

GENDER, POWER AND HARASSMENT IN CONSTRUCTION ACADEMIA: A CRITICAL REVIEW OF WOMEN'S EXPERIENCES, CONSEQUENCES AND INSTITUTIONAL RESPONSES

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Abstract

Gender-based harassment remains a significant barrier to women's full participation, progression and retention within higher education, particularly in male-dominated disciplinary environments. Construction academia encompassing construction management, quantity surveying, civil engineering, architecture and related built-environment fields may reproduce the gendered hierarchies, masculine norms and unequal power relations evident in the wider construction industry. This critical narrative review examines women's experiences of gender-based harassment in construction academia, the personal and professional consequences of such experiences, and the effectiveness of institutional responses. The review draws on peer-reviewed literature concerning construction education, engineering and science, technology, engineering and mathematics academia, broader higher education, and gendered workplace cultures in construction. The evidence indicates that women may experience gender harassment, sexist stereotyping, exclusion, bullying, unwanted sexual attention, professional undermining and retaliation, often within relationships shaped by unequal authority, supervisory dependence and limited representation of women in senior roles. These experiences can affect psychological wellbeing, confidence, academic belonging, research productivity, career progression and retention in construction-related disciplines. The review further finds that policies and reporting mechanisms alone are insufficient where institutional cultures discourage disclosure, minimise allegations, fail to protect complainants from retaliation or do not hold senior personnel accountable. The paper argues that harassment should be understood as a structural and institutional issue rather than a series of isolated interpersonal incidents. It recommends transparent and survivor-centred reporting processes, protection against retaliation, leadership accountability, gender-responsive institutional data, bystander intervention, professional development and stronger collaboration between universities, construction-industry bodies and professional institutions. The review contributes to scholarship by positioning gender-based harassment as a critical concern for equity, academic quality and the sustainable development of construction education and professional practice.

Keywords: Gender-Based Harassment; Construction Academia; Power Relations; Institutional Responses; Women's Experiences.

1. INTRODUCTION

Gender equality remains a persistent concern in higher education, particularly within disciplines historically shaped by masculine professional cultures, unequal access to authority and the underrepresentation of women in senior academic roles (Rosa and Clavero, 2022).

Construction academia including construction management, quantity surveying, civil engineering, architecture, project management and other built-environment disciplines occupies a particularly important position because it prepares graduates for a construction industry that remains strongly male dominated and frequently associated with gendered exclusion, stereotyping and unequal career opportunities (Zhang et al., 2021).

The academic environment is therefore not separate from the industry it serves; rather, it can reproduce, challenge or transform the gender norms that shape women's experiences in construction education and professional practice (Powell and Sang, 2015).

Gender-based harassment in academia encompasses a continuum of conduct that includes sexist remarks, sexualised comments, unwanted attention, professional undermining, gendered bullying, exclusion from networks and retaliation against individuals who raise concerns (National Academies of Sciences, Engineering, and Medicine, 2018).

Gender harassment, which includes verbal and non-verbal behaviours that convey hostility, degrading attitudes or second-class status on the basis of gender, is often more pervasive than overt sexual coercion, particularly in science, engineering and academic settings (Thiripathi, 2022). Such conduct may be normalised as humour, disciplinary tradition, professional "toughness" or informal interaction, making it more difficult for women to identify, challenge or report harmful behaviour (Chroni, 2026).

Construction-related disciplines may create specific conditions of vulnerability because women frequently occupy minority positions in classrooms, research groups, laboratories, fieldwork environments and professional networks.

Research on women in construction has shown that masculine workplace cultures, assumptions about physical and technical competence, exclusion from informal networks and a shortage of visible female role models can undermine women's sense of belonging and career advancement (Navarro-Astor et al., 2017).

Parallel research in science, technology, engineering and mathematics (STEM) academia indicates that women can encounter subtle and overt forms of gendered exclusion, including being interrupted, marginalised, stereotyped as less competent and subjected to microaggressions that erode professional identity and confidence (Khan et al., 2023; Morton et al., 2024). These patterns are relevant to construction academia, where academic hierarchies intersect with the broader gendered culture of the construction sector.

Power is central to understanding harassment in universities. Academic relationships are frequently shaped by unequal authority between senior academics and junior staff, supervisors and postgraduate students, lecturers and students, research leaders and early-career researchers, and permanent and contract employees (Harries et al., 2026).

