



Antecedents Of Psychological Work Environment And Employees' Productivity Performance In Organizations: A Theoretical Perspective.

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ABSTRACT

This study examined the theoretical perspectives of the antecedents of psychological work environment and employees productivity performance. It disclosed that work environment is made up of all the organizational variables both human and material that make work easier and fun to engage on. The study also discussed the antecedents of psychological work environment including human behaviours such as affective, continuance, and normative behaviours. The study evaluated factors linking psychological work environment and employees productivity performance such as the physical setting of the office or organization, job characteristics, broader organizational features, and extra organizational factors. Also studied was the theories that link psychological work environment and employee's productivity performance, which include the General Stress Theory, Job Demand-Control Model, the Warr Vitamins Model, and Psychological Contract. Finally, the study found that affective, continuance, and normative behaviours affect the way employees perform. The study concludes that psychological work environment has a significantly strong impact on the improvement of the productivity performance of employees in organizations.

Keywords: Antecedents, employee's productivity performance, organizations, psychological work environment

INTRODUCTION

Every organization scrambles to increase its level of productivity in a highly turbulent business environment. They would go extra-miles in search of the best of assets (employees) to perform organizational tasks. Some may feel to offer money, cars and other reward packages and incentives in exchange for loyalty and increased productivity (Baridam & Nwibere, 2008) while others may prefer to apply some more creative thinking as strategies towards attracting and retaining talents. Whichever being the case, the strategic intentions of organizations today is to achieve innovation at lightning speed, and as such need people who will work better, smarter and faster to meet this corporate need (Armstrong, 2012; as such proliferating the war for attracting and retaining talented employees. Concomitantly, talented employees have acknowledged their competitive advantage and as such tend to become very pervasive towards the realization of organizational goals (Inyang, 2008).

Consequently, realizing this current challenge of the business environment and to make survival possible, organizations have started laying more emphasis on managing the performance and productivity of their employees, through fulfilling employees' comfort needs; by providing them an effective and conducive work environment that could help to retain old workers and attract new talents too when need be for replacement of retired workers or vacancies.

Work Environment

A work environment is simply the environment in which people do their routine task(s). Work environment creates room for workers to perform for their organizations. It is the combination of both physical and psychological components of a workplace (Haynes, 2008). Every work environment has some significant features that make the people who perform these work comfortable to do so. These features are the totality of the factors present in a workplace, which have direct impact on the comfort, concentration, job satisfaction, health and safety, morale and productivity of employees (Chaudraseker, 2011). It could be those factors that make a worker committed not committed to the job in a workplace. This means that work environment has a very broad category that encompasses both the physical setting of the workplace and the psychological well-being of the worker (Burke, 2000). Perhaps, the physical environment consists of the physical setting, (equipment, heat, noise, air space etc); job characteristics (culture, climate, history etc), and other aspects of the extra-organizational setting such as local labour market conditions, industry sector, work-home relationships, etc (Wall & Parker, 1998).

However, not all aspects of the work environment are equally important or indeed relevant when considering the psychological environment, and how this environment affects employees' well-being and then increased productivity (Edwards et al, 1998). Thus, for the purpose of this study, our major focus is on those aspects of work environment which according to a number of theoretical position, have been seen to be most important and relevant to the psychological well-being of employees and the levels of efforts they assert to become more productive.

Psychological Work Environment

The psychological work environment of organizations have been described by organizational analysts, behaviourists, experts and employees in various forms, all from the angle it affects them. But generally speaking, it is expressed better from the perceptions of the employees; this is because they are the operational tools that determine the performance of every organization, and are also the brains behind the its survival. According to Baltes (2001) it is the employee's perceptions of the work environment that determines the behaviour and structures of the organization, and the image which the organization portrays. This is indicated on dimensions such as role clarity, job importance, leader support, and workgroup co-operations.

