

Active Bodies, Committed Minds: Exploring the Relationship between Employee Physical Activity and Organizational Commitment

Juhi Gahlot Sarkar^{a,*}, Abhigyan Sarkar^a

^a Institute of Management Technology Ghaziabad, Ghaziabad, 201001, U.P., India

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Abstract

Despite a wealth of research highlighting the numerous benefits of physical activity in enhancing employees' overall well-being, there remains a need for a more comprehensive understanding of how different forms of physical activity specifically leisure physical activity (LPA) and occupational physical activity (OPA), impact crucial workplace outcomes such as organizational commitment (OC). Drawing upon Ethics Position Theory, we propose that LPA and OPA influence employees' OC through distinct mechanisms, namely relativism and idealism, respectively. Moreover, we argue that the context of an employee's job evaluation plays a significant role in determining the most effective approach to enhance organizational commitment. Specifically, we contend that implementing LPA programs for junior-level employees, who are engaged in formal and well-structured job activities, can reinforce employee OC by generating idealism, given that organizations establish a group of junior-level employees who primarily evaluate their jobs deontologically. Conversely, for senior-level employees who possess greater autonomy in making strategic decisions for the organization, introducing OPA programs may also lead to reinforcing OC through the mediation of relativism, provided organizations form a group of senior-level employees who predominantly evaluate their jobs teleologically. Our study significantly contributes to the existing literature by deepening the understanding of factors and processes that positively influence employees' organizational commitment. It identifies employee physical activity as a major predictor of organizational commitment, elucidates the explanatory mechanism of ethical position in this relationship, and highlights employees' job evaluation as a crucial boundary condition that shapes the relationship between physical activity and organizational commitment.

Keywords: Physical activity; Organizational commitment; Relativism; Idealism; Deontological job evaluation; Teleological job evaluation

1. Introduction

There is substantial evidence indicating that individuals who engage in regular physical exercise tend to be healthier than those who do not. Despite this, the majority of adults do not meet the recommended

* Correspondence: juhi.gahlot.sarkar@gmail.com

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levels of physical activity necessary to realize its full health and well-being benefits (World Health Organization, 2022). In response, many organizations have introduced workplace-based physical activity programs as a means to enhance employee health and reduce healthcare expenditures (Rezai et al., 2020). Given that employed adults spend a considerable portion of their waking hours at work (Duffy et al., 2021), the workplace presents a strategic and opportune setting to encourage physical activity and, by extension, improve employees' overall physical activity levels. These programs are not only believed to promote physical and mental health but also to yield positive workplace outcomes, including enhanced focus, productivity, performance, and work ability (Ten Brummelhuis et al., 2022; Grimani et al., 2019).

Leisure physical activities (LPA) refer to non-essential physical activities undertaken voluntarily during free time, such as recreational walking (Moore et al., 2012). LPAs are expected to positively influence various workplace outcomes by improving employee well-being and work-life balance. These outcomes include greater organizational commitment (Knecht et al., 2016), higher job satisfaction (Dallmeyer et al., 2023; Abos et al., 2021), increased engagement and productivity (Grimani et al., 2019), and the cultivation of a more positive organizational culture (Santos & Miragaia, 2023). In contrast, occupational physical activities (OPA) are those inherently embedded in job roles, such as physically demanding tasks in manual labor (Steele & Mummery, 2003). OPAs are similarly linked to favorable workplace outcomes, including reduced sedentary behavior, enhanced physical well-being (Dalene et al., 2021), improved job satisfaction (de-Pedro-Jiménez et al., 2021), and heightened perceptions of organizational support (Payne et al., 2018). Prior research states that LPA and OPA have a differential effect on individuals' cognitive processing and attitude formation. For example, unlike OPA, LPA has been found to impact the nigrostriatal dopaminergic system of the human brain that is responsible for stimulating positive psychology (Sarkar & Sarkar, 2025). As employees engage in both LPAs and OPAs while working, it is important to examine how LPA and OPA can differentially impact an employee's job-related attitude.

