

# Level of Job Creativity among Public School Teachers within the Green Line, Israel

Dr. Nadia Rasmy Abo-Toama  
Supervisor of Special Education, Ministry of Education, Israel

## Abstract

The current study aimed to identify the level of job creativity among teachers and the statistically significant differences due to gender, academic qualification, years of experience and school level. The sample consisted of (498) teachers, selected randomly from public schools within the Green Line in Israel. The instrument utilized in this study is Job Creativity Questionnaire after verifying its validity and reliability. The results showed that the mean of job creativity among the respondents was (4.05) with high level of creativity, and the results also showed statistically significant differences in job creativity due to gender in favor of males, due to academic qualification in favor of the post-graduates, and school level in favor of elementary school. The results showed no significant differences due to years of experience. The study recommended the need to maintain a high level of job creativity through providing seminars, lectures, training courses for teachers in public schools and focusing on the domain of originality; because of its significant role in the development of teaching and learning process, which in turn reflected in the future behaviors of students.

**Keywords:** job creativity, public school teachers, the Green Line.

## 1. Introduction

With the increasing emergence of globalization and the most complex technology, hierarchical traditional authorities have become less favorable and less convenient, and workers instead should learn to welcome the initiatives and be creative and take responsibility in their business (Knight & Turvey, 2006). Thus, job creativity emerged in institutions and organizations that face a changing competitive environment. Encouraging job creativity is one of the main objectives of each institution or organization, which seeks to achieve. The significance of creativity has increased in the light of the growing competition between institutions and organizations in order to avoid any drop of human resources (Spreitzer, 2007).

Hammoud (2002) defined Job creativity as a human attempt by the individual or group to use thinking and mental and intellectual potential surrounded by stimuli or environmental variables to produce goods or provide new services that benefit the community, while it was defined by Al-Imian (2005) as the successful use of new processes or programs emerging as a result of decisions within the organization. Abas (2009) defined it as something unusual with a variety of forms and dimensions, based on the subject under consideration, making it appear in a new administrative strategy. Hamadneh (2014) defined it as teacher's potential for production, which is marked with a great deal of intellectual fluency, flexibility, originality, elaboration and sensitivity to the problems in the educational situation.

Regarding the importance of job creativity, Yilmaz (2009) pointed out an increase in the level of job creativity contributes to improving the regulatory level of loyalty among teachers. Job creativity in the school serves as the process of making new ideas, far from the traditional context of thinking, and the development of all methods and techniques that will turn these ideas into applied reality that benefit student, teacher, administration and community.

Creativity was addressed in a number of educational studies, where Alsheniqat (2005) revealed that the level of knowledge and practice of creativity skills among teachers is low. Davidovitch & Milgram (2006) indicated that most lecturers' behaviors do not show job creativity in the classroom, while Yilmaz & Izgar (2009) showed that the job creativity level among teachers was medium. Omar (2012) illustrated that the job creativity of teachers was of low level, and there were no statistically significant differences in the job creativity among teachers due to gender in all dimensions, except for originality, where the differences were in favor of males, and academic qualification and years of experience. The study of Zinta (2013) indicated that the results of job creativity level among teachers were medium. The results showed statistically significant differences in the job creativity level among teachers due to gender in favor of males, and level of education in favor of postgraduates.

## 2. Statement of the problem

In the light of the recent scientific and knowledge development, Israeli educational institutions have become proper for applying job creativity especially it has a significant positive impact on the teacher, the student and the school and on the progress and prosperity of the community; and the author of the current study sought to conduct the current study, in an attempt to answer the following two questions:

1. What is the level of job creativity among teachers in public schools within the Green Line from their perspective?

2. Are there any statistically significant differences at the significance level ( $\alpha = 0.05$ ) in the level of job creativity among public school teachers within the Green Line due to the variables of gender, academic qualification, years of experience and school level?

### 3. Objectives

The current study aimed to:

1. Reveal the level of job creativity among teachers of public schools within the Green Line.
2. Show if there are statistically significant differences due to the variables of gender, academic qualification, years of experience and school level in the level of job creativity among teachers of public schools within the Green Line.

### 4. Significance

The importance of this study lies in conveying pieces of literature review and theoretical framework in the field of job creativity that might benefit the scholars. The results of this study also might benefit decision-makers in the Ministry of Education in Israel. It is also hoped for the results of this study to benefit principals, teachers, and educators in the Green Line area through briefing them on job creativity which contributes to the development of standards and strategies for the training of public school principals on the development of job creativity among teachers.

