

# The Effect of Implicit Attitude on Self-Concept, Emotional Intelligence, Personality Characteristics and Ego Defense Styles

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## Abstract

This study was carried out to assess the effect of other implicit attitudes about one's self-concept on his/her self-concept, emotional intelligence, personality and ego defense mechanisms in bank employees with high emotional intelligence compared with ones with low emotional intelligence. This study involved 153 participants. Subjects were classified into two experimental groups and one control group. The Beck's self-concept inventory, Bar-On emotional intelligence inventory, Defense Styles Questionnaire and NEO Personality Inventory-Revised were applied to assess self-concept, emotional intelligence, ego defense styles and personality characteristics of middle participants of Mellat Bank branches, in Tehran, Iran. The control pre and post-test designs were performed for this study. The research data were analyzed using descriptive analysis, partial correlation, ANCOVA and MANCOVA with a significant level of 0.05. All experimental groups received Beck's self-concept inventory. The analysis showed significant reduction (pre-test to post-test) in low EQ experimental group, enhancing immature defense style and also, partial correlation of Beck self-concept with ego defensive styles, NEO-PI-R, Bar-On EQ-I and its components with controlling of gender and educational level in adult bank employees at the shows that in the result, a very much stronger negative correlation between Beck's self-concept with neuroticism (N) and positive correlation with extraversion (E), conscientiousness (C), Bar-On EQ-I, intrapersonal intelligence, general mood and immature defense style and no significant correlation was observed between openness (O), agreeableness (A), interpersonal intelligence, adaptability, stress management, mature and neurotic defense style.

## Keywords

Emotional Intelligence, Personality, Self-Concept, Implicit Attitude, Ego

## 1. Introduction

The concept of self is complex and multifaceted, encompassing an individual's perception of themselves, their ideal self, and their interactions with the environment (Phillips, 1983; Saikia, 2020). The self-concept is dynamic and can be influenced by various factors, including developmental stages and psychological theories (Mercer, 2012; Macedo & Silveira, 2012) and as Bellmore & Cillessen (2006) refer composite of one's feelings, a generalized view of one's social acceptance, and one's personal feelings about him or herself (Sternke, 2010). Self-concept, broadly defined, is a person's perception of him or herself. These perceptions are formed through one's experience with and interpretations of one's environment, and are influenced by reinforcements, evaluations of significant others, and one's attributions for one's behavior (Shavelson et al., 1976). Self-concept is a psychological concept including emotions, attributes, attitudes, abilities, evaluations and self-description of individuals and it is externally defined through personal, physical and behavioral characteristics; although, internally defined through the emotion of individuals towards themselves and the world in relationship with others (Rinn & Cunningham, 2008; Lau et al., 2008; Lindfors et al., 2014; Berk, 2022). Positive self-concept, which is influenced by various factors including emotional intelligence, can lead to better emotional intelligence (Lumbantobing, 2020).

Emotional intelligence (EI) refers to the ability to perceive control and evaluate emotions. Some researchers suggest that emotional intelligence can be learned and improved, while others claim that it is an inborn characteristic. It can be divided into ability EI and trait EI. The distinction between trait and ability emotional intelligence was introduced by Pop-Jordanova & Stoimenova-Canevska (2014).

Research consistently shows a positive correlation between emotional intelligence and personality traits, particularly conscientiousness, openness to experiences, extraversion, and agreeableness (Nawi, 2012; Mahasneh, 2013). However, Alegre et al. (2019) challenge this, suggesting that trait emotional intelligence may simply be another way to measure the big five personality traits. The relationship between self-concept and personality is complex and multifaceted, with self-concept clarity significantly linked to various personality characteristics (Dunlop, 2017).

The self plays a central role in personality and cognition, and its increasing integration with social cognitive literature has implications for the future of psychology (McCann & Sato, 2000). Self-concept is a crucial construct, with a shift from a unidimensional to a multidimensional perspective, and its reciprocal effects on performance (Van Zanden et al., 2015). Psychologists have confirmed

its role in producing success in many aspects of a person's life if he or she possesses a positive self-concept (Fin & Ishak, 2014; Berk, 2022). If self-concept is positive, there is no psychological impairment, but if self-concept is negative, it endangers individuals' psychological health (Roşu et al., 2013). In personality, psychology has argued that self-concept content has important implications for well-being and mental health. Particularly, the Five-Factor Model of personality proposes that the self-concept is comprised of personality attributes characterized by five relatively orthogonal dimensions (McCrae & John, 1992; McConnell & Strain, 2011). The self is a mental representation that includes both abstract and concrete information, and information processing concepts are useful in understanding the self's involvement in social judgment and behavior (Kihlstrom et al., 1988). The self is also a philosophically informed concept, with a sense of selfhood tied to all experiences and activities (Glas, 2006). Research on self and identity has enhanced personality science, particularly in the areas of self-insight, self-conscious emotions, and narrative identity (McAdams et al., 2021). The study of self and identity is a growing concern, with implications for emotional processes, cognition, social behavior, and psychological disorder (Yardley & Honess, 1986). Culture significantly shapes our conceptions of self, identity, and personality, with implications for self-efficacy and the five-factor model of personality (Holmes, 2020).

