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Relationship between Social Brainpower and Innovative Behavior of School Head Teachers

Abstract

Social awareness is the ability of the person to collaborate, convey and build up common relations with others and performs duties with creative mind. The purpose of study was to identify levels of social brainpower and innovative behavior of school head teachers and examine correlation between two constructs. The study was correlation and survey type in nature. School teachers were part of population and sample of two hundred teachers was drawn from bulk of participants. Questionnaire was developed regarding social brainpower and innovative behavior of school head teachers on five point likert scale to collect relevant information from participants. Reliability was ensured before conducting research. Data were analyzed by using different techniques. Teachers agreed that their head teacher interact with staff members, employees, parents, and students frequently. School leaders have ability to influence others in a positive way. Majority of teachers agreed that head teacher performs in school using innovative behavior. They have sharp mind and ability to think fast and creatively. There is strong statistical significant relationship between social brainpower and innovative behavior of school leaders. Head teachers may think critically and solve problems in the school creatively.

Key words: Social awareness, creative mind, brainpower, and school leaders.

Introduction

The constructive connection of an individual with others prompts a critical job in his prosperity or disappointment in social and professional life, since he lives in an interconnected domain of connection, and the social wise attitude is portrayed with its enthusiasm for individuals, adopt and practicing putative behavior of society, and holding with great associations with others. However, the achievement of an individual does not rely upon cognitive approach but social intelligence is more responsible for achievements in lives of human beings. The factors of the social

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insight show up through the capability of the person in understanding others, the suitable response with those of various thought processes, enhancing friend circle, the capacity in communication with others, and give respect to them. The accomplishment of the person in life fundamentally relies upon the level of recognition and comprehension the various factors towards issues that a person faces throughout life (Khaldi, 2009).

Unterborn (2011) stated that Thorndike is the first one who worked on social knowledge and intelligence when he gave a triple order three measurements for insight: social insight, mechanic intelligence, and dynamic knowledge; the technician knowledge shows the aptitude of managing materials, instruments, and gadgets. Though, the abstract intelligence manages hypothetical conduct and the capacity in managing images, action words, and shapes, and the social intelligence indicates out the wise connection with others. A few researchers characterized the social intelligence idea in various definitions as, Gardner characterized it as the capacity of recognition and the reaction to others temperaments, wishes, and their inactive sentiments and capacities. Jones and Day (1997) described the social insight as the capacity in utilizing comprehension for social issues arrangement. Different researchers gave particular explanations concerning the social intelligence idea and indicated out three frameworks as: 1) Social control, which focuses on social jobs with exact and efficient way and high capability. 2) Social articulation, which presents precise detail, and thoughts interpretation into petulant sentences and implications. 3) Social concern displays people meet with each other on daily basis in different occasions (Goleman-2006). Literature focuses out to the significance of social insight in various professional achievement, for example, teaching profession which needs great association between the instructor and learners have skills to understand others, correspondence, collaboration, adaptability, on high capability dependent on the way of thinking that the social knowledge and intelligence influence in intellectual performance positively thinking styles, way of treating that is pondered learners progress, their creative capabilities in classroom practices, and development of pleasant and mutual framework where every one of the components of teaching process partake with (Cherniss, 2000). Social intelligence is associated with mental wellbeing which is considered to understand others point of views as they want to convey, strong correspondence, perceive their feelings, consent to issue solution, and finding a circumstance of cognizance between person and social condition (Esthood, 1995).

Social awareness is the capacity of the person to collaborate, convey and build up common relations with others it comprised of three parts: Social mindfulness, social abilities and information management. Social knowledge is the capacity of principals to build up positive relations inside and outside the school which will be estimated by utilizing the social insight scale. Inventive administration that the principals will have as indicated by the imaginative practices scale from instructors' place of perspectives (Silvera, Martinussen, & Dahl, 2001).

