

Level of Creative Behavior among Teachers of Public Schools within the Green Line from their Perspective

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Abstract:

The current study seeks to identify the level of creative behavior among teachers of public schools within the Green Line, based on gender, academic qualification, years of experience and level of school. The sample consisted of (502) teachers, selected randomly, from public schools within the Green Line in Israel. The tool utilized is a questionnaire for Creative Behavior consisting of (33) items distributed to five domains: fluency, flexibility, originality, elaboration and sensitivity to the problems. The results showed that the practice of creative behavior among teachers is high, and the results indicated that there are statistically significant differences in creative behavior in public schools due to the impact of gender in the domains of flexibility and sensitivity to the problems in favor of male teachers, but due to academic qualification and years of experience in the domain of originality in favor of bachelor and master holders and experience (5-10 years), and due to level of school in the domain of fluency in favor of prep school; and in favor of primary and prep school in the domain of elaboration. In light of the given findings, the study recommended that creative behavior among teachers must be domestically and regionally developed by improving social and economic conditions for teachers to meet the requirements of life.

Keywords: creative behavior, public schools, Green Line, teachers.

1. Introduction

Creative behavior is the term that is derived from Torrance's definition: perception of gaps, imbalances and missing elements and formulating new hypotheses, reaching certain results, testing the hypotheses, and linking the results with its modifications, and re-testing these hypotheses and then circulated.

Guilford confirms that creativity is an open thinking characterized by its amazing and unique outcome, the diversity of answers given, or significantly mental activity directed by strong desire in search for solutions that were not previously identified; these solutions are characterized by inclusiveness and complex. Creativity includes emotional and moral elements which constitute a distinctive case of mind (quoted in Jerwan, 2012, p.72). Creative behavior is identified as all acts of individual and unique acts practiced in the workplace including the discovery of opportunities, new ideas that scientifically verified, and efforts done to be applied at any organizational level (Alqaryouti, 2000). Alzoubi (2013) defined it as "an individual's ability to produce, marked by more intellectual fluency, flexibility and originality."

The creative behavior refers to the ability of the individual (worker) to meaningfully and creatively use a set of concepts and ideas in order to develop work in the institution or organization to promote to the highest level (Noruzy, et al, 2013). Harrison (2013) indicated that creative behavior of the individual is the style from which he/she can learn and train intensively on the methods of scientific thinking, and can adapt to those around him and emerging circumstances of society, dealing creatively with issues of life.

Therefore, it contributes to finding new competitive environment in light of the great rapid technological development and information revolution (Jelda and Abwi, 2006). The existence of a creative-mannered worker in an institution, who likes risk and seek to know the unknown, contributes to the search for solutions in new ways, and the perception of many alternatives to interact with the problems and takes the appropriate decision to resolve the problem in time, and makes proposals and new ideas that can be applied (Kim and Yoon, 2015). The individual with creative behavior reinforces the creative behavior and encourages suggestions and new ideas by others, and is able to deal with changing requirements; he/she is able to deal with ambiguous situations because they stir him/her to search for solutions (Alqaryouti, 2000).

All institutions of society are responsible for developing creative behavior especially educational institutions. Routine work in leadership and educational methods hinders creativity and motivation, and leads to prepare unqualified teachers and students, which may prevent the provision of comprehensive development needs for society; therefore the progress of society in all aspects of life based on the optimal use of creative behavior in the educational institutions, which in turn is reflected in the behavior of the student (Hamadneh, 2014).

Alkhasawneh (2001) revealed that the degree of practicing of creative behavior among teachers, which contribute to the development of creativity among students, was high, and the lack of differences due to gender. Alshehab (2003) resulted that the role of the teacher in the development of creative thinking among students was medium, and that there were no statistically significant differences in the degree of teachers' practice for their role in the development of creative thinking due to gender, years of experience and academic qualification.

Chant, Moes & Ros (2009) demonstrated that creative behavior among teachers practiced high. The study of Alsaud and Alshamayleh (2010) pointed out that the degree of public secondary school teachers' practice for creative behavior was medium. Yearrian (2011) revealed that the practice of creative behavior among teachers was high.