Specifically, psychological environment is made up those features of the work environment that are relevant to workers behaviors in the workplace (Oldham & Rotchford, 1983). These characteristics of behaviours are mostly traceable to the management, and impact directly and indirectly on the employees. Brooks and Kaplan (1985), stressed that psychological environment is composed of human behaviours in the workplace that define the processes and procedures of work characteristics and culture. Also Statt (1994), opines that it captures a set of characteristics of work environment that affect how workers feel, think and behave. The psychological environment is the assumption, expectation, promises, mutual obligations, attitudes and emotions which are formed in the work environment and to a great extent governs the behaviors of workers. This implies that if the work environment is not conducive, or is made up of authoritative supervisors and unfriendly coworkers, the productivity performance of employees may be negatively impacted on.

Considering this negative impact of the psychological work environment on workers behaviours, it is imperative to review the three major forms of psychological behaviors dominant in every work environment that could hinder performance. These are affective, continuance, and normative behaviours.

1. **Affective Behaviour:** This is the employees' emotional attachment to identify with his job, based on some positive feelings or emotions towards the organization. This situation makes workers to strongly identify with the goals of their organization, strive to help in achieving then and desire to remain part of the organization as much as possible. Employees with this type of behavior maintain work attendance;

attend office regularly, take leave or absence permission only when there is emergency (Mowday, et al, 2002) and intensive need to stay out of work due to health challenge, family pressing needs or other issues that may require such employee compulsorily not to be in the office. Contrarily, employees who are not emotionally attached to their jobs are bored and find work as a source of burden (Baridam & Nwibere, 2008), see nothing new on the job, loose interest and take frequent leaves (Armstrong, 2012). Those who are affectively committed to the job get emotionally attached, and see it as what makes life easy going and interesting, as such work tirelessly and productively to mapping the organization survive and profitable. Besides, this type of employees would not want to be absent from work because they believe they would lose a lot of fun, jokes and pranks (Purcell et al, 2003), and will reduce the speed of productive performance if they miss out a day of work. Sequel to this, they see their office as a second home and cannot compromise its productivity for the risk of low survival rate and existence.

Thus, the antecedents for this behavior stated by Baridam and Nwibere, (2008) are:

a. **Job characteristics:** This is the extent to which the features or components of a job gives the job holder some sorts of responsibilities that makes such worker motivated, committed and proud to carry out such job descriptions. Thus, when employees are entrusted with jobs with high degree of significance autonomy, they get spurred to perform to with their fullest capabilities. Through this ideology is most preferred to employees that fall under the theory category. This includes task autonomy, task significance, task identify, skill variety and supervisory feedback.

b. **Organizational dependability:** This is the extent to which employees feel that the organization can be reliable to attend to matters of their interest fairly. When employees feel secured in their interplay of the contractual terms made with the employers fairly without bias, they most like would love to keep their own part of the contracts fairly.

c. **Perceived participatory management:** The extent to which employees feel they can influence decisions or handle issues of their concern in the work environment. Employees are emotionally stable in the workplace once they understand that they have a voice on her concerning them in the organization.

2. **Continuance Behaviour:** This refers to the behavior of an employee based on the awareness of the high cost of leaving the organization. A typical employee who believes that he has invested a great deal of efforts and time in an organization, and that such organization has fair dealings with its employees, would want to remain in the organization to reap benefits, as any thought of leaving may be a sunk cost to him (Armstrong, 2012). Besides, some of these major antecedents that may make a worker decide not to leave have been highlighted by Baridam and Nwibere (2008), and Armstrong (2012), respectively. These antecedents are as pointed below;

- **Age of the worker:** If the age of the employee is high, especially closer to the mandatory retirement age, there is every tendency that the employee would not want to leave the organization due to the retirement benefits he may forfeit if he leaves, without completing his/her required years of service.
- **Relationship with co-workers:** Being very close to an effective worker can boost the enthusiasm of an employee to perform better in order to enhance productivity.
- **Tenure or duration, years of service of the worker in the present organization:** An employee who has put in so much efforts and years of hard work would not want to dent his reputation; as such will like to retain the pace of hard work, which will boost productivity.
- **Relationship with supervisors:** Good supervisors are energy boosters to their subordinates. They help to make work easier for those employees who work under them; by so doing these employees perform better to increase production.
- **Career satisfaction of the worker in present work environment:**
- **High level of unemployment in the dominant society:** The rate of unemployment in the society can energize an employee to perform better in order not to be sacked from work; since organizations do not retain unproductive employees.
- **Unlimited skilled/talented manpower in the labour market:** Organizations need the best of employees to work for them; as such are not tired of searching and selecting from the bulk of

talents in the labour market. This situation will cause existing employees to work better to retain their job.

