

# Reflective Thinking, Self-esteem and their Relationship among King Faisal University Students

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### Abstract

The study aimed to know the effectiveness of using a training program based on group play in reducing some behavioral and social problems facing students with learning disabilities, the researcher used two tools that included a scale of behavioral problems and social problems scale, after making sure of their validity and stability. The semi experimental method was used. The sample was divided into an experimental group that consisted of (6) students with learning disabilities to which the training program was implemented and a control group consisted of (6) students with learning disabilities who were not exposed to the training program which consisted of (26) sessions. Results showed a clear decrease in behavioral problems (aggressive, impulsive, hyperactivity), and social problems (making friends, social anxiety, social communication) in experimental group on posttest and the effect of training remained on the follow up test.

**Keywords:** training program, group play, learning difficulties, behavioral and social problems.

## مستويات التفكير التأملي وعلاقتها بتقدير الذات لدى طلاب جامعة الملك فيصل

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### الملخص

هدفت الدراسة إلى معرفة فعالية استخدام برنامج تدريبي قائم على اللعب الجماعي في خفض بعض المشكلات السلوكية والاجتماعية للتلاميذ ذوي صعوبات التعلم، واستخدم الباحث أداتي دراسة تشتمل على مقياس المشكلات السلوكية والمشكلات الاجتماعية من إعداده بعد التأكد من ثباتهما وصدقهما. واستخدم المنهج شبه التجريبي. وتكونت عينة الدراسة من (١٢ من التلاميذ ذوي صعوبات التعلم بالمرحلة الابتدائية بمدرسة الإمام محمد عبده بمحافظة الدقهلية، مقسومين إلى مجموعة تجريبية قوامها (٦) طلاب من ذوي صعوبات التعلم تم تطبيق البرنامج التدريبي وجلساته التي تكونت من (٢٦) جلسة تدريبية بواقع جلستين أسبوعياً عليهم، ومجموعة ضابطة قوامها (٦) طلاب من ذوي صعوبات التعلم لم يتعرضوا للبرنامج التدريبي، وأظهرت النتائج انخفاضاً واضحاً في المشكلات السلوكية وهي (العدوانية، الاندفاعية، النشاط الزائد)، والمشكلات الاجتماعية (تكوين صداقات، القلق الاجتماعي، التواصل الاجتماعي) في المجموعة التجريبية في القياس البعدي وبقاء أثر التدريب في القياس التبعي.

الكلمات المفتاحية: برنامج تدريبي، اللعب الجماعي، صعوبات التعلم، المشكلات السلوكية والاجتماعية.

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### **Introduction**

In line with the rapid development of technology and methods for learning in recent decades, teacher is no longer solely knowledge provider and students are expected to develop intellectual and personal qualities which enable them to become effective and autonomous in their quest of knowledge. Reflective thinking is one of cognitive skills that student is expected to master in order to face the challenges of this knowledge revolution. On personal level, self-esteem is among the vast array of issues on which researchers worked on to examine psychological factors impacting students' achievement. As shown in the extant literature, they have often been studied in relation to academic issues such as learning and problem solving. The literature review shows a theoretical vacuity about their possible relationship among students. Our study will therefore provide an opportunity to investigate them among a sample of students and try to see if there is a relationship between them.

### **Reflective thinking**

The ability to reflect on one's knowledge and activity requires higher-order thinking skills. This ability is central to learning. Different definitions have been put forward to signify this ability. For example, Dewey (1933), focusing on the purpose of reflection, defined it as an "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends"(p. 118), while Schön (1992), who thought professionally, talked about reflective practice, which he defined

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as the practice by which professionals become aware of their knowledge, learn from their experience, that is “this capacity to do the right thing... exhibiting the more that we know in what we do by the way in which we do it, is what we mean by knowing-in-action. And this capacity to respond to surprise through improvisation on the spot is what we mean by reflection-in-action” (p. 11). While the definition of reflective thinking is broad and diverse in the literature, authors put an emphasis on purposeful critical analysis of knowledge and experience which leads to achieve meaningful learning. Reflective learning therefore relates to individuals exploring their knowledge of their actions and experiences, as well as their impact on themselves and others (Mann, Gordon, & MacLeod, 2009).

