Exploring the effectiveness of design features to incite positive feelings and desired experiences in workplaces.

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ABSTRACT

This study explores designer's ambitions and employees' experiences in workplaces through the lens of innate human needs and engagement which are factors currently in demand. The paper presents preliminary findings from interviews with professionals that canvassed the expectations their clients had for their workplace, the drivers motivating them and the design features and attributes they employed to deliver the expectations. Preliminary findings point to four predominant experiences that reinforce a gradual evolution toward people centric themes that have emerged in the literature over three decades. Recommendations are made for designers to reimagine future digital workplaces that combines space, technology and social contexts to promote wellness, positive employee' experiences, connection and belonging. In addition, the paper suggests evolving workplaces to support change spatiotemporal and emotionally situated contexts of hybrid work.

Keywords

employee experience, satisfaction, pleasure, workplace design, Corporate Real Estate.

INTRODUCTION

Research has documented the social and physiological benefits of work, we know it fills important human needs like connection, pride and a reflection of one's social identity (Pierce & Brown, 2020). Since we spend most of our waking hours at work, it is important to feel good about being there which happens when we feel we belong to a workgroup (Hisch, 2021; Holt-Lundstad, 2018, Jena & Pradhan 2018). It has been argued that belonging at work is more important than in other social settings (Jena & Pradhan 2018).

In social work settings belonging is delivered through companionship, affiliation, connection, and when a persons' experiences fit with others in a group (Hagerty & Putasky, 1995). The physical design of the workplace, and the experience of digital interactions employees have in them, also engenders belonging by reinforcing social-identity and collective psychological ownership (Petani & Mengis 2023). The caveat in this equation is work must be *meaningful* and have a purpose to deliver authentic experiences that establish belonging.

The link between purpose and an individual's sense of meaning has become supercharged in the aftermath of the pandemic (Atlassian 2021). While conditions have evolved, what remains are employee's expectations that the workplace contribute to positive feelings that enhance their work and personal lives (Worktech & HqO, 2022; Jin et al., 2022; Cobert et al., 2015). This in part explains why the average attendance for Australian workers is 76% of pre-Covid levels with Tuesday – Thursday being the most popular days of attendance (CBRE, 2023). The average Australian pays \$20 a day commuting to work (Australian Commute report, 2022), weighing rising cost of fuel and public transit, a desire to retain newfound flexibility, autonomy, balancing personal commitments, health and wellbeing; the office is frequently the loser of what is now a complex equation (Tenakwah & Watson, 2024)

A point of friction has arisen between the needs of organizations who believe physical presence is critical with those of the individual (Oppong, 2024). This shines a spotlight on the value of physical workplaces, the designers that create them and their decision-making process which has inherent weaknesses including: bias (Hammond et al.,1998), a failure to regard decision making as an ongoing, iterative process (Lovello and Kahneman, 2003; Luftman and Brier, 1999), and a propensity to make decisions with incomplete knowledge (Argyris, 2008).

We know the workplace affects human performance, productivity, and health and it plays a critical role in employees' experiences (Candido et al, 2019), but our focus on physical aspects of space rather than its effect on people leaves us with a lack of insight into which design characteristics and features contribute to positive human experiences desired in today's context.

More data linking design features to emerging themes of hybrid and changed user expectations is required to assist workplace professionals struggling to imagine a workplace of the future that balances the friction between the needs of individuals and those of the organisations, and the spatiotemporal and multiple locatedness of hybrid work.

HYBRID HEAVEN OR HELL

Work from home is now the most popular term used in online job searches (Ziffer, 2023), despite companies' attempts to entice employees back to the office by linking bonuses to attendance or issuing edicts that harken back to historic management trust issues and presenteeism (KPMG, 2023). Studies indicate employees who have flexibility and control over when and where they work are the happiest and experience good work life balance (Hopkins & Bardoel, 2022). This explains the popularity of hybrid work models offering options of working anywhere an employee can connect to a digital network (Felstead & Henseke, 2017; Kingma, 2019) and at any time given ubiquitous connections to their professional networks (Cavazotte et al., 2014; Hislop & Axtell, 2009; Kelliher & Anderson, 2010).

