Job Burnout of Civil Engineers at Residential Construction Site - A Brief Statistical Analysis

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Abstract

Job burnout is an outcome of either exhaustion and or mental distance and or emotional impairment and or cognitive impairment. Voluntary or involuntary Talent turnout is observed from literature review. Short form of Maslach burnout inventory tool (General Survey) is engaged to collect primary data. A sample of site civil engineer/s from the civil engineer's universe is considered to carry this study. To collect the data snow ball technique administered. To ascertain reliability of data the Cronbach Alpha test administered and the value found more than 0.70, hence data is reliable. The respondents are of male, holding diploma degree (28%)/bachelor degree (72%), 22% of them married. The correlation test administered and the study has discovered that exhausted mind may not stay focused; drained out energy leads to uncontrollable emotions; physically exhausted employee may not stay concentrated/mind being working on other things it leads to mistakes at work/reluctant to others opinion about my work; low enthusiasm at work leads to uncontrollable emotions/unintentional overreaction/ trouble in concentration/ mind being working on other things it leads to mistakes at work; Unable to control emotions/ my emotions is not reflect the way I do/unintentional over reaction due to lack of clarity regarding the significance of my work to others; my emotions is not reflect the way I do/ mind being working on other things it leads to mistakes at work/ unintentional over reaction due to lack of emotion controlling; mind being working on other things it leads to mistakes at work due to unintentional over reaction at work; mind being working on other things it leads to mistakes at work due to concentration difficulty at work. The employee, if provide a clarity at work/ enthusiasm/ motivation, may not consider himself for job burnout.

JEL Classification: C1, I3, J5, J7, M54, N3, N35,

Key Words: Talent Turnover, Job burnout, Emotion, Cognitive, Exhaustion

1. Introduction: The Indian residential construction market is expected to reach USD 272.67 billion by 2029, with a projected CAGR of 7.51%. However, high construction costs due to lack of building supplies may hinder growth. In FY21-22, private equity investments in India's real estate reached USD 3.3 billion.

The amount of investments garnered by the top three cities, Bengaluru (19%), Delhi (19%), and Mumbai (39%), was about 77%. Real Estate Investment Trusts (REITs), the Real Estate Regulatory Authority (RERA), and SWAMIH (Special Window for Completion of Construction of Affordable and Mid-Income Housing Projects) are just a few examples of the laws that have been introduced as a consequence of policy pressure that has helped the business. India has made great strides in its urbanization. More than 4000 lakh people are forecasted to reside in Indian cities by 2030. Rising family incomes, India's growing urban population, and ten years of cheap lending rates have all contributed to the country's increased demand for residential real estate. Hyderabad is one of the leading contributors, with 83% of the new launches occurring year over year. West Hyderabad provided the greatest number of homes out of all the zones in the city, making up 52% of all launches. North Hyderabad, which made up around one-third of all the new developments started in the city during Q1 2022, came next. With a 52 percent share, East Bengaluru had the newest residential property debuts, followed by North Bengaluru. With many local and regional businesses and a few numbers of international players, the Indian residential building industry is becoming more and more fragmented and competitive. Delhi Land & Finance, Vasavi group, Manjeera group, SMR Holdings, Ashoka Developers and Builders Ltd., Ramky Group, Aparna Constructions and Estates Pvt Ltd., Salarpuria Sattva Group, Jain Housing, Merlin Group, Steps Stone Builders, Godrej Properties Limited, Prestige Group, NCC Urban and several more are a few of the prominent companies in Hyderabad, India. Major players are growing their initiatives in order to satisfy the growing demand from customers.

Comparing the previous year to 2023, the construction industry had increases in nominal value added of 7% and nominal gross output of 6%. Nominal construction spending continued to rise as of the third quarter of 2023. A major obstacle that

the industry still faces is the persistent lack of trained workers. Registrations for properties costing ₹1 crore and more surged in Hyderabad; in January 2024, the weighted average price grew by 14% year over year. In January 2024, there were 5,411 residential properties registered in Hyderabad, representing a 1% year-over-year (YoY) decline.

According to statistics of Telangana Registration and Stamps Department, the total value of properties registered during the January 2024 was ₹3,279 crore, which is higher by 24% YoY and indicates a tendency towards the sale of higher value dwellings. The Hyderabad residential market encompasses house sales relevant to the primary and secondary real estate markets and is divided into four districts: Hyderabad, Medchal-Malkajgiri, Rangareddy, and Sangareddy. Homes valued between ₹25 and 50 lakh accounted for 47% of all property registrations in Hyderabad in January 2024; homes below ₹25 lakh made for 15% of all registrations, a further decline in proportion. According to a Knight Frank research, the percentage of sales registrations for houses costing ₹1 crore and above has climbed dramatically, from 8% in January 2023 to 14% in January 2024.

Approximately 71% of the properties registered in January 2024 were within the 1,000-2,000 square foot category. Demand for smaller homes (those under 1,000 square feet) moderated, with registrations for this category dropping from 19% in January 2023 to 16% in January 2024. However, demand increased for houses bigger than 2,000 square feet; in January 2024, 13% of registrations were made, up from 9% in the same month the previous year. The Hyderabad residential market had a positive start to 2024, marked by a steady pace in property registrations and a noticeable increase in demand in January for superior quality homes. This can be seen in both the rising price level and the aspirational desire of purchasers to move up to higher-value homes. According to Shishir Baijal, Chairman and Managing Director of Knight Frank India, "developers are also actively keeping pace with these trends, demonstrating adaptability to meet the evolving preferences of discerning buyers. The residential construction market is witnessing rivalry among existing competitors, threat of new entrants, bargaining power of buyers, threat of substitute of products, bargaining power of suppliers, which is in line with Porter's five forces. The real estate has witnessed demand for building constructions in a big number in isolated, semigated, gated communities, which includes flats, duplex as well as triplex houses. This study is focused over a gated community development where in the height of the building is stilt plus five to nine floors only. This building construction has to be carried out in phased manner, namely substructure, super structure, finishes and external development there after handing over of the property. The builder/promoter are active with respect to the planning, design, execution, completing in all respects. The service providers are namely Architects, Structural engineers, Plumbing and drainage layout designers, firefighting specialist, concreting/ plastering/ painting/ house wiring specialists etc. The service providers selected through tendering procedure, but most of the time the promoters/builders do continue the business with existing knowns service providers only, to make the job easy. During the initial stage of construction work the number of service providers are noted to be two or three, like ground breaking, carting the earth, marking for columns, rebar fixing and pour concrete there after backfilling. The number of flat buyers observed to be low in number during ground breaking, sub structure construction and the buyer number will increase as the project progresses. The visit of number of buyer/s is small in number or nil during sub structure construction as well as frame work construction. The builder/promoters prioritize in completing the substructure and they pay attention in completing the column frame structure as early as possible, because it attracts the flat buyers. The finishing works (Main/partition wall, plastering/plumbing/wiring/floor tile laying/dado in bath rooms/ door fixing/ window fixing etc.,) are dependent on each other, hence the work will go over a longer period of time.