Individuals who think reflectively control their actions and learning, and are always wondering about the gap between what they know and what they do or what they want to know (Dewey, 1933). van Velzen (2016) posited that reflective thinking helps us to evaluate any given situation critically. Standing back from one’s actions and thoughts and analyzing them critically lead us to identify what worked well and what went wrong and, then, needed further improvement (van der Schaaf, Baartman, Prins, Oosterbaan, & Harmen, 2011). According to Başol and Gencil (2013), reflective thinking gives meaning to the experience by rebuilding them and leads to more goals that require more global tasks.

Numerous researches (Leung & Kember, 2003; Phan, 2006) highlight the positive associations between deep and surface approaches to learning and stages of reflective thinking. Reflective thinking engage students in their learning process by leading them to evaluate their own thinking and learning and, subsequently, to determine their strengths and weaknesses (Song, Grabowski, Koszalka & Harkness, 2006). A student who gets a result after examination, analysis and interpretation will be able to apply it and create new ones, while a student who only receives the result or the information from his teacher without too much mental exertion, become less imaginative and less creative (Gurol, 2011). Reflective thinking goes beyond school-based lessons, it builds student’s ability to mediate on his or her learning and what he or she does in order to make careful judgments (Lucas & Tan, 2007).

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According to Kember (Kember, Leung, Jones, & Loke, 2000), reflective thinking is composed of four stages, namely, habitual action, understanding, reflection and critical reflection.

Habitual action, which is defined by (Kember et al., 2000) as “that which has been learnt before and through frequent use becomes an activity that is performed automatically or with little conscious thought” (p.383).

Understanding, which is described by Kember et al. (2000) as “thoughtful action” that “makes use of existing knowledge, without attempting to appraise that knowledge, so learning remains within pre-existing meaning schemes and perspectives. Thoughtful action can be described as a cognitive process” (p. 384).

Reflection, which refers to the “critique of assumptions about the content or process of problem solving. The critique of premises or presuppositions pertains to problem posing as distinct from problem solving. Problem posing involves making a taken-for-granted situation problematic, raising questions regarding its validity” (Kember et al., 2000, p. 384).

Finally, critical reflection, which refers to the critique of assumptions or, as Lucas said, “the assessment of assumptions implicit in beliefs, including beliefs about how to solve problems” (Kember et al., 2011, p. 6).

Furthermore, if a student is guided to be present in the “Self-evaluation”, he asks himself questions, and tries to understand how he learns, and can think about these solutions by being aware of his strengths and weaknesses.

These practices make him aware of his learning process and more confident to contribute to reflective thinking situations and this increases his positive self-esteem.

The students evaluate their mental processes and reflect on their thoughts audibly at the end of the evaluation with “Thinking aloud” strategy (Erdogan, 2019, p91).

### **Self-esteem**

Self-esteem is one of the determinant constructs of human behavior in that the success and well-being of a person depend mostly on the degree of one’s self-esteem he or she expresses. The “self” is related to the values, beliefs and attitudes that one holds about oneself. The “esteem” is related

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to the value and worth that one gives oneself (Baumeister, Campbell, Krueger, Vohs, 2003; Harter, 1999; Morganett, 1990). Brown (1993) pointed out that the different conceptualizations of self-esteem addressed it from three perspectives. The first is the general or global self-esteem, which is an evaluation of one's worth and is relatively stable over time. The second is the situational or specific self-esteem, which is an assessment of one's ability in a certain situations, such as study. The third is the task self-esteem, which is an assessment of one's activities in particular situations.

