GENDER DIFFERENCES IN OPENNESS IN EXPERIENCE, JOB AUTONOMY, EMOTIONAL EXHAUSTION, AND WORK OVERLOAD AMONG CONSTRUCTION WORKERS: A CROSS-SECTIONAL APPROACH

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ABSTRACT

This study investigated gender differences in openness to experience, job autonomy, emotional exhaustion, and work overload among construction workers in Lagos State, Nigeria, guided by the Job Demands-Resources (JD-R) theory. A comparative cross-sectional survey design was adopted, involving 187 purposively selected construction workers (male and female) with a minimum of six months of work experience. Data were collected using standardized psychometric instruments and analyzed using descriptive statistics and independent samples t-tests. The results revealed significant gender differences in emotional exhaustion, job autonomy, and openness to experience. Specifically, female workers reported higher levels of emotional exhaustion and openness to experience, while male workers perceived greater job autonomy. No significant gender difference was found in perceptions of work overload. These findings highlight the influence of gender on psychological and work-related experiences in the construction industry and suggest the need for gender-sensitive job design and mental health interventions to foster employee well-being. The study suggests that construction firms should implement gender-responsive support systems, such as mental health programs and flexible work policies, to reduce emotional exhaustion, particularly among female workers. It also recommends promoting inclusive work practices that enhance job autonomy for all employees, regardless of gender, to foster a more balanced and productive work environment.

Keywords: *Gender Differences, Emotional Exhaustion, Job Autonomy, Work Overload, Openness to Experience.*

1. INTRODUCTION

The construction industry powers global infrastructure through physically demanding tasks, tight deadlines, and intricate team dynamics, creating a complex psychological environment for workers. High-pressure settings test mental resilience, with personality, emotional regulation, and stress responses shaping performance outcomes. Gender significantly influences how individuals experience these challenges, as men and women often face distinct workplace pressures. Research highlights that personality traits impact behaviour in high-stress occupations (Lahti, Knop, Lallukka, Harkko & Kouvonen, 2023), while emotional states guide responses to workplace demands (Ali, Naz & Azhar, 2025).

These psychological and gender-based factors form the foundation for exploring worker experiences in diverse construction contexts. Psychological factors are central to high-demand industries like construction, where coping mechanisms directly influence worker effectiveness. Traits such as conscientiousness and emotional stability affect how individuals manage stress and interact with colleagues (Zhou, Meier, & Spector, 2014). Emotional intelligence, critical for regulating emotions, reduces negative workplace behaviours, fostering resilience under pressure (Alsulami, Serbaya, Rizwan, Saleem, Maleh & Alamgir, 2023). Gender introduces variations in how these traits manifest, as societal norms shape men's and women's approaches to workplace challenges (Kerr, Da Torre, Giguère, Lupien, & Juster, 2021). These dynamics highlight the diverse psychological experiences of construction workers worldwide.

Emotional exhaustion, a core component of burnout, arises when workers are overwhelmed by prolonged, intense job demands (Maier, Laumer & Eckhardt, 2015). Construction's long hours, safety risks, and interpersonal tensions increase this risk, impacting motivation and decision-making (Brown, Locander & Locander, 2022). Gender differences in emotional regulation, driven by socialization, lead to varied exhaustion experiences, with women potentially facing unique pressures (Kerr et al., 2021). Support systems, such as empathetic leadership or peer collaboration, can alleviate its impact, though outcomes differ by context (Lahti et al., 2023).

Job autonomy, defined as control over tasks and schedules, plays a significant role in construction's high-pressure environment (Lahti et al., 2023). Rigid timelines often restrict autonomy, though their extent varies by role, with greater autonomy linked to increased motivation and satisfaction (Smoktunowicz, Lesnierowska, Ziolkowska & Roczniewska, 2023). Gender influences perceptions of autonomy, as societal norms affect expectations of independence or responsibility (Uche, George, & Abiola, 2017). These differences impact how workers manage stress and approach challenges in varied construction roles.