These power differentials can increase vulnerability, especially where women depend on senior personnel for supervision, assessment, research opportunities, publication access, professional references, promotion or continued employment (Johnson et al., 2018). Harassment is thus not only an interpersonal issue; it can function as a mechanism through which gendered status hierarchies are maintained and women's participation in academic communities is constrained (Corbett et al., 2024). The consequences of harassment extend beyond immediate emotional distress. Research links gender-based harassment and microaggressions to reduced confidence, psychological stress, self-doubt, diminished job satisfaction, weaker professional identification and intentions to leave STEM-related environments (Khan et al., 2023; Morton et al., 2024).

In academic contexts, harassment can restrict women's participation in research, teaching, conferences, professional networks and leadership opportunities, thereby affecting productivity, career progression and retention.

These individual consequences also generate institutional costs by weakening diversity, reducing the pool of women available for leadership and reinforcing an academic culture in which exclusion is tolerated (National Academies of Sciences, Engineering, and Medicine, 2018; Morton et al., 2024).

Universities commonly respond to harassment through policies, reporting mechanisms, disciplinary procedures, staff training and equality frameworks. However, the presence of a policy does not necessarily ensure an effective response.

Women may refrain from reporting because of fear of retaliation, concerns about confidentiality, dependence on alleged perpetrators, lengthy complaint processes or a belief that university leadership will minimise allegations or protect powerful individuals (National Academies of Sciences, Engineering, and Medicine, 2018b).

Recent evidence from STEM academia further suggests that formal procedures can be ineffective when institutions place the burden of complaint on individuals with less status while failing to address the organisational cultures and networks that enable harassment (Morton et al., 2024).

Effective institutional responses must therefore combine accessible reporting and survivor support with leadership accountability, transparent processes, protection against retaliation and proactive efforts to transform gendered organisational norms.

This critical review examines women's experiences of gender-based harassment in construction academia, the consequences for individual careers and institutional culture, and the adequacy of institutional responses. It draws on peer-reviewed literature from construction, construction education, engineering and STEM academia, as well as wider higher-education research on gender, power and harassment.

The review aims to synthesise the available evidence, identify conceptual and empirical gaps, and propose recommendations for universities, construction faculties, professional bodies and researchers.

The paper is organised into sections addressing women's experiences of harassment, the consequences of harassment, institutional responses, a critical discussion of evidence gaps and implications, and concluding recommendations for advancing safer and more gender-equitable construction academic environments.

Figure 1 presents the conceptual relationship between gendered power structures, women's experiences of harassment, individual and institutional consequences, and institutional responses in construction academia.