Many attempts were done to conceptualize self-esteem. Cooper Smith (1967) conceptualized it as "positive and negative attitudes toward oneself" (p. 31). Rubio (2007), defined it as "a psychological and social phenomenon in which an individual evaluates his/her competence and own self according to some values, which may result in different emotional states, and which becomes developmentally stable but is still open to variation depending on personal circumstances" (p. 5). By this subjective self-assessment ability, one can perceive one's value to the world and to the others, believe that he or she is good, bad, intelligent or looser, that one's existence has meaning and value, face life's challenges, solve problems, achieve happiness, and be given respect.

Subjective experiences in a person's life contribute to shape one's self-esteem development. The good experiences can create favorable attitudes toward the self and develop positive feelings of self-worth; at the opposite, bad experiences can produce opposite effects on the self and develop negative feelings of self-worth. Positive self-esteem gives us the strength to move forward, to make our own way in life and face with confidence the difficulties encountered, without the fear of failure or being rejected. People high in self-esteem are often confident, resourceful, productive, good about themselves, and socially accomplished. This healthy self-esteem is related to several factors such as feeling loved, having rewarding relationships, healthy lifestyle, school and/or professional success, and being able to act effectively. Negative self-esteem is quite the opposite of that. It gives feeling of dissatisfaction, of being uncomfortable with one's self, lack of self-confidence, and incapability. It is related to several psychological and social factors such as emotional deprivation,

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mistreatment, especially during childhood and adolescence, unsatisfying relationships, multiplication of school and/or professional failures, and lack of efficiency.

Clemes and Bean (1990) argued that students' performance in school depend greatly on the level of their self-esteem and that students with low self-esteem tend to have difficulty coping with school environment and to be dissatisfied with it, which in turn affect negatively their learning process and school outcomes. According to Lavoie (2002), students with low self-esteem show exhibit low tolerance for frustration, a lack of autonomy which manifests itself in systematic dependence on their teachers and peers, decision-making difficulties, and evasive attitude when confronted with school tasks. Conversely, individuals with good self-esteem are more likely to accomplish their task successfully than with the same ability but less self-esteem. Learner with high self-esteem shows a passion for learning and takes the initiative regardless of the pressures and obstacles that he may encounter (Apter, 1997; Lavoie, 2002).

### **Problem statement**

Personal characteristics are among the factors that shape our thought. Self-esteem is one of them. It affects all the aspects of individuals' lives including the way of their thinking and performance. Its relationship with reflective thinking among students is remained however uncharted. It is clear that student contribution in reflective thinking situations enhances their self-esteem, Coupled with this situation is also the fact that these three topics, namely self-esteem, reflective thinking and their possible relationship, have not been studied among King Faisal University students in Saudi Arabia. Therefore, the present study was aimed to identify:

1. the level of reflective thinking of a sample of students from of King Faisal University;
  2. the level of their self-esteem;
  3. the relationship between their reflective thinking and their self-esteem.
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## Method

### Participants

The study group of the research consists of 145 undergraduate male students studying in King Faisal University: 81 students from College of Education and 64 students from College of Arts. All students (145) were selected randomly.

### Measures

Two measuring instruments were used for data collection: the Adult Form of Cooper-smith Self-Esteem Inventory, developed by Coopersmith (1981, 2002) for self-esteem, and the Questionnaire for Reflective Thinking, developed by Kember et al. (2000) for reflective thinking. To collect the demographic information of our participants, 3-item personal information form (age, university, and university course) was used. The scales were completed anonymously and the participants were informed of the confidentiality of their answers.

