

The Diagonal Model of Job Satisfaction and Motivation: Extracted from the Logical Comparison of Content and Process Theories

Zafarullah Sahito^{1,2} & Pertti Vaisanen¹

¹ School of Applied Educational Science and Teacher Education, Philosophical Faculty, University of Eastern Finland

² Sukkur IBA, Sindh, Pakistan, Airport Road, Sukkur, Sindh, Pakistan

Correspondence: Zafarullah Sahito, School of Applied Educational Science and Teacher Education, Philosophical Faculty, University of Eastern Finland and Sukkur IBA, Sindh, Pakistan, Airport Road, Sukkur, Sindh, Pakistan

Received: June 2, 2017

Accepted: June 19, 2017

Online Published: June 22, 2017

doi:10.5430/ijhe.v6n3p209

URL: <https://doi.org/10.5430/ijhe.v6n3p209>

Abstract

The purpose of this study is to explore the strongest areas of all prime theories of job satisfaction and motivation to create a new multidimensional model. This model relies on all explored areas from the logical comparison of content and process theories to understand the phenomenon of job satisfaction and motivation of employees. The model consists of the whole picture of the professional life of employees and the requirements of organisations to fulfil employees' basic and fundamental needs and lead them towards the highly successful ratio to achieve personal, professional and organisational goals. The resulting model would be strong and easy to use by all stakeholders (i.e. employees, heads of departments and the organisation) to gain first-hand knowledge of the employees' level of satisfaction, motivation, performance and product. Because the measurement of every employee action and organisational policy would be calculated through different values, the evaluation generated through this model consists of top to bottom and bottom to top diagonal approaches as well as the central value of the model.

Keywords: Job satisfaction and motivation, Teacher educators, Top to bottom diagonal approach, Bottom to top diagonal approach, The central value of the model

1. Introduction

Job satisfaction is a positive emotional state about the fulfilment of values from the job (Locke, 1976) that contains an affective (emotional state) and cognitive (appraisal) components (Organ & Konovsky, 1989). Where individuals are having work delegated, being appraised for their work performance, and being recognised by the profession and for the completion of their work tasks (Megginson, Mosley, & Pietri, 1982), their personal evaluation and perceptions towards the affective and cognitive conditions necessary for job completion and outcome achievement affect their job satisfaction (Schneider & Snyder, 1975). Therefore, individuals want to evaluate their jobs against aspects that are important to their dispositions (Sempene, Rieger, & Roodt, 2002). Motivation is individuals' willingness to do something to satisfy their needs (Whiseand & Rush, 1988) that energises them to take action to modify and use goal-oriented behaviour (Wregner & Miller, 2003). It is individuals' intensity, direction and persistence in their efforts to attain specific objectives (Fuller, Valacich, & George, 2008) with willingness to exert high levels of efforts towards organisational goals and the satisfaction of individuals' needs (Saraswathi, 2011). Work or individuals' motivation start with cognitive recognition of a desire that was not present at the time of individual is noticed, and it is followed by mental desire to achieve a goal through physical actions.

Job satisfaction and motivation are the most discussed topics of organisational behaviour in the field of human resource management (HRM) and development (HRD). These factors have been proven as the most important contributors to an organisation's effectiveness and efficiency. Most researchers have found a positive relationship between job satisfaction and motivation and a complementary relationship between both and other organisational variables (Kian, Yusoff, & Rajah, 2014). Job satisfaction and motivation are two success factors of an organisation because organisational success depends on employees and their attitudes, behaviours and outcomes. The role of management is to help employees to adjust and feel comfortable in the working environment to ensure employees' motivation is consistent with organisational objectives. It is also important to understand the factors, which influence

employees such as different cultures and their influence on what people value and what they see as rewarding (Uzonna, 2013).

1.1 Similarities and Differences between Job Satisfaction and Motivation

Job satisfaction is usually linked with motivation (Aziri, 2011) and most studies have found a strong positive correlation and functional relation between motivation and job satisfaction (Singh & Tiwari, 2011; Nadia & Shagufta, 2011). The value of job satisfaction has a positive significant impact on the value of motivation, and the factors of motivation contribute to the prediction of job satisfaction (Chess, 1994). Specifically, previous studies have identified some common factors of motivation and job satisfaction including power (Hoole & Vermeulen, 2003), job security (Davy, Kinicki, & Scheck, 1997; Ritter & Anker, 2000), financial rewards (Thomson, 2003), and promotion (Hoole & Vermeulen, 2003; Moynihan & Pandey, 2007). Motivation and job satisfaction are quite different from each other in terms of return and performance (Hersey & Blanchard, 1998). Motivation is a payout for an individual to do something to satisfy his or her needs (Whiseand & Rush, 1988), whereas job satisfaction is a simple positive emotional state about the job (Locke, 1976) cited by Brief and Weiss (2001). Motivation is a result of future expectations while satisfaction is a result of past events and experiences (Carr, 2005), and the individual's feelings towards the job will decide the quality of the job and its related elements (Wregner & Miller, 2003; Fuller et al., 2008). Some researchers have discovered a reverse relationship where the job itself determines employees' positive or negative feelings (Megginson et al., 1982; Robbins & Judge, 2010; Sempane et al., 2002); for example, predictors for altruism and generalised compliance are positive indicators (Kim, 2006) of organisational citizenship behaviour. This complicated relationship was found between motivation, job satisfaction and organisational commitment as a positive correlation between job satisfaction and motivation (Tella, Ayeni, & Popoola, 2007).

2. Literature Review

There are many theories of job satisfaction and motivation that attempt to explain the nature and condition of the motivation of employees in an organisation. These theories are partially true and explain the behaviour of certain people at certain times, possibly inside and outside the organisation. However, motivation is a complex behaviour that varies over time and under different conditions, statuses, or circumstances. As a result, the study of job satisfaction and motivation would explore the facts that may motivate the employees to work well with their wish and will of their hearts. All these theories are important for heads of departments, institutes and organisations to understand the phenomenon of job satisfaction and motivation. Such an understanding would help them tackle issues and guide their subordinates and co-workers to work hard in their organisation with interest, peace and prosperity to develop their skills and achieve the success that all stakeholders want and deserve. The different theories of job satisfaction and motivation have provided a suitable and authentic framework to give insight into how to motivate staff in the best manner to work willingly and effectively to enhance productivity.

Workplace motivation theories are classified into two main areas, namely process and content theories (Campbell, Dunnette, Lawler, & Weick, 1970). Content theories have emphasised the factors and needs that encourage and inspire employees' behaviour and performance. These theories have focused on employees' internal factors that energise and direct their working behaviour (Lynne, 2012) are considered the product of internal drives that compel individuals to move towards their satisfaction. The content theories of motivation have been based on early theories of motivation, the most important of which are Maslow's hierarchy of needs, Alderfer's ERG theory, Herzberg's two-factor theory, and McClelland's theory of needs (Lynne, 2012). All content theories assume that all employees in an organisation have the same set of needs; therefore, organisations can predict the characteristics that should be present in the job (Lynne, 2012). Conversely, process theories have emphasised employees' behaviours as driven by their individual needs. Process theories hold that employees will be motivated when their job meets their expectations and values. These theories have focused on the process by which employees' expectations, needs, values and comparative interactions meet with their job tasks to determine motivation. They have also described how individual behaviour is motivated and maintained in self-directed human cognitive processes. All process theories share the notion that employees' diverse needs and cognitive process should be given attention (Lynne, 2012). The major process theories of job satisfaction and motivation are Vroom's expectancy theory, Adam's equity theory, Locke's goal-setting theory, and Skinner's reinforcement theory.

2.1 Content Theories

Maslow's hierarchy of needs is a popular pioneer theory of job satisfaction and motivation, revolving around lower-level and higher-level needs. It states that people are motivated by five basic needs, namely physiological needs, safety and security needs, belongingness, love needs, self-esteem, and self-actualization. Physiological needs are food, water, shelter, and sleep; safety and security needs are security of income like salary and employment, a

place to live, health facilities, and well-being; belongingness and love needs consist of relationships with family members, friends, colleagues, team members and other members of the community and society; self-esteem needs are status, respect, promotions, good grades, and prizes; and self-actualization needs consist of the realisation of potentials, abilities, and fulfilment of capacities. People try to satisfy their physiological needs first. When their lower-level needs are satisfied, they can work towards their other higher-level needs. People always strive to satisfy their new needs, which emerge in the present time in their lives.

Maslow’s concept has been entirely refuted on partially validated (Wahba & Bridwell, 1976), but his needs hierarchy theory has remained popular particularly in an organisational context. The hierarchy of needs is a legitimate explanation for the motivation of human behaviour (Rauschenberger, Schmitt & Hunter, 1980). The concept of needs provides a suitable framework for frontline managers to change employee behaviour (Cangemi, 2009). The intuitive nature of the hierarchy theory depends on the awareness of emotions, which supports practitioners to use this theory despite the lack of evidence regarding its effectiveness (O’Conner & Ybatel, 2007). This framework differs from person to person and day to day because every individual has his or her own motivational framework (Redmond, 2010). The situation had improved significantly at the manufacturing facility before presenting the findings, because the newer generation brought needs such as recognition, fulfilment, and personal growth to the plant, which correspond to the higher level of needs (Cangemi, 2009).

Clayton Alderfer reorganised the Maslow’s hierarchy of needs from five levels to three levels known as core needs (e.g., existence, relatedness needs, and growth needs). Existence needs consist of physiological and safety needs, relatedness needs comprise love and belongingness, and growth needs consist of self-esteem and self-actualization needs. Relatedness and growth needs are higher-order needs. The ERG theory is like a starving artist, who may place greater emphasis on creating art than on existence needs like food or shelter (Redmond, 2010). A person regresses to lower needs to achieve satisfaction (Borkowski, 2009; Redmond, 2010).

Herzberg’s two-factor theory consists of intrinsic job content factors and extrinsic job context factors. Intrinsic factors are known as job satisfiers or motivators, and extrinsic factors are known as dissatisfiers or hygiene factors. Herzberg (1965) identified job satisfiers, the motivating factors of employees, which are directly attributed to motivate employees to achieve high levels of performance. Additionally, hygiene factors, or dissatisfiers, maintain the health, comfort, and social wellbeing of employees, so the removal of hygiene factors results in the dissatisfaction of the employees in the organisation (Drews, 1997). These include company policies, interpersonal relations, working conditions, salary, and job security (Herzberg, 1965). Therefore, motivation factors should be tailored for every employee rather than for all employees (Buhler, 2003) because employees perform at their highest levels after becoming motivated and inspired (Sadri & Bowen, 2011).

McClelland’s theory of needs focuses on needs like the higher-order (social and esteem) needs of Maslow’s hierarchy. Also called achievement motivation theory, McClelland’s theory of needs is concerned with individual needs and environmental factors, which combine to form three basic human motives: need for achievement, need for power and need for affiliation. People who take responsibility, seek challenges and want to work hard to find a solution to problems and reach their ultimate goals are considered to have a high need for achievement. This approach leads them towards faster promotions, professional development and success.