### 5. Methodology

The descriptive approach was used in the current study, through the use of job creativity questionnaire in order to achieve the study objectives, and answer the questions that have been asked.

#### 5.1 Population and sampling

The study population consisted of all teachers of public schools in all areas within the Green Line numbered (4000) teachers during the second semester for the academic year 2015/2016. The study sample consisted of (498) teachers, i.e. (12.5%) of the original population of the study, the participants were randomly chosen and distributed according to the study variables as shown in Table (1).

Table 1: Distribution of the participants according to the variables

Variables	Groups	Frequencies	Percentage
Gender	Male	134	26.9%
	Female	364	73.1%
	Total	498	100%
Years of experience	Less than 5 years	67	13.5%
	(5-10) years	96	19.3%
	More than 10 years	335	67.3%
	Total	498	100%
Academic qualification	Bachelor	266	53.4%
	Post-graduate	232	46.6%
	Total	498	100%
School level	Elementary	292	58.6%
	Prep	109	21.9%
	Secondary	97	19.5%
	Total	498	100%
	Total	498	100.0%

#### 5.2 Instrument

The first draft of the questionnaire consisted of (26) paragraphs distributed to five domains: Fluency (1-5), flexibility (6-11), originality (12-16), elaboration (17-20), and sensitivity to the problems (21-26). Five-point Likert scale utilized (very high, high, medium, low, and very low), along with the following weights (5, 4, 3, 2, and 1) respectively.

##### 5.2.1 Validity

To verify the validity of the questionnaire, it was reviewed and evaluated by ten evaluators, who are more experienced in school administration, psychology and measurement and evaluation at Jordan Universities; where they were asked to check the appropriateness of the paragraphs (items) of the domains and the total instrument (questionnaire), and to make sure of the language and the appropriateness of the instrument to achieve the study objectives. In light of the views and suggestions of the evaluators, the required modifications were made with agreement percentage (80%), and the final draft consisted of (26) paragraphs.

### 5.2.2 Reliability

The reliability of the questionnaire was verified by the method of (test-retest) to a sample of (40) teachers, where Pearson correlation coefficient was calculated between the scores of respondents and the total reliability coefficient of the instrument = (0.91). The second method conducted by calculating of the internal consistency coefficient (Cronbach's Alpha) of the instrument = (0.95). These are considered appropriate values for achieving the objectives of the study, as shown in table (2).

The author used Statistical Package for the Social Sciences System (SPSS) in analyzing the data and concluded the results that were discussed and then some recommendations have been made.

Table (2): Retest reliability and internal consistency coefficient "Cronbach Alpha" for the domains of job creativity and the total score

Domain	Pearson correlation	Cronbach's Alpha
Fluency	0.89	0.87
Flexibility	0.92	0.87
Originality	0.93	0.92
Elaboration	0.90	0.86
Sensitivity to problems	0.90	0.86
Total job creativity	0.91	0.95

Thus, reliability coefficients for the domains through the two methods were more than (0.70), so these values are considered appropriate for the purposes of applying the instrument.

### 5.2.3 Correction for instrument response

As mentioned above, the given degrees (5, 4, 3, 2 and 1) set for the five-type Likert scale, where (5) for very high, (4) for high, (3) for medium, (2) for low, and (1) for very low, the instrument grades ranged from the least score (26) to the highest one (130). To evaluate and judge the level of the arithmetic means of the paragraphs, the domains and the total instrument, the following statistical standard adopted through the following equation:

Instrument maximum (5) - Instrument minimum (1)

The required number of groups (3)

$$5-1/3 = 1.33$$

(1.00 - less than 2.33) is (low)

(2.33 - less than 3.67) is (medium)

(3.67 – less than 5.00) is (high)

## 6. Results

*Results of the first question:* What is the level of job creativity among teachers in public schools within the Green Line from their perspective? To answer this question, arithmetic means and standard deviations calculated for the level of job creativity among the public school teachers within the Green Line from their perspective, as indicated in table (3).

Table (3): Means and standard deviations calculated for the level of job creativity among the public school teachers within the Green Line from their perspective in descending order according to means

Rank	No.	Domain	Mean	St. D.	Level
1	4	Elaboration	4.20	0.62	High
2	5	Sensitivity to problems	4.14	0.60	High
3	2	Flexibility	4.12	0.61	High
4	1	Fluency	4.03	0.67	High
5	3	Originality	3.76	0.78	High
Mean for the total instrument			4.05	0.54	High

Table (3) indicates that the means of the domains of job creativity questionnaire ranged from (3.76) to (4.20) and a standard deviation between (0.78) and (0.60), where the domain of elaboration ranked the first with highest mean (4.20) and a standard deviation (0.62) and high level of creativity, while the domain of sensitivity to the problems ranked the second with a mean was (4.14) and a standard deviation (0.60) and high level of creativity. The domain of originality got the last place with a mean (3.76) and a standard deviation (0.78) and high level of creativity. The mean of the total job creativity was (4.05) with a standard deviation (0.54) and high level of creativity.