2. Site engineers: Site engineers/Construction engineers working for contracting firms are mostly stationed on site and held responsible for planning, coordination, supervision, arrangement of workforce, machines and materials, control of progress, quality, and budget, as well as compliance with statutory requirements in terms of safety and environmental issues. Because of the multidimensional work in nature, site engineers are often instructions to carry out the role of project management as a whole. The management of construction projects typically involves balancing the expectations of different stakeholders, and the potential for role conflict is high.

Couple of challenges are as follows:

- During final finishes stage the site engineers have use the staircase only (i.e. no lift car).
- The engineer has to address the microlevel management in resolving the issues raised by the flat buyers, in this regard the site engineer has to coordinate with the workforce, their office, stores etc., It is observed this kind of coordination has developed the stress among the site engineers.

Builders/promoters acting as a service facilitator to the flat buyers, they buy the service/s from the vendors. Once, the service providers complete agreed work, thereafter they refrain from corrective action. Site engineer/s are struggling to get done the things, hence stress level of site engineer will be very high.

3. Objectives of the Study:

There has been a wealth of literature studying the burnout phenomenon in different occupational groups, including medical practitioners (e.g. nurses) and educators (e.g. teachers). However, limited similar research has focused specifically on construction engineers despite the fact that they may be a high-risk group for burnout. The present study sought to address this gap in order to add to our current knowledge of this intangible, but detrimental, phenomenon.

The objective of study is:

- i. To explore the relevance of burnout phenomenon among construction engineers of Hyderabad construction industry, by engaging the most widely used burnout scale, the short form of Maslach Burnout Inventory (MBI), among a sample of Hyderabad construction engineers.
- ii. To identify job characteristics associated with burnout, as well as their relative importance.
- **4. Research methodology**: The under depicted methodology (Fig.1) adopted to carry out this study.

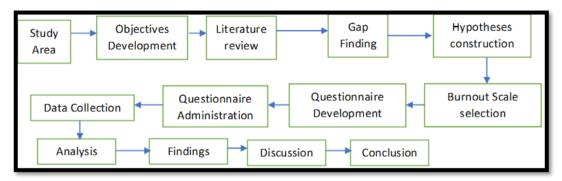


Fig.1: Research methodology

5. Literature review: The engineers working for substructure and super structure of a building are comfortable in comparison to finishing works (i.e. couple of vendors for coordination), but the same engineer is troubled during finishing works, because of coordination with all service providers, which is manageable. But, during the process of pre-handing over the property to owners/buyers, the engineer is troubled while attending more than a owner/buyer (i.e. the number of flats owner) visit on a single day and to get done things through service providers and the engineer/s is noted to be under stress, especially during week end or on public holiday/s. Addressing the observation/s of flat owners is found challenging to site engineers. Taking the corrective of building element is costly affair as well as it demands patience, time and also coordination.

Burnout could only occur among those who work with other people. The staff-client interaction is centered around the clients' current problems (psychological, social or physical) and is therefore charges with feelings of anger, embarrassment, fear or despair. Because solutions for client's problems are not always obvious and easily obtained, the situation becomes more ambiguous and frustrating. For the person who works continuously with people under such circumstances, the chronic stress can be emotionally draining and lead to burnout (Ahmad, S. R., Prasad, K. D. V., Bhakuni, S., Hedau, A., Narayan, P. S., & Parameswari, P. 2023).

A key aspect of the burnout syndrome is increased feelings of emotional exhaustion; as emotional resources are depleted, workers feel they are no longer able to give of themselves at a psychological level. Another aspect of the burnout syndrome is the development of depersonalization (i.e., negative, cynical attitudes and feelings about one's clients).

Zhou et al.'s 2014 study found that role conflict is positively correlated with burnout, and both factors negatively impact an employee's performance. Sovitriana et al.'s 2019 study found a negative association between the theoretical model and burnout among junior high school teachers in South Tangerang. Yirik et al.'s 2015 study found that ages, gender, education levels, departments, and positions of managers significantly influence organizational stress and burnout levels among 318

mid-level managers in four and five-star hotels in Alanya, Turkey. However, these factors do not affect burnout levels. Talent turnout (Dr AB Saraswathi, and Bonniga, Ravinder) is due to lack of motivation.

The compilation of definition/description is presented in a table (Table 1). The theory/models are presented in a table (Table 2). Individual burnout modulators presented in Table (Table 3).

6. Gap: This kind (i.e. job burnout) of study (civil engineers with finishing works) has been not carried in civil engineers' domain in Hyderabad, Telangana, India.

Table 1: Compilation of Definition/Description of Job Burnout

Burnout Description/Definition

For engineers, role conflict (e.g., conflict between professional standards and tight deadlines and/or budget constraints) might be strongly associated with severe "life or death" consequences and that this increased the level of stress (Bacharach et al. 1991).

Increasing safety and environmental imperatives and the threat of personal liability in the event of unforeseen incidents and are likely to increase job related stress among construction engineers. There are strong grounds to suspect that construction engineers are experiencing a considerable amount of job-related stress of various natures. This phenomenon not only threatens the wellbeing of construction engineers, but also reduces the efficiency and long-term competitiveness of the organizations in which they are employed (Lingard 2003).

The construction professionals working in the contracting industry are more familiar with, and therefore have more experience in, handling stressful situations than their counterparts in consulting practices and government departments. This implies that construction engineers who work for contracting organizations are likely to be exposed to higher stress than those in consulting organizations (Ng et al. 2005; Hedau, A. 2020).

Civil contractors are mainly site-based and thus exposed to different, arguably more extreme, stressors than office-based consultants (Lingard 2003).

The dehumanized perception of others can lead staff members to view their clients as somehow deserving of their troubles (Ryan 1971; Hedau, A, Joshi V. 2015).

The omnipresent view that burnout is associated intrinsically to work factors and secondly to personality factors (Bianchi 2018; Maslach 2003, 2006; Shanafelt et al., 2017 Hedau, A. 2016).

The first sign of burnout is when the employee works harder and longer, but his or her accomplishment looks less and less (Freudenberger 1977).

There has been widespread recognition among scholars that job stress, characterized by role overload, role conflict and ambiguity, and responsibility stemming from the work environment, has negative ramifications on organizations and leads to, among other things, low levels of job satisfaction, organizational commitment, productivity and effectiveness (Lee and Ashforth 1993; Cordes and Dougherty 1993; Hedau, A. 2018).

Burnout has been widely identified as chronic emotional fatigue and accounts for this phenomenon (Wright and Bonett 1997; Leiter and Maslach 1988; Schaufeli and Enzmann 1998; Maslach et al. 2001).

It is a gradual process that occurred as a result of constant and daily exposure to stress over a long period of time (Westman and Eden 1997).

A syndrome of emotional exhaustion, cynicism, and reduced professional efficacy". Emotional exhaustion describes feelings of depleted emotional resources and a lack of energy. Cynicism is characterized by a cynical attitude and an exaggerated distancing from one's work. Reduced professional efficacy refers to a situation in which professionals tend to evaluate themselves negatively and become dissatisfied with their accomplishments at work (Maslach et al. 1996;

Maslach et al. 2001; Maslach and Leiter, 2008).

At an individual level, burnout has been associated with mental and physical health problems, e.g., psychological distress, anxiety, depression, reduced self-esteem (Maslach et al. 2001), headaches, sleep disturbances, and substance abuse (Burke and Greenglass 1986).