Obviously, when the above antecedents are dominant in an organization, employees find it difficult to leave, since the psychological climate of the workplace is not controlled by management dictators or employees suppressors, but absorbed by friendly and democratic alliance, that conducive for employees to perform more productively towards achieving organizational goals.

3. **Normative Behavior:** This refers to an employee's feelings of fairness and obligation to remain with the organization based on the internalized values and goals of the employee, which are seen to be achieved while working with the organization. For instance, the organization may have invested resources in training the employee, who then feels obliged to continue with the organization. Some of its antecedents are:

- Co-workers' commitment: This describes the emotions, mood, attitudes, perception, motivations and morale of fellow workers in participating actively in decision-making and effectiveness performance to achieving organizational goals.
- Organizational dependability: The extent to which the organization relies on the employees for more commitments, higher morale, better performance, and effective attainment of organizational goals.
- Participatory management: The extent to which the employees share organizational responsibilities with the organization (Baridam & Nwibere, 2008), and also share the outcomes of collective responsibilities.
- Team cohesiveness: This describes the extent to which an organization creates room for team work and cohesion. Encouraging team spirits boosts psychological work environment, which energizes employees to putting in their best as a team towards enhancing performance.

Sequel to the above discussions, the psychological environment to be reviewed in this study, will focus on affective responses or behaviors of workers in a working environment.

Factors Linking Psychological Work Environment and Employees' Productivity Performance

It is fairly transparent to believe that psychological environment may create the physical conditions that can affect the physical health of a worker. Thus, the presence of a noxious substance to which workers are exposed to, for instance, creates a relatively direct link between an aspect of the physical environment and a subsequent health problem (Jones and Fletcher, 1996). However, the way in which work environments create psychological environments is somewhat less transparent and less direct (Briner, 1996).

Two major issues as observed by Weiss and Cropanzano, (1999) are relevant to this situation. Firstly, a great number of aspects of the work environment could potentially affect psychological environment, as such the interpretations which workers make about their working conditions have a central role in producing psychological well-being, which in turn affects their level of productivity.

On this account, it is therefore not possible to state with certainty that a particular aspect of work will necessarily have an impact on psychological well-being as it depends crucially on the way work is perceived. Secondly, it may often be the combination of a number of key work conditions present, which are important for psychological well-being. Besides, a single work characteristics alone may not be particularly relevant, but the total configuration.

Consequently, the following describes some of the main psychological characteristics in the work environment which may be relevant to an employee's psychological well-being and enhanced productivity performance (Briner, 2005).

The physical setting

The extent to which physical setting has direct effects on the psychological environment, may be less direct and less marked than some of the other features of work environments, but nevertheless, they can be significant in particular kinds of work (Arora, 1980). Thus, three kinds of work influence will be considered here. Firstly, the aspects of work such as heat, noise, and lighting have been shown to affect a number of psychological processes in both direct and indirect ways (Smith, 1989). Noise for example,

may impair the cognitive performance of certain kinds of tasks. Secondly, the physical setting impacts on the level and nature of social interaction between co-workers. The design of open-plan offices for example, and other aspects of the physical lay-out may determine the kinds of interactions that can take place (Hedge, 1982). Thirdly, the physical environment may offer more or less physical safety. Concerns about accidents or injury are likely to have some effects on psychological well-being, and all these affect the productivity performance of workers.

Job Characteristics

There have been numerous attempts to identify the key psychological features or characteristics of jobs. Characteristics that are thought to be important for employees' well-being include qualitative and quantitative workload, the control or discretion workers have over the way they perform tasks, the level of task repetitiveness, and role ambiguity (VanderDoef & Maes, 1999), affects the behaviour of employees. The way in which jobs are designed in relation to technologies, is thought to be a major determinant of job characteristics. The work environment therefore creates these job characteristics through the way jobs are designed and organized and is thought to be one of the most important sets of influences on psychological well-being and overall performance of workers (Sundstrom, 1986). Thus, when job characteristics are well-defined and articulated, employees are to perform more productively since the level of control they have over the job seems to be higher and commensurate with their level of expertise experience.