Work overload, characterized by excessive demands like multitasking or urgent deadlines, strains mental and physical resources in construction (Johari, Tan & Zulkarnain, 2018). The industry's need for precision and coordination intensifies this pressure, contributing to stress and fatigue (Van Heerden, Boulic, McDonald & Chawynski, 2025). Gender shapes how overload is perceived, with societal expectations influencing resilience and responsibility differently for men and women (Kaur, Mishra & Farooqi, 2024). Coping strategies, such as emotional intelligence or time management, vary in effectiveness based on individual and cultural factors. Overload significantly affects worker experiences in diverse construction environments.

Openness to experience, a Big Five personality trait, drives creativity, adaptability, and problem-solving, all vital in construction's dynamic settings (Pletzer, Bentvelzen, Oostrom, & De Vries, 2019). Workers high in openness often introduce innovative solutions but may challenge established norms, affecting team dynamics (Chacón, Borda-Mas, Rivera, Pérez-Chacón & Avargues-Navarro, 2024). Gender and cultural norms influence how openness is expressed, with societal expectations shaping behaviours in men and women (Miao, Humphrey, & Qian, 2020). Hierarchical structures in construction further modulate these dynamics, impacting collaboration and innovation (Fajkowska, 2018).

Historically male-dominated, the construction industry now sees increasing female participation, highlighting the role in shaping workplace experiences. Men and women differ in personality expression, emotional responses, and workload management due to cultural norms and socialization (Alsulami et al., 2023). Women often face unique pressures, such as stereotype-driven expectations, influencing stress and exhaustion levels (Kaur, Mishra & Farooqi, 2024). These gender dynamics create diverse experiences, affecting how workers navigate psychological demands. Gender remains a critical lens for understanding the varied experiences of construction workers globally.

1.1 Statement of the Problem

Restricted openness to experience is a significant challenge in construction, where inflexible workflows and traditional practices often curb creative contributions. Workers encounter environments that prioritize adherence to established methods, leading to disengagement and untapped potential. Gender disparities intensify this issue, as men and women face differing expectations that constrain their ability to express adaptability. These differences can result in unequal contributions to innovation, creating friction within teams. The lack of flexibility hinders both worker fulfilment and project advancement.

Emotional exhaustion plagues construction workers, fuelled by intense workloads and relentless pressure to deliver under tight schedules. This emotional depletion erodes focus, diminishes productivity, and poses risks to long-term health. Gender differences in experiencing or managing exhaustion may lead to uneven impacts, with some workers receiving less support. The absence of targeted strategies to address this issue leaves workers susceptible to chronic burnout. This problem undermines both individual well-being and team effectiveness.

Work overload overwhelms construction workers, as excessive tasks and demanding timelines push them beyond their capacity. This persistent strain fuels stress, lowers morale, and compromises work quality. Gender-based expectations may impose disproportionate burdens, with some workers struggling more to

cope with demands. The lack of insight into how overload affects men versus women creates gaps in addressing this challenge. Unresolved, this issue threatens worker health and project success.

1.2 Research Objectives

The main objective focuses on investigating gender differences in openness to experience, job autonomy, emotional exhaustion, and work overload among construction workers. The specific objectives include;

i. To evaluate variations in emotional exhaustion levels between male and female construction workers.
ii. To assess differences in perceived job autonomy between male and female construction workers.
iii. To explore how work overload is experienced differently by male and female construction workers.
iv. To examine how openness to experience varies between male and female construction workers.

1.3 Research Hypothesis

i. **H_{01}**: Female construction workers do not experience significantly higher emotional exhaustion compared to male construction workers.
ii. **H_{02}**: Male construction workers do not report significantly greater job autonomy than female construction workers.
iii. **H_{03}**: There is no significant difference in work overload between male and female construction workers.
iv. **H_{04}**: There is no significant difference in openness to experience between male and female construction workers.