Consequently, it can be concluded that the practice of creative behavior among teachers may play an effective role in the school work, which resulted in the quest for detecting the level of practice of creative behavior from the perspective of teachers within the Green Line.

2. Statement of the problem

The problem of the study can be determined by identifying level of creative behavior among teachers in public schools within the Green Line. In particular, the current study seeks to answer the following two questions:

1. What is the level of practicing the creative behavior among teachers in public schools within the Green Line from the perspective of teachers?
2. Are there any statistically significant differences at ($\alpha = 0.05$) in the level of creative behavior among teachers in public schools within the Green Line due to gender, years of experience, academic qualification and the level of school?

3. Significance

The significance of this study lies in adding new information to the human knowledge on the level of practicing of creative behavior among teachers and its relation to demographic variables (gender, years of experience, academic qualification and the level of the school). The researchers and students benefit from the instrument developed in conducting future studies. The study will benefit officials in Israel to develop standards for testing public school principals, the development and dissemination of a training program to develop the practice of creative behavior among teachers. Principals, supervisors and teachers may benefit from the results of the current study and its recommendations.

4. Theoretical Framework:

The most important conception involved in this study is "creative behavior". Creative behavior defined by Alhejaya (2012) as producing of new or unfamiliar ideas that will be of useful value to the school. It is theoretically identified in this study as the degree obtained by the teacher on the dimensions of the scale of creative behavior that the researcher developed for the purpose of the current study.

5. Methodology

The descriptive survey approach adopted in this study, this approach enables us to answer the questions of the study.

5.1 Population and sampling

The study population consisted of all teachers in public schools in all areas inside the Green Line numbered

(4000) teachers, in the first semester of the academic year 2015/2016. The study sample consisted of (502) teachers from public schools within the Green Line in Israel, estimated (12.5%) of the original population of the study, and were chosen randomly. The study sample was distributed according to the study variables: gender, years of experience, academic qualification and the level of the school, as shown in Table (1).

Table (1): The study sample according to the frequencies, percentages and variables

Variables	Category	Frequency	Percentage
Gender	Male	270	53.8%
	Female	232	46.2%
Total		502	100%
Academic qualification	Bachelor	199	39.6%
	Master	224	44.6%
	Ph. D	79	15.7%
Total		502	100%
Years of experience	Less than 5 years	105	20.9%
	(5-10) years	130	25.9%
	More than 10 years	267	53.2%
Total		502	100%
School level	Primary	215	42.8%
	Prep.	205	40.8%
	Secondary	82	16.3%
Total		502	100%

5.2 Instrument: Questionnaire of creative behavior

Based on the pieces of literature review mentioned in this study, the questionnaire of creative behavior among teachers was developed, where the first-draft questionnaire consisted of (33) paragraphs distributed to five domains: Fluency (1-8), Flexibility (9-13), Originality (14-20), and Elaboration (21-27), and sensitivity to the problems (28-33). The respondent makes check in front of each paragraph of domains with (very high, high, medium, low, and very low). The instrument has been marked by giving the following scores, respectively (5, 4, 3, 2, and 1). Validity and reliability of the instrument have been verified as follows:

5.2.1 Validity

To verify the validity of the questionnaire, it was reviewed and evaluated by ten evaluators, 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 conducted

with agreement percentage (80%), and the final draft consisted of (33) items.

5.2.2 Reliability

The reliability of the questionnaire was verified by the method of (test-retest) to a sample of (50) teachers, where Pearson correlation coefficient was calculated between the scores of respondents and the total reliability coefficient of the instrument is (0.88). The second method conducted by calculating of the internal consistency coefficient (Cronbach's Alpha) of the instrument = (0.86). These are considered appropriate values for achieving the objectives of the study.

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.

6. Results

Results of the first question: What is the level of practicing the creative behavior among teachers in public schools within the Green Line from the perspective of teachers? To answer this question, means and standard deviations calculated to the level of creative behavior among teachers in public schools within the Green Line from the teachers' perspective, as illustrated in Table (3).