Broader organizational features

Jobs take place and workers work in a much broader organizational context in which the features may be relevant to employees' psychological work environment, which will in turn impact on the level of performance. Two of these features were discussed here. Firstly, the structure of the organization, which includes the number of levels in the hierarchy and the way workers are deployed, such as teams, and the co-ordination between different parts of the organization may all play a role in constructing the psychological environment (Oldman & Rotchford, 1983). The second feature is the organizational culture, which refers to the norms or behaviors and accepted ways of doing things in a particular organization. The culture of an organization may help to shape many aspects of its psychological work environment including social support, working hours, and patterns of interactions such as acceptability of bullying or oppressive behaviors (Armstrong, 2012), which may in-turn affect employees' productive interest.

Extra-organizational factors

It has become increasingly recognized that in order to understand how work correlate with workers psychological environment, and how this impact on productivity, it is also necessary to understand how various situations outside work, play a role in this relationship. Thus, these extra-organizational factors can be discussed on three levels. Firstly, on an individual level; it is clear that what is happening to a worker outside work may have a significant influence on his psychological reactions and well-being in the workplace. For example, workers who are experiencing difficulties with relationships outside work, which are causing them considerable distress, may find dealing with problems at work more challenging than usual, and these may adversely affect their productivity level (Cooper & Marshall, 1976). Also family issues such as domestic violence, spousal infidelity, and other forms of marital, personal or family problems can make a worker depressed and less productive in the workplace. The second level is the local community level where features such as local unemployment levels, transportation, housing and healthcare provisions may all play major role. It may be the case, for example, that in conditions of particularly high unemployment, working conditions, which may more usually be regarded as harmful and intolerable, become more acceptable due to the scarcity of jobs (Baridam & Nwibere, 2008), but one thing paramount is that employees under such pressure may not put in their best. These situations are more obvious in developing countries where there is usually high rate of employment, companies try to become unethical in their relationships with employees, since they know that employees will most likely adapt to the new policies no matter their negative effects on employees, rather than leaving the job, bearing in mind the high rate of unemployment in the labour market. Lastly, the national economic climate may also be significant in influencing psychological environment and productivity performance.

For instance, working in an industry sector that is particularly threatened, is likely to increase feelings of job insecurity.

There are, therefore, numerous ways in which the work environment creates and contains psychological environments that may have significant influences on productivity of employees. Some of the ways in which researchers have attempted to understand and explain these relationships are as discussed below.

Theories Linking Psychological Work Environment and Employee's Productivity Performance

Many aspects of work environment are likely to affect psychological well-being of the workers, and they do so in complex ways. It is therefore, not surprising that different theoretical approaches have been brought to book to developing an understanding of such relationships. Here, some of the major approaches have been discussed. The discussions were focused on the impacts of the models theories used to examine the effects of psychological environment on employees' productivity performance.

General Stress Models

The first set of these general stress models appeared more than 25 years ago and has come to be very widely used (Amadi, 2007). The basic version of this model consists of a series of stressors', such as workload and role ambiguity, usually placed on the left hand side of the model, which are connected to a series of 'strains', such as mental health and absence by arrows on the right hand side of the model (Cooper, 1998). Between these stressors and strains are a number of variables that are thought to moderate the strength of the relationships between stressors and strains such as workers' personality, rate of coping and social support (Kahn, 1991).

While these models are widely used and are useful as general summaries, they do have a number of serious limitations (Siegrist, 1998). Firstly, they are not explanations as such, as explanations attempt to define how and why work characteristics might have an impact on productivity; but these models aim to describe rather than help in the understanding of possible relationships. Secondly, many of the relationships they try to describe have no or limited empirical support. Hence, while they do provide useful summaries, they have limited accuracy. Thirdly, there are many ambiguities with the definitions and meanings of stressors and strains, which limit the usefulness of stress as an explanation of negative reactions to work conditions. General stress models, therefore, simply suggest that if some aspects of the work environment are perceived negative, they also impact negatively on employees' productivity (Stauter & Murphy, 1995).