However, the literature remains divided on whether the outcomes of OPA parallel those of LPA (Holtermann et al., 2021). For instance, White et al. (2020) found that high levels of OPA were associated with increased psychological distress, particularly among women across various occupations. Cillekens et al. (2020), in a review of 158 studies, reported mixed findings: while some studies linked high levels of OPA to improved mental well-being and life satisfaction, others found associations with elevated levels of depression and anxiety. These conflicting results underscore the need to examine whether the workplace manifestations of LPA and OPA operate through similar or divergent mechanisms and lead to convergent or divergent outcomes.

To address this research gap, our study seeks to examine the comparative impact of LPA and OPA on employees' organizational commitment and to identify the underlying mechanisms that shape this relationship. We ground our theoretical framework in Ethics Position Theory (EPT), which posits that individuals' ethical reasoning lies along a continuum of relativism and idealism (Forsyth et al., 2008). The balance between these orientations influences how employees interpret their organizational environment (Park, 2005) and shapes their engagement in ethical or pro-organizational behaviors (Vem et al., 2022).

We posit that employees engaging in LPA are more likely to adopt a relativistic ethical stance—evaluating workplace conduct contextually and based on interpersonal dynamics, rather than adhering to rigid moral absolutes. In contrast, engagement in OPA is hypothesized to reinforce

idealistic ethical evaluations, characterized by adherence to universal principles such as justice, duty, and best practices, with limited allowance for situational interpretation (Wu & Zhang, 2022).

Moreover, we contend that job-specific factors—particularly an employee's role and how they evaluate their job—act as boundary conditions moderating the influence of physical activity on ethical orientation (Gelade et al., 2008). While LPA typically nurtures relativism, it can interact with deontological job evaluation (DJE)—which involves judging job roles based on inherent righteousness and procedural fairness (Casali, 2011)—to strengthen idealism. This effect may be especially relevant for junior employees, whose roles are often formally structured with limited flexibility (Van Hootegem et al., 2023).

Conversely, although OPA generally promotes idealism, it may interact with teleological job evaluation (TJE)—which focuses on the outcomes and utility of work tasks (Michaelson & Tosti-Karas, 2019)—to foster relativism. This interaction may be particularly adaptive for senior-level employees, who possess greater decision-making autonomy and require strategic discretion in their roles (Human Resources, 2023).

We tested the research model through a series of 6 studies. Our research contributes to workplace physical activity literature by deepening the understanding of how leisure and occupational physical activities impact employees' organizational commitment and the ethical positions that facilitate this impact. Second, we underscore the importance of developing relativism (idealism) as the ethical position for senior (junior) employees, and through identifying the boundary conditions of teleological (deontological) job evaluation, provide implementable job recruitment as well as work-team design strategies that will result in harnessing employees' utmost levels of organizational commitment.

2. Hypotheses development

2.1 *The effect of leisure physical activity (LPA) on Organizational Commitment (OC) (LPA → OC)*

According to World Health Organization and Zimmermann and Chakravarti (2022), physical activity is defined as any movement associated with the body that is performed by skeletal muscles and requires energy expenditure. Leisure physical activities (LPA) are non-vital physical activities that a person performs at their discretion during their leisure time, such as recreational walking (Moore et al., 2012).

We anticipate that engaging in LPA would enhance an employee's organizational commitment. The seminal paper by Mowday et al. (1979) conceptualises employee's commitment to the organization as a construct that transcends mere loyalty to encompass an active relationship orientation that represents an individual's level of identification and involvement with a specific organization, reflected through a strong belief in the organization's goals and values, a willingness to exert significant effort on behalf of the organization, and a strong desire to maintain membership in the organization. In the contemporary job markets, an employee's organizational commitment would transpire through enhanced embeddedness that manifests through fit, links and sacrifice (Fit refers to how employees perceive the compatibility between their work/non-work roles in relation to other aspects of their lives. Links encompass the connections employees have with other people, teams, groups, or activities. Sacrifice refers to the costs, whether financial or psychological, that employees would face if they were to leave), decreased moonlighting and higher occupational investments (i.e. increased focus on acquiring knowledge and developing skills that are directly applicable to a particular profession) (Zimmerman et al., 2020). It is anticipated that LPA would increase affective (emotional attachment), normative (obligatory) and continuance (emanating from cognitive evaluation of the costs and benefits associated

with being loyal to the organization) commitment levels (Suliman and Iles, 2000; Houle et al., 2022) of an employee towards the organization.