Social insight is related with the psychological segment and different parts, these segments encourage social correspondence. As indicated by Goleman (2006) social intelligence has two drives: cognitive and emotional. The idea of social insight allude to the capacity to get contemplations, emotions and practices of the

others in various social circumstances, it likewise comprised of the aptitudes which empower people to tackle social issues (Abuhashim, 2008). Innovative behavior of head teachers structure a progress point to use assets, develop job strategies, take care of issues, and build up school condition that can watch or observe the shortcomings, changes, restricting reasons, and appreciate results which shows up profound comprehension to the philosophy of educational structure. Innovative thoughts are progressively adaptable and familiar with information gathering and constraining issues and substitute advancement and inspecting beliefs (Balwahi, 2008).

Numerous researches were identified the role of social intelligence and creative behavior in school setting. A study was directed by Gasim (2012) that expected to realize the social knowledge level among school principals in Kuwait and its impact upon institutional stress. The outcomes demonstrated that the level of social insight among school leaders was high and there were significant difference in stress ascribed to social knowledge. The investigation of Yahyazadeh and Goodarzi (2012) explored the association between social insight and individual qualities of school heads in Iran, the sample comprised of 198 educators. The outcomes of research showed there is difference in social insight level and individual qualities of the educators ascribed to their age, and a constructive connection between social knowledge and individual characteristics. Jeloudar and Yunis (2011) utilized two hundred and three educators from school in Malaysia to locate the degree of social intelligence among instructors and its association with certain techniques to maintain discipline. The outcomes demonstrated the degree of social insight increments with age and a positive relationship between techniques and social insight.

Askool (2009) explored a research which meant to discover the connection between social insight and critical thinking. Three hundred and eighty one students participated in study. The findings of study demonstrated that the social knowledge level was low, the basic reasoning level was mid and there was a measurable relationship between social insight and critical thinking. The investigation of Balwani (2008) showed that 70.4% of the head teachers in Palestine concurred that school leaders assume an incredible job in creating inventive behavior. Toremen (2003) explored variables that improve imaginative or creative behaviors at schools: unbiased assessment system, inspire faculty and overcome fear, support them, and give them healthy environment.

The innovative school leaders were described by the capacity to adjust with changes sensible thoughts, and their capacity to set up deduction model dependent on creative mind, development combination, examination, association and assessment, they likewise ought to be able to acknowledge changes, adapt to emergencies, resolved to perform work and acknowledge others views. Social intelligence is viewed as one of the most significant components in school administration. It empowers head teachers to build up their work and take care of issues. The active school administration actualizes social insight in gathering with educators, courses, assessment of the school work, and share ideas.

Research Objectives

The study was conducted to achieve following objectives:

- Identify the level of social brainpower and innovative behavior of school head teachers.
- 2. Examine the relationship between social brainpower and innovative behavior of school head teachers.
- 3. To check the construct reliability and validity of social brainpower and innovative behavior scales.
- 4. To check difference in teachers' perceptions regarding social brainpower and innovative behavior of school head teachers in terms of demographic variables.

Methodology

Empirical studies demand clear methodology and this thing enhances worth, validness and significance of research. The effectiveness of study depends upon its methodology, in which researcher describes detail method and procedure. This study was quantitative correlation and survey type in nature. The population of the study school teachers of urban and rural areas. Two hundred teachers selected as a sample of study conveniently. Instrumentation is considered a backbone of research study. Researchers are unable to conduct research without valid instrument. However, researchers released their energy and time on instrument development. Questionnaire was developed regarding social brainpower and innovative behavior of school head teachers on five point likert scale to collect relevant information from participants.

Scale was validated by field experts. And after that reliability was ensured by follow the process of pilot testing. It was ensured to confirm the internal consistency among items by applying Cronbach's Alpha initially. Researchers visited schools and met head teachers for taking permission of data collection from teachers. After consent teachers were briefed that data will be used only for research purpose. Participants of study showed cooperative behavior.