Table (3): Means and standard deviations to the level of creative behavior among teachers in public schools within the Green Line from the teachers' perspective in descending order according to means

Rank	No.	Domain	Mean	St. D	Level
1	4	Sensitivity to problems	3.67	0.50	High
2	1	Originality	3.66	0.43	High
3	2	Fluency	3.66	0.47	High
4	3	Flexibility	3.60	0.47	High
5	5	Elaboration	3.58	0.48	High
Total			3.63	0.36	High

Table (3) shows that the arithmetic mean of the domains of the instrument ranged between (3.58-3.67) with standard deviations (0.43-0.50), where the domain of sensitivity to the problems ranked the first place with the highest arithmetic mean = (3.67) and a standard deviation (0.50) and high level. The domain of originality in ranked the second place with a mean (3.66) and a standard deviation (0.43) and high level. The domain of fluency ranked the third place with a mean (3.60) and a standard deviation (0.47) with high level. The field of flexibility got the fourth place with a mean (3.66) and a standard deviation (0.47) with high level, while the domain of elaboration ranked the fifth place and a mean (3.58) and a standard deviation (0.48) with high level. The mean of the total instrument for creative behavior among teachers was (3.63) with standard deviation (0.36) and a high level of significance; it is concluded that the level of creative behavior among teachers of public schools within the Green Line was high and this reveals that principals of public schools encourage teachers within the Green Line to behave creatively.

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

Table (4): Means and standard deviations to the level of creative behavior among teachers in public schools within the Green Line due to the variables of gender, years of experience, academic qualification and the level of the school

Variables	Category		Origin.	Fluency	Flexib.	Sensitivity to problems	Elaboration	Creative behavior among teachers
Gender	Male	M	3.69	3.70	3.64	3.73	3.61	3.67
		St. D	.360	.347	.358	.402	.365	.296
	Female	M	3.62	3.60	3.56	3.61	3.54	3.59
		St. D	.503	.573	.570	.595	.583	.417
Qualification	Bachelor	M	3.71	3.67	3.63	3.68	3.59	3.66
		St. D	.440	.515	.548	.581	.504	.417
	Master	M	3.66	3.67	3.58	3.68	3.61	3.64
		St. D	.427	.424	.381	.425	.418	.310
Ph. D	M	3.52	3.59	3.59	3.64	3.45	3.56	
	St. D	.408	.458	.482	.506	.554	.326	
Years of experience	Less than 5 years	M	3.61	3.61	3.54	3.64	3.48	3.58
		St. D	.500	.646	.675	.683	.639	.465
	(5-10) years	M	3.59	3.60	3.58	3.62	3.59	3.60
		St. D	.456	.453	.446	.447	.447	.330
	More than 10 years	M	3.70	3.71	3.63	3.71	3.61	3.67
		St. D	.387	.378	.371	.443	.413	.320
School level	Primary	M	3.67	3.64	3.58	3.67	3.59	3.63
		St. D	.312	.330	.297	.348	.325	.247
	Prep.	M	3.68	3.73	3.65	3.70	3.63	3.67
		St. D	.497	.492	.508	.540	.529	.397
	Second.	M	3.58	3.52	3.55	3.61	3.41	3.54
		St. D	.524	.648	.687	.714	.630	.476

M = Mean, St. D = Standard deviation

Table (4) shows that there is a variation in the means and standard deviations for the development of creative behavior among teachers in public schools within the Green Line because of the different categories of variables of gender, years of experience, academic qualification and school level. To indicate the significance of statistical differences between the means, analysis of multi-variance was applied to the domains (Table-5) and analysis of quadruple variance for the total questionnaire (Table-6).

