

# **Adolescents Creativity, Self-Concept and Achievement Motivation**

Lama Majed Al-Qaisy and Jihad Turki

## **Abstract**

This study aims to determine the levels and relationships of creativity self-concept and achievement motivation of adolescents. Among a sample of 800 adolescents in the age group of 16-18 years studying in the 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> standers in the higher secondary schools of both private and state syllabus in the geographical area of Amman city are selected as a randomized cluster sample of the study from the population. The results indicate that that self-concept and achievement motivation of high creative male and female adolescents is less than the low creative male and female adolescents. Self-concept and achievement motivation of low creative male and female adolescents is less than the average and is greater than the high creative male and female adolescents. Additionally, the results indicate that achievement motivation of the high self-concept of the male and female adolescents is greater than the average self-concept and is greater than the low self-concept. It is also indicate that the achievement motivation of low average and high self-concept of private syllabus and state syllabus adolescents that the achievement motivations of the high self-concept total adolescents is less than the average self-concept and is greater than the low self-concept. And the correlation between the creativity with their physical self, social self, temperament self, educational self, moral self intellectual self and total self-concept, of sub –samples are not significant.

**Keywords:** Adolescence, creative, achievement motivation, self-concept.

## **1. Introduction**

Adolescence is a period of growth beginning with puberty and ending at the beginning of adulthood; it is a transition stage between childhood and adulthood (Matter, 1984). The period has been likened to a bridge between childhood and adulthood over which individuals most pass before they can take their places as grown adults. The transition from childhood to adulthood is complicated (Hammer & Vaglum, 1990). And the amount of time one takes to pass through this stage is variable, but most adolescents eventually complete the passage. Adolescence is the period of life bounded by puberty and assumption of adult responsibilities. It is heralded by puberty, which begins with the appearance of secondary sex characteristics and ends with psychological markers, such as assumption of adult responsibilities.

Staley Hall (1904) described adolescence as a period of great 'storm and stress', corresponding to the time when the human race was in a turbulent, transitional stage on the way to becoming civilized. Hall said the causes of this storm and stress in adolescents are biological, resulting from changes at puberty. Puberty represents a time of emotional upset and instability in which the adolescent's moods oscillate between energy and lethargy, joy and depression, or egotism and self-depreciation (Conroy, 2003). Adolescence is a psychological concept with biological correlates, but puberty is primarily a biological concept. According to Moore, Jensen, & Hauck (1990), psychologically, adolescence is the age when the individual becomes integrated into the society of adults, the age when the child no longer feels that he/she is below the levels of his/her elders but the equal, at least in rights. The integration into adult society has many affective aspects, more or less linked with puberty. It also includes very profound intellectual changes. The intellectual transformations, typical of the adolescence thinking, enable him to achieve his integration into the social relationships of adults, which are, in fact the most generally characteristics of this period of development (Kaufman, & Baer, 2004). In the early years of adolescence become more peer oriented and less parent oriented as they get older, and conformity to the group is still important to boys and girls. Gradually, they begin to crave for identity and are no longer satisfied to be like their peers in every respect, as they were earlier. According to Nurmi, & Pulliainen (1991) the way young people perceive their parents and peers, is not necessarily the same as how parents perceive events, or what an outside observer might record as happening, if they could observe family interactions.

Adolescence is a period of change. There are five almost universally concomitants of the changes that occur during adolescence. The first is the heightened emotionality. Second, the rapid changes that accompany sexual maturing which makes young adolescents unsure of themselves, of their capacities and of their interests. They have strong feelings of instability, which are often intensified by the ambiguous treatment they receive from parents and teachers. Third, changes in their bodies, their interests, and in the roles the social group expects them to play. Fourth, interests and behavior patterns change, so do values. Fifth, most adolescents are ambivalent about changes. All these changes necessarily create new problems and associated new challenges to them, which highly require the utilization of their potential creative talents and capacities (Rice, 1992). According to Moore, et al (1990), adolescents have to utilize their potential creativity more than children, because of their need to win their peers and adult world. Harris (2004) describes potentially creative youngsters as nonconformists who dislike too much