This general and sometimes simplistic stress (or stressor-strain) approach clearly raises more questions than it answers. While the concept of stress remains one trend in stress theory development which has been towards more specific theories that tend to focus on particular aspects of the processes involved or take a particular theoretical approach to the processes that link psychological well-being and productivity. Examples include person – environment fit and effort-reward imbalance approaches (Siegrist, 1998 in Armstrong, 2012).

Job Demand-Control Model

The best-known and most widely tested specific stress model related to the environment was developed by Karasek in the year 1979, and it is known as the 'job demand-control' model. It posits that the relationship between psychological environment such as job demand, workload, well-being, and productivity depends on the level of control, or job decision latitude that the workers have over their job (Karasek, 1979). According to the model, those jobs that have the most negative impact on health, are those that combine high demands with low control (Jones & Hetcher, 1996). The negative impact of high demand jobs are moderated where there is also a high level of control (Ganster & Schaubrock, 1991). Thus, jobs that have this particular combination are not, according to the theory, damaging to health but rather are 'active' jobs in which learning and development takes place (Osaro, 2020). Besides, high job demands are not in themselves harmful, rather they depend on the level of control present to the job holder (Wall et al, 1996).

The considerable evidence that does exist in this case stressed on is equivocally where more specific approaches to defining and measuring control have been used (i.e. what type of control and over what?), and this provides a little more support for the model.

However, this theory is being criticized on the ground that most organizations do not give high control to workers with high job demand due to the risk of uncertainties. Also the theory cannot help to balance the stress input level of peak performers in organizations with the achievement level as relative to their psychological comfort.

The Vitamin Model

The Warr's Vitamin Model was proposed by Frederick L. Warr in the year 1979. It explains a broad approach to looking more generally at how the psychological features of any work environment, may influence the psychological well-being of an employee (Amadi, 2021). Warr based his theory on an analogy of the relationship between vitamins, physical health, and abilities. Some vitamins, such as A and D, though essential for health, when consumed in large quantities are harmful. Other vitamins, C and B, which are also essential to health, can be consumed in large quantities with no ill-effects (Baridam & Nwibere, 2008). Warr describes psychological features of the environment in terms of vitamins such that the presence of each in the environment is important for psychological well-being but their effects on productivity vary as their level increases (Warr, 1987).

The nine environmental vitamins listed below, in moderation are necessary for psychological well-being, some, such as externally generated goals (workload) and environmental clarity, at very high levels are assumed to be harmful to well-being and adversely affects employees' productivity performance. Others, such as the availability of money and valued social position, are, according to the model, unlikely to be detrimental to workers well-being even at very high levels (Armstrong, 2021).

The vitamin model is useful as a reminder of the range of environmental feature that may be relevant and the fact that their relationship with employees' well-being and productivity may not always be a linear one (Briner & Reynolds, 1993).

The relationship between Warr's Vitamin Model and the impact of psychological work environment on employees productivity performance are discussed below (Briner,1996).

1. Opportunity for control: Discretion, decision latitude, independence, autonomy, job control, self-determination, personal control, absence of close supervision, participation in decision-making, absence of utilization, are psychological features that Warr believes make employees energetic to perform more productively.
2. Opportunity for skill use: Skill utilization, utilization of valued abilities, application of skills and abilities, are assumed to be the vitamins that boost employees' productivity performance.
3. Externally generated goals: Job demands, quantitative or qualitative workload, time demands, role responsibility, time pressure at work, required concentration, conflicting demands, are factors that affect employees negatively if not managed effectively may help to reduce the productivity performance of employees.
4. Variety: Variation in job content and location, non-repetitive work, varied roles and responsibilities, skill variety, number of different job operations.
5. Environmental clarity: Information about the consequences of behaviour (e.g. availability of feedback), information about the future (e.g. absence of job future ambiguity), information about required behaviour (e.g. low role ambiguity).
6. Availability of money: Income level, amount of pay, moderate/high standard of living, absence of poverty, material resources.
7. Physical security: Absence of danger, good working conditions, ergonomically adequate equipment, safe levels of temperature and noise, absence of continuous heavy lifting.
8. Opportunity for interpersonal contact: Quantity of interaction (e.g. contact with others, adequate privacy), quality of interaction (e.g. good relationship with others, social support).
9. Valued social position: Cultural evaluations of status (e.g. social rank, occupational prestige) more localized social evaluations of in-company status or job importance, personal evaluations of task significance (e.g. meaningfulness of job or self-respect from the job), (Briner, 1996).