However, researchers drove a great effort to conduct this study especially in data collection procedure and made it successful. Data collection is not last step; to manage or handle it systematically is healthier and tough task. Data were analyzed by using descriptive and inferential statistical techniques. Path relationship established of social brainpower and innovative behavior of school head teachers. Mean scores, standard deviations, Pearson r, Path relationship, r square, constructs validity and reliability, bootstrapping, independent samples t-test and one way ANOVA were calculated in this study. A detail of data analysis is under follow.

Findings and Results

Table 1: Reliability of Scales

Factors	Cronbach's Alpha	No. of Items
Social Brainpower	.861	15
Innovative Behavior	.866	22

Legitimacy	.881	5
Smoothness	.807	4
Flexibility	.823	4
Sensitivity to Problems	.752	4
Risk Resistance	.832	5

Questionnaire was consisted of two factors; social brainpower of head teachers and innovative behavior. Creative behavior has further five sub dimensions. There were total thirty seven items. First variable social brainpower of head teachers consisted of 15 items and 22 statements described innovative behavior of principals. Cronbach's Alpha was applied to ensure items reliability. The alpha values were .861 and .866 respectively, which are statistically significant and highly acceptable. It showed that there is internal consistency among items and statements are highly correlated with each other.

Table 2: Social Brainpower of Head Teachers

Items	M	SD
Interact with faculty	4.22	.73
ability to influence	4.30	.72
understand communication	4.08	.71
social steadiness	4.02	.98
self confidence	3.88	.97
provides positive climate	4.15	.69
Encouragement and inspiration	3.87	.87
Charismatic personality	4.05	.76
participates in social activities	4.05	.75
Friendly	4.15	.72
Optimistic	4.16	.80
Behaves professionally	4.42	.75
Transparent	4.13	.78
accepts criticism	4.24	.83
Promote group work	4.29	.64

Table shows mean and standard deviation scores of teachers perceptions about social brain power of school principals. Teachers agreed that their head teacher interact with staff members, employees, parents, and students frequently. School leaders have ability to influence others in a positive way. They understand verbal and non-verbal communication at job station. They have self-confidence and socially popular. They are source of inspiration and encouragement for teachers and students. Their charismatic personality compels them to behave professionally

in schools. They are optimistic and friendly behavior. They accept criticism for more betterment and endorse group work. Consequently, in teachers point of views their head teachers have social brain power and they use it for the sake of school development and improvement.

Table 3: Innovative Behavior of Head Teachers

Items	М	SD	
Innovative methods	4.46	.66	
Imitate in solving problems.	4.46	.61	
avoids repetition	4.40	.71	
Strong communication skills	4.56	.64	
Generate new ideas	4.53	.68	
solve problems	4.40	.67	
Provides different ideas in short time.	4.05	.76	
Innovative ideas	4.28	.64	
ability to think fast	4.41	.65	
Developmental thoughts	4.21	.71	
insists to change	4.27	.67	
ability to realize issues	4.18	.79	
Flexible personality	4.38	.68	
predict problems	4.11	.86	
plan to solve problems	3.98	.89	
know strength and weaknesses	4.10	.84	
help to solve problems	4.39	.92	
accepts criticism friendly	4.53	.65	
Accepts failure for success.	4.00	.77	
defend ideas	4.14	.85	
adopts latest ideas	4.21	.79	
takes responsibility	4.52	.66	

Table shows mean and standard deviation scores of teachers perceptions about innovative behavior of school principals. Majority of teachers agreed that head teacher performs in school using innovative methods. Head teachers are worry to solve proems as soon. They have strong communication skills, discuss things with others and solve problems by applying new ideas. They have sharp mind and ability to think fast and creatively. They help teachers to solve problems and accept failure to get success. They adopt latest ideas and takes responsibilities.

Therefore, teachers acknowledged that their head teachers have creative and innovative behaviors.

Table 4: Relationship between Social Brainpower and Innovative Behavior

Factors	r - value	Sig.	
Social Brainpower Innovative Behavior	and .611**	.00	

Table shows that there is strong statistical significant relationship $r = .611^{**}$ between social brainpower and innovative behavior of head teachers in schools. It seems that head teachers have social brain power and think innovatively and creatively during performing job duties. There is positive significant association between two variables.