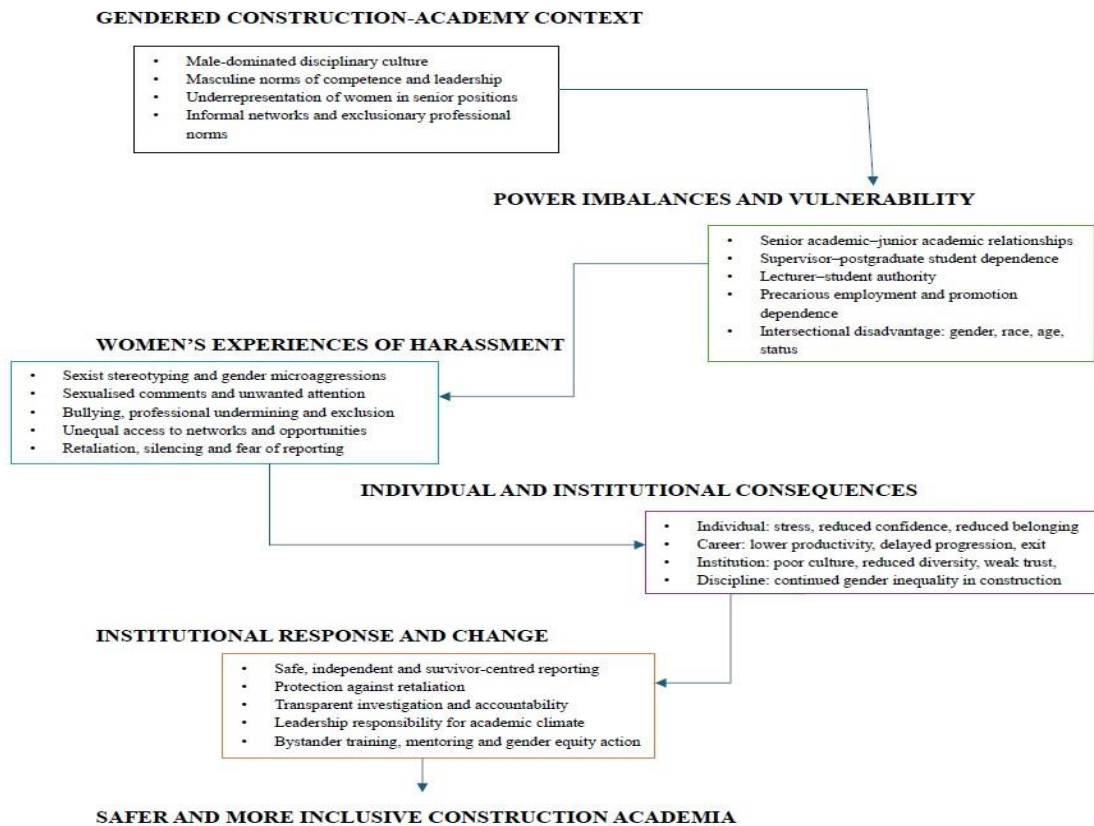


Figure 1: Conceptual Framework of Gender, Power and Harassment in Construction Academia

Source: Author's compilation based on Acker (1990), Berdahl (2007), Fielden et al. (2000), and Morton et al. (2024).

This figure is useful because it shows that harassment is not only an isolated incident but can emerge from structural gender inequality, academic hierarchy and organisational culture. The framework also links directly to your later sections on women's experiences, consequences, institutional responses, discussion and recommendations.

2. LITERATURE REVIEW

2.1 Women's Experiences of Harassment in Construction Academia

Women in construction academia may encounter harassment within disciplinary settings influenced by the masculine norms of the wider construction industry and the hierarchical structures of higher education (Bondestam and Lundqvist, 2020). Research specifically focused on construction academia remains limited, but studies in engineering, STEM higher education and construction workplaces indicate that women's minority status can increase their exposure to gendered exclusion, sexist stereotyping, unwanted sexual attention and professional undermining (Morton et al., 2024; Lo et al., 2024). Women may experience harmful conduct

from lecturers, supervisors, peers, research collaborators, visiting professionals, placement supervisors or industry mentors, particularly where formal academic authority overlaps with informal professional networks (Bondestam and Lundqvist, 2020; Sutton et al., 2021).

Harassment includes gender harassment, unwanted sexual attention and sexual coercion, which occur on a continuum ranging from subtle exclusion to serious abuse of power (Fitzgerald et al., 2018). Gender harassment may include sexist jokes, demeaning comments, sexualised language, objectification, questioning women's technical competence, exclusion from conversations and conduct that communicates that women do not belong in construction-related fields (Leskinen et al., 2011; Khan et al., 2023). Unwanted sexual attention may involve repeated personal messages, intrusive invitations, inappropriate comments or unwelcome physical contact, while sexual coercion involves linking academic or employment benefits to sexual cooperation (Bondestam and Lundqvist, 2020). Women in male-dominated disciplines can also experience gendered bullying, silencing, professional undermining, exclusion from research networks and restricted access to developmental opportunities (Khan et al., 2023; Morton et al., 2024). Table 1 summarises the main forms of gender-based harassment that women may experience in construction academia, their typical manifestations and their potential effects.

Table 1: Forms and Manifestations of Harassment in Construction Academia

Form of harassment	Typical manifestations in construction academia	Potential effect on women	Key supporting sources
Gender harassment	Sexist jokes, demeaning remarks, sexualised language, questioning technical competence, objectification and comments implying that women do not belong in construction-related fields	Reduced confidence, diminished belonging, emotional distress and pressure to prove competence	Fitzgerald, Gelfand and Drasgow (1995); Leskinen, Cortina and Kabat-Farr (2011); Khan et al. (2023)
Unwanted sexual attention	Persistent messages, intrusive invitations, inappropriate personal comments, unwanted physical contact and sexualised communication	Fear, discomfort, avoidance of academic spaces and reduced participation in academic activities	Fitzgerald et al. (1995); Bondestam and Lundqvist (2020)
Sexual coercion	Actual or implied academic, research or employment benefits linked to sexual cooperation; misuse of supervisory authority	Fear of retaliation, compromised academic autonomy and potential career harm	Fitzgerald et al. (1995); Sutton et al. (2021)
Gendered bullying and professional undermining	Silencing in meetings, interruption, dismissal of ideas, exclusion from research teams, hostile criticism and restricted access to developmental opportunities	Reduced visibility, fewer professional opportunities, lower productivity and intentions to leave	Khan et al. (2023); Morton et al. (2024)
Retaliation and exclusion	Social isolation, damaged professional relationships, exclusion from networks, negative	Underreporting, career stagnation, mistrust and withdrawal from	Bondestam and Lundqvist (2020); Sutton et

	evaluations or reduced access to opportunities after reporting concerns	academic or professional activities	al. (2021)
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Source: Author's compilation based on the reviewed peer-reviewed literature.

