Relationship between Pareto Principle and Employees' Compensation: How it Fascinates, Retains and Rewards Executives?

Ayaz Muhammad Khan^{*} and Amna Ramzan^{**}

Abstract

The foremost purpose of the paper was to explore the relationship between the Pareto Principle and employees' compensation. The study was quantitative and 330 leaders were surveyed at the public and private universities of Lahore District. The instrument consisted of 52 items with the Cronbach alpha of .94 was used to collect data from the leader regarding the Pareto Principle and employees' compensation. Through multistage sampling technique, 330 top and middle-level leaders participated in the survey. The results of the survey revealed a significant positive association (r=.876) between Pareto law and employee compensation.

Keywords: Pareto principle, employees' compensation, employees' rewards, executives

^{*} Associate Professor, University of Education, Lahore, Pakistan. Email; ayaz@ue.edu.pk

^{**} PhD (Education.) Scholar, University of Education, Lahore Email; amnaramzan70@gmail.com

Introduction

Pareto Principle, an interesting construct in the professional and business field. It stated that "*in many situations, 80 percent of the effects or outcomes come from only 20 percent of the sources or causes*" (Wiesenfelder, 2013).Thetheory of Pareto Principle was initially discovered in 1897 by an Italian economist Vilfredo Pareto. Pareto's discovery has since been called many names such as Pareto Principle, Pareto Law, Pareto Distribution, Law of Least Effect, 80/rules, Principle of imbalance and 80/20 thinking (Koch, 2011a, 2011b, 2013).An expert and inordinate writer (Koch, 2011a, 2011b, 2013) in the field of Pareto Principle affirmed that the executives those who apply Pareto Principle in their duty takes enjoy more benefits or compensation whether public or private. Koach in his book "*The 80/20 Analysis:the secret to achieving more with less*" assumed that the utilization of Pareto Law by the executiveimpact their personal as well as professional growth in the form of rewards or employee's benefits.

Maxwell is an American leadership developer. He develops more than 6 million executives of different companiesaround 186 countries of the world. Maxwell also acknowledges the Pareto Principle as a technique which increases the leader's Personal as well as professional outputs. Maxwell'swritings and literature (Maxwell, 1993; Maxwell, 1997; Maxwell, 2001, 2002a, 2002b; Maxwell, 2004; Maxwell, 2007a, 2007b, 2008, 2010a, 2010b, 2011a, 2011b; J.C. Maxwell, 2012; John C Maxwell, 2012a, 2012b; Maxwell, 2013a, 2013b; Maxwell, 2014a, 2014b, 2016; Maxwell & Dornan, 1997, 2013; Maxwell & Parrott, 2005)strongly support this supposition.Universally this is all according to researchers who have been studying this phenomenon for longer than you and I have been alive to talk about it. In the research biosphere, the 80/20 principle is actually called the Pareto Principle or the Principle of Factor Sparsity (Edwards, 2015).

A white paper was written by Curtis Chocholous "seasoned executive and Lean Six Sigma Black Belt" on July 14, 2016, concerning The 80/20 Law of Leadership, "Leaders Clarify Priorities and Keep People Focus" he applauded Remarkable reasons causes and factors work behind the assumption of how organisations represent their reactive mode? The first one is their leadership absents of self-managed and do not possesses leadership abilities weak systems, counteracts productive teamwork (Chocholous, 2016). The utilization of the Pareto Principle increases the employee's as well as executives benefit or compensation (Moss, 2014).

Employees' Compensation (CE) named as a statistical term in national accounts or may assume thebalance of payment statistics or occasionally it labelled in corporate accounts. Employees Compensation may be defined as total gross wages paid as remuneration to employees by employers due to work is done in a static period. It may be tangible/intangible, Financial/Non-Financial and membership Based/ Performance Based (Yamoah, 2014). The universities are constituted where the leadership is independently working in the growth and development of future executives for public and private firms of the whole Pakistan (Anwar, Yousuf, & Sarwar, 2011). Howand what degree the university level leadership use Pareto Law in their duty takes, was the milestone of this paper.

This assumption of the writerprovided a basis togenerate the empirical support. As per our best knowledge, there is no such study on the ParetoPrinciple and its relation to executive rewards and compensation.

Objectives of the Study

Resolving the above assumption following objectives were stated to:

- 1. Explore the relationship between Pareto law and employees' compensation in public and private universities
- 2. Calculate the effects of Pareto law on Pay and faculty rank of executives in public and private universities.

Hypothesis

 H_01 :There is no significant association between the mean score of the Pareto Principle and employees' compensation in public and private executives of universities.

 H_02 : There is no significant association between the mean score of the Pareto Principle and pay of executives in public and private universities.