Table 5: Relationship between Social Brainpower and Dimensions of Innovative Behavior

Variables		1	2	3	4	5	6	7
Social Brainpower	Pearson Correlation	1	.453**	.530**	.637**	.457**	.001	.611**
Legitimacy	Pearson Correlation		1	.591**	.618**	.266**	- .011	.736**
	Sig. (2-tailed)			.000	.000	.008	.915	.000
Smoothness	Pearson Correlation			1	.831**	.411**	.051	.801**
	Sig. (2-tailed)				.000	.000	.616	.000
Flexibility	Pearson Correlation				1	.538**	- .044	.855**
	Sig. (2-tailed)					.000	.665	.000
Sensitivity Problems	Pearson Correlation					1	.057	.645**
	Sig. (2-tailed)						.579	.000
Risk Resistance	Pearson Correlation						1	.301**
	Sig. (2-tailed)							.003
Innovative Behavior	Pearson Correlation							1

Table shows the relationship between social brainpower of head teachers and innovative behavior and its sub-dimensions. The relationship of principals' social brainpower with other factors is: legitimacy, $r = .453^{**}$; smoothness, $r = .530^{**}$; flexibility, $r = .637^{**}$; sensitivity, $r = .457^{**}$; and innovative behavior, $r = .611^{**}$. Results confirm that an individual who has social brainpower and well known due to good public relations, his/her personality is flexible. That person tackles serious

issue easily due to flexible behavior. These kinds of people show sincerity and smoothness in their behaviors. They are open minded due to socialization and take risk with creative thoughts to perform their responsibilities effectively and efficiently as leaders of school organizations. Social brainpower develops legitimacy, smoothness, flexible, risk taker attitude among leading personnel. There is positive significant association among factors that falls moderate to strong relationship level.

Table 6: Gender Difference in Teachers' Perceptions about Head Teacher Personality

Variables	Gender	Mean	SD	t	Sig.	
Social Brainpower	Male	60.68	7.315	-3.301	.001	
	Female	64.78	4.838			
Innovative	Male	93.08	8.191	-2.639	.010	
Behavior	Female	97.66	7.769			

Table shows that independent samples t-test was used to check difference in male and female teachers' perceptions regarding social power and creative mind of their head teachers. There was statistical difference in their opinions about social brainpower -3.301 and creative behavior -2.39, p=.01 of school leader at significance level $p \geq .05$. It means that teachers have different perceptions regarding personality of boss due to gender difference.

Table 7: Location Difference in Teachers' Perceptions about Head Teacher Personality

Variables	Location	Mean	SD	t		Sig.
Social Brainpower	urban	63.88	6.836	2.770	.007	
	rural	60.16	6.430			
Innovative	urban	95.39	7.683	.973	.333	
Behavior	rural	93.76	8.880			

Table shows that independent samples t-test was used to check difference in urban and rural teachers' perceptions regarding social power and creative mind of their head teachers. There was statistical difference in their opinions about social brainpower 2.770, p = .0 and no difference regarding creative behavior .973, p = .33 of school leader at significance level $p \ge .05$. It means that teachers have different perceptions regarding socialization of head teachers due to location difference of schools.

Table 8: xperience Difference in Teachers' Perceptions about Head Teacher Personality

Variables	Experience Years	Mean	SD	F	Sig.
Social Brainpower	1 to 10	60.96	7.797	1.416	.25

	11 to 20	63.58	6.109		
	21 to 30	61.89	5.290		
	Total	62.02	6.861		
Innovative Behavior	1 to 10	92.7391	9.14679	3.606	.03
	11 to 20	97.6061	8.01147		
	21 to 30	93.7368	4.67668		
	Total	94.5714	8.30104		

One-way ANOVA was applied to check job experience difference in teachers' perceptions regarding personality of head teacher. There was no difference in teachers' concepts 1.416, p =.25 regarding social brainpower but teachers have different opinions related to innovative behavior of principals 3.606, p = .03 at significance level $p \ge .05$.