Table (5): Multiple quadruple variation analysis for the impact of gender, years of experience, academic qualification and the level of the school to the domains of development of creative behavior

Variance source	Domains	Sum of squares	Degree of freedom	Mean of squares	F-value	Sig. level
Gender	Originality	.022	1	.022	.123	.726
Hotelling=0.21	Fluency	.714	1	.714	3.365	.067
H. = 0.65	Flexibility	.930	1	.930	4.282	.039
	Sensitivity to prob.	1.422	1	1.422	5.643	.018
	Elaboration	.019	1	.019	.084	.772
Qualification	Originality	2.016	2	1.008	5.529	.004
Wilks =.955	Fluency	.403	2	.202	.950	.388
H.=.013	Flexibility	1.022	2	.511	2.355	.096
	Sensitivity to prob.	.180	2	.090	.356	.700
	Elaboration	.555	2	.278	1.236	.291
Years of experience	Originality	1.400	2	.700	3.840	.022
Wilks =.976	Fluency	.654	2	.327	1.540	.215
H.= .280	Flexibility	.569	2	.285	1.312	.270
	Sensitivity to prob.	.305	2	.152	.605	.546
	Elaboration	.309	2	.154	.687	.504
School level	Originality	.130	2	.065	.356	.701
Wilks =.966	Fluency	1.993	2	.997	4.697	.010
H. =.075	Flexibility	.980	2	.490	2.256	.106
	Sensitivity to prob.	.358	2	.179	.709	.492
	Elaboration	1.364	2	.682	3.036	.049
Error	Originality	90.067	494	.182		

Variance source	Domains	Sum of squares	Degree of freedom	Mean of squares	F-value	Sig. level
	Fluency	104.819	494	.212		
	Flexibility	107.248	494	.217		
	Sensitivity to prob.	124.490	494	.252		
	Elaboration	110.977	494	.225		
Total	Originality	93.998	501			
	Fluency	109.273	501			
	Flexibility	110.307	501			
	Sensitivity to prob.	127.110	501			
	Elaboration	114.853	501			

Table (5) indicates the points given below:

- There are no statistically significant differences ($\alpha = 0.05$) due to gender in all domains except the domains of flexibility and sensitivity to problems, where differences were in favor of males.
- The lack of statistically significant differences ($\alpha = 0.05$) due to the impact of academic qualification in all domains except for originality authenticity. Scheffe method of posteriori comparisons used to illustrate the statistically significant differences between the means as shown in table (7).
- There are no statistically significant differences ($\alpha = 0.05$) due to the impact of years of experience in all domains except for originality. Scheffe method of posteriori comparisons used to indicate the statistically significant differences between the means as shown in table (8).
- The lack of statistically significant differences ($\alpha = 0.05$) due to the impact of school level in all domains except for the domains of fluency and elaboration. Scheffe method of posteriori comparisons used to illustrate the statistically significant differences between the means as shown in table (9).

Table (6): Analysis of quadruple variance the impact of the variables of gender, years of experience, academic qualification and the level of the school for the total scale of creative behavior

Source of variance	Sum of squares	Degrees of freedom	Mean of squares	F-value	Sig. level
Gender	.418	1	.418	3.333	0.069
Qualification	.529	2	.265	2.107	0.123
Years of experience	.498	2	.249	1.983	0.139
School level	.658	2	.329	2.621	0.074
Error	62.022	494	.126		
Total	64.656	501			

Table (6) indicates that there are no statistically significant differences ($\alpha = 0.05$) in the practice of total creative behavior due to the variable of gender, academic qualification, years of experience and level of school.

Table (7): Posterior Scheffe method to the impact of the variable of academic qualification on the domain of originality

	Category	Mean	Bachelor	Master	Ph. D
Originality	Bachelor	3.71			
	Master	3.66	.05		
	Ph. D	3.52	.19*	.14*	

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

Table (7) shows no statistically significant differences at ($\alpha = 0.05$) on the domain of originality between the doctorate's on the one hand and all of the bachelor's and master's on the other hand; the differences were in favor of both bachelor's and master's.

Table (8): Scheffe Posterior Comparisons for years of experience on the domain of originality

	Category	Mean	Less than 5 years	(5-10) years	More than 10 years
Originality	Less than 5 years	3.61			
	(5-10) years	3.59	.02		
	More than 10 years	3.70	.09	.11*	

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

Table (8) indicated no statistically significant differences at ($\alpha = 0.05$) on the domain of originality between the two categories of (5-10) years of experience and more than 10 years, where the differences were in favor of those teachers with (5-10) years of experience.