Main Idea	Maslow’s Hierarchy of needs Theory	Alderfer’s Modified Need Hierarchy Theory	Herzberg’s Two Factor Theory	McClelland’s Achievement Motivation Theory
Higher-order needs	Self-actualization	Growth	Satisfier factors	Achievement
	Esteem			Power
Lower-order needs	Social	Relatedness	Hygiene factors	Affiliation
	Safety	Existence		
	Physiological			

Figure. 1. Comparison between Content theories

Source: Literature Review

2.1.1 Comparison of Content Theories of Job Satisfaction and Motivation

Job satisfaction and motivation theories were developed based on the idea of job satisfaction and its high appearance in the process. They can be distinguished based on meaning and purpose (Kian et al., 2014). In this regard,

individuals' attitudes and behaviour decide the success or failure of an organisation based on the overall performance of employees (Kian et al., 2014). Organisations can achieve efficiency by developing a good working culture to attain the goals at large (Uzonna, 2013). For goal attainment, it is necessary to read, understand and utilise the theories properly because each content theory carries various needs of employees in similar terms to motivate them to work hard in their organisations (Borkowski, 2011)..

2.2 Process Theories

Adam's equity theory revolved from the social comparison theory and is considered one of the most popular social exchange theories. It states that the degree of equity or inequity is a major input into job performance and the satisfaction that people perceive in their work situation. Equity occurs when the ratio of a person's outputs to his or her inputs is equal to the ratio of another person's output to input, and inequity occurs when the ratios are not equal. Factors such as education, social status, qualifications, age and organisational position are inputs and rewards, while results such as pay and promotions are outputs. The theory assumes that people compare their performances, attitudes, contributions to work, and benefits with other persons in the organisation. They are motivated in proportion to the perceived fairness of the rewards received for a certain amount of effort as compared to others because they make judgments between their inputs and outcomes with others. The turnover is generally high, so motivating the lowest paid workers has remained a significant challenge (Tudor, 2011).

Researchers have investigated different forms of equity such as pay equity, pay level equity, pay administration equity, procedural and distributive justice, job security and complexity, promotion opportunities equity, and evaluation criteria equity (Roberts, Coulson & Lawrence, 1999). Pay is low, limited or no advancement opportunities and work conditions are not ideal (Tudor, 2011). Empirically, the equity theory has a stronger validity than other organisational behaviour theories, and researchers have recognised it as a useful and powerful indicator to achieve work outcomes (Hatton et al., 1999). Equity theory has a strong link to stress (Hatton et al., 1999), burnout (Mascha, 2007), turnover (Test, Flowers, Hewitt, & Solow, 2003), and job satisfaction (Balcazar, Mackay-Murphy, Keys, Henry, & Bryant, 1998).

Researchers and practitioners have widely accepted Vroom's expectancy theory of motivation, proposed in the 1960s as an alternative to the content models or theories. It states that motivation is a product of three factors: valence, expectancy, and instrumentality. Valence revolves around how much one wants a reward, expectancy refers to one's estimation of the probability that effort will result in successful performance, and instrumentality is the estimation of whether one's performance will result in receiving the reward. The motivational relationship can be expressed in this formula: $Motivation = Valence \times Expectancy \times Instrumentality (V \times E \times I)$. Valence is strength, personal value and person's preference for an outcome that the rewards can be received based on performance, as high valence is a guarantee of high motivation. As a process theory of motivation, Vroom's expectancy theory looks at the cognitive process to study the effects of the motivation of employees working in different organisations (Parijat & Bagga, 2014). Expectancy theory concerns the perception and anticipation of consequence behaviours to predict the consequences of their actions (Michael & Edward, 2011).

Locke's goal-setting theory is an integrative model of motivation like the expectancy theory. Specific setting, a challenging performance, and the commitment to goals and their achievement are the key determinants of motivation. Goals describe a desire for the future. They drive the behaviour that leads to achievement and accomplishment, which motivate individuals to perform well. Specific goals can be measured and lead to higher performance than general goals. Locke's goal-setting theory of motivation emphasises the relationship between goals and performance, asserting that better performance can be seen when goals are specific and challenging, and are used to evaluate performance through feedback and create commitment and acceptance (Lunenburg, 2011). Employees' behaviour and performance can be influenced by goal-setting by organisations and management (Locke & Latham, 2002), as managers accept and support goal-setting to improve and sustain the importance of employees (DuBrin, 2012). Goal-setting can be used under the right conditions as a powerful technique to motivate an organisation's employees to enhance their motivation and performance (DuBrin, 2012; Greenberg, 2011; Newstrom, 2011).

Reinforcement has a central position in the human acquisition of skills and performance competence (Omomia, 2008; Omomia & Omomia, 2014). Operant conditioning consists of voluntary behaviours used in operating the environment (Mergel, 2011). Positive reinforcement tends to encourage the repetition of behaviours, while negative reinforcement motivates an individual to remove a behaviour or avoid an undesirable effect (Grice, 2011). Behaviourism is concerned with consequences of behaviours that are tangible and observable. Behavioural principles influence the development of programmed learning and computer-aided instruction (Griffith & Hamza, 2006). Skinner believed that the purpose of instruction was to alter, modify, and move behaviour in a desired direction.

Therefore, the evaluation of instruction was intended to ensure that the behaviour was changed in the expected direction (Hannum, 2011). Negative reinforcement may not be the same as punishment (Wolfgang, 2001). Researchers have stated that reinforcement theory is a relevant tool for changing employees' behaviour by manipulating the consequences (Kio, Ogunyomi, & Ojodu, 2011). Reinforcement theory, also known as learning theory, refers to the use of stimuli to produce desired behaviours among employees through different occurrences and schedules (Skinner, 1963).

Main Idea	Adam's Equity Theory	Vroom & Porter Lawler's Expectancy Theory / Model	Locke's Goal-setting Theory	Skinner's Reinforcement
1. Inputs 2. Understand the process of Motivation 3. Equity 4. Efforts to perform 5. Emotions 6. Find why	1. Inputs (Efforts of work)	1. Valence	1. Goal setting (Mastery on goals)	1. Positive Reinforcement
				2. Negative Reinforcement
1. Outputs 2. Individual's choices & preferences v/s rewards & accomplishment 3. Inequity 4. Expectance of reward 5. Respect the emotions 6. Find how	2. Outputs (Reward for work)	2. Instrumentality	2. Performance	3. Punishment
		3. Expectancy	4. Extinction	

Figure 2. Comparison of Process Theories

Source: Literature Review

2.2.1 Comparison of Process Theories of Job Satisfaction and Motivation

Process theories of job satisfaction and motivation are concerned with the thought processes of individuals that influence behaviour (Kian et al., 2014). It is concerned with employees' attitudes, behaviours, and overall performances that lead to the success or failure of the organisation (Kian et al., 2014). Organisations can achieve efficiency to develop a good working environment and culture to attain their overall goals (Uzonna, 2013) through reading, understanding, and utilising the theories properly. Each theory highlights various needs of employees and motivation strategies to encourage employees to work hard for the progress of their organisations (Borkowski, 2011). The progress in light of process theories revolves around inputs (e.g., time, effort, loyalty, hard work, commitment, ability, adaptability, flexibility, tolerance, determination, enthusiasm, personal sacrifice, trust in superiors, and support from co-workers and colleagues) and outputs (e.g., job security, esteem, salary, employee benefits, expenses, recognition, reputation, responsibility, sense of achievement, and praise). Outputs can be positive and negative, tangible and intangible (Walster, Traupmann, & Walster, 1978) that an employee perceives because of their relationship to each other with a possible balance ratio that can bring satisfaction with their job.

3. Research Methodology and Procedure

In writing this article, two methods and procedures were taken into consideration, namely the conceptualisation of the topic in terms of clarity of expressions, impact on research, timeliness, and relevance (Whetten, 1989). For this study, many articles were synthesised to write the introduction and literature review, and the logical and mathematical induction and description were done to prove the values of different items and activities to convert the phenomenon from a qualitative (subjective) nature to a quantitative (objective) nature. Theoretical articles discuss the published literature to advance the existing theory or model, refine the theoretical construct, identify

inconsistencies in the theoretical framework, and test internal consistency and external validity (Gravetter & Forzano, 2012). As such, this article focuses on the discussion of published literature to create a new model of job satisfaction and motivation to advance the existing theories and models of the concerned field, depending on the philosophical assumptions of epistemologies (Crotty, 1998) underpinned by the epistemological constructionism which asserts that knowledge is constructed and subjective (Creswell, 2009). The research synthesis conceptualised the topic, while mathematical induction was used for the logical and mathematical proofs.

3.1 Mathematical Induction

Mathematical induction is a process of technique(s) used to prove a given statement about any well-ordered set. It is used to establish statements for the set of all natural numbers in science fields, depending upon the process to form a direct proof. It is usually done in two steps, such as the base case means to prove the given statement for the first natural number, and the inductive step means to prove that, if the statement is assumed to be true for any one natural number, then it must be true for the next natural number as well. Mathematical induction plays a vital and foundational role in making all correctness proofs for computer programs (Anderson, 1979; Franklin & Daoud, 2011). Inductive reasoning is used as an inference rule to write proofs generated through mathematical induction; these are examples of deductive reasoning, where inductive reasoning is excluded from proofs (Franklin & Daoud, 2011; Hazewinkel, 2002). It is difficult to generate mathematical proofs, but it can be done with hard work based on proper background knowledge of both mathematical functions and the field as necessary to format the proof. Initially to explore the term, their definitions, and detailed descriptions to logically devise the proof.

Table 1 presents the three main methods to write mathematical proofs, namely understanding the problem, formatting a proof, and writing a proof. Understanding the problem means to determine exactly what is trying to prove as well as identifying the assumptions and questions to reach a starting point to understand the problem. Formatting a proof consists of a series of logical statements supported by definitions, research findings, laws, rules and regulations, theorems, and principles to prove the truth of statement. Because proofs are only the way to know that a statement is valid, writing a proof consists of using suitable and authentic language and terminology to define one statement, to connect it with another, to compare and contrast, and to define the main characteristics such as similarities and differences, usefulness and misuse, excellence and poorness, goodness and badness, authenticity and unauthenticity, and accuracy and inaccuracy. The characteristics of proof(s) that can be traced back to self-evident or assumed statements are known as axioms (Clapham & Nicholson, 2009; Cupillari, 2005; Gossett, 2009). Certain areas of mathematics involve actively choosing a set of axioms to discover and derive the results from the statement and provide authentic proofs for the theorems.