authority or structure. Potentially creative youngsters generally dislike rules, prefer working alone, and may be rebellious about constraints. They tend to be more tolerant of ambiguity and more social poised, mature, ambitious, and self-confident than their peers are. The relationship between adolescents and adult creativity is curious in some respects. Creative adolescents typically grow up to be creative adults, who often pursue the unusual careers which they envisioned during their youth (Nurmi, & Pulliainen, 1991). In the case of adolescence, the significance of development and utilization of divergent thinking is very high because it is during this time they bloom out with their cognitive field through the development of their operational thinking (Henderson, 2003). If we compare the creative expeditions of children and adolescents, we understand that the creativity of children is instinctual but the creative endeavors of adolescents are rational and productive. Once they start to think rationally and logically, the importance of divergent thinking also increases. This potential creativity of adolescents is understood as another cognitive capacity like intellect and is to be functionalized through creative activities like original, flexible and novel contributions (Wolters, 2004). According to Treffinger, Young, Selby & Shepardson (2002) creativity like intelligence is also normally distributed among population. According to Kaufman & Baer, (2005) creative thinking is the highest of mental functions and creative production, the highest peak of human achievement, these creative capacities are the result of the cognitive developments of this particular period. The potentially creative adolescents have the capacity to see new relationships, to produce unusual ideas and deviate from traditional patterns of thinking. Treffinger, et al (2002) they have a generalized constellation of intellectual ability, personality variables and problem- solving traits. According to them, the creative adolescent is very significant to their future life and appropriate training and caring should be provided to utilize their creative potentials through fostering their self-concept and autonomy (Hoelter & Harper, 1987). Self-concept is the totality of our impressions, thoughts and feelings such that we have a continuing conscious sense of being. It is a composite of ideas, feelings and attitudes a person has about himself. It includes one's self esteem sense of personal worth, and one's sense of who or what one would like to be or one's ideal self (Thrash & Elliot ,2002). The term self-concept is often regarded as consisting of three components the self-perception, self-image and the self-esteem (Wheeler, & Suis, 2005). There are some authors who say that self-concept has a role in the process of making the potential creativity to be functional and also has the ability to accelerate or seduce the achievement motivation of the person (Garzarelli, 1993, Finke et al, 1992). Leary (2007) explored the effect of self-concept, achievement motivation and academic achievement and obtained that self-concept had significant effect on achievement motivation and achievement of students. Marsh & Hau (2003) found that academic achievement had significant effect on self-concept, the family background and the school background had significant effect on self-concept.

Marsh (2007) considered that human motivation could be understood in terms of needs, but emphasized the importance of social needs, rather than psychological or basic activity. The tow needs which he particularly identified in this aspect were the need for achievement and the need for affiliation. Marsh proposed that achievement motivation was the reason why some people seem to be very keen to do well, while others seem to be reluctant to make an effort, and do mind whether they are successful or not. According to the study of Conroy (2003) achievement motivation is working as another

motivational factor for the effective functioning of creativity. Self- concept also is important with regard to achievement motivation, because, people who feel favorably about themselves tend to work hard.

The preliminary analysis of the literature available exposes the lacunae in the scientific research arena about the creativity, self-concept and achievement motivation, of the adolescents. The practical concerns also emphasize the significance of studying how the creativity of adolescents is related or affected by their self-concept and achievement motivation. Creativity is a natural talent inherent with almost every human being. As it was considered and conceived in the earlier days, it is not the possession of a select few. If this grace is not properly nurtured and used, the developmental processes may be badly affected and more than that, this explosive energy may be converted to destructive purposes. In such conditions, the adolescents will turn out to be problems for themselves and the society.

The present study aims to determine the levels and relationships of creativity self-concept and achievement motivation of adolescents.

## **2. Hypotheses**

1-There is a significant difference between the creativity, self-concept and achievement motivation of male and female adolescents

2- There is a significant difference between self-concept and achievement motivation of male and female adolescents

3-There is a significant difference between self-concept and achievement motivation of adolescents.

4- The relationship indicates that there is a significant difference between the creativity and achievement motivation of adolescents.

5- The relationship is significant between creativity and self-concept of adolescents

## **3. Method**

### *3.1 Population*

All the students in the group of 16 -18 years who are studying in 10<sup>th</sup> , 11<sup>th</sup> and 12<sup>th</sup> standards in the higher secondary schools in the geographical area of Amman city. These include both the private and state syllabus schools. There are 2100 higher secondary students in the eight Private Syllabus schools and 3200 higher secondary students in the ten State Syllabus schools in the geographical area of Amman city.

