DOI: 10.38027/ICCAUA2022EN0183

# Evaluation Of Strategies for Employee Participation by Nigerian Construction Organisations

MSc. Ashiru Adegbenga Raphael <sup>1\*</sup>, MA. Anifowose Kamaldeen Jide <sup>2</sup> and MSc. Mohammed Ismail.Oladunni <sup>3</sup>
Department of Construction Management and Quantity Surveying, Heriot-Watt University, Edinburgh. Scotland <sup>1\*</sup>
Department Of Architectural Technology, Federal Polytechnic, P.M.B Kaura –Namoda, Zamfara - State. Nigeria. <sup>2</sup>
Department Of Building Technology, Federal Polytechnic, P.M.B Kaura –Namoda, Zamfara - State. Nigeria. <sup>3</sup>
Email<sup>1\*</sup>: ashiruadegbenga@gmail.com, Email<sup>2</sup>: anifowosekamaldeen@gmail.com, Email <sup>3</sup>:rajisabi20081928@gmail.com

#### **Abstract**

In this study, employee participation by Nigerian construction organizations is investigated as labor scarcity is one of the most persistent issues that the construction industry is facing today. This is intended to identify the construction organization's circumstances to increase employee participation in decision-making. The effect of such participation on the performance of the industry was also assessed. This study was carried out through a questionnaire survey of construction professionals in Zamfara State. Data collected were analyzed using the Chisquare and descriptive statistical analysis obtained. In agreement with the results of preceding studies, the employee's participation among construction organizations from the studies in decision making is at a lower stage which buttresses the Chi-Square analysis result that the employees do not participate actively in construction organizations' study area. This study concluded that there is a need for employers in the industry to categorize decisions that employees should make and to adjust their organizational backgrounds to raise employees' participation spirits as desired.

Keywords: Employee Participation, Organisation Performance, Organisational Background; Decision Making.

#### 1. Introduction

In the concept of HRM, there is no general agreement as to exactly what the term employee involvement should embrace to be effective. Examples of participative practices may include, profit-sharing schemes, quality circles, job enrichment, problem-solving group team briefing, and employee sharing ownership (Loosemore, *et al*, 2003). What is clear is that participation can take different forms depending on the level at which it is focused within the organization. It may be between individual supervisors and immediate subordinates, formal or informal as how a job might be more done effectively, Job safety analysis is a form of group work participation (Loosemore, *et al*, 2003; Akande, 2021). This can be achieved by marking them shareholders in the business and clearly, there will be a range of levels of participation between these two extremes but ultimately the degree of influence employees enjoy will be largely determined by the wiliness and eagerness of both employers and employees to embark upon a process of meaningful change (Allen, et al, 2003). Human relations scholars argue that employee participation practices modify high-order needs such as a sense of achievement, respect, and self-expression, which in turn increase organizational commitment (Miller and Monge, 1986; Wagner *et al*, 1997). By embracing employee participation practices, the organization signals that it values the employees' contributions (Allen, et al, 2003).

However, the construction industry is known as one with poor quality emphasis compared to other sectors like the manufacturing and service sectors. Many criticisms have been geared towards the construction industry for frequent shoddy workmanship in the sector, where it is not only the final product that is subject to criticisms but the processes, the manpower, materials, and so on are under tremendous pressure for better quality in construction (Rhokeun et al, 2010). Furthermore, there are numerous examples of employee participation being used successfully in other industries, but less in construction (Briscoe and Dainty, 2005). Worker participation in problem-solving groups occurs in only 21% of construction cases (Green, 2002). There is a large volume of published studies describing the motivation of construction workers are minimal (Beekeeper, 2021). The high labor turnover in construction is caused by a little opportunity for training and it will ultimately affect skills shortages. Consequently, the lack of labor skills and high labor turnover is also denoted as major reasons for low productivity in construction. Therefore the implementation of people development and participative approaches will enhance the ability of organizations to retain employees (Mahmood et al., 2020). In the short term, the resignation of a trained worker from a company can be considered a loss to the company, but such training will improve the industry as a whole. In summary, employee participation practices are essential for construction. Yet, the industry has neglected to take advantage of its workforce, which means there is a considerable amount of untapped productive potential waiting to be released and it is against this backdrop that this research was carried out to answer the following fundamental research questions:

- How employee participation do holistically relates to construction project productivity;
- How employee participation could be used to improve the effectiveness of individuals and teams at both construction organization and project levels