At an organizational level, burnout was also linked consistently to negative attitudes toward work, which included low levels of motivation, job satisfaction, and organizational commitment, but high levels of job uncertainty (Schaufeli and Enzmann 1998; Maslach et al. 2001).

The counterproductive work behavior such as absenteeism, reduced productivity, and increased staff turnover, hence lowering the overall effectiveness of the organization itself (Wright and Bonett 1997).

It is contagious, spreading to affect the colleagues of those who experience it and even resulting in a negative spillover into home life and it is not only an individual health issue, but also influence socioeconomic factors (Westman and Eden 1997).

It is a different work-related stress syndrome portrayed by dimensions; emotional exhaustion, professional inefficacy, and cynicism. The past research revolved around the human service professions such as nursing and teaching, where they are assumed to be the most exposed to experience burnout, but the same spreads to other working professions such as engineers, banking employees and managers (Tareq Lubbadeh 2020).

The negative consequences of burnout have prompted the calls for intervention programs not only to improve employee's quality of life but also to prevent the organizational losses (Awa et al., 2010).

It is caused by an imbalance between high job demands and insufficient resources. Job demands shall be physical, psychological, social, or organizational aspects of the job, that require sustained physical and/or psychological effort or skills. Therefore, they are associated with certain physiological and/or psychological costs (e.g. work pressure and emotional demands). Job resources shall be physical, psychological, social, or organizational aspects of the job that are either: functional in achieving work goals; reduce job demands and the associated physiological and psychological cost; stimulate personal growth, learning, and development (e.g. career opportunities, supervisor coaching, role-clarity, and autonomy) (Schaufeli & Taris, 2014).

There are several motivational media that occurs between work engagement and burnout that is related to job demand and job resources models. Job resources positively related to the psychological need of satisfaction (Jansen et al., 2018).

Job Demand refers to the level of work that needed and the conditions as well the time constraints associated with the job (Fernet & Sen, 2004). Job Demands related to cognitive and emotional demands that involve a psychological effort such as physical, mental, social or organizational aspects of work (Hakanen., Bakker & Schaufeli, 2006).

In the perspective of Job Resources, it refers to the work engagement, inspirations and optimistic work-related structure characterized by vigour, dedication and engagement. Burnout as feedback to emotional illness and interpersonal stress in the workplace (Prieto, Soria, Martínez, & Schaufeli, 2008).

Burnout has also influenced conceptual work, especially given its place in an extensive range of psychological associated with work, such as work engagement and chronic exhaustion (Maslach & Leiter, 2016).

It included the intensity of job pressure, burnout and effects on both individuals and organizations (Seyedehhava Mousavy, Nur Sakinah Thomas, & Mukundan 2012).

A syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment, that can occur among individuals who work with people in some capacity (Maslach and Jackson, 1984).

The stressors in the work environment, stemming from job, organizational, and social aspects, have been shown to be major predictors of burnout (Leiter and Maslach 2001; Brewer and Clippard 2002; Nyssen et al. 2003).

The identification of the character of occupational stress in the construction industry suggests that engineers in the area are likely to suffer from burnout to a very high degree, because of their constant daily exposure to work-related stress over a prolonged period of time (Hobfoll and Freddy 1993; Westman and Eden 1997).

Burnout scores are more prominent among people who have a more external locus of control - the individual perception of event and achievement as a result of chance, destiny, or under the control of the power of others. while people who have more internal locus of control - the individual perceives the event as contingent upon his/her behavior, ability, and efforts are less prone to burnout (Rotter, 1966).

Neurotic individuals depicted as being emotionally unstable, anxious, hostile, and prone to emotional distress, which aligns with the job burnout dimension (Semmer, 2006; Bianchi, 2018; Swider and Zimmerman, 2010).

Personality traits can play a significant role as a coping mechanism or as an intensifier of burnout dimension. People who show less hardy personality also display a higher score in burnout, especially the exhaustion dimension (Ghorpade et al., 2007; Maslach and Leiter, 2016a).

These Job factors (organizational risk factors) are compiled within six critical areas of the workplace context: Workload, Control, Reward, Community, Fairness, Values (Maslach et al. 2001).

A mismatch or imbalance between the person and the six areas of the job may intensify the likelihood of burnout. On the contrary, the higher the fit between the person and the domains, the higher the possibility of engagement. While the mismatch between the person and the job factors may lead to a higher risk of experiencing burnout, some personal traits of individuals may also contribute to the possibility of burnout (Maslach and Leiter 2008 & 2016, Maslach et al. 2001; Maslach and Leiter, 2016b.

Table 2: Theory/models

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Model/Theory	Author/Developer
Transactional model of stress and coping	Lazarus's (1999)
Scissor model of the interrelation between stress states	Kellmann (2002)
and recovery demands	
Self-determination theory	Ryan and Deci (2000)
JD-R Model	Arnold Bakker and Evangelia Demerouti (2006)

Table 3. Individual burnout modulators

Protectors of Burnout	Enhancers of Burnout					
Agreeableness	Neuroticism					
Conscientiousness	External locus of control					
Extraversion	Type A Personality					
Openness to experience	Alexithymia					
Positive psychological capital	Emotion-focused coping					
Problem-focused coping						

7. Hypotheses: To address the gap the under mentioned hypotheses formulated.

- H_{1a} : At work, I feel mentally exhausted is not correlated with After a day at work I find it hard to recover my energy.
- H_{1a} : At work, I feel mentally exhausted is correlated with After a day at work I find it hard to recover my energy.
- H_{1b}: At work, I feel mentally exhausted is not correlated with After a day at work At work, I feel physically exhausted.
- H_{1b}: At work, I feel mentally exhausted is correlated with After a day at work At work, I feel physically exhausted.
- H_{1c} : At work, I feel mentally exhausted is not correlated with I struggle to find any enthusiasm for my work.
- H_{1c} : At work, I feel mentally exhausted is correlated with I struggle to find any enthusiasm for my work.
- H_{1d} : At work, I feel mentally exhausted is not correlated with I feel a strong aversion towards my job.
- H_{1d} : At work, I feel mentally exhausted is correlated with I feel a strong aversion towards my job.
- H_{1e}: At work, I feel mentally exhausted is not correlated with I'm cynical about what my work means to others.
- H_{1e} : At work, I feel mentally exhausted is not correlated with I'm cynical about what my work means to others.
- H_{1f} : At work, I feel mentally exhausted is not correlated with At work, I feel unable to control my emotions.
- H_{1f} : At work, I feel mentally exhausted is correlated with At work, I feel unable to control my emotions.
- H_{1g} : At work, I feel mentally exhausted is not correlated with I do not recognize myself in the way I react emotionally at work.
- H_{lg} : At work, I feel mentally exhausted is correlated with I do not recognize myself in the way I react emotionally at work.
- H_{1h} : At work, I feel mentally exhausted is not correlated with At work I may overreact unintentionally.

 H_{1h} : At work, I feel mentally exhausted is correlated with At work I may overreact unintentionally.

H_{1i}: At work, I feel mentally exhausted is not correlated with At work, I have trouble staying focused.