LPA is known to lower occupational stress and burnout among employees (Gerber et al., 2020). Biomedical research demonstrates the effectiveness of LPA in increasing oxytocin (Albantakis et al., 2021), a potent hormone that enhances empathy in individuals (Yamagishi et al., 2020; Fragkaki & Cima, 2019). Empathy is an emotion that significantly enhances an individual's pro-social tendencies (Cohen, 2010; Chowdhury & Fernando, 2014; Zollo, 2021). Oxytocin is also known to increase an individual's trust, generosity, and altruism (MacDonald and MacDonald, 2010; Marsh et al., 2021). Affective and normative organizational commitments in essence involve an empathetic pursuit, earmarked by a focus on a transformational (rather than transactional) approach towards the organization (Skinner et al., 2005) and prosocial organizational behaviours (i.e. behaviours for the good of the organization) (Swales, 2002). Thus, engaging in LPA should enhance employees' empathy and pro-social behaviours, which would translate into increased affective and normative organizational commitment. Higher LPA is also known to increase a person's work engagement, which results in greater organizational commitment (Kiema-Junes et al., 2022)

The role of LPA in increasing dopamine and serotonin levels is also well-established in the literature (Sarkar et al., 2022; Sarkar & Sarkar, 2025). These hormones are known to enhance the neural architecture of decision-making such that they curb an individual's urge for immediate gratification through temporal discounting, as evidenced by the reduced drug-taking behaviours of drug addicts and the reduced urge of gamblers to engage in high-risk gambling (Rogers, 2011). LPA can enhance the work focus of individuals by boosting personal resources, such as self-efficacy (Ten Brummelhuis et al., 2022). The effectiveness of LPA in curbing the 'dilution effect' (i.e. focusing on irrelevant information during decision making) as well as reducing an individual's neglect of feasibility in the 'desirability-feasibility trade-off' during decision making, to increase the individual's goal-directed behaviours is demonstrated by Zimmermann and Chakravarti (2022). Goal-directed behaviours have strong positive connections with organizational commitment (Houle et al., 2022). Thus, engaging in LPA is also expected to enhance cognitive aspects of employees' organizational commitment by increasing their self-efficacy towards engaging in goal-directed organizational behaviours.

In summary, LPA alters the hormonal composition of the human body to increase the levels of oxytocin, dopamine, and serotonin, leading employees to engage in prosocial organizational behaviours, and providing them with the self-efficacy to perform these behaviours, thus enhancing their organizational commitment.

H1a: LPA positively influences employees' organizational commitment, such that consumers performing high (low) LPA are more (less) likely to be committed to the organization.

2.2 The effect of occupational physical activity (OPA) on Organizational Commitment (OC) (OPA → OC)

Occupational physical activities (OPA) correspond to the physical activities that a person performs as part of his or her job. These are usually performed in the time frame of occupational working hours, e.g., an 8-hour shift, such as farming, cleaning, etc. (Shala, 2022). OPA would result in dynamic movements of large muscle groups and thus qualifying them as physical activities (Clays et al., 2012). The physical health benefits of OPA in curbing obesity (Church et al., 2011), reducing the risk of some cancers (Mahmood et al., 2017), and all-cause mortality (Cillekens et al., 2019) are well documented in the medical literature. While the physical health benefits of active (vs. sedentary) employment are in themselves considered factors that enrich an individual's quality of life and overall well-being by

reducing the risk of critical illness, recent literature also explores the putative role of OPA in influencing an individual's mental health and well-being.