Table 1. Mathematical Induction Process

S#	Methods	Actions and Guidelines
1	Understanding the problem	<ol style="list-style-type: none"> 1. To identify the question (s). 2. To draw diagram. 3. To study the proofs related to the problem available in literature (Literature review). 4. To ask questions from yourself, coauthor (s), and critical friend (s).
2	Formatting a proof	<ol style="list-style-type: none"> 1. To define mathematical proofs. 2. To know the field and audience well. 3. To identify the nature and kind of proof to be written. 4. To write two column proof as an outline. 5. To convert two column proof to formal written proof.
3	Writing a proof	<ol style="list-style-type: none"> 1. To learn the terminology and vocabulary of writing a proof. 2. To write down all givens. 3. To define all variables. 4. To work through the backwards. 5. To order the steps logically. 6. To avoid using arrows, abbreviations and short forms in written proof. 7. To support all statements with the authentic and widely expected definitions, research findings, laws, rules and regulations, theorems, and principles. 8. To end with the conclusion, write why your work and its conclusion is significant.

(Literature review)

3.2 Objectives of the Study

The following objectives were designed to frame the work in a proper order to conclude the study with the creation of the model:

1. To compare and contrast all theories of job satisfaction and motivation (JSM);
2. To explore the main ideas, characteristics, and relationships between theories of JSM; and
3. To extract the ideas and facts to create new model of JSM.

Objectives number one and two are concerned with the first phase and method of the study related to the theoretical and conceptual work, while the third is concerned with the second phase of the study depending on the extraction of facts and the creation of the model.

3.3 Research Questions

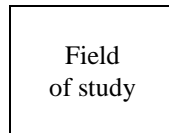
- Q.1: What is the total mathematical value of DM of JSM?
 Q.2: What are the prime approaches and their mathematical values in DM?
 Q.3: What are the mathematical values (ranges) of JSM?
 Q.4: What is the central value of DM?
 Q.5: How will DM of JSM be effective and applicable in the field of human resource management and organisational behaviour?

4. Results

Mathematical induction and description to prove the values of all related items, theories and model.

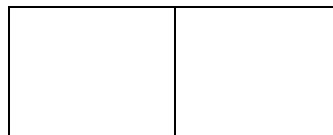
4.1 Process of Extraction and Creation of Model

Step – 01:



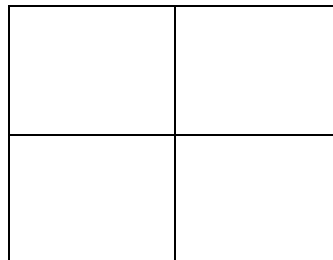
Let suppose one square is considered the field of study, such as job satisfaction and motivation.

Step – 02:



The field of study is divided into two parts as per the paradigms of content and process theories of job satisfaction and motivation. These paradigms and approaches will be used in the process of model development, and the numbers or values will be allotted as per these approaches in the next step.

Step – 03:



The two paradigms are divided into four quarters and are represented as x, y, x', and y' axis and the number of prominent theories in every paradigm respectively.

Step – 04:

5	6	7	8
4	3	2	1

4.1.1 What is the Total Mathematical Value of DM of JSM?

Four theories of each paradigm add to each other and became eight, as shown by quarters. These represent the number of prominent theories in each paradigm of content and process theories. Second, the number of theories is multiplied by the main or key ideas. For example, content theories have lower-order needs and higher-order needs, so four is multiplied by two to equal eight (4 theories X 2 core ideas = 8). The numbers are allotted from one to eight as per the diagonal approach such as from bottom to top. The total value of the columns of the whole table is equal to 36 (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 = 36).

1	2	3	4
8	7	6	5

The paradigm of process theories involves the number of theories multiplied by the main or key ideas as inputs and outputs, so two multiplied by four equals eight (4 X 2 = 8). Both have a total eight of theories of job satisfaction and motivation, so the numbers can be allotted from one to eight as per the diagonal approach such as from top to bottom. The total value of the columns is 36 (8 + 7 + 6 + 5 + 4 + 3 + 2 + 1 = 36).

Step – 05:

1 One	2 Two	3 Three	4 Four
8 Eight	7 Seven	6 Six	5 Five
Nine 9	Ten 10	Eleven 11	Twelve 12
Sixteen 16	Fifteen 15	Fourteen 14	Thirteen 13

$$(1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 + 11 + 12 + 13 + 14 + 15 + 16 = 136).$$

Combining both tables presents a whole picture of the JSM field. The theories are arranged into columns, with content/need theories on the bottom side because they are considered traditional, basic, or foundational theories of the field. Conversely, process theories are put into the upper columns, as they are the latest theories. Job satisfaction and motivation appear in the middle, as they are the main ideas or themes of both paradigms. The other core themes

of two paradigms are also given on both sides of the model. Here, every theory has been given a value in numbers; for example, Maslow’s theory is logically placed in the column with a value of 16 (sixteen only) and Skinner’s theory in the column with a value of 4 (four only). Table 2 presents all theories and their main ideas and concepts with their assigned values.

Table 2. The full and half value of every column is given with the details in this table.

S#	Column number	Name of Theory or Idea	Value of column	Value of half column
01	One	Adam’s Equity Theory (AET)	01	½ (0.5)
02	Two	Vroom’s Expectancy Theory /Model (VET)	02	01
03	Three	Locke’s Goal Theory (LGT)	03	1½ (1.5)
04	Four	Skinner’s Reinforcement Theory (SRT)	04	2
05	Five	Rewards (Rs)	05	2½ (2.5)
06	Six	Motivation (M)	06	3
07	Seven	Job satisfaction (JS)	07	3½ (3.5)
08	Eight	Motivators (Ms)	08	4
09	Nine	Hygiene (H)	09	4½ (4.5)
10	Ten	Job satisfaction (JS)	10	5
11	Eleven	Motivation (M)	11	5½ (5.5)
12	Twelve	Punishment (P)	12	6
13	Thirteen	McClelland’s Achievement Motivation Theory (McAMT)	13	6½ (6.5)
14	Fourteen	Herzberg’s Two Factor Theory (HTFT)	14	7
15	Fifteen	Alderfer’s Modified Need Hierarchy Theory (AMNHT)	15	7½ (7.5)
16	Sixteen	Maslow’s Hierarchy of needs Theory (MHNT)	16	8
Total	16		136	68

Diagonal model of job satisfaction and motivation (DMJSM)

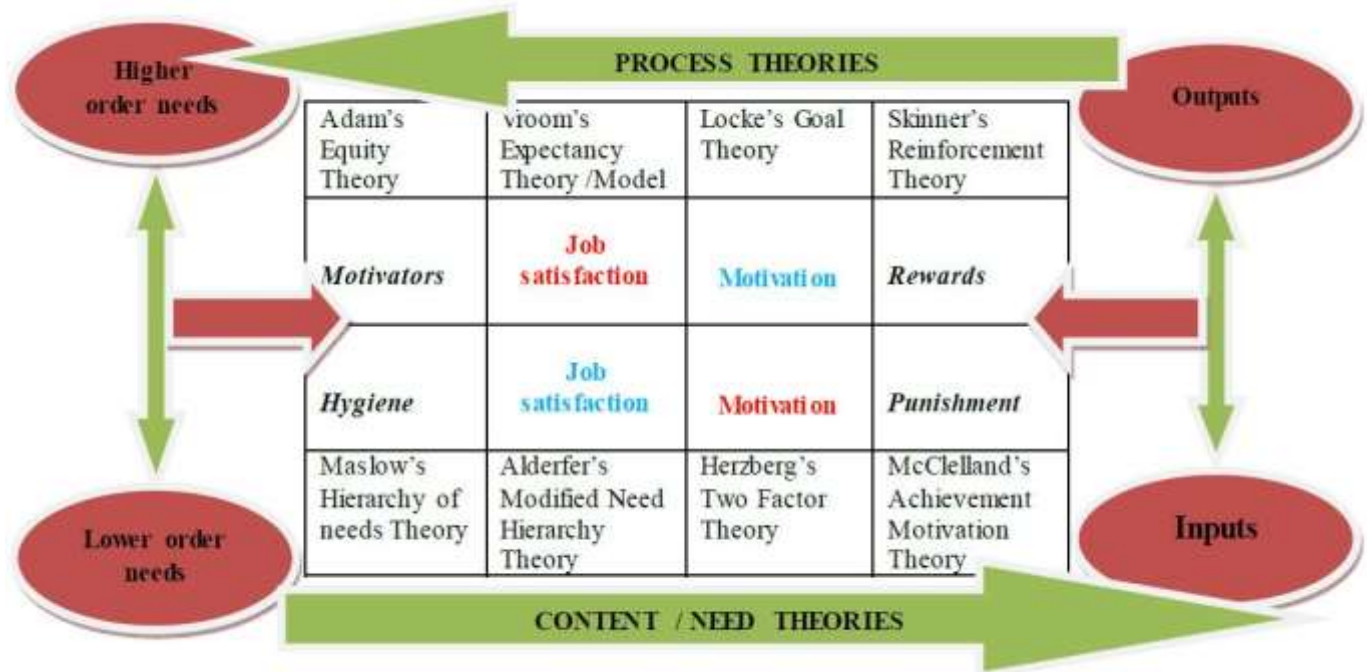


Figure 4.

4.1.2 What are the Prime Approaches and Their Mathematical Values in DM?

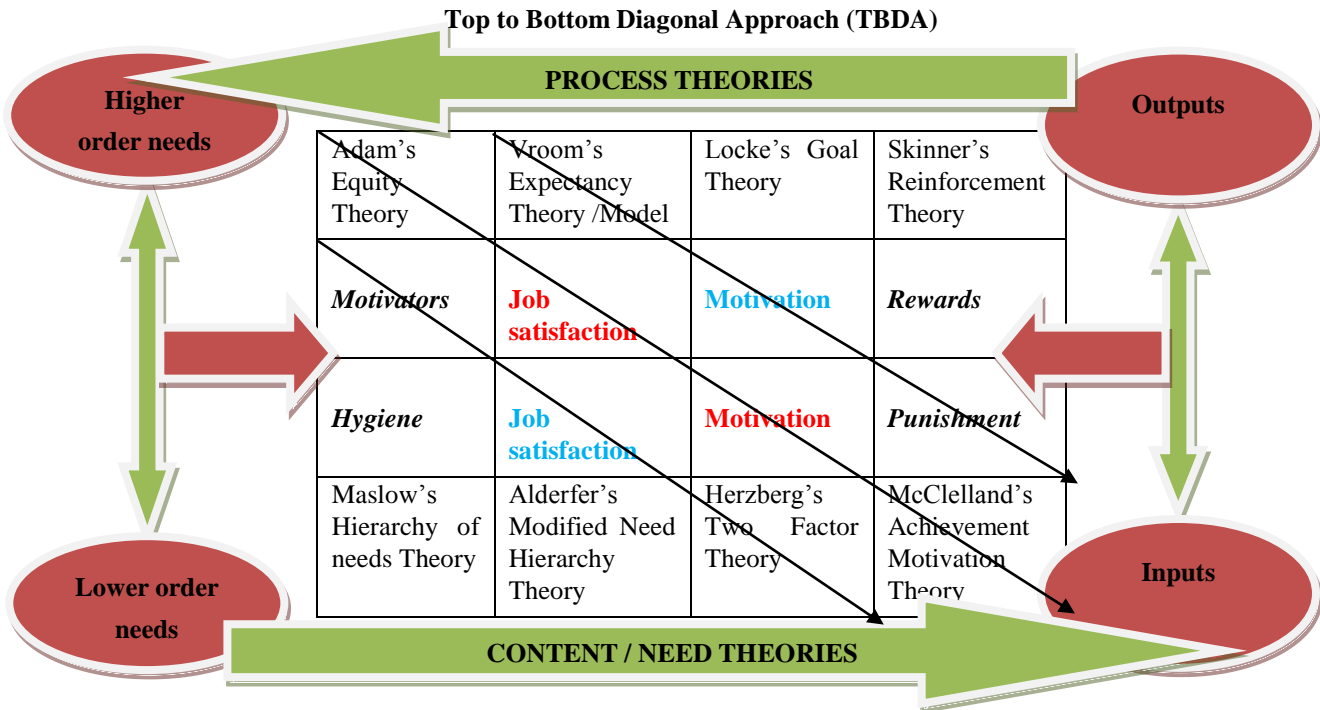


Figure 5.