#### **1.1** Concept of Employee Participation in The Construction Industry

Historically, employee participation has taken several forms, resulting in a multitude of definitions of participation; see (Cooper, 1980; Roca and Retour, 1981; Marchington and Parker, 1990; Geroy *et al*, 1998). Employee participation first emerged in the 1970s when employers began to exert influence on decision-making through their leaders or representatives (Hyman and Mason, 1995). The characteristic of participation was first identified by Tannenbaum and Massarick, (1961) to be decision-making. Definitions of participation tend to fall into one of two broad categories, Direct participation occurs where every employee affected by the decisions made is directly involved in the making of those decisions. Indirect participation comprises a representative who participates in the decision-making on behalf of fellow employees. However, indirect decisions often have a wider span than those of direct participation and extend beyond the immediate work of the employees represented (Coffey, 1996). Indirect schemes of participation are more formal and tend to be initiated and precise to varying extents by management. Employees have a much greater interest indirect forms of participation less in indirect forms of participation; the difference is in the attitudes of construction workers in the 1994 survey by Coffey.

As a form of employee involvement in decision making, employee participation describes the self-perceived value that individuals have of themselves as important, competent, and capable within their employing organizations; employees with high organization-based self-esteem have come to believe that "I count around here" (Pierce and Gardner, 2004). As a leader's behavior, participation will foster high levels of organization-based self-esteem. This is because participation provides an employee the opportunity to exercise self-direction and control, which signals to the employee that the supervisor/organization considers them to be able, task-competent, organizationally important, and need-satisfying (Pierce and Gardner, 2004; Gardner *et al*, 2004; Mahmood *et al.*, 2020)). The incorporation of such positive messages into the employee's self-concept leads to enhanced organization-based self-esteem. Whitener, (2001) equated organizational insider status to Graham, (1991) notion of citizenship, with its implied acceptance of certain responsibilities. They, therefore, argued that employees' conception of themselves as an organizational insider leads them to accept their responsibilities of citizenship. Participation of an employee fosters a sense of belonging that encourages employees to explore ways of promoting both their organization's and their future well-being.

In today's working world, salary increases just weren't enough. Employees need to be acknowledged, encouraged, supported, and engaged. But while most of the recent focus on employee participation has targeted office employees, inspired and encouraged workers are essential to every profession. From accountants to artisans, every employee needs motivation, appreciation, and drive. One field in particular where this is prevalent in the construction industry. Unlike office work, construction is constantly moving, changing, and adapting, creating challenges unlike anywhere else. As construction conditions are constantly changing, weather, traffic, temperature, legal requirements, and dozens of other factors significantly influence construction work. Without regular updates and reliable employee participation, construction employees may feel out of the loop, unimportant, and uninformed. Dependable employee participation not only allows workers to make necessary changes but also demonstrates their importance to the organization. Employees need to know their leaders are aware of issues, addressing needs, and able to offer support. Regular employee participation cuts through the confusion and enables a safe, productive, and engaging work environment.

## 2. Employee Participation as A Key Component of High Commitment In HRM

It is widely accepted that employee participation is a key component of the high commitment bundle of HRM, but that it can take a range of forms in practice where employees are involved at the workplace level – through a wider number of participatory practices that are held more frequently and include opportunities for workers to have their say – the more likely it is that investments in employee participation will reap the reward of organizational commitment (Cox *et al*, 2006). The goals set by Egan stimulated a change of culture in the UK construction industry, with a corresponding change in the attitude of its workforce, particularly concerning involvement, participation, and empowerment (Egan, 1998). Employee involvement only occurs voluntarily, involvement cannot be forced, employees must be willing to contribute their ideas and this only occurs where there is a genuine commitment on the part of employees and employers alike. Therefore it is clear that to implement the reforms proposed by Egan, the active involvement of the workforce is necessary, consequently, the attitude of an individual working towards involvement becomes a fundamental issue in the success of the reforms (Coffey and Fowler, 2010).