As with LPA, there is evidence of the efficacy of OPA in reducing symptoms of depression and anxiety (Chu et al., 2014). It was found that high levels of OPA were associated with higher psychological well-being in employees of a UK university compared to their sedentary counterparts (Cooper & Barton, 2016). The mental health benefits of OPA also include improving the cognitive performance of the employees and maintaining their cognitive abilities as they age (Ratey & Loehr, 2011). Thus, research to date demonstrates the key role that OPA plays in enhancing individuals' well-being, which is reflected in their physical and mental well-being. Well-being is known to strengthen employees' affective and normative organizational commitment (Jain et al., 2009). Jobs that involve performing emotional work requires emotional labour, which may involve applying either deep or surface-level acting (Ashforth & Humphrey, 1993). Affective and normative commitments are emotional (and not cognitive) constructs. Based on action theory and emotion theory, Zapf (2002) posits that employees who have the psychological feeling of well-being and affective commitment towards the organization tend to perform 'acts' of emotional labour effortlessly, as it is easier to express emotion when it is felt. Chowdhury and Fernando (2013, p. 61) state that "lived personal well-being was positively related to perceptions of the 'no harm, no foul' dimension and the 'doing good'" dimension of an individual's beliefs. Thus employee well-being emanating from OPA should enhance affective and normative organizational commitment.

There is some evidence that supports the impact of occupational physical activity on people's cognitive functioning (Falck et al., 2023), so it is anticipated that OPA would enhance the continuance of organizational commitment among employees, which is a cognitive commitment, by enhancing their self-efficacy to continue their work activities in well-performed configurations (Guoyan et al., 2021).

In summary, OPA strengthens consumers' organizational commitment by improving their well-being which enhances their affective and normative organizational commitment, as well as improving their cognitive functioning which enhances their self-efficacy in performing their work activities, thus increasing their continuance commitment.

H1b: OPA positively influences employees' organizational commitment, such that consumers performing high (low) OPA are more (less) likely to be committed to the organization.

2.3 Mediating role of relativism in the relationship between leisure physical activity and organizational commitment (LPA → Relativism → OC)

Ethics Position Theory (EPT) advocates that "people's reactions in ethically toned situations can be traced to variations in their intuitive, personal ethical philosophies" (Forsyth et al., 2008, p. 814). According to the ethics position theory, an individual's ethical position could contextually lie across the paradigms of relativism vs. idealism (Forsyth et al., 2008). The degree of relativism vs. idealism is a precursor to an employee's evaluation of the organizational environment (Park, 2005) and subsequent unethical/pro-organizational behaviours (Vem et al., 2022).

Highly relativistic individuals place a higher emphasis on their perspectives and discretion than on ethical prescriptions when evaluating an ethically coloured concern (Dubinsky et al., 2005; Sivadas et al., 2003). Such individuals tend to reject the possibility of relying on absolute ethical codes to resolve ethical issues (Chowdhury, 2017). They are characterized by a benign "scepticism regarding the existence of inviolate ethical principles" (Arancibia, 2019, p.11). Relativism as a philosophical doctrine is considered the "harbinger of tolerance and the only ethical and epistemic stance worthy of the open-minded and tolerant person" (Arancibia, 2019, p.12). When evaluating an ethical concern, people

with high relativism tend to focus more on the circumstances of the situation and the people than on the ethical norms that apply to the concern (Chowdhury, 2018). Employees who believe that ethics are relative would also be able to better justify some actions as necessary for the accomplishment of work or organizational goals even if these acts contradict their values, and thus would demonstrate higher commitment towards context-specific application of organizational goals and values (Peterson, 2003).

As postulated in H1, LPA increases people's empathy and pro-social behaviours, as well as their generosity and altruism. Thus, it is expected that people who engage in LPA will be more open to an empathetic evaluation of an ethical problem based on the context and the people involved, rather than relying on a set of 'inviolable principles' to reach a conclusion. In addition, Zimmermann and Chakravarti (2022) and Sarkar et al. (2022) explicate the effectiveness of LPA in improving consumers' cognitive and emotional perceptual abilities in judging a task at hand. Thus, LPA improves a person's contextual application of cognitive and emotional intelligence. Such a person would rely on his or her discretionary assessment of the situation and the people involved, rather than relying on a set of absolute ethical principles to reach conclusions. Thus, engagement with LPA is likely to lead to the development of relativism (rather than idealism) as a philosophy, which would be the harbinger of an individual's inclination to develop organizational commitment.