The DMJSM consists of two main diagonal approaches (DAs), namely the top to bottom diagonal approach (TBDA) and the bottom to top diagonal approach (BTDA). In the TBDA, three arrows are drawn to show the proper path or highway and to divide the columns into parts to illustrate the values of different columns and their participation. These different values are added to draw the exact-calculated value of the whole approach as follows:

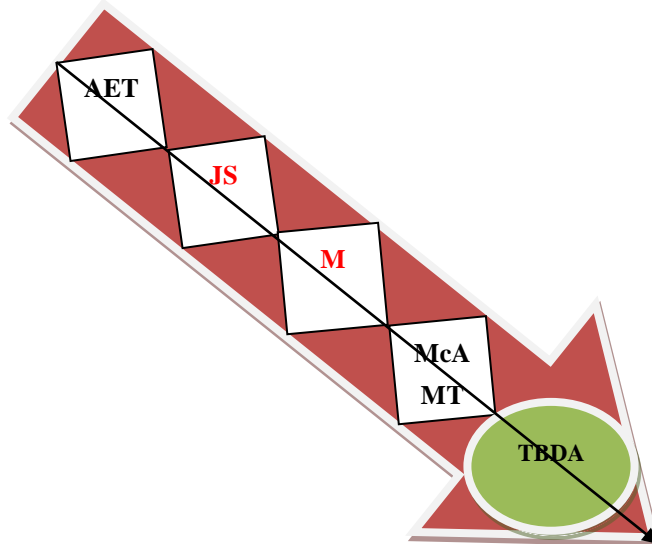


Figure 6.

The formula to find the value of TBDA is as under:

$$TBDA = AET + (VET + Ms) + JS + (M + JS) + M + (P + HTFT) + McAMT$$

Put the values:

$$TBDA = 1 + (1 + 4) + 7 + (3 + 5) + 11 + (6 + 7) + 13$$

$$TBDA = 58$$

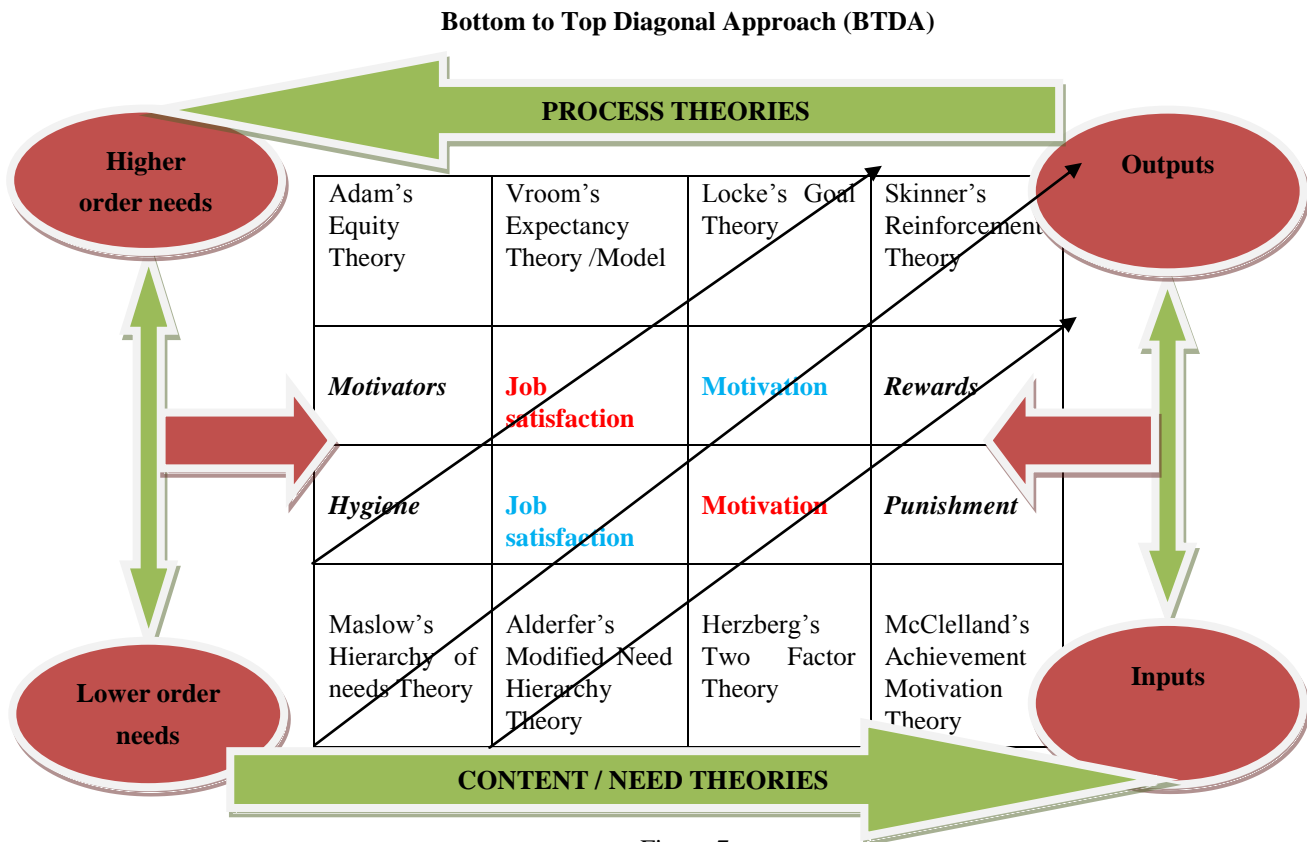


Figure 7.

In the BTDA, the three arrows are drawn to show the proper path or highway and to divide the different columns into parts to illustrate the values of different columns and their participation. These different values are added to draw the exact-calculated value of the whole approach as follows:

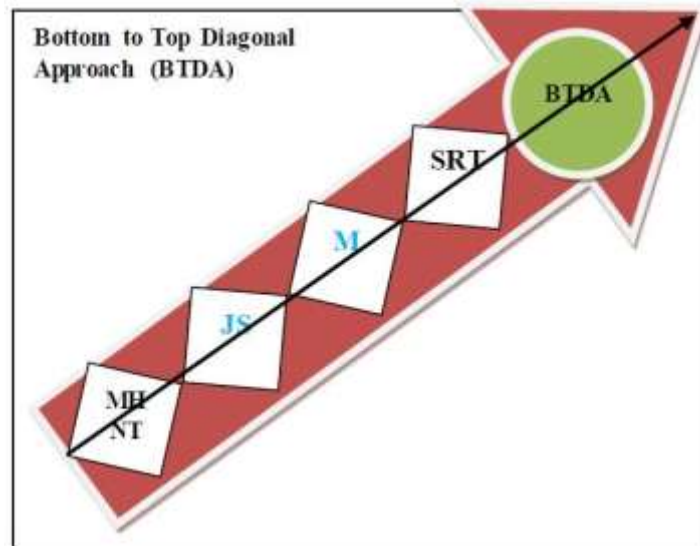


Figure 8.

The formula to find the value of BTDA is as under:

$$TBDA = MHNT + (H + AMHT) + JS + (JS + M) + M + (LGT + Rs) + SRT$$

Put the values in to the formula:

$$TBDA = 16 + (4.5 + 7.5) + 10 + (3.5 + 5.5) + 6 + (1.5 + 2.5) + 4$$

$$TBDA = 61$$

4.1.3 What are the Mathematical Values (Ranges) of JSM?

Therefore, the range of both approaches is from 58 to 61, in round figure it can be consider only 60. It can be said that if an employee is found to be in 60% agreement with the job, that employee is satisfied. An agreement percentage less than 60% indicates dissatisfaction, and agreement of higher than 72% means the employee is highly satisfied.

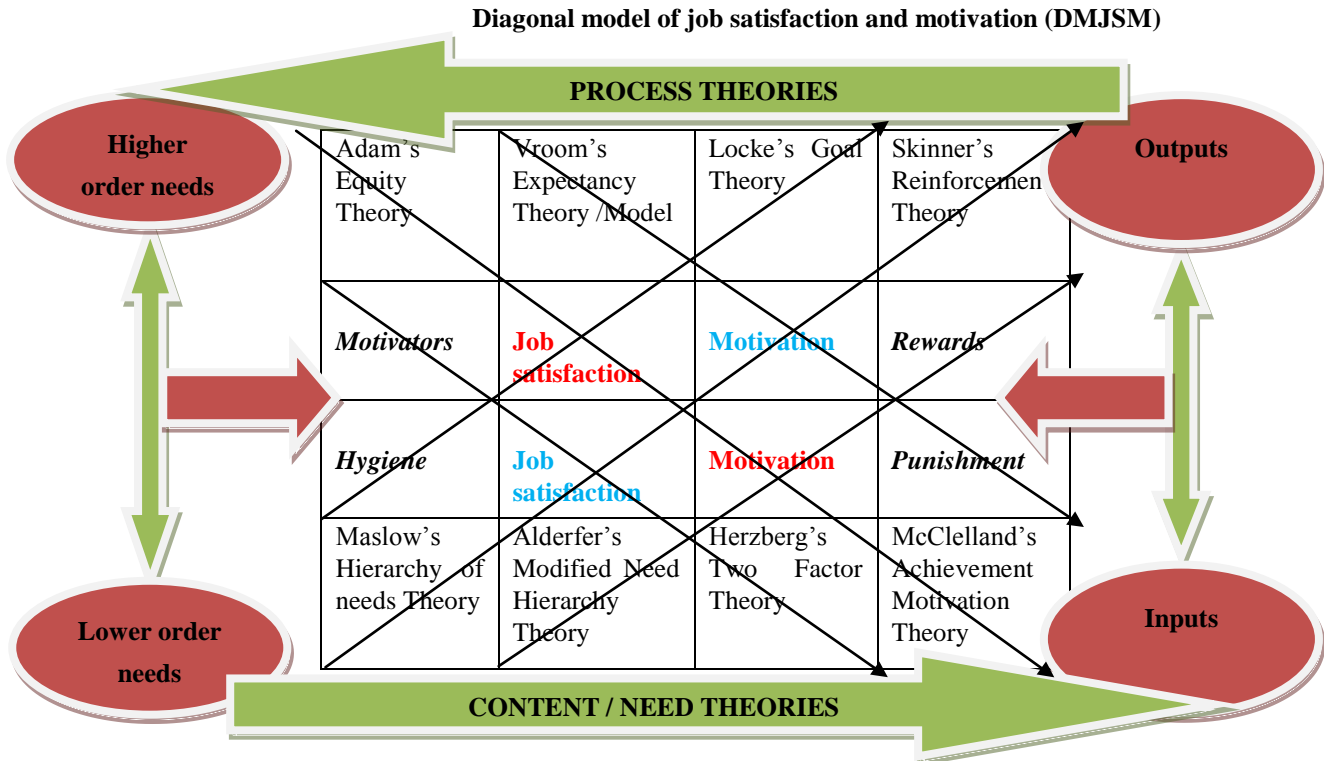


Figure 9.