 H_{1i} : At work, I feel mentally exhausted is correlated with At work, I have trouble staying focused.

H_{Ij}: At work, I feel mentally exhausted is not correlated with When I'm working, I have trouble concentrating.

H_{Ij}: At work, I feel mentally exhausted is correlated with When I'm working, I have trouble concentrating.

 H_{Ik} : At work, I feel mentally exhausted is not correlated with I make mistakes in my work because I have my mind on other things.

 H_{Ik} : At work, I feel mentally exhausted is correlated with I make mistakes in my work because I have my mind on other things.

Hypotheses-2

 H_{2a} : After a day at work, I find it hard to recover my energy is not correlated with At work, I feel physically exhausted.

 H_{2a} : After a day at work, I find it hard to recover my energy is correlated with At work, I feel physically exhausted.

 H_{2b} : After a day at work, I find it hard to recover my energy is not correlated with I struggle to find any enthusiasm for my work.

 H_{2b} : After a day at work, I find it hard to recover my energy is correlated with I struggle to find any enthusiasm for my work

 H_{2c} : After a day at work, I find it hard to recover my energy is not correlated with I feel a strong aversion towards my job.

 H_{2c} : After a day at work, I find it hard to recover my energy is correlated with I feel a strong aversion towards my job.

 H_{2d} : After a day at work, I find it hard to recover my energy is not correlated with I'm cynical about what my work means to others.

 H_{2d} : After a day at work, I find it hard to recover my energy is correlated with I'm cynical about what my work means to others.

 H_{2e} : After a day at work, I find it hard to recover my energy is not correlated At work, I feel unable to control my emotions.

H_{2e}: After a day at work, I find it hard to recover my energy is correlated with At work, I feel unable to control my emotions.

H_{2f}: After a day at work, I find it hard to recover my energy is not correlated I do not recognize myself in the way I react emotionally at work.

 H_{2f} : After a day at work, I find it hard to recover my energy is correlated with I do not recognize myself in the way I react emotionally at work.

 H_{2g} : After a day at work, I find it hard to recover my energy is not correlated At work I may overreact unintentionally.

 H_{2g} : After a day at work, I find it hard to recover my energy is correlated with At work I may overreact unintentionally.

 H_{2h} : After a day at work, I find it hard to recover my energy is not correlated At work, I have trouble staying focused.

 H_{2h} : After a day at work, I find it hard to recover my energy is correlated with At work, I have trouble staying focused.

H_{2i}: After a day at work, I find it hard to recover my energy is not correlated When I'm working, I have trouble concentrating.

 H_{2i} : After a day at work, I find it hard to recover my energy is correlated with When I'm working, I have trouble concentrating.

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 H_{2j} : After a day at work, I find it hard to recover my energy is not correlated I make mistakes in my work because I have my mind on other things.

 H_{2j} : After a day at work, I find it hard to recover my energy is correlated with I make mistakes in my work because I have my mind on other things.

Hypotheses-3

 H_{3a} : At work, I feel physically exhausted is not correlated with I struggle to find any enthusiasm for my work.

H_{3a}: At work, I feel physically exhausted is correlated with I struggle to find any enthusiasm for my work.

H_{3b}: At work, I feel physically exhausted is correlated is not with correlated with I feel a strong aversion towards my job.

 H_{3b} : At work, I feel physically exhausted is correlated with I feel a strong aversion towards my job.

H_{3c}: At work, I feel physically exhausted is not correlated with I'm cynical about what my work means to others.

 H_{3c} : At work, I feel physically exhausted is correlated with I'm cynical about what my work means to others.

H_{3d}: At work, I feel physically exhausted is not correlated with At work, I feel unable to control my emotions.

 H_{3d} : At work, I feel physically exhausted is correlated with At work, I feel unable to control my emotions.

H_{3e}: At work, I feel physically exhausted is not correlated with I do not recognize myself in the way I react emotionally at work.

 H_{3e} : At work, I feel physically exhausted is correlated with I do not recognize myself in the way I react emotionally at work

H_{3f}: At work, I feel physically exhausted is not correlated with At work I may overreact unintentionally.

H_{3f}: At work, I feel physically exhausted is correlated with At work I may overreact unintentionally.

H_{3g}: At work, I feel physically exhausted is not correlated with At work, I have trouble staying focused.

H_{3h}: At work, I feel physically exhausted is not correlated with When I'm working, I have trouble concentrating.

H_{3h}: At work, I feel physically exhausted is correlated with When I'm working, I have trouble concentrating.

H_{3i}: At work, I feel physically exhausted is not correlated with I make mistakes in my work because I have my mind on other things.

 H_{3i} : At work, I feel physically exhausted is correlated with I make mistakes in my work because I have my mind on other things.

Hypotheses-4

H_{4a}: I struggle to find any enthusiasm for my work is correlated is not with correlated with I feel a strong aversion towards my job.

H_{4a}: I struggle to find any enthusiasm for my work is correlated with I feel a strong aversion towards my job.

H_{4b}: I struggle to find any enthusiasm for my work is not correlated with I'm cynical about what my work means to others.

H_{4b}: I struggle to find any enthusiasm for my work is correlated with I'm cynical about what my work means to others.

H_{4c}: I struggle to find any enthusiasm for my work is not correlated with At work, I feel unable to control my emotions.

H_{4c}: I struggle to find any enthusiasm for my work is correlated with At work, I feel unable to control my emotions.

 H_{4d} : I struggle to find any enthusiasm for my work is not correlated with I do not recognize myself in the way I react emotionally at work.

- H_{4d} : I struggle to find any enthusiasm for my work is correlated with I do not recognize myself in the way I react emotionally at work.
- H_{4e} : I struggle to find any enthusiasm for my work is not correlated with At work I may overreact unintentionally.
- H_{4e}: I struggle to find any enthusiasm for my work is correlated with At work I may overreact unintentionally.
- H_{4f}: I struggle to find any enthusiasm for my work is not correlated with At work, I have trouble staying focused.
- $H_{4\mathrm{f}}$: I struggle to find any enthusiasm for my work is correlated with At work, I have trouble staying focused.
- H_{4g_o}: I struggle to find any enthusiasm for my work is not correlated with When I'm working, I have trouble concentrating.
- H_{4g}: I struggle to find any enthusiasm for my work is correlated with When I'm working, I have trouble concentrating.
- H_{4h} : I struggle to find any enthusiasm for my work is not correlated with I make mistakes in my work because I have my mind on other things.
- H_{4h} : I struggle to find any enthusiasm for my work is correlated with I make mistakes in my work because I have my mind on other things.