The potential for employees to avoid the office is likely to be exacerbated when work environments compete poorly with other places where work now occurs (Hq0 & Worktech, 2022). There is low tolerance for poorly performing, lacklustre offices (Yin & Mahrous, 2022), particularly amongst younger digital natives. Physical workplaces require reinvention to address different purposes that are less about doing work, which can happen anywhere depending on one's role, and more about supporting innate human needs like togetherness (Durakovic et al., 2022) that reinforce the meaning of work (Mirvis, 1997).

The rejection of rigid work practices that began well before the pandemic resulted in new spatiotemporal realities inherent in hybrid work models (De Menezes & Kelliher, 2011; Richardson & McKenna, 2014). Added to the economic, cultural and political forces that influence life and drive experiential feeling (Aroles et al., 2021), it becomes clear the focus on physical spaces and technologies over people must expand to include experiences, atmospheres and vibes that space and technology jointly deliver (Endrissat & Leclercq-Vandelannoitte, 2021).

Work experiences today come through multiple channels and complex influences (Baptista et al., 2020; Coetzee, 2019; Dery et al., 2017; Koffer, 2015) including physical spaces, cultural or social rules (Baptista et al., 2020; Kane et al., 2015). In this ecology of work, coined the digital workplace, material aspects of a physical or digital environment cannot be separated from the social contexts, norms and discourses in which they are used (Orlikowski, 2007; Leonardi, 2010).

This boundaryless and transparent concept of work presents significant future opportunities, but it comes with an imperative to evolve the parameters and physical structures of the workplace. New temporal frameworks offer employees high flexibility, digitization and virtualization (Courpasson & Reed, 2004; Richardson et al., 2008) but they come at a cost (Baldissarri et al. 2014). Technology can separate and isolate people, and it can distance or bring them together (Ajzen & Taskin, 2021).

Overcoming intrinsic weakness of digital work to maintain social connections required for organisational culture and collective identity to flourish requires an exploration of new forms of sociality (Aroles et al., 2019). This is an opportunity for workplace designers to lead by expanding into digital environments and embracing the social and material, or sociomaterial, dimensions of technology (Orlikowski, 2007). They also must envision new physical constructs that align with the intentions and expectations of workers.

RESEARCH AIMS AND QUESTIONS

This research aims to provide evidence to improve the design decision making process that often relies on gut instincts and bias. The paper seeks to confirm expectations have shifted, and understand what design features and attributes organisations use in their workplaces to improve employees' experiences. The paper sets the groundwork for a much larger research project examining changing attitudes and expectations of employees regarding physical work environments, and expectations for organisations to leverage their workplace to address broader social issues employees care about.

Findings from a scoping review of industry and academic literature plus a canvas of industry-led events (2021-2023) were used to tease out key topics for questions that were put to industry experts in 32 semi-structured interviews. Preliminary findings are reported that will inform subsequent phases of the project.

METHODS

Participants, recruited through professional networks and Linkedin, agreed to a one-on-one interviews conducted over Microsoft Teams with the primary researcher. The interviews followed a semi-structured, qualitative research approach that allowed for dialogue and modification (Braun & Clarke, 2014). The main topics of discussion were the professional's experiences with clients and their interpretation of what their clients' motivations were in wanting to deliver specific workplace experiences e.g. why and what did they hope it would achieve?

Questions were informed by the literature review which indicates employee's expectations have adjusted due to the widespread adoption of hybrid work practices and other post pandemic shifts in mindset, attitudes, and beliefs about work and by proxy the workplace. The questions explored the physical and pragmatic requirements of the workplace and touched on an environment's ability to positively impact the human experiences of pleasure, satisfaction and motivation.

These words were defined in a workplace context as follows:

Pleasure – facilitates <u>enjoyable interactions</u> and engenders a <u>sense of ownership and identity</u>. Satisfaction – delivers <u>necessary experiences</u> for human performance and <u>sends messages consistent</u> with the company's brand and culture.