Gender harassment is often the most frequent form of sexual harassment in male-dominated academic and workplace environments (Benya et al., 2018). A study of women university students reported that engineering students experienced gender harassment from peers and faculty at a higher rate than students in education, health sciences and business programmes (Buchanan et al., 2025). Specifically, gender harassment was reported by 39.5% of cisgender women in engineering, compared with 25.6% in education, 24.9% in health sciences and 15.0% in business (Buchanan et al., 2025). These findings are relevant to construction academia because engineering and construction-related disciplines share patterns of male dominance, technical-status hierarchies and gendered assumptions about professional competence (Fielden et al., 2000; Navarro-Astor, Román-Onsalo and Infante-Perea, 2017).

Women's accounts of harassment are often shaped by uncertainty, silence and unequal professional dependence (Bondestam and Lundqvist, 2020; Sutton et al., 2021). Women may hesitate to identify conduct as harassment when it is framed as humour, mentoring, disciplinary tradition or normal workplace interaction (Leskinen et al., 2011; Morton et al., 2024). Postgraduate students, early-career academics and temporary staff may be especially vulnerable where senior personnel control supervision, assessment, research funding, publication opportunities, references, promotion and employment prospects (Lundqvist, 2020). Fear of professional consequences, social isolation, disbelief and retaliation may discourage formal reporting even when women experience significant harm (Sutton et al., 2021). Women's vulnerability may increase where they are numerical minorities within departments, research groups, classrooms, laboratories, fieldwork contexts, site visits and industry placement environments (Lo et al., 2024). Vulnerability may also be intensified by intersecting inequalities associated with race, age, disability, sexuality, nationality, language, socioeconomic status and precarious employment (Brown, 2021). A systematic review of construction and natural-resource industries identifies women's lower social status and reduced integration into male-dominated occupational settings as important conditions associated with gender-based violence and harassment (Lo et al., 2024).

2.2 Consequences of Harassment

Gender-based harassment can negatively affect women's psychological wellbeing, academic participation and career progression (Morton et al., 2024). Research links harassment and gender microaggressions with anxiety, stress, emotional exhaustion, reduced confidence, self-doubt, reduced job satisfaction and a weakened sense of belonging within academic and professional settings (Jacob and Jayakumar, 2026). Persistent gender harassment can impair psychological and occupational functioning, especially in male-dominated academic environments (Buchanan et al., 2025).

Harassment can restrict women's access to academic and professional opportunities that are essential for career development (Bondestam and Lundqvist, 2020). Women may avoid specific supervisors, research groups, laboratories, conferences, site visits, industry events or professional networks where they anticipate hostile treatment or inadequate support (Morton et al., 2024). Such avoidance can constrain access to mentoring, research collaboration, publication opportunities, funding, professional visibility, leadership development and promotion pathways (Khan et al., 2023). In construction-related academic fields, exclusion from industry-linked networks may be especially damaging because professional relationships and practical experience contribute to academic credibility and career progression (Navarro-Astor et al., 2017).

Harassment can undermine women's retention in construction-related academic disciplines and contribute to the continuing underrepresentation of women in STEM and construction careers (Morton et al., 2024; Lo et al., 2024). Research on harassment in STEM academia identifies adverse consequences for individuals, witnesses, organisations and the wider field, including intentions to leave and reduced capacity to retain diverse talent (Berhe et al., 2020). The loss of women from construction programmes, academic employment and research careers reduces the diversity of perspectives available in teaching, research, leadership and industry engagement (Navarro-Astor et al., 2017). The effects of harassment extend beyond those directly targeted and can contribute to an institutional culture characterised by fear, silence and mistrust (Bondestam and Lundqvist, 2020; Morton et al., 2024). Where staff and students perceive that powerful individuals are protected or that complaints are minimised, they may become reluctant to report concerns or participate openly in academic life (Bondestam and Lundqvist, 2020; Sutton et al., 2021). Such climates can weaken confidence in institutional fairness, diminish inclusion and compromise universities' commitments to equity and transformation (Morton et al., 2024).