On the other hand, Emotional intelligence (EI) and the type of personality are important factors affecting human life (Stough et al., 2009). In addition, the association between the components of emotional intelligence including difficulty in identifying, describing feelings and externally oriented thinking with ego defense styles was investigated in past studies. Defense mechanisms, the first concept introduced by Freud (1936), have been defined as automatic psychological processes that protect the individual from awareness of internal or external dangers (Blackman, 2023). Defense mechanisms, whose responsibility is to protect the ego from different forms of anxiety (Freud, 1989), may be functional or dysfunctional according to how they are used in the environment (Danto, 2023). These mechanisms are categorized in three major defense styles based on twenty different defense mechanisms (Valliant, 1976). According to which kinds of defense mechanisms are used by the individual, three defense styles are named "mature", "neurotic" and "immature" according to which kinds of defense mechanisms are used by the individual (Andrews et al., 1993). The mature defense style represents normal, adaptive and functional method of coping whereas the immature and neurotic styles may be considered to be a consequence of dysfunctional and maladaptive coping strategies (Sorensen, 2022). Based on the past studies, the adaptive defense styles were correlated with overall emotional intelligence but not with the emotional perception and regulation components. Emotional knowledge was correlated with both adaptive and maladaptive defense styles (Pellitteri, 2002) and also, emotional intelligence was positively associated with mature defense mechanisms and negatively with immature defense mechanisms (Besharat et al., 2007).

According to the theory of self-verification, it can be assumed that individuals seek to maintain a consistent self-concept, even if it is negative, and will therefore seek out information that confirms their self-views (Swann & Read, 1981). This is related to ego defenses, which are unconscious strategies used to protect the self from anxiety and maintain a positive self-image (Conte & Plutchik, 1995). Self-affirmation theory suggests that individuals can resolve the tension between self-protection and self-improvement by affirming their self-worth in response to threats (Sherman & Hartson, 2011). Attitudes can also serve an ego-defensive function by protecting the self-concept from counterattitudinal messages (Knight Lapinski & Boster, 2001). Ego defenses can be adaptive or pathological, and they may serve to cope with reality (Battegay, 1989). A narcissistic defense against affects can lead to an illusion of self-sufficiency (Modell, 1975). These studies collectively highlight the complex interplay between self-verification theory and ego defenses in shaping individuals' self-concept and behavior.

Also, Research has shown a strong connection between personality and ego defense style. Bogo et al. (1970) found that men's autokinetic effect was related to ego defenses, while Mulder et al. (1996) identified specific defense styles associated with certain personality traits. Vaillant (1994) emphasized the importance of considering a patient's defensive style in understanding their psychopathology, highlighting the role of ego mechanisms in shaping personality. These studies collectively suggest that ego defense style is closely intertwined with personality, influencing both adaptive and maladaptive behaviors. Research on defense mechanisms and self-concept reveals a complex interplay. Davidson & MacGregor (1998) argued the challenges in assessing defense mechanisms, suggesting that a comprehensive approach is needed. Catina et al. (1992) illustrated those cognitive components of defense mechanisms, finding that certain cognitive patterns are associated with specific defense mechanisms. Weinberger (1998) integrates psychodynamic theory into a typological approach to personality, emphasizing the role of personality structure and development in defense mechanisms. Cramer (1997) further underscores the link between identity, defense mechanisms, and self-esteem, with the use of defenses being influenced by the degree of identity crisis.

Dr. Davanloo's short-term psychoanalytic approach emphasizes the release of hidden emotions through active work and the interpretation of resistance and defense mechanisms, particularly in the transmission relationship (Davanloo, 1978). This approach incorporates cognitive behavioral techniques (McCullough, 1991) and aims to mobilize the unconscious and remove resistance (Hickey, 2015). The interpretation of transference is a key factor in the success of this therapy (Davanloo, 1978).

Dr. Duanloo's short-term psychoanalysis, influenced by his work in Montreal, has been a significant development in the field of psychotherapy (Buller, 2018). His approach, which focuses on creating multidimensional unconscious structural changes and removing resistance, has shown promise in treating transfe-

rence neurosis (Hickey, 2015). However, it is important to critically evaluate the application of such specialized methods, as they may not be universally applicable (Alexander, 1931).