4.1.4 What is the Central Value of DM?

If we combine both approaches such as TBDA and BTDA in order to calculate the central value of the DM. When both approaches intersect each other, they make a Rambus shape, a geometrical figure in the center of the DM (shown in figure.10). If we calculate their values means to add the values of columns then we get the central value. The formula is as under:

$$\text{Central Value} = \text{Value of column (First - JS)} + (\text{Second - JS}) + (\text{Third - M}) + (\text{Fourth - M}).$$

Put values in to formula

$$\text{Central Value} = \text{Value of column } (3.5) + (5) + (5.5) + (3)$$

Central Value of DM = 17

Now find the value of whole model as:

$$\text{Value of DM} = (\text{Central Value}) \times (\text{Number of Theories per domain}) \times (\text{Domains of Theories / Study}) \text{ or } (\text{Central Value}) \times (\text{Total Number of Theories}).$$

$$\text{Value of DM} = 17 \times 4 \times 2$$

Value of DM = 136

Or

$$\text{Value of DM} = (\text{Central Value}) \times (\text{Total Number of Theories})$$

$$\text{Value of DM} = 17 \times 8$$

Value of DM = 136

Diagonal model of job satisfaction and motivation (DMJSM)

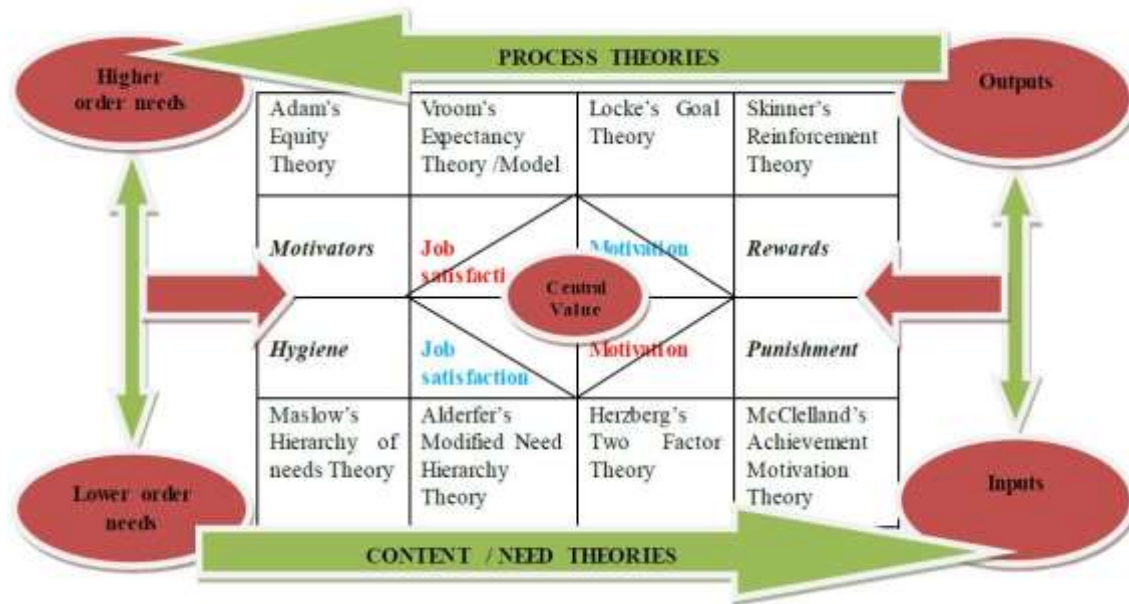


Figure 10.

4.1.5 How will DM of JSM be Effective and Practically Applicable in the Field of Human Resource Management and Organisational Behaviour?

This model would provide appropriate information, knowledge, and suggestions to all stakeholders about the best practices of all eight theories, theoretical frameworks, and backgrounds to achieve the goals of different organisations. Based on the explored values, the next step would be to develop a checklist consisting of the various statements connected with the JSM of the employees (teachers). The checklist can be used by every stakeholder for his or her self-satisfaction or to check the satisfaction of their employees on an immediate basis. All statements would be given a value of 1, and each employee would indicate whether each of the 136 statement was suitable for him or her. Finally, the positively indicated statements would be counted and multiplied by 1 to get the employee’s final score. This score would be matched with the range score(s) explored from the DM of JSM, depending on the main positive characteristics of the theories.

5. Discussions

There are many models of job satisfaction and motivation, including content models like those by Maslow, Alderfer, McClelland, and Herzberg and process models like those by Vroom, Porter and Lawler, Adam, Locke, and Skinner. Beyond these models, the literature offers other examples such as the job characteristics model; the 4-drive model; the multiple-level model of empowerment, performance, and satisfaction; Hugo Kehr’s compensatory model of work motivation and volition; Miriam Erez’s culture-based model of work motivation, Kelley’s co-variation model, and the intrinsic and extrinsic motivation model of work performance. Job satisfaction and motivation are the key influential factors that attract and retain the best talent. These functions are performed through the HRD of any organisation for its success, growth, and development. An organisation’s workforce depends on employees, so they are considered valuable assets that can be maintained and upgraded through using different motivational techniques. The best employee is important for the organisation’s survival, success, and surety of economic development. Motivation is a product of internal and external forces that encourage, attract, and create desire among human beings to stay with a job and to seek and achieve goals for the company and themselves (Spector, 1997). Motivation is an individual’s willingness to do something to satisfy needs (Whiseand & Rush, 1998), and it energises an individual to take action with intensity, direction, and persistence to attain specific objectives (Fuller et al., 2008; Saraswathi, 2011).

The process of model development began with the simple literature review and synthesis of the theories of job satisfaction and motivation. The selection of factors and casual relationships is justified by physiological, economic, and social dynamics of the society. These constitute the assumptions of theory and the theoretical glue that welds the model together, as theory and model cannot be distinguished (Dubin, 1978). The logic underlying the model depends on the soundness of the fundamentals of human nature, organisational requisites, and societal processes to judge the

conceptualisation (Whetten, 1989). The main aim of the synthesis was to identify the authentic facts and figures for the development of a new model in the field, specially keeping in view the conditions and strategies of the different organisations of developing countries like Pakistan. Quality education and work are needed to lay the foundation for economic development through highly skilled human resources to minimise the negative emotional conditions of the people by inculcating positive, peaceful, and prosperous conditions to support teaching, learning, and working environments.

Table 3. A detailed comparison of Content and Process Theories of JSM

Process Theories				
Main Idea	Adam’s Equity Theory	Vroom’s Expectancy Theory /Model	Locke’s Goal Theory	Skinner’s Reinforcement Theory
1. Inputs	1. Inputs	1. Valence	1. Goal setting	1. Positive Reinforcement
2. Understanding the process of motivation	(Effort on work)		(Mastery on goals)	2. Negative Reinforcement
3. Equity				
4. Efforts to perform				
5. Emotions				
6. Find why				
1. Outputs	2. Outputs	2. Instrumentality	2. Performance	3. Punishment
2. Individuals’ choices and preferences v/s rewards and accomplishments	(Reward for work)	3. Expectancy		4. Extinction
3. Inequality				
4. Expectance of reward				
5. Respect the emotions				
6. Find how				
1. Higher order needs	5. Physiological needs	3. Existence	7. Interpersonal relations	4. Avoidance motives
2. Existence needs		2. Relatedness		
3. Dissatisfiers (Hygiene Factors or Extrinsic Factors)	4. Safety needs		6. Company policies and administrative practices	3. Affiliate motives
4. Needs for affiliation	3. Social needs		8. Working conditions	
			9. Supervision status	
			10. Job security	
			11. Pay benefits	
1. Lower order needs	2. Esteem needs	1. Growth	5. Opportunity for growth and advancement	2. Power motives
2. Related and growth needs	1. Self actualization needs		4. Responsibility	1. Achievement motives
3. Satisfiers (Motivation Factors or Intrinsic Factors)			3. Recognition	
4. Needs for achievement and power			2. Working itself	
			1. Achievement	
Main Idea	Maslow’s Hierarchy of needs Theory	Alderfer’s Modified Need Hierarchy Theory	Herzberg’s Two Factor Theory	McClelland’s Achievement Motivation Theory

Need or Content Theories

Empowerment and a sense of authority make employees capable and enhance their decision-making skills at work (Wynter-Palmer, 2012), and positive reinforcement is positively linked with the performance of employees intrinsically and extrinsically (Peterson & Luthans, 2006). Quality education, training, and research are the prime initiatives that can change the future and destiny of any nation through producing skilled human resources to meet the needs of the national and international markets. China has developed its systems and human resources using extrinsic motivation factors to motivate employees in China to work hard in their organisation (Yang, 2011). In this regard, the educational system is highly responsible for developing their accountability policies, as schools, departments, and institutions maintain their autonomy for pedagogical, instructional, and organisational policies to have internal control and maintain the quality levels for their progress to public authorities, which have external control (Hofman, Dijkstra, & Hofman, 2006). If there were a positive relationship between perceptions of equity, then the outcome would be the main motivator of job satisfaction (Khalifa & Truong, 2010). There is a positive relationship between equity and job satisfaction (Deconinck & Bachmann, 2007; Lambert, Hogan & Griffin, 2007; McIntyre, Bartle, Landis, & Dansby, 2002; Paik, Parboteeah, & Shim, 2007), and employees feel satisfaction with their job when they perceive that they are treated fairly (Deconinck et al., 2007; Lambert et al., 2007; McIntyre et al., 2002; Paik et al., 2007; Rifai, 2005). Employees do their work well when they know the high level of motivation is available for them to do a particular task (Fagbohunge & Longe, 2011), such as when they receive feedback, whether positive or negative, or are acknowledge as having improved their performance (Hinkin & Schrieshem, 2004). For teachers, getting proper and authentic feedback is the most valuable tool to improve their skills (Ramiah, 2007). A lack of appreciation for good performance diminishes employees' effectiveness and reduces their satisfaction (Hinkin & Schrieshem, 2004) and vice versa. Rewards and punishment play a pivotal role in behavioural psychology to motivate employees to work hard to achieve the required objectives in an organisation (Kohn, 2004). Therefore, each employee's performance is important in an organisation, and that performance can be motivated through the application of Skinner's reinforcement theory; in fact, positive reinforcement is the most commonly used method to strengthen one's behaviour based on consequences (Wei & Yazdanifard, 2014). These consequences may be connected to six major factors of motivation of employees: high salary, comfortable working conditions, promotions, challenging work, job security, and appreciation of work done (Islam & Ismail, 2008).