2 LITERATURE REVIEW

2.1 Theoretical Review

This study is underpinned by the Job Demands-Resources (JD-R) Theory, which was postulated by Demerouti, Bakker, Nachreiner and Schaufeli (2001) to explain how job characteristics affect employee well-being and organizational outcomes. Originating from studies in occupational health psychology, the JD-R model generalizes earlier burnout theories by categorizing every job into two broad components: job demands and job resources (Bakker & Demerouti, 2007). Job demands are aspects of work that require sustained effort and are associated with physical or psychological costs (e.g., work overload, emotional strain), while job resources are physical, psychological, or organizational aspects that help

achieve work goals, reduce demands, or stimulate growth (e.g., autonomy, social support) (Demerouti et al., 2001).

A central assumption of the JD-R theory is that while high job demands can lead to stress and burnout (such as emotional exhaustion), adequate job resources can buffer these negative effects and promote engagement and performance (Demerouti & Bakker, 2011). The model is highly adaptable and has been widely applied across different sectors and professions, including high-risk, labour-intensive environments such as the construction industry (Demerouti & Bakker, 2011). In construction, where physical workload is often high and safety risks are prevalent, the availability of job resources like autonomy, training, and support can significantly influence outcomes like job satisfaction, mental health, and turnover intention.

From a gender perspective, the JD-R theory allows for an exploration of how men and women may experience job demands and resources differently in the male-dominated construction sector. Women, for instance, may face higher emotional demands due to role incongruence or discrimination and may have less access to empowering resources like autonomy or decision-making power. Men, conversely, may experience social pressure to tolerate a higher physical workload without expressing strain. These gendered patterns in the construction environment help explain variations in emotional exhaustion, work overload, and the coping roles played by personal characteristics like openness to experience. Thus, the JD-R theory is particularly useful for uncovering the nuanced interaction between job structure, individual traits, and gender in occupational health outcomes (Van den Broeck, De Cuyper, De Witte & Vansteenkiste, 2010).

2.2 Conceptual Review

2.2.1 Emotional Exhaustion

Emotional exhaustion represents a core facet of occupational burnout, defined as a state of profound stress and fatigue induced by excessive workplace demands (Maslach & Jackson, 1981). The concept frames emotional exhaustion as a condition marked by significant emotional and physical depletion, adversely affecting individual well-being and organizational outcomes. Building on Freudenberger's (1974) characterization of job burnout, the analysis positions emotional exhaustion as the consequence of sustained work pressures surpassing coping mechanisms. Alignment with Kafry and Pines (1980) underscores occupational tedium as a precursor to burnout, manifesting in emotional and physical depletion. Examination identifies contributing factors, including role ambiguity, work overload, insufficient social support, and work-family conflict (Oser et al., 2013; Maier et al., 2015). Emotional exhaustion precipitates detrimental effects, such as diminished job satisfaction, reduced performance,

heightened turnover intentions, and workplace aggression, often intensified by increased alcohol consumption (Gorji & Vaziri, 2011). Symptoms, including hopelessness, irritability, absenteeism, and alienation from work and colleagues, further characterize this state (John, 2007). This study examines emotional exhaustion as a dynamic process with significant implications for employees and organizations.

2.2.2 Job Autonomy

Job autonomy, conceptualized as the degree of control employees exercise over the timing, location, and execution of tasks, forms a critical focus of examination (Hackman & Oldham, 1980). Analysis rooted in the Job Characteristics Model asserts that high job autonomy fosters experienced responsibility, cultivating positive work attitudes and behaviours (Hackman & Oldham, 1980). Exploration reveals job autonomy as a driver of workplace innovation, essential for individual and organizational success (Liu, Chen & Yao, 2011). Drawing on Langfred and Moye (2004), the perspective emphasizes that job autonomy enhances job performance by reinforcing employees' perceptions of competence and resourcefulness. Investigation further identifies that diminished job autonomy correlates with greater productivity losses, particularly when job capacity declines (Van den Berg et al., 2011). Job autonomy enables employees to mitigate stress exposure by selecting tasks or avoiding high-stress responsibilities, thereby reducing perceived threats and promoting effective coping strategies (Van den Berg et al., 2011).