### *3.2 Participants*

800 adolescents (about 15% of the total population) in the age group of 16-18 years studying in the 10<sup>th</sup> , 11<sup>th</sup> and 12<sup>th</sup> standards in the higher secondary schools of both private and state syllabus in the geographical area of Amman city are selected as a randomized cluster sample of the study from the population. See in table (1)

Table (1) the sample distribution selected from private and state syllabus of the higher secondary schools.

Sample	Male	Female	Total
Private Syllabus	202	198	400
State Syllabus	201	199	400
Total	403	397	800

### 3.3 Instruments

#### 3.3.1 Self-concept questionnaire:

Self-concept questionnaire of Marsh (2007) is used. It provides six separate dimensions of self- concept, which are, physical, social, intellectual, moral, educational and temperamental. It also gives a total self-concept score. The questionnaire contains 48 items. A high score on this questionnaire indicates a higher self-concept, while a low score shows low self-concept. The reliability of the questionnaire was found by test-retest, and it found to be .89 for the total self-concept measure. And experts opinions were obtained to establish the validity of the questionnaire were given to 10 psychologist to classify the items according to the category to which it belongs. Items of highest agreement 85% of agreement were selected.

#### 3.3.2 Achievement motivation scale

Achievement motivation scale of Herman (1990) is used. Questionnaire contents of 14 item asks responding to indicate their level of agreement, disagreement, or uncertainty, using a 5- point scale (i.e., 1= strongly disagree; 3= uncertain; 5= a strongly agree). Cornbach's alpha coefficients among the current sample were .82.

#### 3.3.3 Test of creativity

Item	Gender	Mean	Std. Deviation
------	--------	------	----------------

Test of creativity, Gough (1979). The test contents of 45 items, the reliability of the test is found to be .84. For the purpose of calculating reliability coefficient, the test was administered to a randomly selected sample of 100 students. The validity coefficient, when scores on test of creativity were correlated was found to be .80.

## 4. Result

To knowing the difference between the distribution of low, a average and high groups of creativity, self-concept and achievement motivation of male and female have been computed Mean, and standard deviation, are presented in table (2).

		self-concept	achievement motivation	self-concept	achievement motivation
Low Creativity	Male	104.12	85.300	29.216	29.432
	Female	105.63	82.874	27.403	28.370
Average Creativity	Male	122.21	93.154	45.302	38.242
	Female	108.45	90.815	41.112	37.445
High Creativity	Male	88.433	71.265	52.102	53.711
	Female	89.997	71.0123	53.511	49.758
Total	Male	105.88	87.270	44.465	40.876
	Female	104.26	84.562	42.103	39.480

Table (2) Mean, and Standard deviation of self-concept and achievement motivation of the low, average and high creative of male and female

This table shows the mean, and standard deviation of self-concept and achievement motivation of the low, average and high creative of male and female adolescents. According to the table, the arithmetic mean scores of the self-concept of the low average and high creative male adolescents are (104.12, 122.21, 88.433 and 105.88) and that of female adolescents are (105.63, 108.45, 89.997 and 104.26). The standard deviation of the self-concept of the low, average and high creative male adolescents are (29.216, 45.302, 52.102 and 44.465) and that of female adolescents are (27.403, 41.112, 53.511 and 42.103).

The mean scores of the achievement motivation of the low average and high creative male adolescents are (85.300, 93.154, 71.265 and 87.270) and that of female adolescents are (82.874, 90.815, 71.0123 and 84.562).

The major trend identified from mean score of the self-concept and achievement motivation of the low average and high creative male and female adolescents is that self-concept and achievement motivation of high creative male and female adolescents is less than the low creative male and female adolescents. Self-concept and achievement motivation of low creative male and female adolescents is less than the average and is greater than the high creative male and female adolescents.

Table (3) Mean, and Standard deviation of achievement motivation of male and female adolescents having low, average and high self-concept.