 H_03 : There is no significant association between the mean score of Pareto Principle and faculty rank of executives in public and private universities.

Method

The purpose of the section is to elucidate the research methodology that was adopted for the existing study. It starts out by unfolding the causal research philosophy that covers ontology, epistemology, methodology, and the research model that used in this investigation. Finally, Data collection stratagem and statistical methods functional by the researcher also explained. Easter by and Smith (1991) inscribed that development of research design is a thought-provoking task for the researcher (Easterby-Smith, 1991) but taking philosophical knowledge supports the researcher in the conception of research designs that are exterior of researcher's experience. The paradigm of the current research was positivism. The study was ex-post facto research and quantitative in nature. The survey method was used to collect data. The prospective design of causal-comparative research was used to design the model of research. This basic approach starts with cause and investigating its effects on some variables (Gay, Mills, & Airasian, 2012; Gay, Mills, & Airasian, 2011).



Figure 1. Prospective Design of Causal-Comparative Research

Participants

This study probes by a questionnaire through which the Leadership (*senior & middle level*) and teachers of the university were considered the population of this study. There were only three public universities and nine private universities (*in the case of private universities three conditions**) of Lahore district in which department of education was working/functioning.

Table 1

The s	The sample for the Present Study						
Univ	ersities Located in Lahore	Department/s					
	University of Education, Lahore	Division of Edu. &LMC,BRC, DE					
lic	University of the Punjab, Lahore	Institute of Education & Research					
Public	Lahore College for Women University, Lahore	Institute of Education					
	University of Management & Technology, Lahore	Arts & Social sciences					
Private	University of Lahore, Lahore	Arts & Social sciences					
Priv	Beacon house National University, Lahore	Education					

*Private (¹Education Departmentwith regular Faculty, ²not included in the HEC list of given Charter after 30th June 2010 &³include in HEC list of universities declared eligible for funding under publicprivate-partnership Program) universities hold Education Department in Lahore District

Instrumentation

Pareto Principle Questionnaire (PPQ) questionnaire was developed by conjoining four distinct instruments. A section about demographics also added for gathering data about the sector, gender, age, experience, education, department, faculty rank and pay. The zenith section of both instruments consisted of a requesting appeal to the respondents including all the vital information about the research project and the nadir section consisted of Demographic variables. Demographic variables at the start of questionnaire make the respondents conscious to response accurate.

The first section comprises questions about Prioritization practices of leadership in their duties by Maxwell in the 21 Irrefutable laws of leadership, the 2nd section contains questions about 80/20 analysis, the 3rd section encompasses questions about 80/20 thinking, 4rth unit contains items related to 80/20 rule to be a better leaders by Edwards (2015), 5th part of the instrument holds items linked with the four quadrants matrix and final part contained demographic information of the respondents. Demographic information at the start of questionnaire makes the respondents conscious about giving an actual response to the statements. Cronbach's alpha for fifty-two items measuring theuse of Pareto Principle by leaders in their workplace given in the below table:

Type of Items	Items	Cronbach's Alpha
Overall items	52	0.94
Irrefutable law of leadership	07	0.77
80/20 Analysis	07	0.73
80/20 Thinking	12	0.85
Edwards Michael's Constructs	14	0.88
Four Quadrants Matrix	12	0.87

Cronbach's Alpha on the application of the Pareto Principle by the leader.

The Pareto Principle Questionnaire (PPQ) and subscales consisted of 52 items ($\alpha = .94$) PPQ has good internal consistency. The Irrefutable law of leadershipsubscale consisted of 07 items ($\alpha = .77$), the 80/20 Analysis subscale consisted of 07 items ($\alpha = .73$) and the 80/20 Thinking subscale consisted of 12 items ($\alpha = .85$), Cronbach's alphas for the 14 Edwards Michael's Constructs and 12 Four Quadrants Matrix items were ($\alpha = .88$) and ($\alpha = .87$) respectively. The scale has good internal consistency, with a Cronbach alpha coefficient reported of .85. In the current study, the Cronbach alpha coefficient was 0.94 (Pavot (Pavot, Diener, Colvin, & Sandvik, 1991). The PPQ was found to be decidedly reliable (52 items; $\alpha = 0.94$).

Data Analysis

Descriptive statistics of the paper provides the overview of the organizational profile of the dyads. The table shows the characteristics of the respondents from various universities on the basis of Gender and Sector.

S #	Demographics	Total	Percentage	Mean	SD
1	Public	223	67.6%	1.32	.46
2	Private	107	32.4%		
3	Male	213	64.5%	1.35	.47
4	Female	117	35.5%		

Table 3

Table 2

Sector and Gender Wise Distribution of Executives (n=330)

This table indicates the distribution of executives on the basis of gender (M=1.35; SD=.47) and sector (M=1.32; SD=.46). Total 330 top and middle-level leaders were selected for data collection through Pareto Principle Questionnaire, executives from the public (N=223) and private (107) leaders ware participated in the study.