Table (9): Scheffe posterior comparisons for the impact of school-level variable on the domains of fluency and elaboration

		Mean	Primary school	Prep. School	Secondary
Fluency	Primary	3.64			
	Prep.	3.73	-.08		
	Secondary	3.52	.12	.20*	
Elaboration	Primary	3.59			
	Prep.	3.63	-.04		
	Secondary	3.41	.18*	.22*	

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

Table (9) points out that there are statistically significant differences at ($\alpha = 0.05$) in the domain of fluency in favor of prep, and in the domain of elaboration, in favor of primary and prep.

7. Discussion

The results showed that the arithmetic mean of creative behavior among teachers of the study was (3.63) with high level of significance; so it is concluded that the degree of creative behavior among teachers in public schools within the Green Line from their perspective is high, and this shows that the principals encourage teachers in public schools within the Green Line for creative behavior. Perhaps this result is satisfactory because the Ministry of Education in this region is seeking to make efforts to improve education quality, and the provision of modern educational suppliers that allow teachers to participate in decision-making and decision-taking, and posing of new creative ideas and finding solutions to educational problems that hinder the progress of the educational process.

The results of the current study are consistent with Alshehab (2003) and Yearrian (2011), which showed that the level of practicing creative behavior among teachers was high, but the study is inconsistent with the results of Alsaud and Alshamayleh (2010), which showed that the degree of public secondary school teachers for practicing creative behavior was medium.

With regard to the domains, that of sensitivity to the problems ranked the first place with arithmetic mean (3.67) and high level. The domain of originality ranked the second place with a mean (3.66) and a high level of practice; and it also seems a logical result, where safe school environment in which employees live in light of scientific and cognitive development and modern educational trends that contribute to strengthening the spirit of participation and freedom of thinking could be an effective source in the production of original creative ideas. The domain of fluency got the third place with a mean (3.60) and high level of practice, this is due to teachers' continuous offering of creative ideas and new proposals; and in light of the development of styles of school leadership, it is easy for teachers to think properly without fear or hesitation.

Regarding the level of practice of creative behavior among teachers in public schools within the Green Line and its relationship to the variables of gender, years of experience, academic qualification and the level of the school, the results of the current study showed the following:

1. Gender

There were no statistically significant differences in creative behavior among teachers in public schools within the Green Line due to the impact of the gender variable in all domains except for the domains of flexibility and sensitivity to problems, where differences were in favor of males. This can be attributed to the nature of males and their ability to take responsibility that gives them the opportunity to think flexibly and are free to express their problems and issues, and to provide ideas easily and conveniently, and their ability to make and take decisions is higher than females that are afraid of making mistakes so they try to avoid providing creative ideas.

The results of the current study are inconsistent with the results of Alkhasawneh (2001) and Alshehab (2003), which showed the lack of statistically significant differences in the degree of teachers' practice for creative thinking due to the variable of gender.

2. Academic qualification:

There were no statistically significant differences in creative behavior among teachers in public schools within the Green Line due to the impact of the qualification in all domains except for the domain of originality, where statistical differences were in favor of both bachelor's and master's holders. It can be attributed to the teachers' competence in the practice of creative behavior regardless of their qualification, and that the interaction between teachers in schools within the Green Line weakens the differences between them in the practice of creative behavior, especially in light of educational development in the region, through holding training sessions and regular meetings with the teachers about the problems they face and the progress of teaching process; and this in turn enriches the educational process and reduces the differences between teachers in creative behavior.

The results of the current study is in consistent with Alshehab (2003), which showed lack of statistically significant differences in the degree of teachers' play for their role in the development of creative thinking

attributed to the academic qualification.

3. Years of Experience:

There were no statistically significant differences in creative behavior among teachers in public schools within the Green Line due to the impact of years of experience in all domains except for originality, and the differences were in favor of (5-10) year-experienced teachers. It can be attributed to the teachers' competence in the practice of creative behavior regardless of their qualification, and that the interaction between teachers in schools within the Green Line weakens the differences between them in the practice of creative behavior, especially in light of educational development in the region.

The results of the current study disagreed with Alshehab (2003), which showed lack of statistically significant differences in the degree of teachers' practice of creative behavior due to years of experience.