Item	Gender	Mean	Std. Deviation
Low self-concept	Male	45.3200	17.58
	Female		

			47.455	16.17
Average self-concept	Male		90.979	32.00
		Female	86.156	30.14
High self-concept	Male		134.354	30.66
		Female	143.0452	26.35
Total	Male		87.260	40.88
		Female	85.663	39.49

The table shows the mean, and standard deviation of achievement motivation of the male and female adolescents having low average and high self-concept. The mean scores of the achievement motivation of the male adolescents having low average and high self-concept are (45.3200, 90.979, 134.354 and 87.260). And that of female adolescents are (47.455, 86.156, 143.0452 and 85.663). The major trend identified from mean score of the achievement motivation of low average and high self-concept of the male and female adolescents, is that the achievement motivation of the high self-concept of the male and female adolescents is greater than the average self-concept and is greater than the low self-concept.

Table (4) Mean, and Standard deviation of achievement motivation of adolescents having low, average and high self-concept

Item	Item sample	Mean	Std. Deviation	Std. Deviation
Low self-concept	Low self-concept Syllabus	46.145	17.781	17.58
	State Syllabus	45.455		15.17
Average self-concept	Average self-concept Syllabus	88.492	31.121	30.02
	State Syllabus	86.156		31.14
High self-concept	Private Syllabus	134.354		29.66
	State Syllabus	146.0452		26.35
Total	Private Syllabus	87.260		39.88
	State Syllabus	85.663		40.49

The mean score of the achievement motivation of low, average and high self-concept of Private Syllabus adolescents are (48.320, 92.979, 134.354, and 87.260) and that of State Syllabus are (45.455, 86.156, 146.0452 and 85.663). That means that the achievement motivation of high self-concept total adolescents is less than the average self-concept and is greater than the low self-concept.

Table (5) Mean, and Standard deviation of achievement motivation of adolescents (total sample) having low, average and high self-concept

High self-concept	138.265	29.722
Total	86.621	40.181
Sample	N	r values
Private Syllabus	400	-.070
State Syllabus	400	-.053
Male	400	-.076
Female	400	-.062
Total	800	-.068

This table shows the mean, and standard deviation of achievement motivation of adolescents having low average and high self-concept. The mean scores of the achievement motivation of the adolescents having low average and high self-concept are (46.115, 88.434, 138.265 and 86.621). A significant nature traced from the mean score of the achievement motivation of low average and high self-concept groups of total adolescents is that the achievement motivation of the high self-concept total adolescents is greater than the low and average self-concept total adolescents.

---

Sample	N	r values
--------	---	----------

---

Table (6) Correlation between the creativity and achievement motivation of adolescents

Table (6) shows the relationship between the creativity and achievement motivation of adolescents. The correlation value between the creativity and achievement motivation of Private Syllabus adolescents is -.070. The creativity of State Syllabus adolescents is correlated with their achievement motivation at -.053. The correlation of creativity of male and female group with their achievement motivation is at -.076, and -.062. The r values of sub sample and the total samples are very low and hence are less than .05 level.

Table (7) Correlation between the creativity and self-concept of adolescents

		Physical self	Social self	Temperament self	Education self	Moral self	Intellectual self	total
Private Syllabus	400	-.085	-.075	-.087	-.065	-.075	-.077	-.070
State Syllabus	400	-.020	-.034	-.043	-.055	-.036	-.035	-.063
Male	400	-.076	-.085	-.083	-.072	-.087	-.083	-.086
Female	400	-.033	-.023	-.053	-.043	-.024	-.030	-.047
Total	800	-.055	-.056	-.074	-.062	-.058	-.056	-.066

The table explains the correlation value between the creativity and physical self, social self, temperament self, educational self, moral self intellectual self and total self-concept of Private Syllabus are -.085,-.075, -.087, -.065, -.075, -.077, and -.070. The creativity of State Syllabus adolescents is correlated to their physical self, social self, temperament self, educational self, moral self intellectual self and total self-concept -.020, -.034, -.043, -.055, -.036, -.035, and -.063. The correlation values of creativity of male and female group with their physical self, social self, temperament self, educational self, moral self intellectual self and total self-concept-.076, -.085, -.083, -.072, -.087, -.083, -.086, -.033, -.023, -.053, -.043, -.024, -.030 and-.047.

The correlation between the creativity with their physical self, social self, temperament self, educational self, moral self intellectual self and total self-concept, of sub –samples are not significant because all these values are less than .05 level.