Hypotheses-5

- H_{5a}: I feel a strong aversion towards my job is not correlated with I'm cynical about what my work means to others.
- H_{5a}: I feel a strong aversion towards my job is correlated with I'm cynical about what my work means to others.
- H_{5b}: I feel a strong aversion towards my job is not correlated with At work, I feel unable to control my emotions.
- H_{5b}: I feel a strong aversion towards my job is correlated with At work, I feel unable to control my emotions.
- H_{5c} : I feel a strong aversion towards my job is not correlated with I do not recognize myself in the way I react emotionally at work.
- H_{5c} : I feel a strong aversion towards my job is correlated with I do not recognize myself in the way I react emotionally at
- H_{5d} : I feel a strong aversion towards my job is not correlated with At work I may overreact unintentionally.
- H_{5d} : I feel a strong aversion towards my job is correlated with At work I may overreact unintentionally.
- H_{5e}: I feel a strong aversion towards my job is not correlated with At work, I have trouble staying focused.
- H_{5e} : I feel a strong aversion towards my job is correlated with At work, I have trouble staying focused.
- H_{5f} : I feel a strong aversion towards my job is not correlated with When I'm working, I have trouble concentrating.
- H_{5f.}: I feel a strong aversion towards my job is correlated with When I'm working, I have trouble concentrating.
- H_{5g} : I feel a strong aversion towards my job is not correlated with I make mistakes in my work because I have my mind on other things.
- H_{5g} : I feel a strong aversion towards my job is correlated with I make mistakes in my work because I have my mind on other things.

- H_{6a} : I'm cynical about what my work means to others is not correlated with At work, I feel unable to control my emotions.
- H_{6a}: I'm cynical about what my work means to others is correlated with At work, I feel unable to control my emotions.
- H_{6b}_{0} : I'm cynical about what my work means to others is not correlated with I do not recognize myself in the way I react emotionally at work.

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- H_{6b} : I'm cynical about what my work means to others is correlated with I do not recognize myself in the way I react emotionally at work.
- H_{6c} : I'm cynical about what my work means to others is not correlated with At work I may overreact unintentionally.
- H_{6c} : I'm cynical about what my work means to others is correlated with At work I may overreact unintentionally.
- H_{6d} : I'm cynical about what my work means to others is not correlated with At work, I have trouble staying focused.
- H_{6d}: I'm cynical about what my work means to others is correlated with At work, I have trouble staying focused.
- H_{6e} : I'm cynical about what my work means to others is not correlated with When I'm working, I have trouble concentrating.
- H_{6e} : I'm cynical about what my work means to others is correlated with When I'm working, I have trouble concentrating.
- H_{0f} : I'm cynical about what my work means to others is not correlated with I make mistakes in my work because I have my mind on other things.
- H_{6f} : I'm cynical about what my work means to others is correlated with I make mistakes in my work because I have my mind on other things.

Hypotheses-7

- H_{7a} : At work, I feel unable to control my emotions is not correlated with I do not recognize myself in the way I react emotionally at work.
- H_{7a}^{-} : At work, I feel unable to control my emotions is correlated with I do not recognize myself in the way I react emotionally at work.
- H_{7b}: At work, I feel unable to control my emotions is not correlated with At work I may overreact unintentionally.
- H_{7b}: At work, I feel unable to control my emotions is correlated with At work I may overreact unintentionally.
- H_{7c}: At work, I feel unable to control my emotions is not correlated with At work, I have trouble staying focused.
- H_{7c} : At work, I feel unable to control my emotions is correlated with At work, I have trouble staying focused.
- H_{7d}: At work, I feel unable to control my emotions is not correlated with When I'm working, I have trouble concentrating.
- H_{7d}: At work, I feel unable to control my emotions is correlated with When I'm working, I have trouble concentrating.
- H_{7e}: At work, I feel unable to control my emotions is not correlated with I make mistakes in my work because I have my mind on other things.
- H_{7e} : At work, I feel unable to control my emotions is correlated with I make mistakes in my work because I have my mind on other things.

- H_{8a} : I do not recognize myself in the way I react emotionally at work is not correlated with At work I may overreact unintentionally.
- H_{8a} : I do not recognize myself in the way I react emotionally at work is correlated with At work I may overreact unintentionally.
- H_{8b} : I do not recognize myself in the way I react emotionally at work is not correlated with At work, I have trouble staying focused.
- H_{8b}: I do not recognize myself in the way I react emotionally at work is correlated with At work, I have trouble staying focused.

 H_{8c} : I do not recognize myself in the way I react emotionally at work is not correlated with When I'm working, I have trouble concentrating.

 H_{8c} : I do not recognize myself in the way I react emotionally at work is correlated with When I'm working, I have trouble concentrating.

 H_{8d} : I do not recognize myself in the way I react emotionally at work is not correlated with I make mistakes in my work because I have my mind on other things.

 H_{8d} : I do not recognize myself in the way I react emotionally at work is correlated with I make mistakes in my work because I have my mind on other things.

Hypotheses-9

H_{9a}: At work I may overreact unintentionally at work is not correlated with At work, I have trouble staying focused.

H_{9a}: At work I may overreact unintentionally at work at work is correlated with At work, I have trouble staying focused.

H_{9b}: At work I may overreact unintentionally at work is not correlated with When I'm working, I have trouble concentrating.

H_{9b}: At work I may overreact unintentionally at work is correlated with When I'm working, I have trouble concentrating.

 H_{9c} : At work I may overreact unintentionally at work is not correlated with I make mistakes in my work because I have my mind on other things.

 H_{9c} : At work I may overreact unintentionally at work is correlated with I make mistakes in my work because I have my mind on other things.

Hypotheses-10

 H_{10a} : At work, I have trouble staying focused is not correlated with When I'm working, I have trouble concentrating.

 H_{10a} : At work, I have trouble staying focused is correlated with When I'm working, I have trouble concentrating.

 H_{10b} : At work, I have trouble staying focused is not correlated with I make mistakes in my work because I have my mind on other things.

 H_{10b} : At work, I have trouble staying focused is correlated with I make mistakes in my work because I have my mind on other things.

Hypotheses-11

 H_{11a} : When I'm working, I have trouble concentrating is not correlated with I make mistakes in my work because I have my mind on other things.

 H_{11a} : When I'm working, I have trouble concentrating is correlated with I make mistakes in my work because I have my mind on other things.

8. Burn out scale: From the secondary survey the generic instruments as well as Specific instruments compiled in table (Table 4). To carry out this study short version of the Maslach Burnout Inventory Tool (BAT) (Table 5) has been adopted.

Table 4: Instruments for assessing burnout (Source: Edú-Valsania, S.; Laguía, A.; Moriano, J.A. Burnout: A Review of Theory and Measurement. Int. J. Environ. Res. Public Health 2022)

Generic Instruments	Specific Instruments					
Questionnaire for the Evaluation of Burnout	Maslach Burnout Inventory-Human Services Survey (MBI-HSS)					
Syndrome at Work (CESQT)						
Maslach Burnout Inventory (MBI)	Brief Burnout Questionnaire Revised for nursing staff					

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Copenhagen Burnout Inventory (CBI)	Brief Burnout Questionnaire Revised for nursing staff					
Burnout Clinical Subtypes Questionnaire	Physician Burnout Questionnaire					
(BCSQ-36/12)	Teacher Burnout Questionnaire					
Oldenburg Burnout Inventory	Psychologist's Burnout Inventory					
Burnout Assessment Tool (BAT)	Burnout Questionnaire for Athletes					
Shirom-Melamed Burnout Questionnaire	School Burnout Inventory					
(SMBQ)	Parental Burnout Inventory					

8.1. The Maslach Burnout Inventory MBI

The most frequently employed tool for job burnout assessment is the Maslach burnout inventory (MBI; Maslach and Jackson, 1981) which first developed in the early 1980s, as an attempt to measure the three dimensions: Emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA) (Maslach and Jackson, 1981).