On the basis of gender, the executives were also distributed in this section of the paper. Total male(M=1.35; SD=.47) and female(M=1.32; SD=.45)participated in this Study. The pie chart demonstrated the % of respondents on the basis of sector.



Correlation among Variables

Initially, Bi-Variate correlation (Pearson) was applied to inspect the association of the mean scores of Pareto Principle and executives' compensation. As mentioned the paper would purely explore the relationship between the Pareto Principle and leader's pay and faculty rank. The table of correlation analysis displays that the Pareto Principle and leader's compensation significant positively correlated. The coefficient of pay (r=.597**) and Faculty rank (r=.636**) decisional values in the supports of hypothesis H_02 : There is no significant association between the mean score of Pareto Principle and pay of executives in public and private universities and H_03 : There is no significant association between the total means scores of Pareto Principle and leader's compensation (r=.876**) also positively correlated. H_01 : There is no significant association between the mean score of Pareto Principle and leader's compensation (r=.876**) also positively correlated. H_01 : There is no significant association between the mean score of Pareto Principle and leader's compensation (r=.876**) also positively correlated. H_01 : There is no significant association between the mean score of Pareto Principle and employee's compensation in public and private executives of universities. Further results regarding all the included variables also depicted in the table.

Table 4

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Key Variables	SE	Mean	SD	Gender	Sector	Income	Rank	P1	P2	P3	P4	P5	Total
Gender	.026	1.35	.479	1	040	376**	121*	009	008	.128*	131*	.230**	.052
Serving	.026	1.32	.469		1	262**	295**	.283**	270**	004	092	.082	.230**
Income per	024	1 70	()7			1	.333**	50**	.57**	100**	05*	240**	507**
Month	.034	1.79	.627			1	.333	59**	.5/**	.182**	95*	340**	.597**
Faculty	040	2.33	205				1	.279**	.710***	.222*	424*	228**	.636**
Rank	.049	2.33	.893				1	.219	./10	.222*	424**	220	.030***
1 st Pareto													
Principle	.267	34.34	4.84					1	.447**	.512**	.517**	.404**	.636**
Factor													
2 nd Pareto													
Principle	.259	31.96	4.71						1	$.578^{**}$.687**	.527**	.747**
Factor													
3rd Pareto													
Principle	.472	55.59	8.58							1	.710**	.710**	.867**
Factor													
4 th Pareto													
Principle	.658	59.84	11.96								1	.764**	.927**
Factor													
5 th Pareto													
Principle	.554	52.75	10.07									1	.876**
Factor													
Pareto	1 870	234.5	33.08										1
Principle	1.070	234.3	55.70										1

Table	5

S#	Demographics	Total	Mini/Maxi	Mean	SD
1	Gender	330	1/2	1.35	.479
2	Serving As	330	1⁄2	1.32	.469
3	Income per Month	330	1/3	1.79	.627
4	Faculty Rank	330	1⁄4	2.33	.895
5	Position	330	1⁄4	2.78	1.003
6	Leader's Age	330	1/6	3.63	1.241
7	Leader's Experience	330	1/6	4.34	1.427
8	Department/Division	330	1⁄4	1.80	1.009
9	Qualification	330	1/3	2.45	.660

Descriptive Statistics of Demographics Variables (N=330)



Hypothesis Testing

Pareto Law and Leadership Compensation

H₀1: There is no significant association between the mean score of Pareto Principle and employee's compensation in public and private executives of universities. The first hypothesis was rejected at the sig. level of P<0.05 &r=.876** which indicates strong association between the Pareto Principle and executivecompensation. (Cohen 1983) affirmed that magnitude of association between variables "*small correlation r=.10 to .29, Medium correlation r=.30 to .49 and large correlation r=.50 to 1.0*) the calculated r=.46 indicates medium correlation"(Cohen, Cohen, West, & Aiken, 1983).

Pareto Law and Leadership Pay

H₀**2:** There is no significant association between the mean score of the Pareto Principle and pay of executives in public and private universities. The first hypothesis was rejected at the sig. level of P<0.05 & r=.597** which indicates a strong association between Pareto Principle and executives' compensation. (Cohen, 1983) affirmed that magnitude of the association between variables "*small correlation r=.10 to .29, Medium correlation r=.30 to .49 and large correlation r=.50 to 1.0*) the calculated r=.46 indicates medium correlation"(Cohen, et al., 1983).