As a topic of current interest in management thinking, participation has tended to rise and fall in prominence, but it consistently remains a significant part of the management approach adopted by almost all organizations, and the emphasis on teams and team building over recent years (Coffey and Fowler, 2010). Participation also concurs with the more consensual approach to management adopted by post-modern organizations, which have recognized their greater dependency on the intellectual potential of their employees to remain competitive in an increasingly turbulent global business environment (Huczynski and Buchanan, 2007). Employee perceptions of management implementation processes and attitudes in the workplace were much stronger than those associations found between employee attitudes towards participatory structures. From a management perspective, it is therefore particularly important to pay attention to how involvement is applied by Cox, Suter, and Marchington's research in 2006

## 2.1 Management Role in Employee Participation in Decision Making By Construction Organizations

While management's role is critical to achieving total quality, employee participation is often the most overlooked part of the process. Employee involvement evolved out of the business's need to improve performance. The impact of human resources in the organization depends on the kind of empowerment given to them. According to Lawler *et al*, (1992) employee involvement programs have a positive effect on company performance and internal business conditions. Gufreda and Maynard (1992) described employee involvement as the process of transforming an organization's culture to utilize the creative energies of all employees for problem-solving and for making improvements. Mak (2000) recommended that management should pursue the Tao "road" of people-based management that recognizes the importance of daily interaction with all employees and a shared identity with them in solving work problems. Vilasini *et al*, (2012). further recommended that employee participation initiatives should become management's daily routine, rather than considering them as extra activities.

## 2.2 Need for Employee Participation In Decision Making By Construction Organizations

Much has currently been written about the need to encourage employees to share knowledge for the industry to maintain a role as an intelligent provider in a technologically sophisticated environment. However, there is little written about the relationship between employee rights to satisfactory employment conditions, employee responsibilities in decision making, and employee willingness to share their knowledge collaboratively (Kassing, 2007). It is argued that competition in the technologically sophisticated twenty-first century requires intelligent organizations that manage knowledge rather than rely on hard assets. Allee (1997) argued that knowledge has to be developed constantly and shared collectively to facilitate a fundamental change in thinking from that based on Newtonian to one based on quantum physics, Management=employee. Despite recognition of the extent of change required to the management-employee relationship, there is a little detailed discussion about how this can be achieved, particularly how to encourage employees to share their knowledge in construction organizations. There is an assumption that employees, once they understand the importance of knowledge, will be willing to share it (Allee, 1997).

Management theory, although historically arguing for "managerial prerogative" as part of Taylor's (1964) managerial control concepts, began to recognize the need to satisfy a broader range of employee needs through greater employee involvement as part of a socio-technical system (Trist, 1981). This went further than Maslow's needs hierarchy in 1954 and questioned the frontier of management control. By the late 1980s, management theory advocated improved quality of working life and increased employee participation in decision-making to satisfy employee needs for self-fulfillment and encourage their participation in productivity and quality improvement. Researchers on best practices in the United States found that successful construction organizations were characterized by significant levels of participation by employees on a wide range of matters (Deriouzos, 1989).

Yet employees often remain silent and do not raise legitimate concerns about workplace issues out of fear or acquiescence (Kassing, 2002). Relational standing with one's supervisor informs employees about remaining silent (Milliken et al, 2003). More so, Milliken, Morrison, and Hewlin's research in 2003 discovered that 85% of employees interviewed reported remaining silent on at least one occasion. Additionally, they found that almost a quarter of employees reported not feeling comfortable speaking to supervisors about their concerns and that employees rated concerns with supervisors as more significant than any other issue about which they would remain silent. Thus, employees' tendencies to remain silent may be exacerbated by superior-subordinate relationship quality. Employee participation, in turn, can be in ways that challenge or threaten superior-subordinate relationships (Kassing 2005; Mahmood et al., 2020). Circumvention, for instance, which involves going around one's immediate supervisor to share concerns with someone higher in the chain of command, can

prove detrimental to superior-subordinate relationship quality (Mak, 2000). Yet employees have regularly circumvented their supervisors as a step in the whistle-blowing process (Brown *et al,* 2007). Brown, Geddes, and Heywood research in 2007 found that the whistle-blowing process began simply with a declaration of concern to one's supervisor that led to circumvention only when an employee believed that the supervisor would or did fail to act on the concern.

Additionally, continuous improvement through employee participation is a core lean principle that identifies the inability to utilize the knowledge and skills of employees as the eighth waste. This waste involves losing time, skills, ideas, improvements, and learning opportunities by not listening to employees. Lean theory suggests improving participative culture through different tools like improvement suggestions, rewarding mechanisms, and multi-skilling. In summary, employee participation practices are required in high-risk and complex projects with a high level of technology. There is a trend in construction projects of increasing implementation of such practices. However, these practices vary with the management and project teams

#### 3. Research Methodology

Employee participation in decision-making in the construction industry was investigated in this study from the point of view of management. The point of view of management is considered important since participation is investigated about the backgrounds in the organizations. In this study, we measure employee participation by asking the employers to indicate the positions that are allowed to make specific decisions and management of projects (Kassing, 2009; Ezennaya, 2011). Samples for the study were selected from Zamfara State with a total of 19 organizations randomly selected from the study area where the most concentrated organizations participated in the questionnaire survey. The respondents to the questionnaires were the principals of the organizations and or their representatives. Data were analyzed using the Chi-square was used in analyzing the participation in decision-making variables.