Herringer & Haws (1991) and Epstein & Morling (1995) both support the idea that individuals seek to enhance and verify their self-concept. This is further supported by Rogers et al. (1977), who found that self-reference is a powerful encoding process, and by Sheldon et al. (1997), who found that variations in the Big Five personality traits are related to psychological authenticity. McAbee & Connelly (2016) extend this by proposing a model that separates personality variance into consensus about underlying traits, unique self-perceptions, and impressions conveyed to others. However, Meleddu & Guicciardi (1998) highlight the influence of social desirability on self-knowledge, suggesting that individuals may not always seek accurate self-verification and confirm the prominent influence of social desirability, but Meleddu & Guicciardi, also provide support for the hypothesis of the specificity of self-perception.

The main question (concept) is how mature defense mechanisms are developed in bank employees with the help of increasing social skills such as emotional intelligence according to self-verification theory? We will have two hypotheses to answer this question, the first hypothesis is that if people feel that they are subject to the judgment of those around them and those close to them, their defense mechanisms will appear, and the second hypothesis is that people with higher emotional intelligence will show more mature defense mechanisms.

## 2. Methods

Research has shown that implicit beliefs about emotions and emotional intelligence can influence performance on ability-based emotional intelligence tests (Cabello & Fernández-Berrocal, 2015). In this research, the relationship between self-concept, personality characteristics, emotional intelligence and ego defense styles concurrently is rare but it is important because according to Shamir (1991), self-concept “much wider a concern with successful task performance” and more the manner in which an individual defines oneself, i.e., the answer to the question “who am I?” (Sims, 2023). Another consideration is that the self-verification theory assumes that people seek to maintain the consistency between the content of their self-concept and their social involvements. These people prefer interaction partners (e.g., college roommates) who view them in a consistent manner with their self-concept (Swann, 1997; Swann et al., 1989) and direct social interactions to “correct” others’ misconceptions about the self (Swann & Read, 1981). But while we do not know if we expose a stimulus (the implicit attitude of others towards self-concept) to a person in a semi-empirical situation, how will he/she behave? Because attitudes are activated outside of conscious attention, by shows both that activation occurs more rapidly than can be mediated by conscious activity and that activation is initiated by (subliminal) stimuli, the presence of which is unreportable (Di Gioia et al., 2019). We have to

be able to hide the other's attitude of him or herself, because in this study, we just want to investigate of the effects of others' implicit attitudes about one's self-concept. The importance of this issue is that past research has shown that the implicit attitudes extends work on automatic activation to explain how the attitude activated by one object can be (mis)attributed to another and it activates the defense mechanisms in the individual (Beck, 1979; Greenwald & Banaji, 1995). In a similar vein, cognitive dissonance research has shown that people prefer endorsing ideas and behaving in ways consistent with their already-existing beliefs about the self to avoid an aversive state of arousal that results from such inconsistencies. Although one can respond to cognitive dissonance in ways ranging from hypocrisy reduction to reaffirming one's sense of moral integrity, the starting point for experiencing dissonance stems from the conflict between one's actions and the content of one's self-concept (McConnell & Strain, 2011). In this study, context is a workplace and staffs are faced with high levels of complexity when seeking to measure of other's attitudes about his or her self-concept. To simplify the task and keep the implicit effect as an interventionist factor out of our study, they will be asked to distribute questionnaires about their self-concept between employees above (a superior or senior colleagues) or below (a junior or subordinate colleagues) and their own position (a cooperating colleagues) status and their friend outside the workplace, because the mixed-status relationships often are referred to as supervisor-subordinate or leader-member relationships. The nature of these relationships can vary significantly, depending on individuals and organizational structures (Sias, 2008). Since the attitude of most employees in the workplace is the superior or senior colleagues because of his prejudices and given certain authority are targeted against a particular section of employees and it causes more stress and greet emotional disturbance to the sufferers, we have to consider that in this environment, people with high emotional intelligence have more success in the workplace than people with low emotional intelligence, when they put their self-concept at risk of judgment, trust the workplace, and are more flexible in stressful situations than those with low emotional intelligence (Nikolaou & Tsaousis, 2002).

To examine the impact of other implicit attitudes on self-concept, emotional intelligence, personality, and self-defense mechanisms in high-emotional intelligence bank employees compared to low-emotional intelligence people. To test this hypothesis, we first test the total number of participants based on the emotional intelligence questionnaire, and after evaluation, we divide them into two groups: A group with high emotional intelligence and another group with low emotional intelligence. Then we give them self-contained questionnaires to answer for themselves and their relatives. After a week, of collecting the answers, they are tested again and the results are examined.

### **2.1. Participants, Procedure, and Measures**

Firstly, we examined relationships through PASW software with partial correla-

tions of Beck's own concept with bar-On EQ-I and its five core components; three-factor scores of Defense styles and five main factors of personality scores (NEO-PI-R) through gender control and educational level of the employees of the Mellat Bank's branch in, Iran in 2015. We conducted the research on a sample of 153 adult employees (104 men) who were 34.81 years old on average ( $sd = 2.78$ ) and the youngest participants were 30 years old and the oldest 40 years old ( $set = 10$ ) with the same experiences (7 - 10 years). Their level of education was as follows: Bachelor's degree holders = 85 and master's degree holders = 68. Our samples were selected through multi-stage cluster sampling. First, all the districts of the Tehran Mellat Bank's branch were divided into four sections north, south, West and east, then from each section one area (districts 1, 2, 3, 4) was randomly selected. Subsequently, a list of the bank was prepared, and from each region four branches of the bank were selected at random. Finally 4 classes were selected for study and all staff responded to the questionnaires.