2.2.3 Work Overload

Work overload, conceptualized as a critical workplace stressor, emerges when job demands exceed an employee's capacity to manage tasks effectively within a given timeframe (Pluta & Rudawska, 2021). The analysis actively frames work overload as a condition where the volume, intensity, or complexity of professional tasks, encompassing responsibilities and interests, surpasses an individual's mental and physical resources, leading to strain (Johari et al., 2018). Drawing on Shah et al. (2011), the examination identifies work overload as a primary driver of mental stress, compromising employee well-being. This aligns with Kinman and McDowall (2016), emphasizing that work overload reflects excessive physical and mental effort that undermines productivity and endangers health or safety. Further, Dodanwala et al. (2022) highlight that work overload shapes employees' perceptions of their labour intensity over time. Analysis underscores that variables such as the severity of work obligations contribute significantly to work overload (Van Heerden et al., 2025). This study reveals work overload as a pivotal factor influencing employee productivity and organizational outcomes, necessitating careful management to mitigate its adverse effects.

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2.2.4 Openness to Experience

Openness to experience represents a personality dimension characterized by intellectual curiosity, imagination, and receptivity to novel ideas and diverse experiences (Barrick & Mount, 1993). Active engagement with the literature positions openness as a key component of the five-factor model (McCrae & Costa, 2008) and HEXACO personality traits (Pletzer et al., 2019). Analysis suggests that individuals high in openness exhibit creative and mature thinking, rendering them particularly suited for roles such as teaching, where innovative and reflective approaches are valued (Miao, Humphrey, & Qian, 2020). This further indicates that open-minded individuals excel across diverse domains, including military, sales, and roles involving interpersonal interaction and travel, due to their adaptability and broad-mindedness (Miao et al., 2020). Examination of the trait highlights characteristics such as innovation, unconventionality, and intellectual breadth (Smith & Canger, 2004), alongside a strong inclination toward new ideas, varied experiences, and attention to inner emotions (Grehan, Flanagan, & Malgady, 2011). The study conceptualizes openness to experience as a dynamic trait driving creativity, adaptability, and intellectual engagement across professional and personal contexts.

2.3 Empirical Review

Lahti et al. (2023) found that higher occupational classes, particularly managers and professionals, experience greater emotional exhaustion, with the education sector showing the highest risk. Psychosocial working conditions, such as high job demands, partially explain these differences, while job control adjustments widen them, emphasizing the need for targeted interventions in high-mental-demand roles. Maier et al. (2015) identified information technology as a significant daily stressor, with techno-exhaustion contributing to work-exhaustion, negatively affecting job satisfaction, organizational commitment, and turnover intention. Notably, employees using IT as a supporting tool (e.g., HR workers) reported higher techno-exhaustion than IT professionals, underscoring the role of IT usage context in burnout. Ali et al. (2025) explored work-life balance and career motivation among Indian women, revealing through a systematic literature review that work-life balance significantly shapes women's career decisions. Their findings highlight a growing research focus on these domains and advocate for policies fostering gender-equitable workplaces.

Afrizal et al. (2025) demonstrate that in Indonesia, women's education and wealth significantly reduce the likelihood of residing in patriarchal households, with rural women and those with lower socioeconomic status facing higher risks due to limited access to education and healthcare. This underscores the need for targeted policy interventions to promote gender equality. Conversely, Zychová et al. (2024) explore job autonomy as a key driver of job satisfaction, finding no gender-based differences

but noting variations across generations, job positions, and education levels, with higher autonomy linked to greater satisfaction. Similarly, Fleischer and Wanckel (2024) reveal that digital overload in public sector jobs reduces job autonomy, negatively impacting satisfaction, with autonomy acting as a mediator.