2.3 Institutional Responses

Institutions should provide reporting pathways that are accessible to both students and staff, including individuals whose academic or employment progression depends on senior personnel. Table 2 summarises key institutional responses to gender-based harassment in construction academia, their intended functions and the barriers that may undermine their effectiveness.

Table 2: Institutional Responses to Gender-Based Harassment in Construction Academia

Institutional response	Intended function	Barriers to effectiveness	Application in construction academia	Supporting sources
Codes of conduct and sexual-harassment policies	Define unacceptable conduct, responsibilities, reporting options and possible disciplinary consequences	Poor awareness, vague definitions, inconsistent enforcement and policies that exist only for compliance	Apply standards to classrooms, laboratories, site visits, fieldwork, research settings and industry placements	Bondestam and Lundqvist (2020); Henry (2024)

Accessible reporting mechanisms	Enable students and staff to report harassment through confidential, independent and multiple channels	Fear of retaliation, lack of trust, power dependence, unclear procedures and confidentiality concerns	Provide reporting options for students, postgraduate researchers, temporary staff and individuals on industry placement	Sutton et al. (2021); Bondestam and Lundqvist (2020)
Independent investigations and disciplinary procedures	Ensure fair, timely and transparent assessment of complaints and appropriate sanctions	Delays, conflicts of interest, legalistic processes, insufficient communication and perceived protection of senior personnel	Use independent investigators where allegations involve senior academics, supervisors or industry partners	Bondestam and Lundqvist (2020); Henry (2024)
Survivor-centred support services	Provide counselling, academic accommodations, referral services and guidance throughout the reporting process	Limited resources, inadequate staff training, fragmented support and fear of loss of confidentiality	Support students and staff affected during research, teaching, site work, placement and professional events	Bondestam and Lundqvist (2020); Henry (2024)
Leadership accountability and climate monitoring	Address systemic risk through leadership responsibility, climate surveys, anonymised data and performance monitoring	Weak senior commitment, limited transparency, poor follow-through and absence of measurable targets	Hold heads of department and faculty leaders accountable for culture, prevention and responses to recurring concerns	Morton et al. (2024); Bondestam and Lundqvist (2020)
Prevention and capability development	Prevent harmful conduct through gender-responsive induction, bystander training, mentoring and awareness programmes	One-off training, lack of evaluation, poor participation and failure to address structural power relations	Include staff, students, placement supervisors, professional mentors and external industry partners	Lo et al. (2024); Morton et al. (2024)
Cross-sector collaboration	Extend protection beyond campus through partnerships with professional bodies and construction organisations	Unclear responsibilities, inconsistent external standards and weak monitoring of placement environments	Establish shared protocols for industry placements, site visits, internships and professional events	Lo et al. (2024); Navarro-Astor et al. (2017)

Source: Author's compilation based on the reviewed peer-reviewed literature.

Universities commonly respond to harassment through codes of conduct, sexual-harassment policies, reporting procedures, disciplinary processes, counselling services, staff training and equality initiatives (Smyth, 2021). Effective responses require accessible reporting options, clear information about available support, timely and independent investigation processes, survivor-centred services and explicit protection against retaliation (Wadiwel et al., 2021). Institutions should provide reporting pathways that are accessible to both students and staff,

including individuals whose academic or employment progression depends on senior personnel (Sutton et al., 2021).

The presence of a policy does not itself guarantee prevention, accountability or meaningful redress (Stewart, 2014). Bondestam and Lundqvist's (2020) systematic review found insufficient research-based evidence on the effectiveness of formal mechanisms and case-management structures for addressing sexual harassment in higher education. Reporting systems may be undermined by unclear procedures, delays, overly legalistic processes, inadequate confidentiality, conflicts of interest and insufficient support for complainants (Hook and Fines, 2023). Women may decline to report because they fear retaliation, disbelief, reputational harm, career damage or adverse consequences within closely connected academic and professional networks (Sutton et al., 2021).

Institutional interventions are more likely to be effective where they address organisational culture and power relations, rather than focusing only on the handling of individual complaints (Bondestam and Lundqvist, 2020; Morton et al., 2024). Leadership accountability, independent complaint mechanisms, transparent processes, regular climate assessments, survivor-centred support and meaningful sanctions are important elements of a comprehensive response (Reeves and Erooga, 2025).

Institutions can use anonymised reporting data, response-time information and climate-survey findings to identify patterns, assess the effectiveness of interventions and demonstrate accountability while maintaining confidentiality (Suardi et al., 2026).