The MBI considered as one of the first scientifically validated burnout measurement and the most extensively utilized tool to evaluate burnout (Bria et al., 2014; Halbesleben and Buckley, 2004; Maslach et al., 2001; Schaufeli et al., 2016; Shirom et al., 2005; Shirom and Melamed, 2005).

There are currently three versions of Maslach burnout inventory; The MBI-human services survey (MBI-HSS), the MBI-educators survey, or MBI-ES and the MBI-general survey, or MBI-GS(Table 5) (Bria et al., 2014; Maslach et al., 2001).

Table 5: The short version of the Burnout Assessment Tool (BAT)

Exhaustion

- 1. At work, I feel mentally exhausted
- 2. After a day at work, I find it hard to recover my energy
- 3. At work, I feel physically exhausted

Mental distance

- 4. I struggle to find any enthusiasm for my work
- 5. I feel a strong aversion towards my job
- 6. I'm cynical about what my work means to others

Emotional impairment

- 7. At work, I feel unable to control my emotions
- 8. I do not recognize myself in the way I react emotionally at work
- 9. At work I may overreact unintentionally

Cognitive impairment

- 10. At work, I have trouble staying focused
- 11. When I'm working, I have trouble concentrating
- 12. I make mistakes in my work because I have my mind on other things

(Source: Citation: Schaufeli, W.B., De Witte, H. & Desart, S. (2020). Manual Burnout Assessment Tool (BAT) – Version 2.0. KU Leuven, Belgium: Unpublished internal report.)

9. Data Collection: The data required for this study has been obtained through secondary data as

well as primary data. The secondary data has been collected from the published papers as well as online e-resources. The primary data has been collected by administering the questionnaire, in the civil engineering community and this community works for real estate developers.

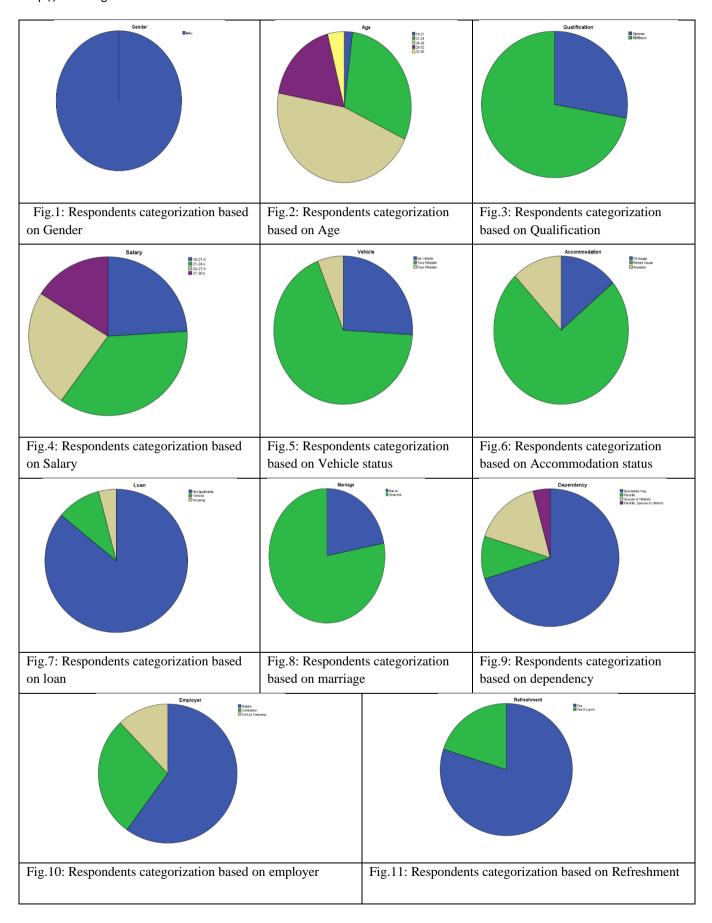
- **10. Sample Collection:** The sample is collected from a civil engineer's universe. The sample is selected based snow ball sampling technique under non-probability sampling.
- 11. Data Analysis: The data analyzed in a scientific way through SPSS package. Demographics analysis, test for data reliability as well as correlation variable shall be carried out.
- **12. Findings**: The analysis of demographics is as follows:
- **12.1 Gender:** From the data analysis it is observed that the respondents are of male engineers only and no female engineer found responded (Fig.1).

- **12.2 Age**: From the data of age analysis, it is observed that 2% of respondents are in the age group of 18 yrs. to 21 yrs., 30% of respondents are in the age group of 21 yrs. to 24 yrs., 46% of respondents are in the age group of 24 yrs. to 28 yrs., 18% of respondents are in the age group of 28 yrs. to 32 yrs., 4% of respondents are in the age group of 32 yrs. to 36 yrs. (Fig.2).
- **12.3 Qualification**: From the data of qualification analysis, it is observed that 28% of respondents are holding diploma degree where as 72% of respondents are holding bachelor degree (Fig.3).
- **12.4 Salary**: From the data of salary analysis, it is observed that 24% of respondents are paid salary in the range of Rs. 18,000/- to Rs. 21,000/-, 36% of respondents are paid salary in the range of Rs. 21,000/- to Rs. 24,000/-, 24% of respondents are paid salary in the range of Rs. 24,000/- to Rs. 27,000/- and 16% of respondents are paid salary in the range of Rs. 27,000/- to Rs. 30,000/- (Fig.4).
- **12.5 Vehicle**: From the data of vehicle analysis, it is observed that 26% of the respondents have no vehicle with them, 68% of the respondents are owning two-wheeler vehicle where as 6% of the respondents are owning four-wheeler (Fig. 5).
- **12.6** Accommodation: From the data of accommodation analysis, it is observed that 14% of respondents residing in PG house, 37% of respondents residing in a rented house where as 13% of respondents are residing in ancestor's property (Fig.6).
- **12.7 Loan**: From the data of loan analysis, it is observed that 10% of respondents have a liability of loan towards the vehicle, 4% of respondents have a liability of loan towards the house, 86% or respondents does not have loan liability (Fig.7).
- **12.8 Marriage**: From the data of marriage analysis, it is observed that 22% of respondents are married, whereas remaining 78% of respondents are unmarried (Fig.8).
- **12.9 Dependency**: From the data of dependents/dependency analysis, it is observed that 70% of respondents have to serve none, 10% of the respondents have to serve their parents, 16% of the respondents have to serve spouse and children where as 4% of the respondents have to serve parents, spouse and children (Fig.9).
- **12.10 Employer**: From the data of employer analysis, it is observed that 60% of respondents are employed with builders, 14% of the respondents employed with contractor/s, 6% of the respondents are employed with Pvt.Ltd., companies (Fig. 10).
- **12.11 Refreshment**: From the data of refreshment facility analysis, it is observed that 80% of the respondents are facilitated with a cup of tea, where as 20% of the respondents are facilitated with tea & lunch (Fig.11).
- **13 Reliability:** The reliability test has been carried by administering the data over the SPSS package. The number of respondents is 50 and the Cronbach alpha is 0.714. The Cronbach alpha value is being more than 0.7(Dr AB Saraswathi, and Bonniga, Ravinder.) the data is reliable.
- **14** Correlation: The correlation test has been carried by administering the data over the SPSS package. The analysis output has been tabulated (Table 6).