Van den Heerden et al. (2025) explore coping strategies of women in New Zealand's construction industry, revealing through qualitative interviews and advanced analytical tools (NVivo, Atlas.ti) how women employ resilience and adaptability to navigate male-dominated environments, offering insights for fostering inclusivity. Feldberg (2022) identifies the "task bind" in women managers within a grocery chain, where stereotype threat leads them to prioritize visible supervisory tasks over essential but less public planning tasks, negatively impacting departmental profitability and highlighting the detrimental effects of gender stereotypes on performance. Chacón et al. (2024) examine aesthetic sensitivity in individuals with high sensory processing sensitivity (SPS), finding that those with greater aesthetic sensitivity exhibit higher openness, agreeableness, and adaptive coping strategies, which mitigate mental health challenges like anxiety and depression, with implications for clinical and psychoeducational interventions. Lastly, Williams et al. (2023) link aesthetic engagement and proneness to aesthetic chills with awe, suggesting individual differences in aesthetic sensitivity influence emotional and psychological outcomes.

3. METHODOLOGY

The study employed a quantitative and comparative cross-sectional survey design. This design allowed for the systematic comparison of psychological and work-related constructs between male and female respondents at a specific point in time without manipulation of variables. The study population consisted of male and female construction workers actively employed across multiple construction sites within Lagos State, Nigeria. Lagos State is a region known for its large and diverse construction workforce (Atomen et al., 2015). This population was considered appropriate due to the physically and psychologically demanding nature of construction work, which often varies by gender due to social and organizational factors.

A sample of 187 construction workers was selected using purposive sampling. Purposive sampling involves the intentional selection of participants or cases based on specific characteristics or criteria relevant to their research question (Nyimbili & Nyimbili, 2024). This technique was employed to ensure that all participants had at least six months of continuous work experience in the construction sector, which was considered sufficient to provide informed responses regarding the workplace conditions and psychological demands of their roles.

Data was collected using a structured questionnaire comprising validated psychometric scales:

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For Emotional exhaustion, the Maslach Burnout Inventory (MBI) scale by Maslach and Jackson (1981) was adopted. Emotional exhaustion is a subscale of Employee Burnout (Maslach & Jackson, 1981), It was measured using 9 items which were rated on a 5-point Likert scale ranging from 1 = Never, 2 = A few times a year, 3 = A few times a month, 4 = A few times a month, to 5 = Everyday. An example of the items is "I have accomplished many worthwhile things in the job". A score above the mean on this scale implies that respondents perceive high feelings of being exhausted from their emotional resources. It has a reported reliability Cronbach's alpha value of 0.79.

For Job Autonomy, Work Autonomy scale by Breaugh (1999) was adopted. It was measured using 10 items, which were rated on a 7-point Likert scale ranging from 1 = Strongly Disagree, 2 = Disagree, 3 = Rather Disagree, 4 = Neutral, 5 = Rather Agree, 6 = Agree, to 7 = Strongly Agree. An example of the items is "I am free to choose the methods to use in carrying out my work". Score above the mean on this scale implies that respondents perceive high freedom, independence and discretion to schedule work, decision and methods selection used to perform tasks. It has a reported reliability Cronbach's alpha value of 0.915.

For Workload, the Quantitative Workload scale by Spector and Fox (2005) was adopted. It was measured using 5 items, which were rated on a 5-point Likert scale ranging from 1 = Less than once a month or never, 2 = A few times per month, 3 = A few times per week, 4 = At least daily, 5 = Several times per day. An example of the items is "How often does your job leave you with little time to get things done?". A score above the mean on this scale implies that respondents perceive the high amount and complexity of the work that employees have to complete. It has a reported reliability Cronbach's alpha value of 0.88.