Next, we examined the hypothesis of whether another implicit attitude about self-concept could affect his self-concept. The bar-On EQ-i components, the five main character factor scores (NEO-PI-R) and self-defense styles (mature, neurotic and immature) in bank employees with high emotional intelligence compared to those with low emotional intelligence. For this purpose, the semi-experimental method with pre-test and post-test with the design control group was used as a research method. Of the 153 participants in the previous study, 80 employees were willing to participate in the experiment. The total population of the study includes all adults (49 males) and executive employees whose educational level was as follows: Bachelor's degree holders = 55 and master's degree holders = 25. In the first stage, all 80 participants were divided into three groups: experimental group 1 with high emotional intelligence ( $N = 20$ ), Group 2 with low emotional intelligence ( $N = 20$ ) and control group ( $N = 40$ ). Classification criteria in experimental groups were based on the cutting point of emotional intelligence scores. In the second phase of the experiment they were asked to list Beck's self-concept (BSTI) colleagues (top or senior colleagues, junior colleagues or subordinates and fellow colleagues) at work and a friend outside of work who would like to respond to them and return their responses a week later. After that, without result, they were told other implicit attitudes about his self-concept, once again, as after the test, the three groups were asked to answer questionnaires on the same conditions before the test. Finally, finally, to compare three groups of all variables, PASW was used to analyze ANCOVA and MANCOVA.

## 2.2. Research Instruments

### 2.2.1. The Beck's Self-Concept (BST)

BST was used as a tool for self-assessment in the study. The questionnaire was performed individually or in group. Its original language is English and includes 25 questions, in which individuals must compare themselves with others whom they know. This questionnaire is a 5-point test in which eight questions indicate the value and 17 questions indicate decreasing value (Beck et al., 1990). The scores

can be changed for each summing the obtained scores. Therefore, the total score is ranged from 25 to 125. The total validity coefficient for this 25-question questionnaire was reported 0.750 (Shamsi et al., 2015) and in this study, the Cornbach's alpha coefficient was found to be 0.72 in Iran.

### 2.2.2. Emotional Quotient Inventory (EQ-I)

In general, Bar-On considers emotional intelligence and cognitive intelligence to contribute equally to a person's general intelligence, which then offers an indication of one's potential to succeed in life (Bar-On, 2004; Mishar & Bangun, 2014). 130 participants completed the Farsi version of Bar-On emotional intelligence inventory according to Dehshiri (2003) in Iran, and all data were analyzed with PASW. Bar-On EQ-i is a 133-item questionnaire with a 5-point Likert response scale. This test and its subscales have reliability and validity in Iranian culture. With the adapted version in Iran, the Cornbach's alpha coefficient was found to be 0.76 and the results of the factor analysis provided some support for the inventory hypothesized structure. This Inventory is a 90-item and responses to each item can range from; "1 = very seldom or not true of me" to "5 = very often or true of me" for positively or negatively-keyed items respectively (Dehshiri, 2003). The scales and subscales are; intrapersonal intelligence (emotional self-awareness, assertiveness, self-regard, self-actualization, independence), interpersonal intelligence (empathy, interpersonal relationships, and social responsibility), adaptability (problem-solving, reality testing, and flexibility), stress management (stress tolerance, impulse control), and general mood (happiness, optimism). Higher scores indicate a higher level of emotional intelligence. In this study, the questionnaire provides a total score. Cronbach's alpha coefficients were 0.91 for intrapersonal intelligence, 0.87 for interpersonal intelligence, 0.88 for adaptability, 0.85 for stress management, 0.87 for general mood, and 0.96 for the emotional Quotient (EQ).

### 2.2.3. Defense Styles Questionnaire (DSQ-40)

Defense Styles Questionnaire (DSQ-40) is a 40 item questionnaire developed by Andrews et al. (1993), measuring three categories of defense mechanisms that may be used by respondents. The Farsi version of this questionnaire was translated by Besharat et al. (2007). The 40 items measure three styles labeled: mature, immature and neurotic. Respondents answered to each item on a nine-point Likert scale, ranging from "Completely Agree" to "Completely Disagree". The Mature defense style includes defense mechanisms of sublimation, humor, anticipation and suppression. The Neurotic defense style includes defense mechanisms of undoing, pseudo-altruism, idealization and reaction formation. The Immature defense style includes the following defense mechanisms: projection, passive aggression, acting-out, isolation, devaluation, autistic fantasy, denial, displacement, dissociation, splitting, rationalization and somatization. Cronbach's alphas of 0.75, 0.73 and 0.72 were reported for the three defense styles of mature, neurotic and immature respectively. Furthermore, test-retest reliability of  $r = 0.81$  was reported after a four-week interval in 30 subjects (Besharat &



Shahidi, 2011), and in this study, in the present study, Cronbach's alphas of 0.82, 0.76 and 0.81 were for the three defense styles of mature, neurotic and immature respectively.