The main difference among the employees of developed and developing countries is that developed countries are welfare states. They provide basic facilities and benefits to all their nationals and their families, such as free educational and medical facilities, sound communication systems, updated safety and security systems, employment opportunities, and unemployment support and other allowances. In developing countries, people get little from their states, and they struggle to get and keep their jobs, especially by obeying the legal requirements of their department and organisation. Conversely, no one thinks or cares about the basic needs of employees of their organisation; instead, they focus on work and progress. Therefore, the two approaches of this DM (i.e., TBDA and BTDA) will provide them authentic knowledge about the basic needs of employees and helped them to develop strategies to motivate their employees easily. BTDA starts with the MHNT and ends at the SRT. As personal income has a positive correlation with job satisfaction (Linz & Semykina, 2012), it is significantly correlated with organisational commitment (Asri et al., 2007). Earlier studies found that pay and benefits had the strongest association with job satisfaction of employees in Australia (Stringer, Didham, & Theivananthampillai, 2011), and that pay was an effective factor to motivate the employees of 96 Malaysian organisations (Islam & Ismail, 2008). Compensation factors have a significant effect on job satisfaction (Ibrahim & Boerhaneoddin, 2010), and medical benefits, job security, and retirement plans have motivated and inspired employees (Sadri & Bowen, 2011). Co-workers and job satisfaction have positive relationships among employees (Lin & Lin, 2011). Workgroup interactions and co-workers have significant positive correlations with job satisfaction (Ducharme & Martin, 2000). Supervisory factors have positive relationships with leader-member interactions and job satisfaction (Lin & Lin, 2011). Supervisory factors are the main source of coordinative relationships, trust, confidence, and respect between leaders and followers, which leads to a higher rate of employees' job satisfaction (Weng, Lai, & Li, 2010). Employees feel appreciation and a sense of belonging to the organisation when acknowledged by their supervisors (Shiraz, Rashid, & Riaz, 2011), and having employees give their best performance to their organisation increases customer satisfaction, which positively affects the growth of revenues and profits (Elloy, 2012; Sarwar & Khalid, 2011). Following performance-based rewards, employees are likely to perform better based on their increased high job satisfaction and motivation, which must have a positive impact on organisational performance, employees' commitment (Levy, 2003), absenteeism, and turnover intentions (Yousef, 2000). However, on the other side, there is a great possibility of a decline in results when Western theories of management (Maruyama, 1984) and growth-oriented organisational theories (Whetten, 1980) are examined in Eastern cultures. The theories and models should be used with some amendments regarding cultural issues and conditions to get more successful results for the employees and the organisations.

6. Conclusion

We conclude that the theory and model give accurate and authentic information to conduct in-depth research studies about any phenomena and the inhabitants to save time, finances, and energy. The theory and the model give all related features and provide a strong foundation to understand the issues, problems, characteristics, negative and positive aspects, and finally the process and product of the phenomena. Dubin (1978) argued that a complete theory contains four essential elements: what (concepts, constructs, variables); how (factors are identified, related, and co-related); why (factors are selected based on physiological, economic, and social dynamics); and who, where, and when (the conditions place limitations on the propositions generated from a theoretical model). In this connection, the meaning of different terms is derived from the context through observations to understand the reality and truth that is happening. Therefore, the authors of inductively generated theories have a responsibility to discuss the limits of generalisability (Gergen, 1982). Researchers have conducted many studies on JSM in different parts of the world, and their findings are in the favour or against of any theory and model. Most researchers have used theoretical frameworks for their studies; for example, job satisfaction was related to age, educational level, and levels of intrinsic and extrinsic factors among faculty members of Malaysian universities in one study (Edward & Teoh, 2009). Extrinsic motivation factors have positively contributed to job satisfaction, while intrinsic factors have demotivated employees. There was a significant positive relationship between company policies, administration, and job satisfaction (Edward & Teoh, 2009).

This research model is generalised for all employees of different organisations throughout the world, especially developing countries, where the basic and fundamental needs are still significant problems for the employees of many organisations. Monetary or extrinsic rewards can positively reinforce employees' work behaviour (Rudge, 2011), and growth-need-strength to job design theories transformed the extant views and altered the research practice (Hackman & Lawler, 1971). However, job satisfaction is an attitude of an employee towards his or her job (Brief, 1998) that has a negative relationship with turnover and negative work outcomes (Sousa-Poza & Sousa-Poza, 2007; Chow & Haddad, 2007; Falkenburg & Schyns, 2007, Wagner, 2007) but a positive relationship with productivity and positive work outcomes (Keller & Julian, 1996; Neff, 2003)

References

- Aldag, R. J., Stearns, T. M. (1987). *Management*. South-Western Publishing Co., 442-443.
- Anderson, R. B. (1979). *Proving Programs Correct*. New York: John Wiley & Sons. New Jersey, USA.
- Asri A., Munir S., Zikri M., Hassan N. K., Norizan Md. N., & Junaimah, J. (2007). Employee Organizational Commitment in SMEs: Evidence from the manufacturing sector in Malaysia. *International Review of Business Research Papers*, 3(2), 12-26. <https://www.researchgate.net/publication/265221899>
- Ayub, N., & Rafif, S. (2011). The Relationship between work motivation and job satisfaction. *Pakistan Business Review*, 13(2), 332-347.
- Aziri, B. (2011). Job Satisfaction: A Literature Review. *Management Research and Practice*, 3(4), 77-86.
- Balcazar, F., MacKay-Murphy, M., Keys, C., Henry, D., & Bryant, F. (1998). Assessing perceived agency adherence to the values of community inclusion: Implications for staff satisfaction. *American Journal of Mental Retardation*, 102, 451-463. [https://doi.org/10.1352/0895-8017\(1998\)102<0451:APAATT>2.0.CO;2](https://doi.org/10.1352/0895-8017(1998)102<0451:APAATT>2.0.CO;2)
- Borkowski, N. (2011). *Organizational Behavior in Health Care*, 2nd (ed.). United Kingdom, Jones and Bartlett Publisher International.
- Borkowski, N. (2009). *Organizational behavior, theory and design in health care*. Jones and Bartlett Publishers, Ontario, Canada.
- Brown, S. P., Cron, W. L., & Slocum, J. W. (1997). Effects of goal-directed emotions on salesperson volitions, behaviour and performance: A Longitudinal study. *Journal of Marketing*, 61, 39-50. <https://doi.org/10.2307/1252188>
- Brief, A. P. (1998). *Attitudes in and around organizations*. Thousand Oaks, CA: Sage.
- Brief, A. P., & Weiss, H. M. (2001). Organizational Behavior: Affect in the Workplace. *Annual Review of Psychology*, 53, 279-307. <https://doi.org/10.1146/annurev.psych.53.100901.135156>
- Campbell, J. P., Dunnette, M. D., Lawler, E. E., & Weick, K. E. (1970). *Managerial behavior, performance and effectiveness*. New York: McGraw-Hill.

- Cangemi, J. (2009). Analysis of an Adversarial Labor/Management Situation in a Latin American Industrial Setting: A Case Study using Maslow's Hierarchy of Needs. *Organization Development Journal*, 27(1), 37-47.
- Carr, J. (2005). Families of 30–35-Year Olds with Down's syndrome. *Journal of Applied Research in Intellectual Disabilities*, 18, 75-84. <https://doi.org/10.1111/j.1468-3148.2004.00226.x>
- Casper, W. J. & Harris, C. M. (2008). Work-life benefits and organizational attachment: self-interest utility and signaling theory models. *Journal of Vocational Behavior*, 72, 95-109. <https://doi.org/10.1016/j.jvb.2007.10.015>
- Cherrington, J. L. (1989). *Organisational Behaviour*. Boston, Toronto, Allyn and Bacon.
- Chess, E., (1994). *Measurement of Motivational Tools: Considering the Medical Representative of India*. Monapa Books, New Delhi
- Chow, C., Haddad, K., & Singh, G. (2007). Human resources management, job satisfaction, morale, optimism and turnover. *International Journal of Hospitality and Tourism Administration*, 8(2), 73-88. https://doi.org/10.1300/J149v08n02_04
- Clapham, C. & Nicholson, J. (2009). *The Concise Oxford Dictionary of Mathematics*, 4th (ed.). Oxford University Press Inc., New York
- Cooper, H. M. (2003). Editorial. *Psychological Bulletin*, 129(1), 3-9. <https://doi.org/10.1037/0033-2909.129.1.3>
- Cooper, H. M. (2003). Organizing knowledge synthesis: A Taxonomy of literature reviews. *Knowledge in Society*, 1, 104-126. <https://doi.org/10.1007/BF03177550>
- Cooper, H. M. (1988). Organizing knowledge syntheses: A taxonomy of literature reviews. *Knowledge in Society*, 1, 104-126. <https://doi.org/10.1007/BF03177550>
- Cupillari, A. (2005). *The Nuts and Bolts of Proofs*. Elsevier Academic Press, London.
- Danish, R. Q., & Usman, H. (2010). The Impact of reward and recognition on job satisfaction and motivation: an empirical study from Pakistan. *International Journal of Business and Management*, 5(2), 159-167. DOI: <https://doi.org/10.5539/ijbm.v5n2p159>
- Davy, J. A., Kinicki, A. J. & Scheck, C. L. (1997). A test of job security's direct and mediated effects on withdrawal cognitions. *Journal of Organizational Behavior*, 18, 323-349. [https://doi.org/10.1002/\(SICI\)1099-1379\(199707\)18:4<323::AID-JOB801>3.0.CO;2-#](https://doi.org/10.1002/(SICI)1099-1379(199707)18:4<323::AID-JOB801>3.0.CO;2-#)
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum. <https://doi.org/10.1007/978-1-4899-2271-7>
- Deconinck, J. & Bachmann, D. (2007). The Impact of equity sensitivity and pay fairness on marketing managers' job satisfaction, organizational commitment and turnover intentions. *Marketing Management Journal*, 17(2), 134-141.
- Drew, S. A. W. (1997). From knowledge to action: the impact of bench marking on organizational performance. *Long Range Planning*, 30(3), 427-441. [https://doi.org/10.1016/S0024-6301\(97\)90262-4](https://doi.org/10.1016/S0024-6301(97)90262-4)
- DuBrin, A. J. (2012). *Essentials of management*. Mason, OH: Cengage Southwestern.
- Dubin, R. (1978). *Theory development*. New York: Free Press.
- Ducharme, L. J., & Martin, J. K. (2000). Unrewarding work, coworker support and job satisfaction. *Work and Occupations*, 27(2), 223-244. <https://doi.org/10.1177/0730888400027002005>
- Elloy, D. (2012). Effects of ability utilization, job influence and organization commitment on employee empowerment: An Empirical study. *International Journal of Management*, 29(2), 627-632.
- Fagbohungebe, B. O., & Longe, S. O. (2011). *An introductory psychology: Concepts and principles*. Lagos: Kotleb consults.
- Falkenburg, K. & Schyns, B. (2007). Work satisfaction, organizational commitment and withdrawal behaviors. *Management Research News*, 30(10), 708-723. <https://doi.org/10.1108/01409170710823430>
- Franklin, J., & Daoud, A. (2011). *Proof in Mathematics: An Introduction*. Sydney: Kew Books.
- Fuller, M. A, Valacich, J. S, & George, J. F. (2008). *Information Systems Project Management: A Process and Team Approach*. Upper Saddle River, New Jersey: Pearson Prentice Hall.