## 3.1 Research Analysis

**Table 1:** Chi-Square Test On Employee Participation A = Always, B = Sometimes, C = Occasionally, D = Never

Always Sometimes Occasionally Never Total

			10
13	6	2 0 21	
11.00	6.44	2.56 1.00	
0.364	0.031	0.121 1.000	
1	9	8 3 21	
9.091	1.013	11.599 4.000	
3	13	3 2 21	
11.00	6.44	2.56 1.00	
5.818	6.669	0.077 1.000	
11.00	6.44	2.56 1.00	
0.091	0.375	0.121 0.000	
14	5	1 1 21	
11.00	6.44	2.56 1.00	
0.818	0.324	0.947 0.000	
10	8	2 1 21	
11.00	6.44	2.56 1.00	
0.091	0.375	0.121 0.000	
18	2	0 1 21	
4.455	3.065	2.556 0.000	
17	2	2 0 21	
11.00	6.44	2.56 1.00	
3.273	3.065	0.121 1.000	
13	5	3 0 21	
11.00	6.44	2.56 1.00	
	13 11.00 0.364 1 11.00 9.091 3 11.00 5.818 10 11.00 0.091 14 11.00 0.818 10 11.00 4.455 17 11.00 3.273 13 11.00	13 6 11.00 6.44 0.364 0.031  1 9 11.00 6.44 9.091 1.013  3 13 11.00 6.44 5.818 6.669  10 8 11.00 6.44 0.091 0.375  14 5 11.00 6.44 0.818 0.324  10 8 11.00 6.44 0.091 0.375  18 2 11.00 6.44 4.455 3.065  17 2 11.00 6.44 3.273 3.065  13 5 11.00 6.44	11.00     6.44     2.56     1.00       9.091     1.013     11.599     4.000       3     13     3     2     21       11.00     6.44     2.56     1.00       5.818     6.669     0.077     1.000       10     8     2     1     21       11.00     6.44     2.56     1.00     0.001       14     5     1     1     21       11.00     6.44     2.56     1.00     0.947     0.000       10     8     2     1     21       11.00     6.44     2.56     1.00     0.001       10     8     2     1     21       11.00     6.44     2.56     1.00     0.000       18     2     0     1     21       11.00     6.44     2.56     1.00     4.455     3.065     2.556     0.000

Total 99 58 23 9 189

Chi-Sq = 63.344, DF = 24, P-Value = 0.000

Table 2. Summarized Table

Chi-Sq value	DF	P-Value
63.344	24	0.000

Source: Field Survey, 2022

H<sub>0</sub>: Employees participate actively in the construction activities

H<sub>1:</sub> Employees do not participate actively in the construction activities

 $\alpha = 0.05$ 

From the results of the Chi-Square analysis in table 1 above, the P-value of the analysis is less than the alfa value ( $\alpha$  = 0.05). We, therefore, reject the null hypothesis and conclude that the employees do not participate actively in Zamfara State construction organizations.

## 4. Conclusion

This research sought to evaluate the relationship between employee responsibility to participate in decisionmaking and employee willingness to share their knowledge collaboratively. It was argued that despite acknowledgment of the need for employees to participate and share their knowledge, little has been written on how to encourage participation (Rhokeun, et al, 2010). Many studies have found that employee involvement is significantly correlated with organizational commitment or its predictors (Taylor, 1964; Femie and Meicalt, 1995; Jones, 2002). Employee participation may reduce the likelihood that employees leave their jobs (the 'exit option') because they have the opportunity to express their opinions (the 'voice option') about their workplace decisions that directly affect them (Jones, 2002). Yankov and Kleiner (2001), Jones (2002), and (Mahmood et al., 2020) also argued that employee participation practices provide opportunities for dissatisfied workers to voice their concerns and thus reduce the likelihood of quitting. The research also revealed that some changes have occurred in the attitude of construction workers towards involvement and participation, but these are mixed and do not at this stage establish a discernible trend towards an increase or decrease. Some important attitudes have changed very little, such as the desire to be involved and the importance of being involved, but there is no enhanced desire from employees towards participation expected as revealed by the Chi-square analysis. Overall, the positive attitude towards participation remains weak, with no indication of any significant improvement, which suggests that the propensity for participation and empowerment still exists. Lastly, there are no shortcuts to improving construction workforce engagement. But with sincere effort on the part of leadership to promote trust, openness, and workplace safety, the construction organizations will be able to reduce turnover and create an engaged, productive workforce.