Pareto Law and Leadership Rank

H₀**3:** There is no significant association between the mean score of Pareto Principle and faculty rank of executives in public and private universities. The first hypothesis was rejected at the sig. level of P<0.05 & r=.636**which indicates astrong association between the Pareto Principle and executives' compensation. Cohen 1983) affirmed that magnitude of the association between variables "*small correlation r=.10 to .29, Medium correlation r=.30 to .49 and large correlation r=.50 to 1.0*) the calculated r=.46 indicates medium correlation"(Cohen, et al., 1983).

Results and Discussion

On the basis of data analyses following results were scrutinized:

- 1. The PPQ was found to be decidedly reliable (52 items; $\alpha = 0.94$).
- The results indicate the distribution of executives on the basis of gender (M=1.35; SD=.47) and sector (M=1.32; SD=.46). Total 330 top and middle-level leaders were selected for data collection through Pareto Principle Questionnaire, executives from the public (N=223) and private (107) leaders ware participated in the study.

- 3. Results on the basis of gender, the executives were also distributed in this section of the paper. Total male (M=1.35; SD=.47) and female (M=1.32; SD=.45) participated in this Study.
- 4. The calculation of correlation analysis displays that the Pareto Principle and leaders' compensation significant positively correlated.
- 5. The coefficient of pay (r=.597**) and Faculty rank (r=.636**) decisional values in the supports of hypothesis H₀2: There is no significant association between the mean score of Pareto Principle and pay of executives in public and private universities and H₀3: There is no significant association between the mean score of Pareto Principle and faculty rank of executives in public and private universities.
- 6. The results quantified that the total mean scores of Pareto Principle and leader's compensation (r=.876**) also positively correlated. H_01 : There is no significant association between the mean score of Pareto Principle and employee's compensation in public and private executives of universities. Further results regarding all the included variables also depicted in the table. As it was supported by literature Pareto Principle and level four were interrelated. The rejection of 5th hypothesis supported the assumption of Maxwell (2011).

"Every leader needs to understand the Pareto Principle in the area of people oversight and leadership". Overall 20 % people in the firm responsible for 80% of the success of the company. First, recognize your 80% producers spent 80 % "people time" on exceptional 20%. "Regulate what 20 percent of the work gives 80 percent of the return and train an assistant to do the 80 percent less effective work. This "frees up" the producer to do what he/she does best" and requests the top 20% to do on-the-job preparation for the next 20 %" (p.45).

Maxwell also confessed in his wrings that, the productionorganization also depended on the utilization of Pareto Principle by their leadership. The rejection of hypothesis affirms the supposition of Maxwell (2007).

"Pareto principle stipulates 80% work always done by 20% people in the organization. at every workplace 20% exceptional people then others they substantially more valuable and effective they should be a reward, equip, empower, motivated and encourage because they are producing 80 % outcome. Leaders should fashion 80% appreciation, cost and support for top 20% people. Writing in "Be All You Can Be" Maxwell review that, Geniuses people pay 10 % their potential but if 10% of potential to using 20% they could double outcomes and motionless have 80 percent of potential unexploited" (p.112). As Pareto Principle and production level was positively correlated Chu (2009) affirm that the long-term success and production of an organization depends upon the utilization of 80/20 rules by their leadership. Richard Koch (2015) confess that Pareto Principle proposes that there are a "*few really important reasons that explain superior educational performance*" and that 80/20 approaches and methods will substantiate brilliant consequences. The other hypothesis rejection may cause by contextual alterations as prescribed in literature or other variations of the study. The future studies may be conducted to accept or reject the results of the current paper. It may also be conducted causal-comparative or in another form of research. The leadership level assessment questionnaire was partially used in present paper it may be used completely in future studies for more precise results.

Implications and Recommendations

As we noticed that the results support that the leaders who apply 80/20 technique in their daily matters significantly correlated with their compensation given by organization whether public or private. All the executives top and middle level at public and private universities of Lahore district who participated in this study, researchers find a positive correlation between the mean scores of Pareto Principle and Leaders' compensation in the terms of Pay and Faculty rank. Rejection of three hypothesis acknowledge the literature (Koch, 2011a, 2011b, 2013) and the developing leadership companies of (Maxwell, 1993, 2002a, 2002b, 2007a, 2007b, 2008, 2010a; John C Maxwell, 2012a; Maxwell, 2013a, 2013b).

This study was done at university it may be at other levels in the department of education or types of organization whether governmental or semi-government. Only two variable pay and rank was tested in this study future researchers may conduct it in the whole model of Employee's compensation based on Membership based rewards or performance-based rewards this would support the assumption clearly and succinctly. Lastly, it is acknowledged this study was purely conducted in the context leadership of education department the result iscontextually based.

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