#### 2.2.4. NEO Personality Inventory-Revised (NEO-PI-R)

The revised form of NEO personality questionnaires (long form) used in this research, is a self-evaluation personality inventory that consists of 240 items that define all five major factors of personality and six traits of each factor in the Persian version by Garousi et al. (2001) in Iran and long-form of NEO questionnaires is a personality measurement instrument with likert, with five points that scored 0, 1, 2, 3, 4 and some of the are scored inversely (Zarrin et al., 2021). Computing correlational coefficients of a sample including and doing main elements of varimax rotation were will shown that every scale with its indicator has a significant correlation coefficient, while it has no remarkable relationship with other indicators (Haghshenas, 2006). In this study, reliability coefficients for the five major factors were: 0.87 for Neuroticism, 0.86 for Extraversion, 0.84 for Openness, 0.82 for Agreeableness, 0.87 for Conscientiousness.

### 3. Results

Firstly, descriptive statistics (M and SD) and inter-correlation coefficients (Pearson's r) for all are reported in Table 1.

**Table 1.** Partial correlations of Beck's self-concept with Bar-On EQ-I and its five major components, three factor scores of the ego defense styles and five major factor scores of personality (NEO-PI-R) via controlling for gender and educational level of 153 employees.

Pearson	M	SD	Intellectual Ability	Work Efficacy	Physical Attractiveness	Social Skills	Virtual Vices	BSCT
Intrapersonal Intelligence	108/59	9/44	0/252*	0/015	0/140	0/272*	-0/071	0/234*
Interpersonal Intelligence	71/59	7/52	0/309*	0/162	-0/152	0/251*	-0/255*	0/121
Adaptability	62/35	8/79	0/179	-0/084	0/062	0/137	0/002	0/121
Stress Management	38/41	6/68	0/059	-0/341*	0/017	0/310*	0/484*	0/226
General Mood	45/47	6/63	0/395*	0/014	0/123	0/538**	0/078	0/441*
Bar-On EQ-I (total)	326/41	31/64	0/291*	0/050	0/051	0/353*	0/037	0/269*
Mature defense style	43/53	8/00	-0/048	-0/236*	-0/130	-0/003	0/298*	-0/028
Neurotic defense style	41/35	8/04	0/330*	0/077	-0/045	0/241*	-0/508*	0/050
Immature defense style	105/88	21/25	0/288*	-0/171	0/006	0/381*	-0/017	0/211*
Neuroticism (N)	82/47	15/76	-0/453*	-0/007	-0/039	-0/567**	-0/300*	-0/521**
Extraversion (E)	103/18	16/07	0/525**	0/091	0/273*	0/428*	0/040	0/506*
Openness (O)	103/71	15/62	0/201*	-0/047	-0/163	0/254*	0/086	0/136
Agreeableness (A)	117/41	8/07	-0/206*	-0/409*	0/035	0/007	0/064	-0/155
Conscientiousness (C)	125/76	13/48	0/585**	0/178	0/268*	0/607**	-0/429*	0/462*

Notes. \*Correlation is significant at the 0.5 level (2-tailed) and \*\*Correlation is significant at the 0.05 level (2-tailed).

As shown, the correlations between the Bar-On emotional intelligence and Beck's self-concept scales exhibit a significant (at  $p < 0.5$ ) positive correlation between intrapersonal intelligence ( $r = 0.23$ ), general mood ( $r = 0.44$ ) and total EQ ( $r = 0.27$ ) and no significant correlation was identified between interpersonal intelligence, adaptability, stress management and the total Beck's self-concept scale. The high and positive correlation between EI and Beck's self-concept subscales related to social skills ( $r = 0.35$ ) and also the high significant (at  $p < 0.05$ ) positive correlation with general mood ( $r = 0.54$ ) with social skills. Among of the EI components, the stress management ( $r = -0.34$ ) and interpersonal intelligence ( $r = -0.26$ ) has significant (at  $p < 0.5$ ) negative correlations with work efficacy and virtual vices, respectively. The correlations between the ego defense styles and Beck's self-concept scales exhibit a significant (at  $p < 0.5$ ) positive correlation with intellectual ability ( $r = 0.29$ ), social skills ( $r = 0.38$ ) and total Beck's self-concept scale ( $r = 0.21$ ) and there is no significant correlation was recognized between work efficacy and physical attractiveness with immature defense style. However, and high and negative correlation between neurotic defense style with virtual vices ( $r = -0.51$ ), no significant correlation was observed between total Beck's self-concept and also, neurotic defense style has significant positive correlation between intellectual ability ( $r = 0.33$ ) and social skills ( $r = 0.24$ ). In addition, a significant positive correlation was seen between virtual vices ( $r = 0.30$ ) and negative correlation between work efficacy ( $r = -0.24$ ). No significant correlation between total Beck's self-concept, social skills, physical attractiveness and intellectual ability, and defense style. However, there is a significant correlation between all of the big-five personality factors and intellectual. A significant (at  $p < 0.05$ ) positive correlation with E ( $r = 0.52$ ), C ( $r = 0.58$ ) and O ( $r = 0.20$ , at  $p < 0.5$ ) and also, a significant (at  $p < 0.5$ ) negative correlation with N ( $r = -0.45$ ) and A ( $r = -0.21$ ) Was calculated the high significant (at  $p < 0.05$ ) correlation between big-five personality factors and Beck's self-concept subscales Was related to C ( $r = 0.61$ ) as positive and N ( $r = -0.57$ ) as negative with social skills.