## 5. Discussion

The objective of the study is to assess the level of potential creativity, self-concept and achievement motivation of the male, female, Private Syllabus and State Syllabus. The result showed that the potentially high group is comparatively more than the low creative group. On the other hand the low self-concept group is more than the high self-concept group. In the case of achievement motivation the trend is that, low achievement motivation group is higher than the high achievement motivation group. The difference among self-concept is more than that of the achievement motivation. Both in the cases of self-concept and achievement motivation the low scores are more than the high scores.

According to the studies of Elliot & Sheldon (1997), Elliot & Thrash (2004) the adolescence is the most creative period in life. During these years they develop their rational, formal, deliberate thinking patterns and hence the instinctual creative talents of the childhood turn to be the rational, purposeful, potential creativity. Hence the findings that, the adolescents are potentially high creative than low creative further consolidate

their observations and also agree with the general thinking that the adolescents are really potentially high creative.

The result of this study shows that the low self-concept scorers are more than the high self-concept scorers. This is conformity to the study of Conroy (2004) who examined the level of adolescents seems to be low because of various psychosocial or physical reasons. The results showed that the achievement motivation is low scoring adolescents are more than the high scoring adolescents and this is in tune with the findings of the studies conducted by (Elliot & Sheldon, 1997, Elliot & Thrash 2004) there are a variety of reasons for the poor achievement motivation.

Hence it may be concluded that there are more potentially high creative adolescents than the potentially low creative adolescents but with regard to the self-concept and achievement motivation the low scorers are more than the high scorers. This situation is highly alarming because it give an indication that the self-concept and achievement motivation. Of the adolescents are poor and that will cause lot of problems and also will cause the wastage of this immense potential resource of the future. Also the results indicated that the level of correlation between the physical self, social self, temperament self, educational self, moral self intellectual self and total self-concept, of all the sub-samples with their creativity, are not significant correlation between these variables. There are research findings of different scholars from different populations which, say that there is no significant relationship between creativity and self-concept (Wolters, 2004, Abraham, Windmann, Daum, & Güntürkün, 2005, Jared, Susan, Joseph & Ryan, 2010). In all those studies, the major argument is that creativity is a cognitive faculty like intelligence and not significant relationship with the self-concept. And these results say that a change in the level of potential creativity not make a similar variation with regard to the self-concept.

## 6. Conclusion

This study finding indicate that the potential creativity of adolescents is comparatively high, but the self-concept and achievement motivation are poor and, hence, the researcher suggests studying the various factors that cause the poor self-concept and achievement motivation in future. The school / familial environments also should be studied in further researches to discover the other variables that affect the functioning of the potential creativity to the optimum utilization and effective functionalisation. The teachers and social workers, along with the other significant team members, should develop appropriate measures to give opportunities to the gifted adolescents to utilize their creative potentials. The gifted but problem adolescents are to be specially treated and provide with appropriate responsibilities so that they, instead of being problems, will turn to be productive members in the society.

## References

- [1] Abraham, A., S. Windmann., I. Daum., and O. Güntürkün., 2005. "Conceptual Expansion and Creative Imagery as a Function of Psychotics". *Consciousness and Cognition* 14, pp. 520–534.
- [2] Conroy, D. E., 2003. "Representational Models Associated With Fear of Failure in Adolescents and Young Adults". *Journal of Personality* 71, pp. 757-783.
- [3] Conroy, D. E., 2004. "The Unique Psychological Meanings of Multidimensional Fears of Failing". *Journal of Sport and Exercise Psychology* 26, pp. 484-491.
- [4] Elliot, A. J., and K. M. Sheldon., 1997. "Avoidance Achievement Motivation: A Personal goals Analysis". *Journal of Personality and Social Psychology* 73, pp. 171-185.
- [5] Elliot, A. J., and T. M. Thrash., 2004. "The Intergenerational Transmission of Fear of Failure". *Personality and Social Psychology Bulletin* 30, pp. 957-971.
- [6] Finke, R. A., T. Ward., and S. Smith, 1992. "Creative Cognition: Theory, Research and Applications". Cambridge, MA: MIT Press.
- [7] Garzarelli, P., 1993. "Self-Concept and Academic Performance in Gifted and Academically Weak Students". *Adolescence* 28, pp. 235-237.
- [8] Gough, H. G., 1979. "A Creativity Scale for the Adjective Check List". *Journal of Personality and Social Psychology* 37, pp. 1398–1405.
- [9] Hammer, T., and P. Vaglum, 1990. "Use of Alcohol and Drugs in the Transitional Phase from Adolescence to Young Adulthood". *Journal of Adolescence* 13, pp. 129-142.