The Psychological Contract

Finally to be considered is the psychological contract, most recently popularized by Rousseau, (1995) as a theoretical approach to understanding how the work environment may affect psychological well-being,

and in turn, affect employees' productivity performance. The psychological contract essentially describes the relationship between a worker's belief about what they give to their employer (e.g. effort, commitment, high morale, intrapreneurship) and what they should expect in return (e.g. fair treatment, payment, respect, recognition, promotion, etc), (Inyang, 2008). According to this approach, when a worker perceives that their employer has in some way violated this contract by not, for example, rewarding extra effort with promotion, strong negative emotions are produced which may have long-term implications for well-being (Armstrong, 2012), and may affect the productivity performance of the employees.

Conversely, when the psychological contract is perceived as a fair one, psychological well-being is likely to be enhanced, and level of productivity of the worker is expected to be enhanced. The work environment within this approach is conceptualized as a set of beliefs that the organizations will respond to their work behaviors, and what the organizations believe that, workers hold about their (organization's) behavior (Baridam & Nwibere, 2008).

CONCLUSION

How best can the relationship between the work environment such as the psychological environment, and employees' productivity performance be understood? The answer would appear to be that there is no one best way. In attempting to use the stress approach to address this problem, it is assumed that the stress models have numerous limitations and can sometimes appear to be little more than lists of work and person factors that may cause problems to the worker, and a description of these possible problems impacting on the worker's output. Models that are more specific appear to be useful for some workers in some situations. Thus, the vitamin model is a reminder of the numerous and complex nature of the relationships between the psychological environment and employees' productivity. Affective events theory and psychological contract approaches appear to be more useful but for somewhat specific situations, may have some lapses.

Thus, three implications for understanding psychological environment and employees' productivities in organizations are as follows: Firstly, it is essential to clarify precisely what requires explanation about psychological environment of the workers. Different types of well-being phenomenon, include specific and diagnosable mental health conditions (e.g. depression, anxiety disorder), mood states related to motivation (e.g. fatigue, tiredness), other mood states (e.g. depression affect, boredom), and specific emotions (e.g. anger, resentment) may affect the psychological environment of a worker. Each of these types of phenomenon is likely to require a different kind of explanation resolutions, and the challenge is to identify which one is likely to be most helpful.

A second way of developing understanding is to take into account the influence of various contexts in work and Psychological well-being relationships. Such contexts may include individual qualities and personality attributes of the worker and the particular conditions in that job or organization. The theory that helps understanding and intervening, for a particular worker in one context may not be useful for other individuals in other context of work environment. As such management can develop a categorical approach to fix employees into the psychological category they fall into in order to decide which parameter to use in creating a conducive psychological environment for employees, so as to impact positively on their productivity performance.

Lastly, returning to a point made earlier, work environments can have both positive and negative consequences for psychological environments of workers. Any comprehensive understanding of how work affects well-being must take into account both the salubrious and harmful influences of work on workers' psychological well-being, and how it affects employees' productivity performance level. Therefore, understanding all these and keeping to the strategic approaches will help organizations create a positive psychological work environment that will promote employees well-being, and also enhance their productivity performance.