Next, the investigation of the results of the independence test showed the numbers of two experimental and the control groups are not significantly different considering demographic traits. Therefore, due to the lack of correlation between demographic traits and dependent variables, it was not necessary to statistically control them. Firstly, all of the descriptive statistics (M and SD) of others implicit attitude superior or senior colleagues, junior or subordinate colleagues and cooperating colleagues in the workplace and friends outside the workplace about one's self-concept scales are reported in **Table 2**.

The result of the repeated measures ANOVAs are used to examine means differences in the total Beck's self-concept scale of the others implicit attitude about one's self-concept, indicates there are no significant differences between the means of others and one's implicit attitude about him or her self-concept within-subject design (regardless of sex and education):  $V = 0.824$ ,  $F(5, 35) = 1.493$ ,  $p = 0.217$  ( $V$  is the sign we use to show the Wilks' Lambda outcome). Subsequently,

**Table 2.** Means and standard deviation of bank employee's self-concept and other attitude about his/her self-concept.

Dependent variables of Self-Concept	Self-report of Self-Concept (pre-test)		Other Feedback of person's Self-Concept								Self-report of Self-Concept (post-test)	
			A friend outside the workplace		A superior or senior colleagues		A junior or subordinate colleagues		A cooperating colleagues			
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Intellectual Ability	16/20	1/96	17/22	2/21	16/45	1/80	16/60	1/60	16/45	1/75	16/35	2/21
Work Efficacy	17/25	2/63	17/50	2/42	18/05	1/91	17/72	2/44	17/30	1/80	17/15	2/12
Physical Attractiveness	15/43	2/01	16/85	2/24	15/87	2/08	16/60	2/10	15/95	1/85	16/18	2/53
Social Skills	16/03	2/11	15/45	2/50	16/20	1/62	15/60	2/11	15/70	1/80	16/30	1/92
Virtual Vices	13/18	1/85	13/83	2/40	13/80	1/65	14/23	1/56	14/25	1/88	13/70	1/47
BSCT (total)	78/08	6/25	80/85	6/14	80/37	5/24	80/75	5/46	79/65	4/91	79/68	6/17

to compare three groups in all scales and subscales, the multivariate analysis of covariance (MANCOVA) was used. Box test was not significant for any of the variables. Thus conditioned matrices homogeneity of variance/covariance was met. In order to investigate the significance of this difference, the summary of multivariate analysis of covariance (MANCOVA) results is presented in **Table 3**.

**Table 3** indicates a significant multivariate effect across the groups for the combined immature defense style of total ego defense styles. Referring to the Wilks' Lambda outcome in **Table 3**, we can report that we have only a significant multivariate outcome, in respect of total ego defense styles (mature, neurotic and immature) across the effect of others implicit attitude about one's self-concept's participants ( $\lambda = 0.834$ ,  $F(6, 144) = 2.281$ ,  $p = 0.039$ ). Moreover, immature scores ( $F(2, 74) = 3.769$ ,  $p = 0.028$ ) differ significantly across the groups. Post hoc (Bonferroni) analyses of the univariate outcomes showed that bank employees with low emotional intelligence compared to the employees with high emotional intelligence ( $p = 0.044$ ) had more than immature defense style (Mean Difference = 9.849) under the effect of other implicit attitude about their self-concept and the partial effect size according to **Table 3** (the partial eta squared) is 0.08. It means that 8% differences of post-test scores for the total ego defense styles are explained by the impact of this test. Finally, to understand the impact of each subscales of immature defense style, the multivariate analysis of covariance (MANCOVA) for total immature defense style was used. MANCOVA analyses showed a significant multivariate effect for total immature defense style subscales across the groups: ( $\lambda = 0.539$ ,  $F(24, 108) = 1.631$ ,  $p = 0.039$ ). Univariate analyses with respect to 12 subscales of immature defense style indicated that in 4 subscales, there are significant effects as follows; ( $F(2, 65) = 6.049$ ,  $p = 0.004$ ) with  $\eta^2 = 0.157$  for acting-out; ( $F(2, 65) = 4.744$ ,  $p = 0.012$ ) with  $\eta^2 = 0.127$  for autistic fantasy, ( $F(2, 65) = 4.765$ ,  $p = 0.012$ ) with  $\eta^2 = 0.128$  for passive aggression and ( $F(2, 65) = 4.068$ ,  $p = 0.022$ ) with  $\eta^2 = 0.111$  for isolation. Post hoc (Bonferroni) analyses of the univariate outcomes of these subscales are reported in **Table 4**.