*Results of the second question:* Are there any statistically significant differences at the significance level ( $\alpha = 0.05$ ) in the level of job creativity among public school teachers within the Green Line due to the variables of gender, academic qualification, years of experience and school level? To answer this question, means and standard deviations calculated for the level of job creativity among public school teachers within the Green Line according to the variables of gender, academic qualification, years of experience and the school level, as shown in Table (4).

Table (4): means and standard deviations for the level of job creativity among public school teachers within the

Green Line according to the variables of gender, academic qualification, years of experience and the school level

Variables	Groups		Fluency	Flexibility	Orig.	Elaboration	Sensitivity to problems	Total job creativity
Gender	M.	M	4.14	4.15	3.85	4.18	4.23	4.11
		St. D	.63	.56	.76	.57	.59	.52
	F.	M	3.98	4.11	3.72	4.21	4.10	4.02
		St. D	.68	.62	.79	.61	.60	.55
Years of ex.	Less than 5 years	M	3.99	4.07	3.65	4.10	4.06	3.98
		St. D	.70	.57	.84	.66	.59	.57
	(5-10) years	M	4.02	4.11	3.72	4.19	4.09	4.02
		St. D	.66	.53	.71	.58	.60	.49
	More than (10) years	M	4.04	4.13	3.79	4.22	4.17	4.07
		St. D	.67	.63	.79	.60	.60	.56
Academic qualification	Bach.	M	3.98	4.06	3.68	4.15	4.10	3.99
		St. D	.70	.63	.80	.62	.60	.56
	Post-grad.	M	4.08	4.19	3.84	4.25	4.18	4.11
		St. D	.64	.57	.76	.58	.60	.52
School level	Elementary	M	4.08	4.20	3.80	4.27	4.18	4.11
		St. D	.70	.58	.79	.60	.60	.55
	Prep	M	3.98	4.04	3.73	4.15	4.14	4.01
		St. D	.60	.61	.78	.56	.59	.52
	Second.	M	3.91	3.96	3.67	4.04	3.99	3.91
		St. D	.66	.63	.77	.63	.60	.54

**M = Mean, St. D = standard deviation**

Table (4) showed ostensible variation in means and standard deviations to the level of the job creativity among teachers in public schools within the Green Line because of the various variables of gender, academic qualification, years of experience and the school level. Multiple variation analysis for the domains was used to illustrate the significance of statistical differences between the means as illustrated in table (5), and quadruple analysis of variance for the total instrument as shown in table (6).

Table (5): analysis of multi-variation to the impact of the variables of gender and years of experience on the domains of job creativity

Variance source	Domains	Sum of squares	Freedom degrees	M. of squares	F-value	Sig.
Gender	Fluency	4.13	1	4.13	9.35	.02
Hotelling = 0.040 H=.002	Flexibility	.10	1	.10	2.83	.09
	Originality	2.17	1	2.17	3.60	.06
	Elaboration	.03	1	.03	.08	.77
	Sensitivity to problems	2.32	1	2.32	6.57	.01
Years of exp. Wilks =.993 H=.967	Fluency	.04	2	.020	.04	.96
	Flexibility	.01	2	.01	.01	.99
	Originality	.58	2	.29	.48	.62
	Elaboration	.31	2	.15	.43	.65
Academic qualification	Sensitivity to problems	.24	2	.12	.33	.72
	Fluency	1.78	1	1.78	4.04	.05
	Flexibility	2.95	1	2.95	8.36	.00
	Originality	3.66	1	3.66	6.07	.01
School level	Elaboration	1.58	1	1.58	4.45	.04
	Sensitivity to problems	1.39	1	1.39	3.93	.05
	Fluency	4.13	2	2.07	4.69	.01
	Flexibility	6.25	2	3.13	8.87	.00
Wilks =.959 H=.024	Originality	1.96	2	.98	1.62	.20
	Elaboration	4.13	2	2.06	5.82	.00
	Sensitivity to problems	3.43	2	1.71	4.85	.01
	Fluency	216.61	491	.44		
Error	Flexibility	173.19	491	.35		
	Originality	295.81	491	.60		
	Elaboration	174.16	491	.36		
	Sensitivity to problems	173.38	491	.35		
	Total	Fluency	224.70	497		
	Flexibility	182.15	497			
	Originality	303.49	497			
	Elaboration	180.36	497			
	Sensitivity to problems	180.10	497			