Hypotheses-1

The p value is more than 0.05, hence the null hypotheses (H_{1a} H_{1b} O₀, H_{1c} H_{1d} H_{1e} H_{1f} H_{1g} H_{1g} H_{1h} H_{1g} H_{1h} H_{1g} H_{1k} O₀, H_{1d} H_{1h} H_{1g} H_{1h} H_{1h} H_{1g} H_{1h} H_{1h} H_{1g} H_{1h} H

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{1i}) hence, the alternate hypotheses (H_{1i}) is accepted. It means there is a correlation between mentally exhausting and trouble in staying focused.



Hypotheses-2

The p value is more than 0.05, hence the null hypotheses (H_{2a} H_{2b} O, H_{2c} H_{2d} H_{2d} H_{2b} H_{2b} H_{2i} H_{1j}) has been accepted. It means After a day at work, I find it hard to recover my energy does not correlated with After a day At work, I feel physically exhausted, I struggle to find any enthusiasm for my work, I feel a strong aversion towards my job, I'm cynical about what my work means to others, At work I may overreact unintentionally, At work, I have trouble staying focused, When I'm working, I have trouble concentrating and I make mistakes in my work because I have my mind on other things.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{2e}) hence, the alternate hypotheses (H_{2e}) is accepted. It means there is a correlation between After a day at work, I find it hard to recover my energy and with At work, I feel unable to control my emotions.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{2f}) hence, the alternate hypotheses (H_{2f}) is accepted. It means there is a correlation between After a day at work, I find it hard to recover my energy and I do not recognize myself in the way I react emotionally at work.

Hypotheses-3

The p value is more than 0.05, hence the null hypotheses $(H_{3a}, H_{3b}, H_{3d}, H_{3e}, H_{3e}, H_{3g}, H_{3g}, H_{3g})$ has been accepted. It means At work, I feel physically exhausted does not correlated with I struggle to find any enthusiasm for my work, I feel a strong aversion towards my job, At work, I feel unable to control my emotions, I do not recognize myself in the way I react emotionally at work, At work I may over react unintentionally and At work, I have trouble staying focused.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{3c}) hence, the alternate hypotheses (H_{3c}) is accepted. It means there is a correlation between At work, I feel physically exhausted and I'm cynical about what my work means to others.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{3h}) hence, the alternate hypotheses (H_{3h}) is accepted. It means there is a correlation between At work, I feel physically exhausted and When I'm working, I have trouble concentrating.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{3i}) hence, the alternate hypotheses (H_{3i}) is accepted. It means there is a correlation between At work, I feel physically exhausted and I make mistakes in my work because I have my mind on other things.

Hypotheses-4

The p value is more than 0.05, hence the null hypotheses $(H_{4a}, H_{4b}, H_{4d}, H_{4d}, H_{4f})$ has been accepted. It means I struggle to find any enthusiasm for my work does not correlated I feel a strong aversion towards my job, I'm cynical about what my work means to others. I do not recognize myself in the way I react emotionally at work, At work, I have trouble staying focused.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{4c}) hence, the alternate hypotheses (H_{4c}) is accepted. It means there is a correlation between I struggle to find any enthusiasm for my work and At work, I feel unable to control my emotions.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{4e}) hence, the alternate hypotheses (H_{4e}) is accepted. It means there is a correlation between: I struggle to find any enthusiasm for my work and At work I may overreact unintentionally.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{4g_0}) hence, the alternate hypotheses (H_{4g_1}) is accepted. It means there is a correlation between I struggle to find any enthusiasm for my work and When I'm working, I have trouble concentrating.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{4h}) hence, the alternate hypotheses (H_{4h}) is accepted. It means there is a correlation between I struggle to find any enthusiasm for my work and I make mistakes in my work because I have my mind on other things.

Hypotheses-5

The p value is more than 0.05, hence the null hypotheses (H_{5a} ₀, H_{5b} ₀, H_{5c} ₀, H_{5d} ₀, H_{5e} ₀, H_{5f} ₀, H_{5g} ₀) has been accepted. It means I'm cynical about what my work means to others; At work, I feel unable to control my emotions; I do not recognize myself in the way I react emotionally at work; I may overreact unintentionally; At work, I have trouble staying focused; When I'm working, I have trouble concentrating; with I make mistakes in my work because I have my mind on other things are not related with I feel a strong aversion towards my job.

Hypotheses-6

The p value is more than 0.05, hence the null hypotheses (H_{6d}, H_{6e}, H_{6f}) has been accepted. It means I'm cynical about what my work means to others does not correlated with At work, I have trouble staying focused, When I'm working, I have trouble concentrating, I make mistakes in my work because I have my mind on other things.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{6a}) hence, the alternate hypotheses (H_{6a}) is accepted. It means there is a correlation between I'm cynical about what my work means to others and At work, I feel unable to control my emotions.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{6b}) hence, the alternate hypotheses (H_{6b}) is accepted. It means there is a correlation between I'm cynical about what my work means to others and I do not recognize myself in the way I react emotionally at work.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{6c}) hence, the alternate hypotheses (H_{6c}) is accepted. It means there is a correlation between I'm cynical about what my work means to others and At work I may overreact unintentionally.

Hypotheses-7

The p value is more than 0.05, hence the null hypotheses (H_{7c}, H_{7d}, H_{7d}) has been accepted. It means At work, I feel unable to control my emotions does not correlated with At work, I have trouble staying focused, When I'm working, I have trouble concentrating.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{7a}) hence, the alternate hypotheses (H_{7a}) is accepted. It means there is a correlation between At work, I feel unable to control my emotions and I do not recognize myself in the way I react emotionally at work.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{7b}) hence, the alternate hypotheses (H_{7b}) is accepted. It means there is a correlation between At work, I feel unable to control my emotions and At work I may overreact unintentionally.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{7e}) hence, the alternate hypotheses (H_{7e}) is accepted. It means there is a correlation between At work, I feel unable to control my emotions and I make mistakes in my work because I have my mind on other things.