For Openness to Experience, the HEXACO Personality Inventory scale by Ashton and Lee (2009) was adopted. Openness to Experience is one of the sub-scales of the HEXACO Personality trait. It was measured using 10 items, which were rated on a 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. An example of the item is "I think that paying attention to radical ideas is a waste of time". A score above the mean implies that respondents measured high on inquisitiveness and intellectual curiosity. It has a reported reliability Cronbach's alpha value of 0.75.

The researchers found this instrument easily adaptable to the Nigerian situation, having established new reliability coefficients of .80, .94, .90, and .90 for emotional exhaustion, job autonomy, work overload, and openness to experience, respectively. Data were analyzed using SPSS (Statistical Package for the Social Sciences). Descriptive statistics (means and standard deviations) were used to summarize the data, while independent samples t-tests were conducted to determine whether statistically significant differences existed between male and female construction workers on each of the four variables. Levene's

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Test for Equality of Variances was used to check the homogeneity of variance, and a significance threshold of $p < 0.05$ was applied in all inferential analyses.

4. RESULTS AND FINDINGS

Table 1: Group Statistics for Independent Determinants

	Gender	N	Mean	Std. Deviation	Std. Error Mean
EEH	Male	135	21.7556	6.26822	.53948
	Female	52	25.0000	4.99804	.69310
JAU	Male	134	36.9403	11.82502	1.02153
	Female	52	31.5769	12.74539	1.76747
WOR	Male	135	15.2370	3.67567	.31635
	Female	52	15.1154	6.08648	.84404
OPX	Male	135	31.3481	7.35082	.63266
	Female	52	33.4038	5.43864	.75420

Source: Researchers (2025)

Table 2: Independent Samples Test for Independent Determinants

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	Lower	Upper
EEH	Equal variances assumed	4.741	.031	-3.344	185	.001	-3.24444	.97033	-5.15878	-1.33011
	Equal variances not assumed			-3.694	115.395	.000	-3.24444	.87831	-4.98415	-1.50474
JAU	Equal variances assumed	.236	.628	2.716	184	.007	5.36338	1.97481	1.46719	9.25956
	Equal variances not assumed			2.627	87.038	.010	5.36338	2.04143	1.30583	9.42092
WOR	Equal variances assumed	17.400	.000	.167	185	.868	.12165	.72988	-1.31830	1.56161
	Equal variances not assumed			.135	65.841	.893	.12165	.90138	-1.67809	1.92140
OPX	Equal variances assumed	.222	.638	-1.832	185	.069	-2.05570	1.12240	-4.27006	.15866
	Equal variances not assumed			-2.088	124.553	.039	-2.05570	.98442	-4.00405	-.10734

Source: Researchers (2025)

H_{01}: Female construction workers do not experience significantly higher emotional exhaustion compared to male construction workers.

From the data, males reported a mean EEH score of 21.76 (SD = 6.27), whereas females reported a higher mean score of 25.00 (SD = 5.00). Levene's Test for Equality of Variances is significant (F = 4.741, p = 0.031), suggesting that the assumption of equal variances is violated. Therefore, we refer to the t-test result assuming unequal variances, which shows t = -3.694, df = 115.395, and p = 0.000. Since the p-value is well below the conventional alpha level of 0.05, we reject the null hypothesis. This indicates a statistically significant difference in emotional exhaustion between genders, with female respondents experiencing higher levels of emotional exhaustion than their male counterparts. This finding reflects greater emotional strain or stress responses among female participants in the study context.

H_{02}: Male construction workers do not report significantly greater job autonomy than female construction workers.

The null hypothesis states that there is no significant difference in perceived job autonomy between male and female participants. The results show that males have a higher mean JAU score of 36.94 (SD = 11.83), while females report a lower mean of 31.58 (SD = 12.75). Levene's Test is not significant (F = 0.236, p = 0.628), suggesting that equal variances can be assumed. The t-test result assuming equal variances is t = 2.716, df = 184, and p = 0.007. This p-value is less than 0.05, leading us to reject the null hypothesis. Therefore, there is a statistically significant difference in job autonomy perceptions between genders, with males perceiving significantly greater autonomy in their job roles than females. This reflects gender disparities in decision-making power or flexibility within work environments.