H2a: Relativism is more likely to mediate the effect of LPA on employees' organizational commitment than idealism.

2.4 Mediating role of idealism in the relationship between occupational physical activity and organizational commitment (OPA → Idealism → OC)

People with high idealism tend to internalize and religiously follow inviolable ethical rules or principles that guide their actions and behaviours (Dubinsky et al., 2005). Such people believe that there is a set of universal "right" actions that constitute the only morally appropriate code of conduct (Mudrack & Mason, 2020). We suggest that idealism mediates the relationship between OPA and organizational commitment.

A review of previous literature provides evidence of the link between OPA and an individual's ethicality. Homer (1914) traces the course of the history of physical education as schools began to recognize 'the claims of the body' in a well-rounded education, and thus, physical education became a profession. Over time, physical education became a means of instilling a higher level of ethicality in students and making them responsible citizens. Similarly, military physical education is an important tool for developing 'military morale,' which is reflected in a soldier's attitude toward duty, self-mastery, sense of justice, discipline, and spirit of cooperation and mutual respect (Ulio, 1941). In 2016, China introduced a military physical education curriculum in higher education to promote duty-conscious ethicality (Wu & Zhang, 2022). All these OPA programs are aimed at inducing 'idealistic' (rather than relativistic) prescriptions in shaping an individual's ethical position.

Sinnicks (2021, p.272) emphasizes the importance of professional practices aimed at achieving the "best forms of work" when he envisions a future in which "everyone has the opportunity to participate in the very best activities." He proclaims that building best practices requires institutional support and directives, and OPA could be used effectively to achieve such a vision of business ethics. Thus, the foregoing literature underscores the importance of OPA in building a sound ethical position for individuals that translates into prosocial organizational behaviours. It is important to note that this position is highly 'idealistic,' characterized by duty, justice, best activities, and best practices that form an all-encompassing, supreme guiding code of conduct, leaving little (if any) room for contextual evaluation of the conduct.

Dunlop (1975, pp. 156-157) states, "Virtuous behaviour, which proceeds from a virtuous disposition, is still virtuous even though the ends of the behaviour are deplorable." When men display courage or generosity on the playing field, even when they pursue reprehensible goals, we cannot deny them the quality of virtue. For virtue is a quality of character, not a quality of the kind of action, and a man's character may exhibit some virtues even if the ends he pursues are usually contemptible." The ethicality of athletes, military personnel, and even the teaching of physical education in schools is centred on this 'idealistic' position, i.e., adherence to an inviolable code of virtuous conduct. Workplace ethicality is more often based on such inviolable codes, and Henle et al. (2005) show that idealistic (as opposed to relativistic) employees tend to exhibit significantly less deviant behaviours in the workplace. Based on the preceding discussion, we propose that OPA promotes a person's idealism, which drives his or her pro-social behaviours such as organizational commitment.

H2b: Idealism is more likely to mediate the effect of OPA on employees' organizational commitment than relativism.

2.5 The moderating role of deontological job evaluation (DJE) in strengthening the impact of LPA on idealism for junior-level employees

In H2a, we proposed that LPA's influence on OC is mainly guided by the ethical position of relativism. LPA thus tends to be rather ineffective in building idealism as the subject's ethical position. However, managers may want to contextually reinforce employees' idealism (which is weak in LPA) to achieve desired organizational outcomes. It is anticipated that reinforcement of idealism would especially be important for employees working in junior positions, who have no/low autonomy in organizational decision-making (Human Resources, 2023). Such employees would fall on the 'structured' spectrum of Van Hootegeem et al.'s (2023) job roles context, where the job-related activities are formal and well-designed, with little, if any, scope of deviation. We posit that reinforcing idealism is critical for such employees because the job roles of junior-level employees typically do not involve formulating organizational decisions: they rather involve implementing organizational decisions in the most effective ways based on the directives of the organization. An idealistic ethical position would provide the junior employees with the self-efficacy to execute their organizational duties while relying on the absolute codes as prescribed by the organization.