Table 6: Correlation among the statement/s

	Correlations												
		At work, I feel mentally exhausted	After a day at work, I find it hard to recover my energy	At work, I feel physically exhausted	I struggle to find any enthusias m for my work	I feel a strong aversion towards my job	I'm cynical about what my work means to others	At work, I feel unable to control my emotions	I do not recognize myself in the way I react emotionally at work	At work I may overreact unintention ally	At work, I have trouble staying focused	When I'm working, I have trouble concentrati	I make mistakes in my work because I have my mind on other things
At work, I feel mentally exhausted	Pearson Correlation	1	.131	.234	.090	.202	092	229	.069	151	.331	.271	.049
	Sig. (2-tailed)		.363	.102	.536	.159	.527	.110	.633	.295	.019	.056	.736
	N	50	50	50	50	50	50	50	50	50	50	50	50
After a day at work, I find it hard	Pearson Correlation		1	018	.069	276	046	.312 [*]	.308	.264	.005	009	.202
to recover my	Sig. (2-tailed)			.904	.634	.052	.753	.027	.030	.064	.971	.950	.159
energy	N		50	50	50	50	50	50	50	50	50	50	50
At work, I feel	Pearson Correlation		- 00	1	.055	.117	.524**	.021	.156	.028	.192	.322	.297
physically exhausted	Sig. (2-tailed)			'									
ox iduotod					.706	.420	.000	.882	.278	.846	.182	.023	.036
I struggle to find	N Pearson Correlation			50	50	50	50	50	50	50	50		50
any enthusiasm					1	.251	.100	.335°	135	.461**	.245	.416**	.483**
for my work	Sig. (2-tailed)					.078	.490	.017	.349	.001	.086	.003	.000
	N				50	50	50	50	50	50	50	50	50
I feel a strong aversion towards	Pearson Correlation					1	.063	.111	.259	.134	.089	.227	.267
my job	Sig. (2-tailed)						.666	.443	.069	.354	.541	.113	.061
	N					50	50	50	50	50	50	50	50
I'm cynical about what my work	Pearson Correlation						1	.399**	.438**	.287	.044	036	.250
means to others	Sig. (2-tailed)							.004	.001	.043	.764	.806	.080
	N						50	50	50	50	50	50	50
At work, I feel unable to control	Pearson Correlation							1	.507**	.456**	.117	082	.341
my emotions	Sig. (2-tailed)								.000	.001	.420	.571	.015
	N							50	50	50	50	50	50
I do not recognize myself in the way I	Pearson Correlation								1	.268	.193	192	.110
react emotionally at work	Sig. (2-tailed)									.060	.180	.181	.446
	N								50	50	50	50	50
At work I may overreact	Pearson Correlation									1	069	.256	.469**
unintentionally	Sig. (2-tailed)										.634	.072	.001
	N									50	50	50	50
At work, I have trouble staying	Pearson Correlation										1	.119	.127
focused	Sig. (2-tailed)											.410	.381
	N										50	50	50
When I'm working, I have trouble	Pearson Correlation											1	.692**
concentrating	Sig. (2-tailed)												.000
	N											50	50
I make mistakes in my work because I	Pearson Correlation												1
have my mind on other things	Sig. (2-tailed)												
	N												50
	nificant at the 0.05 leve	. ,											
**. Correlation is significant at the 0.01 level (2-tailed).													

Hypotheses-8

The p value is more than 0.05, hence the null hypotheses ($H_{8a}_{0}, H_{8b}_{0}, H_{8c}_{0}, H_{8d}_{0}$) has been accepted. It means I do not recognize myself in the way I react emotionally at work does not correlate At work I may overreact unintentionally, At work, I have trouble staying focused, When I'm working, I have trouble concentrating and I make mistakes in my work because I have my mind on other things.

Hypotheses-9

The p value is more than 0.05, hence the null hypotheses (H_{9a}, H_{9b}) has been accepted. It means At work I may overreact unintentionally at work does not correlate At work, I have trouble staying focused and When I'm working, I have trouble concentrating.

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{9c}) hence, the alternate hypotheses (H_{9c}) is accepted. It means there is a correlation between At work I may overreact unintentionally at work and I make mistakes in my work because I have my mind on other things.

The p value is more than 0.05, hence the null hypotheses $(H_{10a}_{0}, H_{10b}_{0})$ has been accepted. It means At work, I have trouble staying focused does not correlate When I'm working, I have trouble concentrating and I make mistakes in my work because I have my mind on other things.

Hypotheses-11

The p value is less than 0.05. We are failed to accept the null hypotheses (H_{11a}) hence, the alternate hypotheses (H_{11a}) is accepted. It means there is a correlation between When I'm working, I have trouble concentrating and I make mistakes in my work because I have my mind on other things.

- **15 Conclusion**: The summary of analysis is as follows:
- **15.1 Gender**: All respondents are of male category, the female gender have a opportunity to take up site work supervision.
- **15.2** Age: From the data of age analysis, it is observed that 2% of respondents are in the age group of 18 yrs. to 21 yrs., 30% of respondents are in the age group of 21 yrs. to 24 yrs., 46% of respondents are in the age group of 24 yrs. to 28 yrs., 18% of respondents are in the age group of 28 yrs. to 32 yrs., 4% of respondents are in the age group of 32 yrs. to 36 yrs.
- **15.3 Qualification**: From the data of qualification analysis, it is observed that 28% of respondents are holding diploma degree where as 72% of respondents are holding bachelor degree.
- **15.4 Salary**: From the data of salary analysis, it is observed that 24% of respondents are paid salary in the range of Rs. 18,000/- to Rs. 21,000/-, 36% of respondents are paid salary in the range of Rs. 21,000/- to Rs. 24,000/-, 24% of respondents are paid salary in the range of Rs. 24,000/- to Rs. 27,000/- and 16% of respondents are paid salary in the range of Rs. 27,000/- to Rs. 30,000/-.
- **15.5 Vehicle**: 74% percentage of respondents are having their own transport, remained percentage respondents are dependents over public transport.
- **15.6 Accommodation**: From the data of accommodation analysis, it is observed that 14% of respondents residing in PG house, 37% of respondents residing in a rented house where as 13% of respondents are residing in ancestor's property.
- 15.7 Loan: Maximum respondents are being at young age they might be not required any financial assistance.
- **15.8 Marriage**: Maximum percentage of respondents are being comparatively at young age, they have not entered in to the married life.
- **15.9 Dependency**: High percentage of respondents have no dependents, it means the engineers at early age taken up the job and also family members are self-dependents/ no assistance required.
- **15.10 Employer**: Maximum number respondents are working with builders and few are working with contractor/s and very respondents are working with Pvt.Ltd., companies. It means opportunities are available with builders than that of contractor or Pvt.Ltd companies
- **15.11 Refreshment**: 20% respondents have a facility of tea and lunch, where as 80% have a facility of tea only.
- **15.12 Reliability:** The Cronbach alpha value is being more than 0.7, the data is reliable.
- 15.13 Hypotheses: This study has discovered that exhausted mind may not stay focused; drained out energy leads to uncontrollable emotions; physically exhausted employee may not stay concentrated/mind being working on other things it leads to mistakes at work/reluctant to others opinion about my work; low enthusiasm at work leads to uncontrollable emotions/unintentional overreaction/ trouble in concentration/ mind being working on other things it leads to mistakes at work; Unable to control emotions/ my emotions is not reflect the way I do/unintentional over reaction due to lack of clarity regarding the significance of my work to others; my emotions is not reflect the way I do/ mind being working on other things it leads to mistakes at work/ unintentional over reaction due to lack of emotion controlling; mind being working on other things it leads to mistakes at work due to unintentional over reaction at work; mind being working on other things it leads to mistakes at work due to concentration difficulty at work. The employee, if provide a clarity at work/ enthusiasm/ motivation, may not consider himself for job burnout.

15.14 Benefits of this study to the construction industry:

This study aims to enhance understanding of burnout among construction professionals and their organizations, providing a foundation for designing effective interventions like job redesign to manage, control, or curb burnout.

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