REFERENCES

- Amadi, G.N. (2008). Human stress and management. A realistic approach, Emhai Printing and Publication Company.
- Arora, S.P. (1980). Office organization and management”, Vikas Publishing House, PVT LTD.
- Battes, B.B. (2001). Psychological climate in the work setting. <https://www.researchgate.net>.
- Briner, R.B. & Reynolds, S. (1993). Bad theory and bad practice in occupational stress. *The Occupational Psychologist*, 19, 8-13.
- Briner, R.B. (1996). The neglect and importance of emotion at work. *European Journal of Work Organizational Psychology*, 8, 232-346.
- Brooks, M.J. & Kaplan, A. (1972). The office environment: Space planning and affective behavior. *Human Factors*, 14(5), 373-391.
- Chaudrasekar, K. (2011). Workplace environment and its impact on organizational performance in public sector organizations, *International Journal of Enterprise Computing and Business Systems*, 1(1).
- Cooper, C. (1998). *Theories of organizational stress*. Oxford University Press.
- Cooper, C.L. & Marshall J. (1976). Occupational sources of stress: A review of the literature pertaining to Coronary Heart Disease and Mental ill-Health. *Journal of Occupational Psychology*, 49, 11-28.
- Edwards J.R., Caplan, R.D., & Van Harrison R. (1998). Person-environment fit theory: Conceptual foundations, empirical evidence and directions for future research. In: Cooper CL, ed. *Theories of Organizational Stress*. Oxford University Press, 28-67.
- Eulberg, J.R., Weekley J.R., & Bhagat, R.S. (1988). Models of stress in organizational research. A Metatheoretical Perspective. *Human Relations*. 41, 331-350.
- Fineman, S. (1993). *Emotion in organizations*. Sage.
- Ganster, D.C. & Schaubroeck, J. (1991). Work stress and employees' health. *Management* 17, 235-271.
- Haynes, B.P. (2008). An evaluation of the impact of the office environment on productivity. *Journal of Facilities*, 26 (5/6), 178-19.
- Hedge, A. (1982). The open-plan office, a systematic investigation of employee reaction to their work environment. *Environment and Behavior*, 14(5), 519-542.
- Jones, F. & Fletcher, B.C. (1996). Job control and health. In: Shabracq MJ, Winnubst JAM, Cooper CL, eds. *Handbook of Work and Health Psychology*. John Wiley, 33-50.
- Kahn, R.L. & Byosiere, P. (1991). Stress in organizations. In: Dunnette M, ed. *Handbook of Industrial and Organizational Psychology*. Rand – McNally.
- Karasek, R.A. (1979). Job demands, job decision latitude and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24, 285-307.
- Monday, J.P., Porter, L & Steers, N. (2000). Commitment in the workplace towards a General Model. *Human Resources Management Review*, 11(3), 299-326.
- Oldman, G.R. & Rotchford, N.L. (1983). Relationships between office characteristics and employee reactions: A study of the physical environment. *Administrative Science Quarterly*, 28, 542-556
- Peters, T. & Waterman, R. (1982). *In search of excellence*, Harper & Harper & Row.
- Purcell, J. Kinmie, K., Hutchinson, R. B. & Swart, J. (2003). *People and Performance: How People Management Impacts on Organizational Performance*, CIPD.
- Rousseau, D. (1995). *Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements*. Thousand Oaks: Sage.
- Sauter S.L. & Murphy, L.R. (1995). *Organizational risk factors for job stress*. Washington, DC: *American Psychological Association*.
- Siegrist, J. (1998). Adverse effects of the effort–reward imbalance at work: Theory, empirical support, and implications for prevention. In: Cooper CL, ed. *Theories of Organizational Stress*. Oxford University Press, 190-204.
- Smith, A. (1989). A review of the effects of noise on human performance. *Scandinavian Journal of Psychology*, 30, 185-206.

- Statt, D.A. (1994). Psychology and the world of work. New York University Press, 457. *Psychology, Industrial*.
- Sundstrom, E. (1986). *Work places: The psychology of the physical environment in offices and factories*. Cambridge University Press.
- Vanderdoef, M., & Maes, S. (1999). The job demand-control-support model and psychological well-being: A review of 20 years of empirical research. *Work and Stress*, 13, 87-114.
- Wall, T.D. & Parker S.K. (1998). Job and work design. Thousand Oaks: Sage.
- Wall, T.D., Jackson, P.R., Mullarkey, S., & Parker S.K. (1996). The demand-control model of job strain: A more specific test. *Journal of Occupational Organizational Psychology*, 69, 153-166.
- Warr, P.B. (1987). Work unemployment, and mental health. Oxford University Press.
- Weiss, H.M. & Cropanzano, R. (1999). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. *Research in Organizational Behavior*, 18, 1-74.