- Gergen, K. (1982). *Toward transformational in social knowledge*. New York: Springer-Verlag. <https://doi.org/10.1007/978-1-4612-5706-6>
- Gossett, E. (2009). *Discrete Mathematics with Proof*, 2nd (ed.). John Wiley and Sons, New Jersey, USA.
- Gravetter, F. J., & Forzano, L. B. (2012). *Research methods for the behaviour sciences*, 4th (ed.). Belmont, CA: Wadsworth Cengage Learning.
- Greenberg, J. (2011). *Behavior in organizations*, 10th (ed.). Upper Saddle River, NJ: Prentice Hall.
- Grice, R. (2011). *Where knowledge rules: Psychology*. Retrieved on 16/6 from: [file:///E:/evaluation/1753679-Skinners-theory of personality.htm](file:///E:/evaluation/1753679-Skinners-theory%20of%20personality.htm).
- Hackman, J. R., & Lawler, E.E. III. (1971). Employee reactions to job characteristics. *Journal of Applied Psychology Monograph*, 55, 259-286. <https://doi.org/10.1037/h0031152>
- Hannum, W. (2011). *Application of theories goals and objective individual differences motivation teaching methods*. Retrieved on 17/6/2014. From <file:///E:/evaluation/evaluation.htm>
- Hatton, C., Emerson, E., Rivers, M., Mason, H., Mason, L., & Swarbrick, R. (1999). Factors associated with staff stress and work satisfaction in services for people with intellectual disability. *Journal of Intellectual Disability Research*, 43, 253–267. <https://doi.org/10.1046/j.1365-2788.1999.00208.x>
- Hazewinkel, M. [Ed.]. (2002). *Encyclopaedia of Mathematics, Supplement III*. Springer, Netherlands. <https://doi.org/10.1007/978-0-306-48373-8>
- Hersey, P., & Blanchard, K. H. (1988). *Management of Organizational Behavior: Utilizing Human Resources*, 5th (ed.), Prentice-Hall, Englewood Cliffs, NJ.
- Herzberg, F. (1968). One more time: how do you motivate employees? *Harvard Business Review*, 46(1), 53-62.
- Herzberg, F. (1965). Job attitudes in the Soviet Union. *Personnel Psychology*, 18(3), 245-252. <https://doi.org/10.1111/j.1744-6570.1965.tb00283.x>
- Herzberg, F., Mausner, B., and Snyderman, B.B., (1959). *The motivation to work*. New York: John Wiley & Sons.
- Hinkin, T. R. & Schrieshem, C. A. (2004). If you don't hear from me, you know you are doing fine: The effect of management non-response to employee performance. *Cornell Hotel and Restaurant Administration Quarterly*, 45(4) 362-372. <https://doi.org/10.1177/0010880404270061>
- Hofman, R. H., Dijkstra, N. J., & Hofman, W. H. A. (2006). *School (self) evaluation and student achievement*. APERA conference, 28 – 30 Nov, Hong Kong.
- Hoole, C. & Vermeulen, L. P. (2003). Job satisfaction among South African Aircraft Pilots. *South African Journal of Industrial Psychology*, 29(1), 52-57. <https://doi.org/10.4102/sajip.v29i1.86>
- Ibrahim, I., & Boerhaneoddin, A. (2010). Is Job Satisfaction Mediating The Relationship Between Compensation Structure And Organisational Commitment? A Study in the Malaysian power utility. *Journal of Global Business & Economics*, 1(1), 43-61.
- Islam, R., & Ismail, A. Z. H. (2008). Employee Motivation: A Malaysian Perspective. *International Journal of Commerce & Management*, 18(4), 344-362. <https://doi.org/10.1108/10569210810921960>
- Jaafar, M., Ramayah, T., & Zainal, Z. (2006). Work satisfaction and work performance: How project managers in Malaysia perceive it? *Academy of World Business, Marketing and Management Development Conference Proceedings*, 2(113), 1305-1313.
- Keller, R., & Julian, S. (1996). A Multinational study of work climate, job satisfaction, and the productivity of R&D teams. *IEEE Transactions on Engineering Management*, 43(1), 48-49. <https://doi.org/10.1109/17.491268>
- Kenrick, D. T., Griskevicious, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid of needs, contemporary extension built upon ancient foundations. *Perspectives of Psychological Science*, 5(3), 292-314. <https://doi.org/10.1177/1745691610369469>
- Khalifa, M. H. E., & Truong, Q. (2010). The Relationship between employee perceptions of equity and job satisfaction in the Egyptian private universities. *Eurasian Journal of Business & Economics*, 3(5), 135-150.
- Kian, T. S., Yusoff, W. F. W., & Rajah, S. (2014). Job satisfaction and motivation: What are the difference among these two? *European Journal of Business and Social Sciences*, 3(2), 94-102. URL: <http://www.ejbss.com/recent.aspx>

- Kim, S. (2006). Public service motivation and organizational citizenship behavior in Korea. *International Journal of Manpower*, 27(8), 722-740. <https://doi.org/10.1108/01437720610713521>
- Kio, J. S., Ojodu, H. O., & Ogunyomi, P. O. (2011). *Introduction to organizational behaviour*. Lagos: Dartrade limited.
- Kohn, A. (2004). *What does it mean to be well educated?* Boston: Beacon press.
- Lambert, E. G., Hogan, N. L., & Griffin, M. L. (2007). The impact of distributive and procedural justice on correctional staff job stress, job satisfaction, and organizational commitment. *Journal of Criminal Justice*, 35(6), 644-656. <https://doi.org/10.1016/j.jcrimjus.2007.09.001>
- Levy, P. L. (2003). *Industrial/Organizational psychology*. Understanding the workplace. Boston: Houghton Mifflin Company.
- Lin, S. C., & Lin, J. S. J. (2011). Impacts of coworkers' relationships on organizational commitment and intervening effects of job satisfaction. *African Journal of Business Management*, 5(8), 3396-3409. DOI: 10.5897/AJBM10.1558
- Linz, S. J. & Semykina, A. (2012). What Makes Workers Happy? Anticipated Rewards and Job Satisfaction. *Industrial Relations*, 51(4), 811-844. <https://doi.org/10.1111/j.1468-232X.2012.00702.x>
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation. *American Psychologist*, 57(9), 705-717. <https://doi.org/10.1037//0003-066X.57.9.705>
- Locke, E. A. (1976). *Nature and Causes of Job Satisfaction*. In M. D. Dunnette (eds.). *Handbook of Industrial and Organizational Psychology*, 54, 1297-1349.
- Lunenburg, F. C. (2011). Expectancy theory of motivation: Motivating by altering expectations. *International Journal of Management, Business and Administration*, 15(1), 1-6.
- Lunenburg, F. C. (2011). Goal-Setting theory of motivation. *International Journal of Management, Business and Administration*, 15(1), 1-6.
- Luthans, F. (1998). *Organizational Behavior*, 8th (ed.). McGraw Hill International Edition, Boston, USA.
- Luthans, F. (1995). *Organizational Behavior*, 5th (ed.). McGraw Hill International Edition, Boston, USA.
- Lynne, W. (2012). *Raising Performance through Motivation*, Part One: Content Theories. Michael Heath Consulting.
- Maruyama, M. (1984). Alternatives, concepts of management: Insights from Asia and Africa. *Asia Pacific Journal of Management*, 1, 100. <https://doi.org/10.1007/BF01733683>
- Maruyama, M. (1984). Alternative concepts of management: Insights from Asia and Africa. *Asia Pacific Journal of Management*, 1, 100-111. <https://doi.org/10.1007/BF01733683>
- Mascha, K. (2007). Staff morale in day care centers for adults with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 20, 191-199. <https://doi.org/10.1111/j.1468-3148.2006.00316.x>
- Maslow, A. (1943). A Theory of human motivation. *Psychological Review*, 50, 370-396. <https://doi.org/10.1037/h0054346>
- McIntyre, R.M., Bartle, S., Landis, D. & Dansby, M. (2002). The Effects of equal opportunity, fairness, attitudes on job satisfaction, organizational commitment, and perceived work: A Group efficacy. *Military Psychology*, 14, 299-319. https://doi.org/10.1207/S15327876MP1404_5
- Mergel, B. (2011). *Instructional design & learning theories*. Retrieved on 16/6/2014. From: <file:///E:/evaluation/brenda.htm>.
- Megginson, L.C., Mosley, D.C., & Pietri, P.H. (1982). *Management Concepts and Applications*, 4th (ed.) New York: Harper Collins.
- Michael, B., & Edward, R., [Ed.]. (2011). *Introduction to Organizational Behaviour*, Jaico Publishing House, Mumbai.
- Miller, W.R., & Rollnick S. (2002). *Motivational interviewing: Preparing people for change*, 2nd (ed.). New York: Guilford.
- Mondy, R.W., Holmes, R.E., Flipppo, E.B. (1940). *Management: Concepts and Practices*. Allyn and Bacon, Inc. USA.