### **The Coopersmith Self-Esteem Inventory-Adult Form.**

In view of the ages of the participants, researchers used the adult form of the Adult version of the inventory (CSEI-AD), built to measure the self-esteem of people aged over 15 years. The instrument, consisting of 58 items, generates four subscale scores distributed as follows: General self-esteem (26 items), Social self-esteem (8 items), Home-parents (8 items), School-academic (8 items), Total self (50 items), and Lie scale score (8 items). For each item, participants answer whether the statement provided is "Like Me" or "Not Like Me". The scores are reported as: total number correct of all scales excluding Lie (a maximum of 50) and separate score total number of responses indicative of defensive, Lie reaction (a maximum of 8). But, for convenience sake the total CSEI-AD score is multiplied by two so that maximum score is 100. According to Farahi (2011), the values of Cronbach alpha as was found to be 0.87 for total self, 0.67 for General self-esteem, 0.56 for Social self-esteem and Home-parents, and 0.79 for School-academic.

### **The Questionnaire for Reflective Thinking (QRT).**

The QRT, built by Kember et al.(2000),is composed of four subscales that assess the following four levels of reflective thinking, each containing four items: Habitual action (HA) which is related to the activity that is learnt through frequent use and progressively performed automatically or with little conscious thought, Understanding (U), which is related to thoughtful activity of individuals in which they use their existing knowledge and get comprehension of different things/phenomena, Reflection (R), which is related to the critique and appraisal of assumptions about the content or process of problem solving, and Critical reflection (CR), which is related to the process through which individual reviews reflection evidence on the bases of conscious and unconscious prior learning. The questionnaire asks students to indicate their level of agreement with each statement. The items are answered on a four-point Likert scale from 1 (“definitely agree”) to 4 (“definitely disagree”). Researchers used adapted version to Arabic. Morched (2014) reported the values of Cronbach alpha as 0.7 for (HA), 0.76 for (U), 0.79 for (R), and 0.76 for (CR).

### **Data analysis.**

SPSS software version 21 was used for statistical analyze of data. The data were analyzed using descriptive statistics on the raw data from the questionnaires .A correlation matrix (Pearson product-moment correlation coefficient) was run to investigate the possible relationship between scores obtained by the participants in each test and the possible relationship between reflective thinking and self-esteem.

## **Results**

### **The QRT Scores**

The means and standard deviations of the sample’s scores for the QRT are stated in Table 1.

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**Table (1)**  
**Descriptive Statistics for QRT Scores**

	<b>N</b>	<b>Sum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Habitual action	145	1492.00	10.2897	2.55744
Understanding	145	1949.00	13.4414	2.29999
Reflection	145	1817.00	12.5310	2.50015
Critical reflection	145	1625.00	11.2069	2.75605
Reflective Thinking total degree	145	6883.00	47.4690	6.44857
Valid N (listwise)	145			

As seen in table 1, the average of the students' reflective thinking score is (47.46) it is pretty nearly to 75%. Only understanding subscale score exceeds this limit. Understanding subscale score is the highest one, exceeding the 75% this can be explained that students were taught how to use thinking skills -including reflective thinking- in studying during the course, whereas the Critical reflection subscale score is the lowest one, not exceeding the moderate level. These results indicate that the students' reflective thinking average level is moderate.

### The CSEI-AD Scores

The means and standard deviations of the sample's scores for the CSEI-AD are presented in Table 2.

**Table (2)**  
**Descriptive Statistics for CSEI-AD Scores**

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
General self-esteem	145	17.1862	4.43939
Social self-esteem	145	5.9379	1.56888
Home-parents self-esteem	145	6.3448	1.65571
School-academic self-esteem	145	4.7379	1.95086
Lie scale	145	5.6759	1.35340
Total self	145	34.2	7.68
Valid N (listwise)	145		

As seen in table 2, the average of the students’ self-esteem score is (34.2) According to Ryden (1978), the average score of total self is significantly below average level. General self-esteem subscale average is (17.18) , it is nearly representing (68.7% ), social self-esteem subscale average is (5.93) , it is nearly representing (74.22% ) which exceeds 68% and these result can be explained that social settings in which reflective thinking is applied enhanced social self-esteem.