## Acknowledgments

We give Almighty God the Glory who granted us the grace to accomplish this research work despite the COVID-19 Pandemic challenges. Our deep appreciation goes to our beloved wives Mrs. Selimot Temitope Anifowose, Mrs. Morufat Kehinde Ashiru, and Mrs.Rukayyat Mohammed for their inexorable backing throughout this research work. Our deep appreciation and gratitude go to the respondents-field professionals for their appropriate and creative ideas for the success of this research work.

## **Conflict Of Interests**

The authors affirm no conflict of interest.

## References

Allee, V. (1997) The Knowledge Evolution, Newtown. MA: Butterworth-Heinemann.

Allen, D.G., Shore, L.M. and Griffeth, R.W. (2003). 'The role of perceived organizational support and supportive human resource practices in the turnover processes. Journal of Management, **29**: pp.1, 99–118. https://doi.org/10.1177/014920630302900107

Akande, O. (2021). Urbanization, Housing Quality and Health: Towards a Redirection for Housing Provision in Nigeria. Journal of Contemporary Urban Affairs, 5(1), 35–46. https://doi.org/10.25034/ijcua.2021.v5n1-3

Briscoe, G., & Dainty, A. (2005). Construction supply chain integration: an elusive goal. "Supply Chain Management: An International Journal", **10**(4), 319-326. https://doi.org/10.1108/13598540510612794

- Brown, M., Geddes, L.A., and Heywood, J.S. (2007). 'The determinants of employee involvement schemes: private sector Australian evidence'. Economic and Industrial Democracy, **28**: pp.2, 259–291.https://doi.org/10.1177/0143831x07076118
- Coffey, M. (1996) The Potential for Employee Involvement in Construction. Proceedings of CIB W65 8<sup>th</sup> International Symposium, Glasgow, E&FN Spon
- Cooper, C. (1980) Developing Organizational Life: participation at work, Journal of Leadership and Organizational Development, Vol. 1, 2.
- Cox, A., Suter, J. and Marchington, M. (2006) 'Employee Involvement and Participation: Developing the concept of institutional embeddedness using WER2004,' Human Resource Management Journal, **20**, pp.2150-2168. https://doi.org/10.1080/09585190903178104
- Deriouzos. M. Lesier. R. and Solow, R. (1989). Made in America: Regaining the Productivity Edge: New York: Harper Perennial Press.
- Egan, J. (1998) Rethinking Construction, Report of the Construction Task Force, Construction Industry Council, London
- Ezennaya N. P. (2011), Employee participation in decision making and its impact on productivity: an appraisal of the government printing press and two other private publishing firms in Enugu, Master thesis, University of Nigeria, Enugu, Nigeria.
- Femie, S. & Meicalt, D. (1995). Participation contingent pay representation and workplace performance: Evidence from Great Britain. British Journal of Industrial Relations. pp.179—115.
- Gardner, D. G., Van Dyne, L., & Pierce, J. L. (2004). The effects of pay level on organization-based self-esteem and performance: A field study. Journal of Occupational and Organizational Psychology, **77**: pp.307–322.
- Geroy, G., Wright, P. and Anderson, J. (1998) "Strategic performance empowerment model." Empowerment in Organizations, 6(2) pp. 57-65
- Gufreda, J.J., and Maynard, L.A. (1992), Employee involvement in the quality process, in Total Quality, Ernst & Young Quality Group, USA, pp. 162-7.
- Graham, J. W. (1991). An essay on organizational citizenship behavior. Employee Responsibilities and Rights Journal, 4: pp.249–270.
- Green, S. D. (2002). The human resource management implications of lean construction: critical perspectives and conceptual chasms. "Journal of construction research", **3**(1), 147-165.
- Hyman, J. and Mason, B. (1995) Managing Employee Involvement and Participation, London, Sage.
- Huczynski, A. and Buchanan, D. (2007) Organizational Behavior: An Introductory Text. 6th ed. Harlow, Prentice Hall/FT
- Jones, S. (2002) Employee Rights, Employee Responsibilities and Knowledge Sharing in An Intelligent Organization: A Journal of Employee Responsibility and Rights. 14, Nos. 2/3.
- Kassing, J. W. (2002). Speaking up: Identifying employees' upward dissent strategies. Management Communication Quarterly, 16, pp.187-209. https://doi.org/10.1177/089331802237234
- Kassing, J. W. (2005). Speaking up competently: A comparison of perceived competence in upward dissent strategies. Communication Research Reports, **22**, p.227-234. https://doi.org/10.1080/00036810500230651
- Kassing, J. W. (2007). Going around the boss: Exploring the consequences of circumvention. Management Communication Quarterly, 21, p.55-74 https://doi.org/10.1177/0893318907302020
- Kassing, J. W. (2009) Breaking chain of command: Journal of Business Communication, **46**(3), p311-334, 24p https://doi.org/10.1177/0021943609333521
- Latham, M. (1994) Constructing the Team, London, HMSO
- Lawler, E., Mohrman, S. and Ledford, G., (1992), Employee involvement and total quality management: Practices and Results in Fortune 1000 Companies. San Francisco: Jossey Bass.
- Loosemore, M., Andrew Dainty, A., and Helen Lingard, H. (2003). Human Resource Management in Construction Projects: Strategic and ... books.google.co.uk (Assessed: 10th March 2021). https://doi.org/10.4324/9780203417881
- Mahmood, S., Awang, Z., Kmeil, F. A. R., & Jakada, A. H. (2020). Participation of Local Youth Workers in Construction Industry and Strategies for Improvement: A Study in Kelantan and Terengganu. International Journal of Academic Research in Business and Social Sciences, 11(2), 394-401. http://dx.doi.org/10.6007/IJARBSS/v11-i2/8225
- Mak, W.M., (2000), The Tao of People-based management, Total Quality Management, vol. **11**, Nos 4/5 & 6, pp. 636-640. https://doi.org/10.1080/09544120050007869
- Maslow, A, H, (1954) Motivation and Personality. New York: Harper and Row.