**Table 3.** Multivariate analysis of covariance summary for all variables.

Ind. variable	MACOVA				Dep. variable	Univariate analysis			
	Wilks'	F	<i>p</i>	$\eta^2$		F	df	<i>p</i>	$\eta^2$
Ego Defense Styles	0.83	2.28	0.039*	0.087	Mature Defense Style	1.99	2	0.145	0.051
					Neurotic Defense Style	0.78	2	0.463	0.021
					Immature Defense Style	3.77	2	0.028*	0.092
Emotional Intelligence	0.81	1.47	0.159	0.097	Intrapersonal Intelligence	2.05	2	0.137	0.054
					Interpersonal Intelligence	0.22	2	0.803	0.006
					Adaptability	0.96	2	0.388	0.029
					Stress Management	1.02	2	0.365	0.028
					General Mood	0.94	2	0.396	0.025
Beck Self-Concept	0.93	0.52	0.874	0.037	Intellectual Ability	0.171	2	0.843	0.005
					Work Efficacy	1.503	2	0.229	0.040
					Physical Attractiveness	0.733	2	0.484	0.020
					Social Skills	0.226	2	0.799	0.006
					Virtual Vices	0.380	2	0.685	0.010
NEO-Personality	0.92	0.52	0.876	0.037	Neuroticism (N)	0.872	2	0.423	0.024
					Extraversion (E)	0.233	2	0.793	0.006
					Openness (O)	0.328	2	0.722	0.009
					Agreeableness (A)	0.031	2	0.970	0.001
					Conscientiousness (C)	0.338	2	0.714	0.009

Notes. \*The significant at the 0.05 level.

**Table 4.** Pairwise comparisons of immature defense style variables of employees.

Dep. Variables	(I) 3 group	(J) 3 group	Mean Difference (I-J)	SE	<i>p</i>	95% Confidence Interval for Difference <sup>a</sup>	
						Lower Bound	Upper Bound
Acting-out	Control	Exp. (Low EQ)	-3.940*	1.322	0.012	-7.188	-0.691
		Exp. (High EQ)	0.223	1.080	1.000	-2.432	2.877
	Exp. (Low EQ)	Control	3.940*	1.322	0.012	0.691	7.188
		Exp. (High EQ)	4.162*	1.261	0.005	1.064	7.261
	Exp. (High EQ)	Control	-0.223	1.080	1.000	-2.877	2.432
		Exp. (Low EQ)	-4.162*	1.261	0.005	-7.261	-1.064

## Continued

<b>Autistic Fantasy</b>	Control	Exp. (Low EQ)	-4.131*	1.346	0.009	-7.437	-0.824
		Exp. (High EQ)	-1.318	1.100	0.705	-4.021	1.384
	Exp. (Low EQ)	Control	4.131*	1.346	0.009	0.824	7.437
		Exp. (High EQ)	2.812	1.283	0.096	-0.342	5.966
	Exp. (High EQ)	Control	1.318	1.100	0.705	-1.384	4.021
		Exp. (Low EQ)	-2.812	1.283	0.096	-5.966	0.342
<b>Passive Aggression</b>	Control	Exp. (Low EQ)	-2.862*	1.063	0.027	-5.474	-0.250
		Exp. (High EQ)	0.077	0.869	1.000	-2.057	2.212
	Exp. (Low EQ)	Control	2.862*	1.063	0.027	0.250	5.474
		Exp. (High EQ)	2.939*	1.014	0.015	0.448	5.430
	Exp. (High EQ)	Control	-0.077	0.869	1.000	-2.212	2.057
		Exp. (Low EQ)	-2.939*	1.014	0.015	-5.430	-0.448
<b>Isolation</b>	Control	Exp. (Low EQ)	-2.487	1.022	0.053	-4.999	0.025
		Exp. (High EQ)	0.159	0.835	1.000	-1.894	2.212
	Exp. (Low EQ)	Control	2.487	1.022	0.053	-0.025	4.999
		Exp. (High EQ)	2.646*	0.975	0.026	0.250	5.042
	Exp. (High EQ)	Control	-0.159	0.835	1.000	-2.212	1.894
		Exp. (Low EQ)	-2.646*	0.975	0.026	-5.042	-0.250

Notes: Based on estimated marginal means. <sup>a</sup>Adjustment for multiple comparisons: Bonferroni. \*The mean difference is significant at the 0.05 level.