Table 9: ualification Difference in Teachers' Perceptions about Head Teacher Personality

Variables	Qualification	Mean	SD	F	Sig.
Social Brainpower	M.A/M.Sc	62.13	6.998	3.188	.04
	M.Phil	58.73	7.695		
	PhD	65.00	3.038		
	Total	62.02	6.861		
Innovative	M.A/M.Sc	95.2174	8.46944	1.864	.16
Behavior	M.Phil	90.8000	7.62702		
	PhD	95.4286	7.54182		
	Total	94.5714	8.30104		

One-way ANOVA was applied to check qualification difference in teachers' perceptions regarding personality of head teacher. There was significant difference in teachers' opinions 3.188, p =.04 regarding social brainpower but teachers have no different opinions related to innovative behavior of principals 1.864, p = .16 at significance level $p \ge .05$.

Discussion

Researches were identified the role of social intelligence and creative behavior in school setting. A study was directed by Gasim (2012) that expected to realize the social knowledge level among school principals in Kuwait and its impact upon institutional stress. The outcomes demonstrated that the level of social insight among school leaders was high and there were significant difference in stress ascribed to social knowledge. These results matched current study that explored findings that school leaders have ability to influence others in a positive way. They understand verbal and non-verbal communication at job station. They have self-confidence and socially popular. They are source of inspiration and

encouragement for teachers and students. Their charismatic personality compels them to behave professionally in schools. They are optimistic and friendly behavior. They accept criticism for more betterment and endorse group work. Consequently, in teachers point of views their head teachers have social brain power and they use it for the sake of school development and improvement.

Askool (2009) explored a research which meant to discover the connection between social insight and critical thinking. Three hundred and eighty one students participated in study. The findings of study demonstrated that the social knowledge level was low, the basic reasoning level was low and there was a measurable relationship between social insight and critical thinking. Result of present study supported past findings. There is strong statistical significant relationship between social brainpower and innovative behavior of head teachers in schools. It seems that head teachers have social brain power and think innovatively and creatively during performing job duties. There is positive significant association between two variables.

Conclusion

Current study was designed to explore relationship between social brainpower and innovative behavior of school head teachers. The level of social brainpower and innovative behavior among school leaders were identified before correlation. It was observed in discussion that findings of this study aligned with past studies' results. Questionnaire was piloted tested. There is internal consistency among items and statements are highly correlated with each other. Teachers agreed that their head teacher interact with staff members, employees, parents, and students frequently. School leaders have ability to influence others in a positive way. They understand verbal and non-verbal communication at job station. They have selfconfidence and socially popular. They are source of inspiration and encouragement for teachers and students. Their charismatic personality compels them to behave professionally in schools. They are optimistic and friendly behavior. Majority of teachers agreed that head teacher performs in school using innovative methods. Head teachers are worry to solve proems as soon. They have strong communication skills, discuss things with others and solve problems by applying new ideas. They have sharp mind and ability to think fast and creatively.

It is concluded that school leaders have creative and innovative behaviors. There is strong statistical significant relationship between social brainpower and innovative behavior of head teachers in schools. It seems that head teachers have social brain power and think innovatively and creatively during performing job duties. There was statistical difference in participants' opinions about social brainpower and creative behavior of school leader. It seems that teachers have different perceptions regarding personality of boss due to gender difference. There was statistical difference in their opinions about social brainpower and no difference regarding creative behavior of school leader. It means that teachers have different perceptions regarding socialization of head teachers due to location difference of schools. It is concluded that level of social brainpower and innovative behavior among school head teachers is high and both variables are strongly connected with each other.

Recommendations

Last segment of study is recommendations that provide suggestions on the basis of results of study. The study was related to social brainpower and innovative behavior of school head teachers. It was observed that school leaders are competent in social intelligence. They need to develop self confidence among themselves. It is part of their administrative duty to encourage and motivate staff members and inculcate leadership skills among them. Head teachers may think critically and solve problems in the school creatively. Innovative behavior is demand of current period, thus they have abilities to think and tackle situations according to situation. Social brainpower and innovative behavior of school head teachers are positively associated. Therefore, school leaders may become competent in social intelligence and due to this thing their behavior may develop positive and innovatively.