Table (5) showed that there were no statistically significant differences ( $\alpha = 0.05$ ) due to the impact of gender in all domains, except for the domains of fluency and sensitivity to problems, and the differences were in favor of males. There were no statistically significant differences ( $\alpha = 0.05$ ) due to the impact of years of experience in all domains. There were statistically significant differences ( $\alpha = 0.05$ ) due to the impact of academic qualification in all domains, in favor of post-graduates. There were statistically significant differences ( $\alpha = 0.05$ ) due to the impact of school level in all domains, except for the domain of originality. Scheffé model was used to show the statistically significant differences between means.

Table (6): analysis of quadruple variance for the impact of gender and years of experience on the total degree of job creativity

Variance source	Sum of squares	Freedom degrees	Mean of squares	F-value	Sig. level
Gender	1.64	1	1.64	5.76	.01
Years of experience	.10	2	.053	.18	.83
Academic qualification	2.20	1	2.20	7.73	.00
School level	3.85	2	1.92	6.74	.00
Error	140.13	491	.28		
Total	146.97	497			

Table (6) reveals that there are statistically significant differences ( $\alpha = 0.05$ ) due to the impact of gender, where F-value was (5.76) and statistically significant at (0.01), and differences were in favor of males. There were no statistically significant differences ( $\alpha = 0.05$ ) due to the impact of years of experience, where F-value was (0.18) and statistically significant at (0.83). There were statistically significant differences ( $\alpha = 0.05$ ) due to the impact of academic qualification, where F-value was (7.73) and statistically significant at (0.00), and

the differences were in favor of post-graduates. There were statistically significant differences ( $\alpha = 0.05$ ) due to the impact of school level, where F-value was (6.74) and statistically significant  $t_a$  (0.00). Scheffé model was used to show the statistically significant differences between means as shown in table (7).

Table (7): Posterior Comparisons through Scheffé model to the impact of school level on job creativity

Domains	School level	Mean	Elementary	Prep	Secondary
Fluency	Elementary	4.08			
	Prep	3.98	.10		
	Secondary	3.91	.17*	.07	
Flexibility	Elementary	4.20			
	Prep	4.04	.16		
	Secondary	3.96	.24*	.08	
Elaboration	Elementary	4.27			
	Prep	4.15	.12		
	Secondary	4.04	.23*	.12	
Sensitivity to problems	Elementary	4.18			
	Prep	4.14	.05		
	Secondary	3.99	.19*	.14	
Total Job Creativity	Elementary	4.11			
	Prep	4.01	.10		
	Secondary	3.91	.19*	.09	

\* Significant at the significance level ( $\alpha = 0.05$ ).

Table (7) showed statistically significant differences ( $\alpha = 0.05$ ) between the elementary and the secondary; differences were in favor of the elementary school in all domains and in the total job creativity.

## 7. Discussion

- Results showed that job creativity among public school teachers within the Green Line was of a mean (4.05) and high level of creativity. This can be attributed to several reasons, including: The technological and knowledge revolution that accompanied this era; and Ministry of Education's ambitions for sustainable development in education that emerges through the development of creativity in educational institutions and paying more attention to the skills of job creativity and modern methods of teaching, such as creativity. The results of the current study are consistent with the results of Alsheniqat (2005), which showed a low level of arithmetic mean of the level of job creativity skills among teachers, the study of Yilmaz & Izgar (2009), which showed medium level of job creativity among teachers, as well as the study of Zinta (2013), which showed that the level of job creativity among teachers ranged from low to medium. With regard to domains, the results showed that the domain of elaboration ranked the first place with the highest arithmetic mean (4.20) and high level of creativity, this maybe due to the vision of educational institutions seeking to develop the teaching and learning process; Hence the teachers' will for creativity reflected in organizing things and making proposals for increasing the action plans in the school. Sensitivity to the problems got the second place with a mean of (4.14) and high level of creativity, this can be attributed also to the vision of educational institutions seeking to develop the teaching and learning process by using creative solutions for problems; hence teachers sought to collect and analyze information about a problem before taking a decision, and unravel the mystery of problems facing students by involving them in action, and to find solutions for emergency problems, and the development of multiple alternatives to address the problems, and the preference for team work to individual action in solving problems.
- The results showed statistically significant differences due to the impact of gender in the domains of fluency and sensitivity to the problems, and the differences were in favor of males. This may be attributed to some of the social and political factors in the region and that may restrict job creativity among female teachers, which prevent them from providing creative experiences in the educational institution and prevent them from any positive participation, while male teachers easily give their ideas, opinions and experiences. The results of the current study were consistent with Omar (2012), which showed no statistically significant differences in the job creativity among teachers due to gender in all dimensions except for originality and the differences were in favor of males. It agreed with Zinta (2013), which showed statistically significant differences in the level of job creativity among teachers due to gender in favor of males.
- Results showed no statistically significant differences due to the impact of years of experience on all domains of job creativity and total instrument. This may be due to the full knowledge of job creativity experienced by the participants through training courses provided by the Ministry of Education. The