Motivation –<u>reinforces connection</u> to the occupants' <u>meaning and purpose</u> in work and encourages participation and engagement.

Participants selected for the study had a minimum of ten-years' industry experience delivering workplaces. Below is a list of participants, the total number interviewed by role and the bias inherent in their role.

Workplace Strategists (5 participants)

Workplace Designers (8 participants)

Experience Designers (3 participants)

Tenant Advisors (5 participants)

Building Developers (1 participant)

Architects (3 participants)

End Users (7 participants)

Interviews were recorded, transcribed with transcriptions cleaned of repeating words, fillers such as 'kind of', 'so', and 'you know' and to improve readability. All identifying information was removed following analysis and dissemination with participant assigned a letter depicting their expertise e.g. D-designer, and number. The transcripts were coded in NVIVO software which uses text analytics and relies on machine learning algorithms to aid and empower analyses through data-coding of analysed text.

A preliminary review of the data uncovered four predominant experiences along with a number of themes that emerged from a review of the presence of words, concepts, or topics within the text that also includes associated words. Using machine-learning algorithms and software for text analytics insights were gained that are not explicitly stated but hidden in the frequency of appearance of key concepts.

Scoping review

The scoping review had two separate and complementary parts. Firstly, the scoping review of 57 peer-review papers published between 1990 and 2023 tested the hypothesis that a shift in focus has occurred related to work environments. Scopus was used as the search tool engine to discover peer-review papers published more recently using a matrix of keywords including: workplace or office and design combined with management, leadership, satisfaction, productivity, motivation, experience or engagement and then location (Australia) was used. After screening for relevance, the sample size a total of 11 papers were found. Secondly, an additional search for industry reports was downloaded from key design and consultancy firms, including Atlassian, Deloitte, McKinsey & Company, HqO Worktech, The Wellbeing Lab and Gensler. A total of 7 reports were included. This additional search aimed to include research reports led by industry that would not otherwise be published in academic literature.

DISCUSSION & Results

Key findings from literature search

The literature review highlights organisations historically viewed the workplace as a cost burden rather than an enabler or investment in people (Oseland, 2021); over the past two and a half decades this has slowly changed with the emergence of impenetrable, people related outcomes such as psychological safety (McQuaid, 2021; HqO & Worktech, 2022), togetherness and belonging (Durakovic et al., 2022), innate human needs (Pierce & Brown, 2020), collective cognition (Akoyo & Askanasy, 2020) and inclusion appearing in workplace literature as highlighted in Table 1.

In tandem themes related to changed ideas about place and time consistent with hybrid work appear that require attention including the spatial and cultural challenges inherent in the 'multiple locatedness' of hybrid work (Hislop et al., 2015; Cousins & Robey, 2005).

The physical workplace is now just one of many portals employees will use to access information, culture and connectivity (HqO & Worktech, 2022). Although technologies make it possible for work to happen anywhere, it is still carried out somewhere - either in physical or digital environments, and more likely in both. In either case, workplaces act as carriers of value for psychosocial work and organisational culture (Oseland, 2021; Nanayakkara et al., 2021; Ronda & DeGracia, 2022) and affect moods, stress levels and happiness (Vischer & Wifi, 2017; Wapshott & Mallett, 2012; Picard et al., 2020).

While emerging spatio-relational configurations offer workers choice and force a consideration of options other than the typical office centric approach, barriers remain to reimagining future workplaces that will satisfy the desires and the opportunities technology offers to work differently. The default to physical place and attendance implied in the phrase 'designing a workplace worthy of a commute' sets a false equation in aligning workplace success with attendance. Being at the office does not prove productive work occurred or satisfactory experiences gained. In fact, being at work is less important than feeling positive while there (Deloitte, 2021). However, despite a plethora of workplace research, there is limited knowledge to aid decisions related to human experiences.