References

Abdel-Naser, D. A., & Wael, M. A. (2016). Social intelligence and conflict management strategies among high intact students and those with problematic behavior in secondary stage. *Journal of Studies of Educational Sciences*, 43(5), 1915-1935.

Abuamsha, B. (2013). Social intelligence and emotional intelligence and their relationship with happiness among Gaza University students (Master thesis). College of Education. Alazhar University. Gaza.

Abuhashim, M. (2008). The components of social, emotional intelligences and their relationship among Saudi and Egyptian University students, a comparative study. *College of Education Journal*, 18(76), 71-95.

Alkhazraji, I., & Azi, A. (2010). Social intelligence and its relationship with achievement among students of female teachers college. *Dialy Journal*, 47, 35-52.

Aronson, E. (2004). Social psychology. Translated by Shekarkan. Tehran: Roshd Press.

Askool, K. (2009). Social intelligence and its relationship with critical thinking and some variables among University students (Master thesis). College of Education. Islamic University. Gaza.

Atbi, K, N. (2017). Spiritual intelligence among high and low achiever university students. *Journal of Basra Researches for Human Sciences*, 42(4), 67-88.

Balwani, N. (2008). The role of school management in developing creativity in governmental schools in northern region of Palestine and the obstacles from principals point of views (Master thesis). Alnajah University.

Cherniss, C. (2000). Emotional intelligence. What is it and why it matters paper presented at the annual meeting to the society for industrial an organizational psychology. New Orleans LA-www Eiconsortium.org.

Easthood, A. (1995). Psychology of adjustment personal growth world. Prentice hall: New York.

Gasim, G. (2012). Social intelligence level among secondary schools principal in Kuwait and its relationship with organizational stress. *Education Journal*, 7(5), 32-38.

Goleman, D. (2006). Social intelligence. New York: Bantam Dell.

Hussain, F. A. (2011). Personal intelligence and its relationship to spiritual intelligence and social intelligence: A correlation study. Dra Emaarefa for publishing, Egypt.

Jaber, A. (2003). Multiple intelligence. Dar El-fekr Elaraby. Cairo.

Jeloudar, S., & Yunus, A. (2011). Exploring the relationship between teachers social intelligence and classroom discipline strategies. *International Journal of Psychological Studies*, 3(2), 149-155.

Jones, K., & Day, J. (1997). Discrimination of two aspects of cognitive-social intelligence from academic intelligence. *Journal of Educational Psychology*, 89(3), 486-497.

Khalidi, I. (2009). Social intelligence and its relationship with inside and outside locus control among Bagdad University (Master thesis). Bagdad University Iraq.

Korkmaz, M. (2013). The relationship between organizational health and social intelligence. *Educational Research Quarterly*, 2(1), 14-36.

Kriemeen, H., & Hajaia, S. (2017). Social intelligence of principals and its relationship with creative behavior. *World Journal of Education*, 7(3), 84-91.

Silvera, D., Martinussen, M., & Dahal, T. (2001). The tromso social intelligence scale, a self-report measure of social intelligence. *Scandinavian Journal of Psychology*, 42(4), 313-319.

Talalfha, H. (2014). Social intelligence level among social studies teachers at Zarka province and its relationship with classroom interaction patterns. *Dirasat*, *41*(2), 87-109.

Troman, F. (2003). Creative school and administration. *Educational sciences: Theory and practical*, 3(1), 248-253.

Unterborn, K. (2011). Creating a performance-based social intelligence measure using situational judgment test format (Unpublished dissertation). Central Michigan University, Mount Pleasant, Michigan, USA.

Yahyazadadeh, S., & Goodarzi, F. (2012). Predicting senior secondary schools teachers' social intelligence by HEXACO-PI-R personality traits based on age groups. *International Journal of Asian Social Science*, 2(5), 739-747.