Construction faculties should tailor prevention and response strategies to the disciplinary contexts in which students and staff work, including laboratories, fieldwork, site visits, industry placements and professional events (Lo et al., 2024). Relevant interventions include gender-responsive induction, bystander training, codes of conduct for site-based learning, safe placement procedures, mentoring networks and clearly communicated expectations for external industry partners (Lo et al., 2024; Morton et al., 2024).

Universities, professional bodies and construction organisations should collaborate to ensure that protections against harassment apply across academic and workplace-learning environments (Hay and Flaming, 2024).

3. METHODOLOGY

This study adopted a critical narrative literature review to examine gender, power and harassment in construction academia. A critical narrative review was appropriate because the topic involves overlapping bodies of literature from construction management, engineering and STEM education, higher education, gender studies, organisational behaviour and workplace-harassment research. Narrative reviews are suited to synthesising evidence from diverse methodological traditions while enabling critical examination of dominant themes, conceptual gaps and institutional implications (Ferrari, 2015). Narrative reviews should nevertheless clearly define their scope, identify the databases and search terms used, and explain how sources were selected for synthesis (Riva et al., 2022). The review focused on women's

experiences of gender-based harassment in construction-related higher education. For this purpose, construction academia included construction management, quantity surveying, civil engineering, architecture, project management and other built-environment disciplines offered within universities and higher-education institutions. Because peer-reviewed studies specifically addressing harassment in construction academia are limited, the review also included relevant studies from engineering, STEM academia, broader higher education and construction workplaces. This approach enabled the review to identify evidence relevant to the gendered disciplinary culture, hierarchical power relations and institutional conditions that may shape women's experiences in construction-related academic settings (Hasan et al., 2021).

Peer-reviewed literature was identified through searches of Scopus, Web of Science, Google Scholar, ScienceDirect, Sabinet and African Journals Online. The search used combinations of terms including "gender-based harassment", "sexual harassment", "gender harassment", "women in construction", "construction education", "construction academia", "engineering education", "STEM academia", "higher education", "university", "academic power", "institutional response", "reporting mechanisms" and "South Africa".

Searches were supplemented by reviewing the reference lists of influential articles and systematic reviews to identify additional peer-reviewed sources relevant to the review themes. The review included English-language, peer-reviewed journal articles that addressed one or more of the following: gender-based harassment, sexual harassment, gendered bullying, sexist microaggressions, power relations, women's experiences in construction or STEM, consequences of harassment, reporting processes, institutional responses, prevention strategies or gender equity in higher education.

Studies were included where they focused directly on construction academia, construction workplaces, engineering or STEM disciplines, or general university settings that could provide relevant analytical insight. The review excluded non-peer-reviewed media articles, opinion pieces, unpublished theses, sources unrelated to higher education or construction, duplicate studies and publications that did not address gender, harassment, power or institutional response.

The selected literature was analysed using thematic synthesis. Relevant data were extracted into a review matrix containing the author, year, research setting, participant group, research method, type of harassment or gendered harm examined, key findings, reported consequences and institutional recommendations.

The findings were then grouped into three main themes: women's experiences of harassment in construction academia; individual, career and institutional consequences; and institutional responses, including policies, reporting mechanisms, preventive interventions and barriers to change.

Thematic synthesis enabled comparison between evidence directly related to construction and evidence from adjacent STEM and higher-education contexts. Figure 3 summarises the literature-review process used to identify, select and synthesise peer-reviewed evidence on gender, power and harassment in construction academia.