Table 1. Evolving themes in workplace literature

Researcher	Primary topic/finding		
1990 -1999			
Csikszentmihalyi & Rathunde 1990	Humans are inclined to communicate with others		
Nourse & Roulac 1993	Space supports organisations' enterprise by sending messages		
Amabile et al., 1996	Space facilitates the transfer of knowledge		
Fisk & Rosenfeld 1997	Workplace quality is linked to sick leave		
2001 - 2010			
Barclay & York 2001	Space can be orchestrated for connection		
Gosling et al., 2001	Symbolism		
Ayoko & Hartel 2003	Physical and psychological space are triggers of personal conflict		
Zagreus et al., 2004	Layout, colour, furniture and maintenance affect performance		
Lindholm & Levainen 2006	Space is important in achieving organisational goals		
Becker 2007	Building on Hawthorn, patterns and culture		
Fayard & Weeks 2007	Space affordances		
Vischer 2009	Supporting human capital		
Seppala et al., 2009	Retention, dedication		
Mintzberg 2009	Belonging & community		
Devine-Wright & Clayton 2010	Symbolic & cultural meaning		
Pierce & Jussila 2010	Psychological ownership and collectively held feelings		
2011- 2019			
Vischer 2011	Space helps us understand who I am, how I should act		
Wapshott & Mallett 2012	Community and organisational hope		
Jeacle & Parker 2013	Workplace drives organisational strategy		

Bacevice & DeGraff 2013	Value creation	
Laing & Bacevich 2013	Leadership, coordination	
Haapakangas et al., 2008, 2014	Ambient noise	
Holt-Lunstad et al., 2015	Social & physiological benefits of connection	
Bammens 2016	Engagement and organisational climate	
Spinuzzi 2018	Space & social isolation	
Appel-Meulenbroek et al., 2018	Employee needs and preferences	
Wang et al., 2019	Work engagement and inclusive leadership	
Candido et al., 2019	Employee performance and IEQ	
2020 - 2023		
Pierce & Brown 2020	Innate human needs, motivation & belonging	
Akoyo & Ashkansy 2020	Collective cognition, Design of work, technology and aesthetics	
Bodin- Danielson et al., 2022	Noise & distraction	
Ward & Parker 2020	Business hopes	
Apple-Muelenbroek et al., 2020	Job burnout, distraction, noise	
Spreitzer et al., 2020	Knowledge transfer	
Akoyo & Ashkanasy 2020	Connection belonging, motivation and commitment	
Danielson 2020	Individual and group performance	
Picard et al., 2020	Mindset and behaviours	
Hopkins & Figaro, 2021	War for talent	
Nanayakkara et al., 2021	Shared culture	
Zhang et al., 2021	Spatial affordances in virtual realm	
Usher 2021	Creation confused with productivity	
Roumpi 2021	Employee resilience	
Jin et al., 2022	IEQ health benefits	
McQuaid 2021	Psychological safety & human thriving	
Cheese 2021	Fairness, inclusion	
Lee et al., 2021	Sustainability & negative influences	
Appel-Meulenbroek et al., 2022	Performance & face-to-face interaction	
HqO & Worktech 2022	Psychological comfort	
Wang et al., 2022	Employee willingness and engagement	
Ronda & Degracia 2022	Workplace aesthetics & cultural congruence	
Collings 2021	Overworked due to job insecurity	
Durkovic et al., 2022	Togetherness motivates employee	

Preliminary findings from interviews

In design disciplines, "user experience" is a broader term than usability or satisfaction, usability does not inherently imply satisfaction and vice versa (Norman, 2004). This becomes evident in office designs where users experience spaces and artifacts as aesthetically pleasing but also note their flaws (Babapour et al., 2022). Satisfaction in offices is often measured using thermal comfort, air quality or noise control (Kwon et al., 2019). The challenge is indoor environment and comfort are based on using the office over time, not on a single factor-response relationship (Bluyssen, 2014) which is more likely to occur in hybrid. What is also missing is the user's satisfaction with their experience.

The following table reports preliminary findings of our study exploring the evolution of employees' expectations related to human experiences. Four key expectations appear in the far left of the table followed by the motivations the professional felt that experience was requested. Finally on the right are the design features, attributes and opportunities that were commonly used to satisfy the expectations.