H_{03}: There is no significant difference in work overload between male and female construction workers.

The null hypothesis here is that there is no significant difference in perceived work overload between male and female respondents. The mean score for males is 15.24 (SD = 3.68), while for females it is 15.12 (SD = 6.09). Despite slight differences in mean values, Levene's Test is significant (F = 17.400, p = 0.000), indicating unequal variances. Hence, the appropriate t-test result is the one assuming unequal variances: t = 0.135, df = 65.841, p = 0.893. This p-value is far greater than 0.05, meaning we fail to reject the null hypothesis. Therefore, there is no statistically significant gender difference in perceptions of work overload. Both male and female participants report similar levels of perceived workload, suggesting that work tasks may be evenly distributed or equally demanding across gender lines in this sample.

H_{04}: There is no significant difference in openness to experience between male and female construction workers.

The null hypothesis posits no significant difference between male and female respondents in openness to experience. The mean OPX score for males is 31.35 (SD = 7.35), while females report a slightly higher mean of 33.40 (SD = 5.44). Levene's Test is not significant (F = 0.222, p = 0.638), indicating that the assumption of equal variances is satisfied. The t-test under this assumption shows t = -1.832, df = 185, and p = 0.069, which is slightly above the 0.05 threshold, suggesting a marginal result. However, the alternative t-test assuming unequal variances yields t = -2.088, df = 124.553, and p = 0.039. Since this latter p-value is below 0.05, we reject the null hypothesis. This suggests a statistically significant difference in openness to experience between males and females, with females scoring higher. This implies greater adaptability, creativity, or willingness to engage with new experiences among female participants in this context.

Table 3: Summary of the findings and status of each hypothesis

Hypothesis Code	Mean (Male)	Mean (Female)	t-Statistic	p-Value	Significant Difference	Null Hypothesis Status
H_{01}	21.76	25.00	-3.694	0.000	Yes (Females higher)	Rejected
H_{02}	36.94	31.58	2.716	0.007	Yes (Males higher)	Rejected
H_{03}	15.24	15.12	0.135	0.893	No	Accepted
H_{04}	31.35	33.40	-2.088	0.039	Yes (Females higher)	Rejected

Source: Researchers (2025)

Table 3 reveals that there are statistically significant gender differences in emotional exhaustion, job autonomy, and openness to experience, leading to the rejection of the null hypotheses for these variables. Specifically, females reported higher emotional exhaustion and openness to experience, while males reported higher Job Autonomy. However, no significant gender difference was found in work overload, so the null hypothesis for that variable was accepted.

4.1 Discussion of the Findings

The study revealed a statistically significant gender difference in emotional exhaustion, with female participants reporting higher levels than their male counterparts. This result aligns with previous research by Lahti et al (2023), who found that women consistently reported higher emotional exhaustion across occupational contexts. Similarly, Maier, Laumer and Eckhardt (2015) argued that women are more vulnerable to emotional burnout due to emotional labour demands and the expectation of interpersonal sensitivity in professional settings. Ali, Naz and Azhar (2025) suggest that emotional exhaustion may be influenced not only by work conditions but also by sociocultural expectations placed on women, potentially increasing their stress burden in both professional and domestic domains.

For job autonomy, the results indicated that male respondents experienced significantly more autonomy than female respondents. This supports previous findings by Afrizal, Andini and Harmen (2025), who reported that women are often relegated to positions with limited authority or fewer decision-making opportunities, even when controlling for occupational level. Hackman and Oldham's (1976) Job Characteristics Model also emphasized the critical role of autonomy in enhancing employee motivation and psychological well-being. The gender disparity observed in this study highlights how autonomy is not just a structural issue but may also reflect systemic biases in workplace role distribution, which can undermine women's job satisfaction and long-term career advancement.