Paradigms of employee moral judgment based on teleology and deontology are predominantly used by researchers pursuing the domain of employee morals (DeConinck & Lewis, 1997; Smith et al., 2023). In this hypothesis (H3a), we propose that the effect of LPA on idealism can be enhanced by largely recruiting junior employees who would mainly engage in deontological evaluation of their job profiles. The foundation of deontological morals is based on obligations with regard to the acts, as required to be performed by God, by natural law, or by rationality (Whetstone, 2001). As discussed in H2a, LPA directs individuals towards relativism, and relativistic individuals place greater emphasis on their personal views and discretion rather than on ethical imperatives. However, contextual factors may interact with individuals' ethical positions and influence their decision-making (Smith et al., 2023; Hastings & Finegan, 2011; Callanan et al., 2010), and models of employees' ethical behaviours have always emphasised the theoretical significance of person-situation interaction (Trevino, 1986). We explain that LPA can interact with deontological job evaluation to enhance employee idealism. This is because the deontological cue prompts the employees to evaluate the inherent moral obligations related to the procedures involved in performing their job-related tasks (Soto-Pérez et al., 2022) as well as affiliative behaviours (Brown & Sacco, 2019), thus strengthening their idealism, thereby enhancing organizational commitment. Based on the above discussion, we hypothesize that:

H3a: The mediation of idealism between LPA and the employee's OC is strengthened by deontological job evaluation (DJE).

2.6 The moderating role of teleological job evaluation (TJE) in strengthening the impact of OPA on relativism for senior-level employees

In H2b, we proposed that the effect of OPA on OC is routed via the ethical position of idealism. As such, LPA is rather ineffective in building relativism as the ethical position of the subject. However, it would be important for the organization to contextually reinforce relativism as an ethical position of senior-level managers. Individuals who hold a relativistic position are disposed to give high importance to situational factors while making judgements (Valentine & Bateman, 2011). Such an approach would be judicious for senior-level employees who have the autonomy to take organizational decisions (Human Resources, 2023), and require strategic competence such as the skill of collaborating in the development of an organization's strategy (strategic positioner); establishing trust through business expertise (credible activist); recognizing and cultivating an organization's culture, procedures, or identity (capability builder); initiating and coordinating the process of organizational change (change champion); integrating practices into cohesive solutions to address future business challenges (innovator and integrator); comprehending and aligning technology for information, efficiency, and connections (technology advocate) (Guan et al., 2016). Most of the elements of strategic competence require employees to go beyond defined organizational structures and to weigh contextual/situational factors when making judgements. In such strategic contexts, relying on relativism would be helpful to go beyond inviolable ethical codes to arrive at judgements.

In this hypothesis (H3b), we propose that the influence of OPA on relativism can be enhanced by recruiting senior-level managers who would predominantly engage in teleological evaluations of their organizational job roles. Teleological morality is based on the inherent value (utility) of the outcomes of the action, i.e., the cost-benefit analysis of the action. Teleology focuses on the 'best' consequences that maximize happiness (Whetstone, 2001), where the actor considers "weighing the interests of affected parties impartially to determine the most net beneficial course of action" (Michaelson & Tosti-Karas, 2019, p.22). Teleological evaluation would lead the employees to assess the outcomes of the act and enhance their effort to maximize happiness for the organizational stakeholders, thus reinforcing their relativism. Therefore, it is hypothesized that:

H3b: The mediation of idealism between OPA and OC is strengthened by teleological job evaluation (TJE).

The figures below show the above hypothesized relationships:

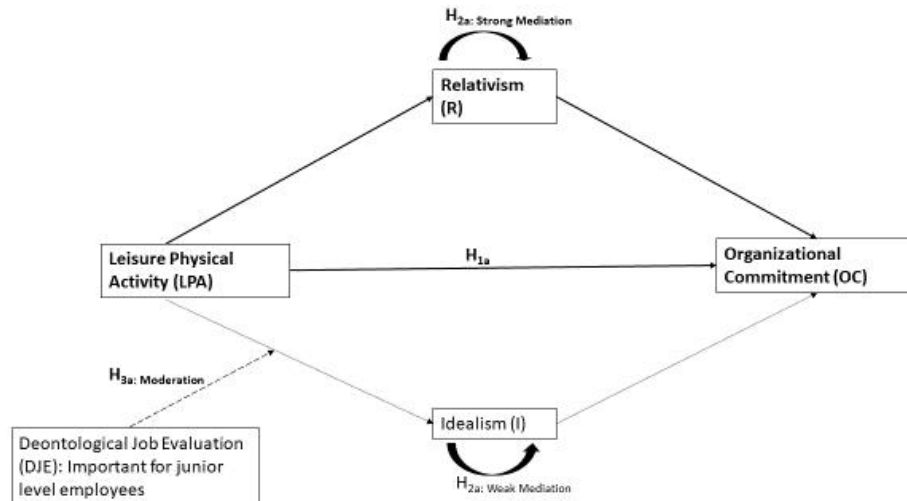


Figure 1. Conceptual Framework for the Impact of Employees' Leisure Physical Activities on Organizational Commitment

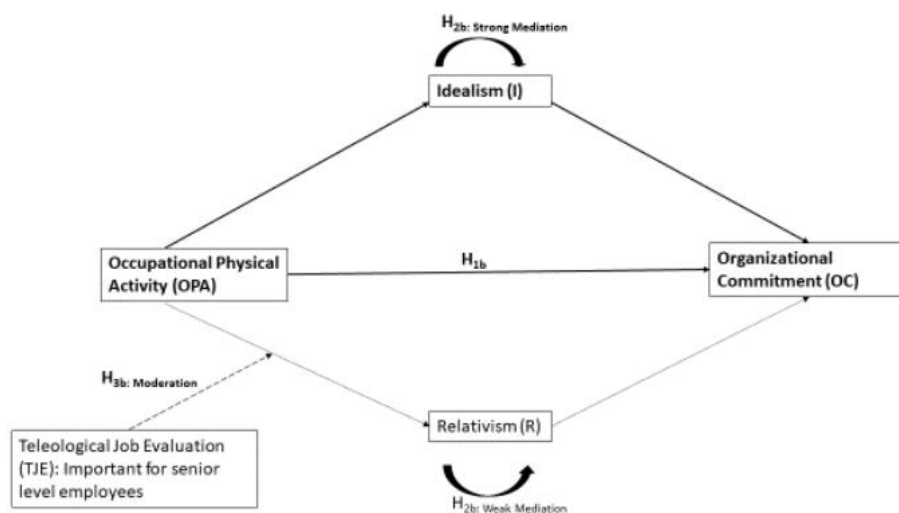


Figure 2. Conceptual Framework for the Impact of Employees' Occupational Physical Activities on Organizational Commitment

3. Overview of studiesFunding

To test the hypothesised relationships, we conducted 6 studies.

Study 1 comprises two field experiments (1a and 1b) designed to study employees in their naturally occurring work environments, and provides evidence that establishes causal links (Baldassarri and Abascal, 2017) between physical activity (leisure and occupational) and organizational commitment. Studies 2, 3, 4 and 5 utilise cross-sectional surveys with a representative sample of respondents to assess the ecological validity of our findings (Van Heerde et al., 2021) from study 1, as well as to additionally assess the mediation of ethical position (relativism vs idealism) and the moderation of moral job evaluation (deontological vs. teleological) for the causal relationships established in study 1.

The respondents for all our studies were screened to ensure that they had worked in their current organization for at least six months. Such selection criterion was adopted as prior research maintains, “Much of the theoretical and empirical research devoted to affective organizational commitment has been based on the assumption that this form of commitment develops with tenure” (Beck and Wilson, 2000, p. 114). This criterion was followed to ensure that our study participants had developed a sufficient amount of organizational commitment owing to their tenure with the organization so that we could tease out the contribution of physical activity to the development of this OC.