Expectation for the workplace to deliver	Driver or Motivation	Features, Attributes and Opportunities
Community & Connection	Support hybrid and togetherness Convey being a part of something bigger	Kitchen spaces that bleed into other places for informal chats Town Hall spaces
	Provide human, social and professional connection	Breakout areas
	Share ideas, insights & strengthening relationships	Communal tables to share meals
		A company sponsored food and beverage offering
		Multifunctional social space
Flexibility & Choice	Flexibility is now an obligation for most workers	Soft spaces for connectivity and future flexibility
	Desire to work somewhere else other than the office	Multipurpose space with storage
	Empower people to work how they work best	Flexible facades
	Support changing lives and more personal elements that	Reception spaces become auditorium
	reinforce purpose and meaning	Studio spaces for projects
Good Technology & Functionality	To equal the level of technology in employees'	Introduction of apps: The Work Life app, Calven
	homes Imperative to connect	Walk up help desk
	instantly	Improved collaboration technology in meeting rooms.
	Ensure the right people and places are available when an employee goes to the office	Lights on sensors

	Improve digital meetings.	Headset & rules. Areas for silence. Social media and Workplace media networks
Curated Hospitality	To create a key differentiator from the home environment. Offer employees services they don't get at home. Provide an experience that is better than what you would experience at home.	A high level of luxury and hospitality Dynamic cleaning White glove service and human touch Hyper curation and well serviced food and beverage offering Coffee bars & barista Curators of the workplace, building & precincts.

CONCLUSION

Over the past decades a definitive shift in the mindsets of both organisational leaders and their employees has taken place in thier attitudes and expectations of the workplace. Trends like hybrid working that began well before the global pandemic have firmly embedded bringing to light challenges of multiple locatedness and digital inclusion. Expectations of human centric outcomes such as togetherness and belonging (Durakovic et al., 2023), innate human needs (Pierce & Brown, 2020), collective cognition (Akoyo & Askanasy, 2020) human thriving, and psychological safety (McQuaid, 2021) are now considered to be necessary workplace outcomes.

While these words have become the lexicon used by designers touting the benefits of their efforts and the value of design, there are significant gaps in knowing which elements effectively deliver the best outcomes. This highlights a vulnerability. Workplaces must produce different outcomes in smaller footprints, if they fail, employees won't use them. Similarly, designers unable to deliver additional value may find themselves competing unsuccessfully against powerful AI tools that are able to generate interior designs in the time it would take a human a decade to deliver (Nayeri, 2023).

Given the nature of hybrid work and the many changes that have taken place, it is understandable that organisations are questioning the importance of investing in workplaces when employees spend most of their time working remotely (Ronda & Gracia, 2022). Companies are confronted with the mystery of

how much space they need and some are debating whether they need space at all (Boland et al., 2020; Naor et al., 2022). For these reasons it is important to understand which features deliver the experiences currently in demand.

Literature and this research confirm a shift in expectations has occurred, but it is also clear physical solutions alone will not deliver the experiences expected. A comprehensive look at the role and purpose of work in our lives, the impact of physical and digital environments and whether the benefits of curated experiences and events continue to deliver over an extended period of time should be brought into discussions related to the design of future office environments.

Supporting connection & community, choice, digital connectivity and hospitality events may be an unfair burden to place on organisations, designers, or the workplace. But the challenges posed in this paper establish an imperative for designers of workplaces to take this on if they hope to deliver value and support psychological aspects of life that employees expect. This has not traditionally been part of a workplace brief, but it needs to be moving forward.

This research will reduce the gap in our understanding by clarifying what elements are used to deliver desired experiences. Subsequent phases of the project will explore the divide between designers' thoughts and intentions and users' feelings in space. Together they will shed light on what works and what doesn't and force the justification of the inclusion of design elements that lack intention. In a future where workplace must do more with less, an appreciation of nuances is required to combat the risk of abandoning physical workplaces at the expense of psychosocial wellbeing.

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