- Marchington, M. and Parker, P. (1990) Changing Patterns of Employee Relations, Hemel Hempstead, Harvester Wheatsheaf.
- Miller, K. I., and Monge, P. R. (1986). 'Participation, satisfaction, and productivity: a meta-analytic review'.

  Academy of Management Journal, 29: 4, pp.727–753
- Milliken, F. J., Morrison, E. W., and Hewlin, P. F. (2003). An exploratory study of employee silence: Issues those employees don't communicate upward and why. Journal of Management Studies, 40, pp.1453-1476. https://doi.org/10.1111/1467-6486.00387
- Pierce, J. L., & Gardner, D. G. (2004). Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. Journal of Management, **30**:Pp 591–622 https://doi.org/10.1016/j.jm.2003.10.001
- Rhokeun, P; Eileen, A; Douglas, K. (2010) Employee involvement and group incentives in manufacturing companies: a multi-level analysis Human Resource Management Journal, Vol. 20, p227-243, 17p. https://doi.org/10.1111/j.1748-8583.2010.00126.x
- Roca, S. and Retour, D. (1981) Participation in enterprise management: bogged down concepts, Economic and Industrial Democracy, **2** (1), pp.14
- Tannenbaum, R. and Massarick, F. (1961) Participation by subordinates in Tannenbaum R, Weschler R and Massarick F (eds) Leadership and Organization, New York, McGraw-Hill, pp80-100.
- Taylor. F, (1964). 'Shop Management' Scientific Management. New York: Harper and Row Press
- Trist. E. (1981), The evolution of socio-technical systems: A conceptual framework and an action research program. In Occasional Paper (2). Ottawa: Ontario Quality of Work-Life Centre.
- Verba, S. (1961) cited in Pateman, C. (1970) Participation and Democratic Theory, and Cambridge. University Press
- Vilasini, Nimesha&Neitzert, T.R. (2012). Improving project performance through worker participation in alliance projects. Association of Researchers in Construction Management, ARCOM 2012 Proceedings of the 28th Annual Conference. 1. 621-630
- Wagner, J.A., Leana, C.R., Locke, E.A. and Schweiger, D.M. (1997). 'Cognitive and motivational frameworks in US research on participation: a meta-analysis of primary effects'. Journal of Organizational Behavior, **18**: 1, pp.49–65.
- Whitener, E.M. (2001). 'Do "high commitment" human resource practices affect employee commitment? A cross-level analysis using hierarchical linear modeling. Journal of Management, **27**: 5, pp.515–535.
- Yankov, L., &Kleiner, B. H. (2001). Human resources issues in the construction industry. "Management Research News", 24(3/4), 101-105. https://doi.org/10.1108/01409170110782711