current results are consistent with the results of Omar (2012), which showed no statistically significant differences in the job creativity among teachers due to years of experience.

- Results showed statistically significant differences due to the impact of academic qualification on all domains of job creativity, and the differences were in favor of holders of postgraduate studies. This may be attributed to the deep vision and creativity skills experienced by holders of the doctoral and master degrees, and through their post-graduate studies, they possess modern methods and teaching strategies that develop their job creativity and students'. The results of the current study agreed with Zinta (2013), which showed differences in the level of job creativity among teachers due to the academic qualification in favor of postgraduates. It is inconsistent with the Omar (2012), which showed no statistically significant differences in the job creativity among teachers according to academic qualification.
- Results showed statistically significant differences due to the impact of school level in all domains of job creativity and in the total instrument and the differences were in favor of the elementary school. This may be due to the nature of the school; where the high school and prep school have large buildings, large numbers of students, large number of student problems and administrative tasks and follow-up and supervision, which in turn may hinder the progress and creativity of the teacher, but the elementary school allows for the creativity of teachers and their creative skills; due to the scarcity of student problems and complexities of the administrative work as well as teaching duties.

## 8. Recommendations

In the light of the results of the current study, the author recommends the following:

1. The need to maintain the high level of job creativity through providing seminars, lectures, training courses for teachers of public schools and to focus on the domain of originality while training; because of its significant role in the development of teaching and learning process in the school, which is reflected in the future behavior of students.
2. It is necessary to provide appropriate environment in secondary schools, which helps reinforce job creativity among teachers.

## References

- Hamadneh, Burhan. (2014). Guide to Talent and Creativity. Irbid: Modern world of books.
- Alhamdi, Ibrahim. (2004). The reality of the practice of critical thinking skills and creative thinking among teachers of History at High Schools in Saudi Arabia from teachers and principals' perspective, unpublished Master Thesis, Yarmouk University, Irbid, Jordan.
- Hammoud, Khudair. (2002). Organizational behavior. Amman: Safa house for publication and distribution.
- Alsheniqat, F. (2005). Effectiveness of a proposed training program on the development of creative thinking skills among teachers of Islamic Education, prep stage in Jordan. Unpublished doctoral dissertation, Amman Arab University, Amman, Jordan.
- AlShehab, Qais. (2003). The teacher's role in the development of creative thinking among public school students from the viewpoint of supervisors and teachers in the Sultanate of Oman, unpublished Master Thesis, Yarmouk University, Irbid, Jordan.
- Abbas Ali. (2009). Fundamentals of Management. V. (4). Amman: Dar Almaseera.
- Omar, Fatima. (2012). Professional creativity among secondary school teachers and its relationship with some demographic variables. Unpublished MA Thesis, Sudan University of Science and Technology, Khartoum, Sudan.
- Davidovitch, N and Milgram, R. (2006). Creative Thinking as a Predictor of Teacher Effectiveness in Higher Education. *Creativity Research Journal*, 18(3): 385- 390.
- Knight, A and Turvey, N. (2006). Influencing Employee Innovation Through Structural Empowerment Initiatives: The need to Feel Empowered. *Entrepreneurship Theory and Practice*, (6): 313 – 324.
- Spreitzer, G. (2007). Taking Stock: A review of More Than Twenty Years of Research on Empowerment at work, for Thcoming. Hand Book of Organization Development, Sage publications.
- Yilmaz, E. (2009). Examining Organizational Commitment of Primary School Teachers Regarding Their Job Satisfaction And Schools Organizational Creativity. *Elementary Education Online*, 8 (2): 467- 484.
- Yilmaz, E. and Izgar, H. (2009). Examination of Primary School Teachers' Job Satisfaction with Regards to Organizational Creativity within a School Context. *Elementary Education Online*, 8(3): 943-951.
- Zinta, Z. (2013). Creativity from View of Job Market. *Budapest Management Review*, 2-13.