**Table 4** shows the participant employees under the effect of others implicit attitude about their self-concept with low EI compared to the employees with high EI, ( $p = 0.005$ , Mean Difference = 4.162), ( $p = 0.015$ , Mean Difference = 2.939) and ( $p = 0.026$ , Mean Difference = 2.646) more than acting-out, passive aggression and isolation, respectively. Furthermore, compared to the control group ( $p = 0.012$ , Mean Difference = 3.940), ( $p = 0.009$ , Mean Difference = 4.131) and ( $p = 0.027$ , Mean Difference = 2.862) more than acting-out, autistic fantasy and passive aggression, respectively.

#### 4. Discussion and Conclusion

This study shows the partial correlation of Beck's self-concept with NEO-PI-R, Bar-On EQ-I, ego defense styles and its components with gender control and educational level in the branch of the Mellat bank employees. Also, there is a stronger negative correlation between neuroticism (N) and positive correlation with extraversion (E), conscientiousness (C), Bar-On EQ-I, intrapersonal intelligence, general mood and immature defense style, and no significant correlation has been seen with openness (O), agreeableness (A), interpersonal intelligence,

adaptability, stress management, mature and neurotic defense style. We initially thought that due to self-concept relationships and N, E, C, and general moods, when employees are confronted with the implicit attitude of others about their self-concept, changes can be seen in all these variables, but it seems that this influence does not exist in all of them, except in the immature defensive style. So it seems that the factor that can affect the increase in the level of immature defense mechanisms, especially in people who don't have high emotional intelligence, is their own negative perception, which is shaped by the level of anxiety from being judged by people close to them.

To sum up, the present study appears to indicate that bank employees use self-defense mechanisms (here, immature defense style) to maintain and prove their self-concept. We have a reason for this effect. For example, since the participants were not aware of the result of another implicit attitude about their self-concept (due to empirical constraints and moral constraints), they were prejudiced only on the basis of their own subjective interpretation. This can be predicted based on their understanding of the implicit attitudes of others. Paulhus & John (1998) and Vohs & Heatherton (2001) both highlight the role of self-deception in ego defense, with Paulhus & John discussing the egoistic and moralistic biases that can lead to self-deception. Swann & Read (1981), Swann et al. (1992) and Chen et al. (2006) explore the strategies and motives behind self-verification, with Swann emphasizing the role of social interactions in confirming self-conceptions and Chen extending this to the collective level of self-definition. Swann & Read (1981) and Madon et al. (2001) found that individuals with negative self-views may seek unfavorable feedback to confirm their self-conceptions. Swann & Read (1981) and Swann et al. (1992) further proposed that self-verification is driven by a desire for predictability and control, and that individuals use social interactions to confirm their self-conceptions. In general, implicit attitudes are automatically activated-drive behavior by default unless rejected by controlled processes (Ajzen, 2002). However, the need for control can also be so strong that people have an inaccurate understanding of having it, leading to suspicious actions and inappropriate self-blame. Therefore, even if people have (and are looking for) self-concepts full of positivity and control, this desire can have negative aspects that ironically can subvert a person's larger goals (McConnell & Strain, 2011).

The main results confirm that control process to maintain self-concept of inemployees with high emotional intelligence was significantly through mature defense mechanisms and was seen for people with low emotional intelligence through immature defensive styles such as acting, isolation, autistic fantasy and passive aggression.

The present study points out that emotional intelligence plays an important role in controlling the mature defense mechanism and, of course, in maintaining one's self-concept when people feel they may be misjudged.

The present study notes that emotional intelligence plays an important role in

controlling the mature defense mechanism and of course in maintaining one's self-concept when people feel they may be misjudged. Our findings have also aligned with other research, as a positive relationship between emotional intelligence and self-verification perceptions has been shown. Studies have shown that emotional intelligence is associated with higher self-esteem and self-realization (Calero et al., 2018; Barnard & Herbst, 2005). This relationship is further supported by the role of emotional intelligence in shaping self-concept and self-efficacy, which are key components of self-perception (Lumbantobing, 2020; Costa et al., 2013). In addition, self-affirmation, the process of affirming one's self-concept, is influenced by emotional intelligence, especially in the context of self-contextual views (Chen et al., 2006). However, measuring emotional intelligence, whether through self-reporting or performance-based methods, can be influenced by personality management and impact (MacCann et al., 2003; Sjöberg & Engberg, 2004). Despite these measurement challenges, perceived emotional intelligence can be employed and trained to predict and improve self-concept in bank employees which could be subject to further future research in the field. In addition to these results, it can be suggested that increasing the skills of emotional intelligence will help employees equip themselves with more mature defenses against the judgment of others.

### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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