- Moynihan, D.P., & Pandey, S.K. (2007). Finding workable levers over work motivation, comparing job satisfaction, job involvement, and organizational commitment. *Administration & Society*, 39(7), 803-832. <https://doi.org/10.1177/0095399707305546>
- Neff, K.D. (2003). The Development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223-250. <https://doi.org/10.1080/15298860390209035>
- Newstrom, J.W. (2011). *Organizational behavior*, 13th (ed.). New York, NY: McGraw- Hill.
- O'Connor, D., & Yballe, L. (2007). Maslow revisited: Construction a Road Map of Human Nature. *Journal of Management Education*, 31(6), 738-756. <https://doi.org/10.1177/1052562907307639>
- Omomia, O. A. & Omomia, T.A. (2014). Relevance of Skinner's theory of reinforcement on effective school evaluation and management. *European Journal of Psychological Studies*, 4(4), 174-180. <https://doi.org/10.13187/ejps.2014.4.174>
- Omomia, T. A. (2008). *Effectiveness of vicarious reinforcement and contingency contracting techniques in the enhancement of academic achievement of impulsive Junior Secondary School Students in Lagos State*. Ph.D. Thesis. Dept. of Guidance and Counseling. University of Ibadan. Xiv + 223pp.
- Organ, D. W., & Konovsky, M. (1989). Cognitive vs. affective determinants of organizational citizenship behaviour. *Journal of Applied Psychology*, 74(1), 157-164. <https://doi.org/10.1037/0021-9010.74.1.157>
- Paik, Y., Parboteeah, K. P., & Shim, W. (2007). The Relationship between Perceived compensation, organizational commitment and job satisfaction: The Case of Mexican workers in the Korean Maquiladoras. *International Journal of Human Resource Management*, 18(10), 1768-1781. <https://doi.org/10.1080/09585190701570940>
- Parijat, D. P., & Bagga, S. (2014). Victor Vroom's Expectancy Theory of Motivation - An Evaluation. *International Research Journal of Business and Management (IRJBM)*, VII(9), 1-8.
- Peterson, S. J., & Luthans, F. (2006). The Impact of financial and nonfinancial incentives on business-unit outcomes over time. *Journal of Applied Psychology*, 91(1), 156-165. <https://doi.org/10.1037/0021-9010.91.1.156>
- Rafikul, I., & Ismail, A. Z. H. (2008). Employee motivation: A Malaysian perspective. *International Journal of Commerce and Management*, 18(4), 344-362. <https://doi.org/10.1108/10569210810921960>
- Ramiah, B. A. L. (2007). Headmasters' reinforcement behaviour and teachers' performance in primary school. 14th National Seminar on Educational leadership and management. 25th – 27th June. Kementerian pelajaran, Malaysia.
- Rauschenberger, J., Schmitt, N., & Hunter, J. E. (1980). A Test of the Need Hierarchy Concept by a Markov Model of Change in Need Strength. *Administrative Science Quarterly*, 25(4), 654-670. <https://doi.org/10.2307/2392286>
- Redmond, B. F. (2010). *Need Theories: What Do I Want When I Work? Work Attitudes and Motivation*. The Pennsylvania State University World Campus.
- Rifai, H. A. (2005). A Test of the relationships among perceptions of justice, job satisfaction, affective commitment and organizational citizenship behavior. *Gadjah Mada International Journal of Business*, 7, 131-154. <https://doi.org/10.22146/gamaijb.5574>
- Robbins, S. P., & Judge, T. A. (2010). *Essentials of organizational behavior* 10th (ed.). Upper Saddle River, NJ: Pearson Education.
- Robbins, S. P., & Judge, T. A. (2013). *Organizational Behavior*, 15th (ed.). Pearson Education Inc., Boston, USA.
- Robbins, S. P. (2009). *Organizational Behavior*. Pearson Prentice Hall, India: New Delhi.
- Roberts, J. A., Coulson, K. R., & Lawrence, B. C. (1999). Salesperson Perceptions of Equity and Justice and their Impact on Organizational Commitment and Intent to Turnover. *Journal of Marketing Theory and Practice*, 7(1), 1-16. <https://doi.org/10.1080/10696679.1999.11501815>
- Ritter, J. A. & Anker, R. (2002). Good jobs, bad jobs: Workers' evaluations in five countries. *International Labour Review*, 141(4), 331 – 358. <https://doi.org/10.1111/j.1564-913X.2002.tb00244.x>
- Rudge, A. (2011). Birmingham city council links increased contribution and outcomes to reward and recognition. *Human Resource Management International Digest*, 19(5), 6-8. <https://doi.org/10.1108/09670731111153258>
- Sadri, G., & Bowen, R. C. (2011). Meeting employee requirements: Maslow's hierarchy of needs is still a reliable guide to motivating staff. *Industrial Engineer*, 43(10), 44-48.

- Saraswathi, S. (2011). A Study on factors that motivate IT and Non-IT sector employees: A Comparison. *International Journal of Research in Computer Application and Management*, 1(2), 72-77.
- Sarwar, A., & Khalid, A. (2011). Impact of Employee Empowerment on Employee's Job Satisfaction and Commitment with the Organization. *Interdisciplinary Journal of Contemporary Research in Business*, 3(2), 664-683.
- Scanlan, B. K., & Keys, B. (1987). *Management & organizational behavior* 2nd (ed.). Malabar FL: Robert E. Krieger Publishing, USA.
- Schermerhorn, J. R. (2001). *Management Update 2001*, 6th (ed.). New York: John Wiley and Sons, Inc.
- Schneider, B., & Alderfer, C. P. (1973). Three studies of measures of need satisfaction in organizations. *Administrative Science Quarterly*, 18(4), 489-505. <https://doi.org/10.2307/2392201>
- Schneider, B. & Snyder, R.A. (1975). Some relationship between job satisfaction and organizational climate. *Journal of Applied Psychology*, 60(3), 318-328. <https://doi.org/10.1037/h0076756>
- Sempene, M. E., Rieger, H. S. & Roodt, G. (2002). Job satisfaction in relation to organisational culture. *South African Journal of Industrial Psychology*, 28(2), 23-30. <https://doi.org/10.4102/sajip.v28i2.49>
- Sherry E. Moss, S. E., Sanchez, J. I., Brumbaugh, A. M., & Borkowski, N. (2009). The Mediating role of feedback avoidance behavior in the LMX–performance relationship. *Group & Organization Management*, 34(6) 645-664. <https://doi.org/10.1177/1059601109350986>
- Shiraz, N., Rashid, M., & Riaz, A. (2011). The Impact of Re-ward and Recognition Programs on Employee's Motivation and Satisfaction. *Interdisciplinary Journal of Contemporary Research in Business*, 3(3), 1428-1434.
- Skinner, B. F. (1963). Operant Behaviour, *American Psychologist*, 18(8), 503-515. <http://dx.doi.org/10.1037/h0045185>
- Singh, S. K., & Tiwari, V. (2011). Relationship between motivation and job satisfaction of the white-collar employees: A Case study. *Management Insight*, 7(2), 31-39.
- Spector, P.E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA: Sage.
- Steers, R. M., Bigley, G. A. & Porter, L. W. (1996). *Motivation and leadership at work*. Singapore: McGraw-Hill.
- Stringer, C., Didham, J., & Theivananthampillai, P. (2011). Motivation, pay satisfaction, and job satisfaction of front-line employees. *Qualitative Research in Accounting & Management*, 8(2), 161-179. <https://doi.org/10.1108/11766091111137564>
- Sousa-Poza, A. & Sousa-Poza, A. A. (2007). The Effect of Job Satisfaction on Labor Turnover by Gender. *Switzerland Journal of Socioeconomics*, 3(6), 859-913. <https://doi.org/10.1016/j.socec.2007.01.022>
- Tan, T. H., & Amna, W. (2011). Herzberg's motivation-hygiene theory and job satisfaction in the Malaysia retail sector: The Mediating effect of love of money. *Asian Academy of Management Journal*, 16(1), 73-94.
- Tella, A., Ayeni, C.O., & Popoola, S.O. (2007). Work motivation, job satisfaction, and organisational commitment of library personnel in academic and research libraries in Oyo State, Nigeria. *Library Philosophy and Practice (e-journal)* paper 118, 1-16. <http://digitalcommons.unl.edu/libphilprac/118>
- Test, D. W., Flowers, C., Hewitt, A., & Solow, J. (2003). Statewide study of the direct support staff workforce. *Mental Retardation*, 41, 276–285. [https://doi.org/10.1352/0047-6765\(2003\)41<276: SSOTDS>2.0.CO; 2](https://doi.org/10.1352/0047-6765(2003)41<276: SSOTDS>2.0.CO; 2)
- Thomson, D. (2003). Incentive schemes have to work! *Management Today*, 18(10), 46-47.
- Tudor, T. R. (2011). Motivating Employees with Limited Pay Incentives Using Equity Theory and the Fast Food Industry as a Model. *International Journal of Business and Social Science*, 2(23), 95-101.
- Uzonna, U. R. (2013). Impact of motivation on employees' performance: A Case study of credit west bank Cyprus. *Journal of Economics and International Finance*, 5(5), 199-211. <https://doi.org/10.5897/JEIF12.086>
- VanYperen, N. W., & Hagedoorn, M. (2003). Do high Job demands increase intrinsic motivation, fatigue, or both? The role of job control and job social support. *Academy of Management Journal*, 46(3), 339-348. <https://doi.org/10.2307/30040627>
- Wagner, J. (2007). Exports and Productivity: A Survey of the Evidence from Firm-level Data. *The World Economy*, 30, 60-82. <https://doi.org/10.1111/j.1467-9701.2007.00872.x>

- Wahba, M. A., & Bridwell, L. G. (1976). Maslow reconsidered: A Review of research on the need hierarchy theory. *Organizational Behaviour and Human Performance*, 15, 212-240. [https://doi.org/10.1016/0030-5073\(76\)90038-6](https://doi.org/10.1016/0030-5073(76)90038-6)
- Wei, L. T. & Yazdanifard, R. (2014). The impact of Positive Reinforcement on Employees' Performance in Organizations. *American Journal of Industrial and Business Management*, 4, 9-12. <http://dx.doi.org/10.4236/ajibm.2014.41002>
- Weng, L. C., Lai Y. Z., & Li, Y. J. (2010). Too much of a good thing: The Curvilinear relationship between leader-member exchange and service-oriented organizational citizenship behavior. *Journal of Human Resource Management*, 10(1), 29-52. <https://doi.org/10.4236/ajibm.2014.41002>
- Whetten, D. A. (1989). What constitutes a Theoretical contribution? *Academy of Management Review*, 14(4), 490-495. <https://doi.org/10.5465/AMR.1989.4308371>
- Whetten, D. A. (1980). Organizational decline: A neglected topic in organizational science. *Academy of Management Review*, 5, 577-588. URL: <http://www.jstor.org/stable/257463>
- Whiseand, P. & Rush, G. (1988). *Supervising Police Personnel: Back to Basics*. Prentice Hall, New Jersey.
- Whiseand, P. & Rush, G. (1998). *Supervising police personnel: The fifteen responsibilities 3rd* (ed.) Prentice Hall, New Jersey.
- Wolfgang, C. H. (2001). *Behavioural analysis. Model (Glossary definitions). Solving discipline and classroom management problems*, 5th (ed.). pp. 21-49. Wiley/Jossey. Bass Education.
- Wong, E. S. K., & Heng, T. N. (2009). Case Study of Factors Influencing Jobs Satisfaction in Two Malaysian Universities. *Journal of International Business Research*, 2(2), 86-98. <https://doi.org/10.5539/ibr.v2n2p86>
- Wynter-Palmer, J. E. (2012). Is the use of short-term incentives good organization strategy? *Compensation & Benefits Review*, 44(5), 254-265. <https://doi.org/10.1177/0886368712471591>
- Yang, F. (2011). Work, motivation and personal characteristics: An In-Depth study of six organizations in Ningbo. *Chinese Management Studies*, 5(3), 272-297. <https://doi.org/10.1108/17506141111163363>
- Yousef, D. A. (2000). Organizational commitment: a mediator of the relationships of leadership behavior with job satisfaction and performance in a non-western country. *Journal of Managerial Psychology*, 15(1), 6-24. <https://doi.org/10.1108/02683940010305270>