to other groups.

### **Conclusion**

In summary, EI could increase the resistance against stressful events, and the individual's ability to manipulate impulses and negative emotions, and reduce irresponsible and hostile behaviors. Individuals with higher EI are, therefore, more confident with themselves and their lives, as if they

feel more valued and higher self-esteem. Regarding negative relationship between self-esteem and aggression, people with low self-esteem would participate less frequently in social interactions and prefer to remain anonymous. They have a lower ability to recognize their own and others' feelings. In addition, trait EI and low self-esteem is associated with a wide range of psychological manifestations such as aggression that could be classified as psychopathology. Such people commonly criticize and blame themselves and feel as victims, and they avoid expressing their thoughts and feelings because of earning of others' reactions. In bilinguals, with an increase in general self-esteem and EI, aggression would be reduced. Since human beings express their needs and desires through language and verbal interactions, bilinguals can better achieve their goals due to their ability to interact in two different situations. They, therefore, exhibit less aggression in their social interactions. The findings show that learning in a second language is more beneficial in terms of gaining better social interactions and sense of worthiness. This study presents the differences of the levels of EI, self-esteem and aggression, as well as, the relation of the components of EI vs. self-esteem and aggression in mono- and bilinguals. Furthermore, it provides insights into how differences in sociolinguistic experiences and language proficiency might be related to adjustment state in bilinguals.

### **Limitations and Suggestions**

Similar studies on other bilinguals could be beneficial in terms of comparing our findings with them. Because of limited literature, however, it was not possible to do so. Moreover, the majority of the bilinguals in this study were Azeri (Turk) students who were selected from the faculty of humanities, which may limit generalization of our findings. Also, we used self-reporting tools for data collection. Therefore, we recommend that future studies should include other bilinguals, and also use different, more reliable data collection methods.

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Received: 15 / 6/ 2013  
Revised : 12/ 12/ 2013  
Accepted: 20 / 12/ 2013