The Correlation Coefficient Between SelfEsteem and Reflective Thinking

The result of the correlation between QRT scores and CSEI-AD scores analysis is given in Table 3.

**Table (3)**  
**Correlation between reflective thinking skills and self-esteem**

Correlations			
		Self-esteem	Reflective thinking
Se total	Pearson Correlation	1	0.2060**
	Sig. (2-tailed)		0.0060
	N	145	145
Rf total	Pearson Correlation	0.2060**	1
	Sig. (2-tailed)	0.0060	
	N	145	145
**. Correlation is significant at the 0.01 level (2-tailed).			

Legend – se total: total of self-esteem; rf total: total of reflective thinking.

As seen in table 3, there was a low level meaningful correlation in the positive sense ( $r=0.206$ ,  $p<0.01$ ) between self-esteem and students’ reflective thinking.

**Discussion**

The purpose of this study was to determine the level of reflective thinking among a sample of students from King Faisal University, that of their self-esteem, as well as their possible relationship.

Results related to reflective thinking were similar to those obtained by Elmorshed (2014), who found that reflective thinking levels among Jouf University students were below the limit of 75%. It should be noted that the sample Elmorshed (2014) worked on was composed of students from two genders. According to him, this result indicates that the existing university curricula and teaching methods do not promote the use and the development of reflective thinking among this category of learners. According to Lucas and Tan (2006) it is necessary to use learning journals to promote reflective thinking during teaching so that the traditional teaching methods do not support reflective thinking. An education system which is based on memorization cannot develop reflective thinking skills in students (Griffith & Frieden, 2000). In such an education system, teachers hold the authority and students are expected to be reactive and submissive (Abednia & Izadinia, 2013). Therefore, there is little opportunity for students to be nurtured as reflective thinkers.

It was also noted that Critical reflection subscale score was lower than those of understanding and reflection, a result obtained by Elmorshed (2014) and which agrees with Kember et al. (2000) assertion that critical reflection is generally less common in people than understanding and reflection.

Results related to self-esteem can be attributed to a number of factors. Some of them were highlighted by Arnold (2007) and Alrabai (2017). The latter spoke about degrading practices from Saudi teachers common in Saudi Arabia, that were negatively affecting the self-esteem of learners, such as labeling, sarcasm, put-downs, unfair comparisons between bad students and brilliant students, and absence of praise and interest, which behaviors increase their feeling of inadequacy and inferiority.

Finally, the correlation coefficient indicated that there was a low meaningful statistical relationship between the tendency to reflective thinking and self-esteem among our students' sample. This finding is not significantly consistent with those showing self-esteem as one of the emotional factors affecting cognitive skills (Lancaster, Naillon & Kibby, 2004; Seabi, 2011). These studies emphasize that without a positive tendency toward cognitive skills, cognitive activity stands below

the standard level. One possible explanation for this finding is that our students, for one reason or another, do not improve their image or enhance their value through activities requiring high levels of reflective thinking. This result could also be explained with reference to our interpretation of self-esteem outcomes, which depicted some of the de motivating teaching practices. These hypothesis needs to be verified through studies dealing with the interest and the value of reflective thinking and its use for personal fulfillment and social success.

### **Conclusion and recommendations**

Findings derived from this study revealed that students' self-esteem average score is significantly below the average level, that their reflective thinking average level is moderate, and these variables are weakly correlated. Explanations put forward emphasized the lack of concern for this cognitive activity in studies as well as the coercive teaching methods. In view of these findings, we think that there is a crucial need to be concerned about students' reflective thinking, to promote the use of this variable in all school activities, and make it a source of personal fulfillment. This can be obtained by instructing some university programs, through the use of appropriate teaching methods and evaluation standards. Theoretically, the findings lead us to question this weak relationship between the two variables and to dig deeper in order to detect its extent (by subjects, specialties, levels of study, etc.) and understand the underlying reasons for it.

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