4. School level:

There were no statistically significant differences in creative behavior among teachers in public schools within the Green Line due to the impact of school-level variable in all domains except for the domains of fluency and elaboration, where the differences were in favor of prep schools in the domain of fluency, and in favor of each of the primary and prep school, in the domain of elaboration. This can be attributed to the small learning environment as the primary and prep school that give greater opportunity for teachers to develop their creative behavior; by providing a fruitful environment that stimulates their creativity, and make optimum investment and excellent reputation, enabling them to confront several challenges and difficulties in contemporary circumstances.

8. Recommendations

In light of the findings of the study, the researcher recommends the following:

- The researcher recommends the development of creative behavior among teachers locally and regionally by improving social and economic conditions for teachers to meet the demands of life.
- The need to provide training courses for fresh or less experienced teachers to make them able to understand the meaning of transformational leadership in general and requirements of the ideal effect in the school work in particular.
- Studies can be conducted similar to the current study through examining larger population and samples, and other variables such region, academic grade of study, the age of the teacher and the specialization and economic and social level of the teacher.

References:

- Jerwan, Fathi. (2012) Methods of Detecting the talented and caring for them, i (3). Amman: Dar Alfikr.
- Jelda, Salim and Abwi, Zaid. (2006) Creativity and innovation management. Amman: House of knowledge.
- Alhejaya, Suleiman. (2012) The pressures of work and its relationship to the creative behavior among public high school principals in the province of South Jordan. *Journal of Educational and Psychological Sciences*, 13 (1): 305-324.
- Hamadneh, Burhan. (2009) The degree of Science and Mathematics Teachers' Practice of creative thinking from the perspective of the supervisors in Irbid Governorate. Unpublished MA Thesis, Al-Balqa` Applied University, Salt, Jordan.
- Hamadneh, Burhan. (2014) Guide to talent and creativity. Irbid: the modern world of books.

Alkhasawneh, Faten. (2001) The degree of history teachers' practice of innovation among their students. Unpublished MA Thesis, Yarmouk University, Irbid, Jordan.

Alzoubi, Myson. (2013) The degree of creative behavior in classroom management among the teachers of King Abdullah II Schools of Excellence in the Hashemite Kingdom of Jordan. *Mutah Journal for Research and Studies- humanities and social sciences series*, 28 (3): 289-332.

Alsaud and Alshamayleh (2010) Administrative styles of principals of public high schools in Jordan and its relationship to the creative behavior of teachers. *Journal of King Saud University*, Educational Sciences and Islamic Studies. 22 (1), 167-205.

Alshehab, Qais (2003) The teacher's role in the development of creative thinking among public school students from supervisors' and teachers' perspective in the Sultanate of Oman, Unpublished Master Thesis, Yarmouk University, Irbid, Jordan.

Alqaryouti, Muhammad (2000) Organizational behavior: Study of individual and group in different organizations, vol. 3, Oman: Alshurouk House for publication and distribution.

Chant, R., Moes, R. & Ros, M. (2009). Curriculum construction and teacher empowerment: Supporting invitational education with a creative problem solving model. *Journal of Invitational Theory and Practice*, 15: 55-69.

Harrison, J. (2013). The Effects of Instructor Transformational Leadership and Verbal Immediacy on Learner Autonomy and Creativity in Online Contexts. ProQuest LLC, PH.D. Dissertation, Regent University.

Kim, S. and Yoon, G. (2015). An innovation-driven Culture in Local Government: Do Senior Manager's Transformational Leadership and the Climate for Creativity Matter? *Public Personnel Management*, 44(2): 147-168.

Noruzi, A, Dalfard, V.M, Azhdari, B. et al (2013). Relations Between Transformational Leadership, Organizational Learning, Knowledge Management, Organizational Innovation, and Organizational Performance: An empirical Investigation of Manufacturing Firms, *International Journal of Advanced Manufacturing Technology*. 64:1073-1085.

Yearrian, S. (2011). Empowerment of Teachers and Students Through Creative Literacy Practices. ProQuest, Ed. D. Dissertation, Lindenwood University, 264.