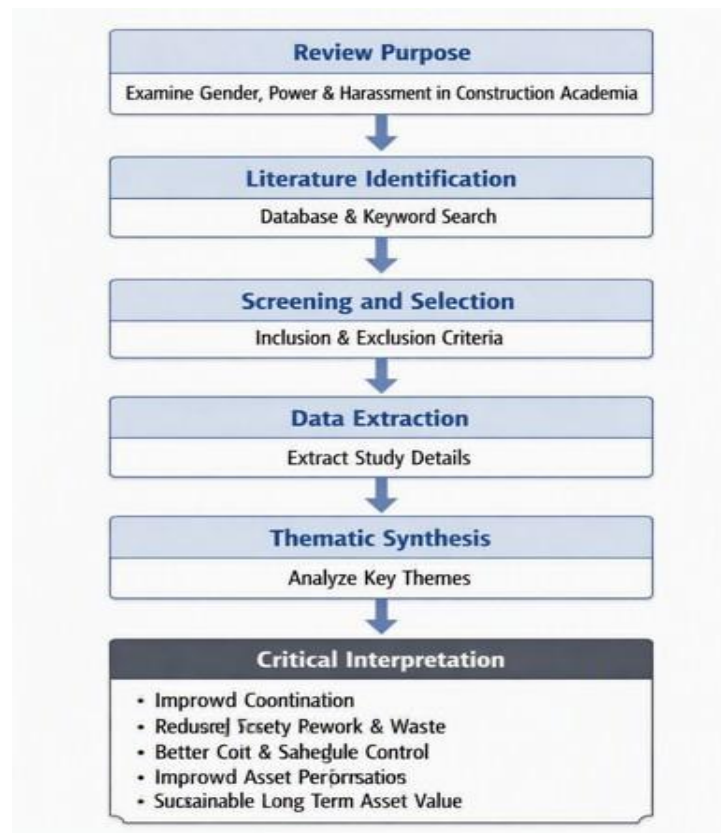


Figure 3: Critical Narrative Literature-Review Process

Source: Author's compilation based on Green, Johnson and Adams (2006), Ferrari (2015), and Riva et al. (2022).

The review has limitations. It was not designed as a systematic review and did not use a formal PRISMA protocol, duplicate screening or quantitative meta-analysis. Its findings therefore provide a critical synthesis of the available literature rather than a statistically generalisable estimate of the prevalence of harassment in construction academia. The inclusion of adjacent STEM, construction-workplace and general higher-education studies was necessary because of limited directly relevant literature, but findings from these contexts should not be assumed to apply identically to all construction-academy settings.

4. DISCUSSION

This review demonstrates that gender-based harassment in construction academia should be understood as a structural consequence of gendered power relations rather than as a set of isolated interpersonal incidents. Construction academia is influenced by the male-dominated culture of the broader construction sector, while universities are characterised by hierarchical relationships between senior academics, junior staff, postgraduate students and undergraduate students (Fielden et al., 2018; Bondestam and Lundqvist, 2020). These overlapping conditions

can create environments in which women experience gender harassment, sexist stereotyping, unwanted sexual attention, professional exclusion, bullying and retaliation (Morton et al., 2024). Women in male-dominated academic programmes have been shown to experience more gender harassment than women in gender-equivalent programmes, reinforcing the importance of disciplinary culture and gender composition in shaping risk (Dresden et al., 2018; Buchanan et al., 2025). The review further indicates that gender harassment is often normalised through informal practices, humour, exclusionary language and beliefs that women are less suited to technical or leadership roles. These practices may appear less severe than overt sexual coercion, but their cumulative effect can weaken women's confidence, sense of belonging and willingness to participate fully in academic and professional activities (Khan et al., 2023). In construction-related academic settings, women may be particularly exposed during site visits, industry placements, fieldwork, laboratories, research collaborations and professional events, where university-based power relations intersect with industry networks and work cultures (Lo et al., 2024). The literature therefore suggests that harassment prevention in construction education must extend beyond campus boundaries and cover all environments in which students and staff learn, conduct research and engage with industry.

Harassment has consequences that extend beyond individual wellbeing. The evidence reviewed links gendered harassment and microaggressions to stress, diminished confidence, psychological distress, reduced academic belonging and intentions to withdraw from STEM-related environments (Khan et al., 2023; Morton et al., 2024). It can also restrict access to supervision, research collaboration, publications, mentoring, professional networks and leadership opportunities, with implications for women's career progression and long-term retention in construction academia and industry (Navarro-Astor et al., 2017; Bondestam and Lundqvist, 2020). At an institutional level, tolerated harassment can weaken trust, limit diversity in teaching and research, diminish the legitimacy of equity commitments and sustain a cycle in which women remain underrepresented in positions of authority (Tauber et al., 2022).

A central finding is that institutional policies and reporting procedures are necessary but insufficient. Formal policies may have limited impact when reporting is experienced as unsafe, inaccessible, slow or likely to result in retaliation, particularly where alleged perpetrators hold senior academic or professional authority (Alshibili et al., 2021). Institutional approaches that depend entirely on individual complaints can place an unfair burden on women while leaving the culture, incentive structures and informal networks that enable harassment unchanged (Liu, 2026). Effective institutional responses should therefore combine confidential and independent reporting options, survivor-centred support, timely investigations, and protection against retaliation, leadership accountability, transparent monitoring and meaningful sanctions for misconduct (Henry, 2024).