- [10] Harris, J. A., 2004. "Measured Intelligence, Achievement, Openness to Experience, and Creativity". *Personality and Individual Differences* 36, pp.913-929.
- [11] Henderson, S. J., 2003. "The Correlates of Inventor Motivation, Creativity and Achievement". Unpublished Doctoral Dissertation, Stanford University.
- [12] Herman, W. E., 1990. "Fear of Failure as a Distinctive Personality Trait Measure of Test Anxiety". *Journal of Research and Development in Education* 23, pp.180-185.
- [13] Hoelter, J., and L., Harper, 1987. "Structural and Interpersonal Family Influences on Adolescent Self-Conception". *Journal of Marriage and the Family* 49, pp.129-139.
- [14] Jared, M., J. Susan., J. Joseph., and Ryan, 2010. "Dispositional Approach-Avoidance Achievement Motivation and Cognitive Self-regulated Learning: The Mediation of Achievement Goals". *Individual Differences Research* 8 (2), pp. 97-110.
- [15] Kaufman, J. C., and J. Baer, 2004. "The Amusement Park Theoretical (Apt) Model of Creativity". *The Korean Journal of Thinking & Problem Solving* 14(2), pp.15-25.
- [16] Kaufman, J. C., and J. Baer, 2005b. "Creativity across Domains: Faces of the Muse". Hillsdale, NJ: Lawrence Erlbaum Associates.
- [17] Leary, M. R., 2007. "Motivational and Emotional Aspects of the Self". *Annual Review of Psychology* 58, pp. 317-344.
- [18] Marsh, H. W, and K.T., Hau, 2003. "Big-Fish-Little-Pond Effect on Academic Self-Concept". *American Psychologist* 58, pp. 364-376.
- [19] Marsh, H. W., 2007. "Self-Concept Theory, Measurement and Research in to Practice: The Role of Self-Concept in Educational Psychology". Leicester. UK: British Psychological Society.
- [20] Matter, R.M., 1984. "The Historical Emergence of Adolescence: Perspectives from Developmental Psychology and Adolescent Literature". *Adolescence* 19, pp.131-142.
- [21] Moore, J.W., Jensen, B, and W.E., Hauck, 1990."Decision Making Processes of Youth". *Adolescence* 25, pp.583-592.
- [22] Nurmi, J.A., and H. Pulliainen, 1991."The Changing Parent-Child Relationships, Self-Esteem, and Intelligence as Determinants of Orientation to the Future During Early Adolescence". *Journal of Adolescence* 14, 17-34.
- [23] Rice, Philip., 1992. "Human Development A life Span Approach". Macmillan Publishing Company, New York.

[24] Thrash, T. M., and A. J. Elliot, 2002. "Implicit and Self-Attributed Achievement Motives: Concordance and Predictive Validity". *Journal of Personality* 70, pp.729-756.

[25] Treffinger, D., G. Young., E. Selby., and C. Shepardson., 2002. "Assessing Creativity: A Guide for Educators". Storrs, CT: National Research Center on the Gifted and Talented.

[26] Wheeler, L., and J. Suis., 2005. "Social Comparison and Self-Evaluation of Competence". In A. J. Elliott & C. S. Dweck (Eds.), *Handbook of Competence and Motivation* (pp. 566-578). New York: Guilford Press.

[27] Wolters, C. A., 2004. "Advancing Achievement Goal Theory: Using Goal Structures and Goal Orientations to Predict Students' Motivation, Cognition, and Achievement". *Journal of Educational Psychology* 96, pp. 236-250.

## **Biography**

1. Dr. Al-Qaisy Lama was born in 1972 in Tafila, Jordan. She received her Ph.D. in Psychological and Educational Counseling in 2006. In the same year she joined Tafila Technical University. Currently, she is an Assistant Professor in the Faculty of Educational Sciences. Her research interest includes child education and gender awareness. She has published many articles in reputed Journals.

2. Dr. Turki, Jihad was born on Al Salt City 1969, Jordanian. He received his Ph.D. in Special education in 2004, working from 2005 up to date at Tafila Technical University as Assistance literature .