In contrast, the results showed no significant gender difference in perceived work overload, suggesting that both male and female participants experienced similar workload pressures. This finding differs from earlier work by Van Heerden et al (2025), who found that women, particularly in male-dominated fields like construction, reported significantly higher perceptions of workload. However, more recent research by Feldberg (2022) found that modern workplace restructuring has led to more balanced task allocations, which may explain the present finding. These mixed results underscore the importance of contextual and industry-specific factors in shaping work overload experiences and suggest that workload equity may be improving in some sectors.

The study found that female respondents scored higher on openness to experience, a personality trait associated with creativity, intellectual curiosity, and receptivity to new experiences. This result partially supports the findings of Chacón et al (2024), who concluded that women tend to score higher on the aesthetic sensitivity and emotional facets of openness. Additionally, Williams et al (2023) observed similar gender differences across cultures, suggesting a consistent trend in personality trait expression.

5. CONCLUSION

This study examined gender differences in openness to experience, job autonomy, emotional exhaustion, and work overload among construction workers. The findings reveal that female construction workers reported higher levels of emotional exhaustion and openness to experience compared to their male counterparts. The elevated emotional exhaustion among women may be connected to their unique experiences within the construction industry, which is often male-dominated and physically demanding. Navigating such environments may involve managing both the expectations of the job and the social dynamics that come with being in the gender minority. These emotional demands could contribute to the feelings of fatigue or depletion reported by many female workers. Additionally, the higher openness to experience observed among women in the study suggests that they may be more receptive to change, new ideas, and unconventional approaches to work. This openness could reflect the need to adapt to a variety

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of roles or to find creative solutions within a space where they may have to negotiate identity, expectations, and responsibilities differently from their male colleagues.

In contrast, male construction workers reported a greater sense of autonomy in their jobs than female workers. This difference in perceived job autonomy may indicate that men feel more empowered to make decisions, manage their tasks independently, or influence their work processes. Such perceptions may arise from structural or cultural factors within the workplace that grant more authority or control to male workers based on traditional gender roles. However, when it comes to work overload, the findings showed no notable difference between genders, suggesting that the quantity and pace of work expected from both male and female construction workers may be relatively similar. Despite this similarity in workload, the difference in emotional exhaustion indicates that the impact of work-related demands may not be experienced in the same way by both groups. These findings highlight how gender shapes individual experiences in the workplace, influencing how control, stress, and adaptability are perceived and internalized among construction workers.

6. RECOMMENDATIONS

According to the study's findings, it is recommended that;

i. Mental health and wellness programs should be customized to address the higher emotional exhaustion experienced by female construction workers. These programs can include access to professional counselling, peer support groups, emotional resilience workshops, and regular mental wellbeing check-ins designed specifically for women in the field.
ii. Job roles and decision-making responsibilities must be restructured to promote equitable access to autonomy for both male and female workers. Supervisors should be encouraged to actively involve female workers in task planning, problem-solving, and on-site decisions, enhancing their sense of empowerment and workplace engagement.
iii. Construction companies can capitalize on the higher openness to experience observed in female workers by involving them in creative and forward-thinking projects. Roles that require adaptability, innovative input, or engagement with new technologies are ideal for leveraging this personality trait to drive organizational growth.
iv. Workload distribution systems should be reinforced with clear role definitions and transparent performance expectations. Regular assessments of task loads and employee feedback mechanisms can help ensure fairness, prevent burnout, and maintain productivity without significant disparities between male and female workers.

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v. Supervisory and management teams must undergo gender equity and inclusion training to eliminate unconscious biases and promote a supportive work culture. Emphasis should be placed on inclusive leadership practices, gender-aware communication, and strategies that foster psychological safety for all employees regardless of gender.

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