5. GAPS IN UNDERSTANDING

A major gap is the limited number of peer-reviewed studies that focus directly on women's experiences of harassment in construction academia. Much of the available evidence comes from broader higher education, STEM disciplines, engineering education or construction

workplaces, which are relevant but cannot be assumed to represent the specific institutional and professional dynamics of construction-management, quantity-surveying, architecture and civil-engineering departments (Bridges et al., 2020). This gap supports the need for research that examines construction academia as a distinct environment shaped by both university hierarchy and industry-linked professional culture. Existing studies also rely heavily on cross-sectional surveys, self-reported experiences and general perceptions of organisational climate. There is limited longitudinal research examining how harassment affects women's academic performance, postgraduate completion, research productivity, promotion, professional registration, leadership progression and retention over time. Further evidence is also needed on the experiences of women who hold intersecting marginalised identities, including Black women, women with disabilities, LGBTQ+ women, international students, contract workers and early-career academics. Intersectional research is essential because gender-based vulnerability is shaped by more than gender alone (Humbert et al., 2025).

There is also insufficient evidence on the effectiveness of institutional interventions. Although universities increasingly use policies, awareness campaigns, reporting platforms, counselling services and training initiatives, relatively few studies assess whether these measures reduce harassment, improve reporting safety, prevent retaliation or change departmental culture over time (Ritonga and Thamrin, 2024). Research should therefore move beyond documenting the existence of institutional policies and assess outcomes such as reporting accessibility, case-resolution time, and complainant wellbeing, recurrence of misconduct, perpetrator accountability and changes in organisational climate.

6. IMPLICATIONS

Universities should treat gender-based harassment as a governance, equality, and occupational-wellbeing and academic-quality issue. Senior leaders, deans, heads of department and research leaders should be accountable for creating respectful academic environments, monitoring departmental climate and responding effectively to patterns of gendered harm. Institutions should establish independent and confidential reporting channels, provide trauma-informed support, guarantee protection against retaliation and communicate clearly about investigation procedures and possible outcomes. Construction faculties should develop context-specific interventions that address the risks associated with site visits, fieldwork, laboratories, professional events, industry placements and research collaborations. These interventions should include codes of conduct for academic and external partners, gender-responsive orientation programmes, and safe reporting routes for students on placement, bystander-intervention training and clear consequences for misconduct. Universities should also work with professional councils, construction firms and industry associations to ensure that harassment protections apply across the transition from academic training to professional practice.

Future research should prioritise qualitative and mixed-method studies that centre women lived experiences in construction academia. Longitudinal studies are needed to trace the effects of harassment on retention, promotion, research productivity and professional careers.

Comparative research across universities, disciplines, provinces and institutional types could identify the conditions that support safer and more inclusive construction academic environments. Evaluation studies should test whether interventions such as independent reporting offices, bystander training, gender-equity leadership measures, mentoring systems and transparent accountability mechanisms produce measurable improvements.

7. CONCLUSION

This critical review finds that women's experiences of harassment in construction academia are shaped by the interaction of male-dominated disciplinary cultures, university hierarchies, unequal access to authority and inadequate institutional accountability. Harassment includes not only overt sexual misconduct but also gender harassment, sexist stereotyping, microaggressions, bullying, exclusion, professional undermining and retaliation. These forms of harm can reduce women's wellbeing, confidence, academic belonging, career progression and retention while also undermining institutional culture, equality commitments and the diversity of future construction-sector leadership. The review concludes that universities should not rely solely on policies and individual reporting processes to address harassment. Effective change requires institutional commitment to safe and independent reporting, survivor-centred support, anti-retaliation protections, transparent investigations, meaningful sanctions and leadership accountability. Construction faculties must recognise that learning and professional development often occur across university and industry settings, requiring joint responsibility between universities, placement providers, professional bodies and construction organisations.

Key Recommendations are as Follows:

- Universities should establish confidential, accessible and independent reporting systems for students and staff.
- Institutions should ensure protection against academic, professional and employment-related retaliation.
- Faculty leaders should be accountable for departmental climate, prevention and timely responses to harmful conduct.
- Construction programmes should apply explicit conduct standards to site visits, fieldwork, industry placements, laboratories and professional events.
- Universities should provide regular gender-responsive training and bystander-intervention programmes for staff, students and external partners.
- Professional bodies and construction organisations should collaborate with universities to extend harassment-prevention and reporting protections into workplace-learning environments.
- Future research should produce more direct evidence on harassment in construction academia, especially in South Africa and across intersecting identities.

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