Before conducting the main studies, the validity of all study constructs: LPA, OPA, OC (affective, continuance and normative), DJE and TJE was tested. Data were collected by administering paper and pen questionnaires among 220 employees working in three IT companies and two banks by visiting their branches. The respondents rated all construct scale items (shown in Appendix) keeping their current employment and job roles in mind. We conducted confirmatory factor analysis (CFA) to test the measurement model. The model achieved a good fit (CMIN/DF = 2.78; IFI = 0.72; CFI = 0.72; RMSEA = 0.07). The composite reliability (CR) of all constructs was computed which is reported in Appendix along with the scale items.

Next, we describe the study designs and the results. Table 1 provides an overall summary of all studies.

Table 1. Summary of Studies

Study	Proportions of employee levels - Top: middle: junior	Predictor	Moderator	Mediator	Outcome	Controls
Study 1a	27%:34%:39%	Leisure physical activity			Organizational commitment	Age, gender; work commitment, and global regular physical activity
Study 1b	24%:35%:41%	Occupational physical activity			Organizational commitment	Age, gender; work commitment, and global regular physical activity
Study 2	21%:37%:42%	Leisure physical activity		Relativism; Idealism	Organizational commitment	Occupational physical activity, sex, age and work commitment

(Table 1. continued)

Study	Proportions of employee levels - Top: middle: junior	Predictor	Moderator	Mediator	Outcome	Controls
Study 3	23%:34%:43%	Occupational physical activity		Relativism ; Idealism	Organizational commitment	Leisure time physical activity, sex, age and work commitment
Study 4	All junior-level employees	Leisure physical activity	Deontological job evaluation	Idealism	Organizational commitment	Occupational physical activity, sex, age and work commitment
Study 5	All senior-level employees	Occupational physical activity	Teleological job evaluation	Relativism	Organizational commitment	Leisure time physical activity, sex, age and work commitment

3.1 Study 1a: A field experiment to assess the effect of leisure physical activity (LPA) on Organizational Commitment (OC)(LPA → OC)

3.1.1 Design, sample, procedures and measures

Study 1a was designed to test H1a and employed one factorial between-groups design (leisure physical activity: absent vs. present), similar to the approach used by Li et al. (2022). 97 relationship managers, probationary officers and tellers of a nationalised bank in India participated in the study. The participants were undergoing a five-day management development program (MDP) in the officers' training college of the bank in a major metropolitan city in India. On the 3rd day of their training, participants were asked to take a short session break and participate in leisure activities orchestrated by the trainers. 47 participants were randomly assigned to the control condition (leisure physical activity: absent) and 50 were exposed to the treatment (leisure physical activity: present) condition. Participants in the control condition sat through a 30-minute stand-up comedy video. Participants in the treatment group were asked to engage in about 30 minutes of moderate-intensity physical activity (4 repeated sets of 10 squats, 10 chest flies, 10 jumping jacks) with intermittent breaks of 2 minutes after every 5 minutes of physical activity. This intervention was designed as per the World Health Organization (WHO) recommendation of at least about 22 minutes of moderate-intensity aerobic activity per day (150 minutes/week) (World Health Organization, 2022; Sparling et al., 2015).

Post the 30-minute leisure breaks, participants in both groups were requested to complete a questionnaire that included questions on the dependent variable (organizational commitment measured using 8 items capturing affective commitment, 8 items capturing continuance commitment and 8 items capturing normative commitment adopted from Allen and Meyer, 1990), as well as control variables

(demographics: age, gender; work commitment measured through 4 items adapted from Klien et al. (2012), and the global regular physical activity (GRPA) measured using global physical activity questionnaire developed by the World Health Organization (WHO) (Zimmermann and Chakravarti, 2022). The measurement instruments are shown in Appendix.

3.1.2 Analysis and results

To analyse the data, we employed Analysis of Covariance (ANCOVA) using IBM SPSS 27.

Before testing the effect of LPA on organizational commitment, the assumption about homogeneity of variance was tested using Levene's test for equality of error variances, and the results showed that the assumption was fulfilled ($F=1.623$; $p = 0.206$). The results showed a significant main effect of LPA on organizational commitment ($F = 8.127$; $p = 0.005$, partial $\eta^2 = 0.082$, indicating a medium effect size with observed power of 0.805). None of the covariates had a significant impact on organizational commitment. See Figure 2a.

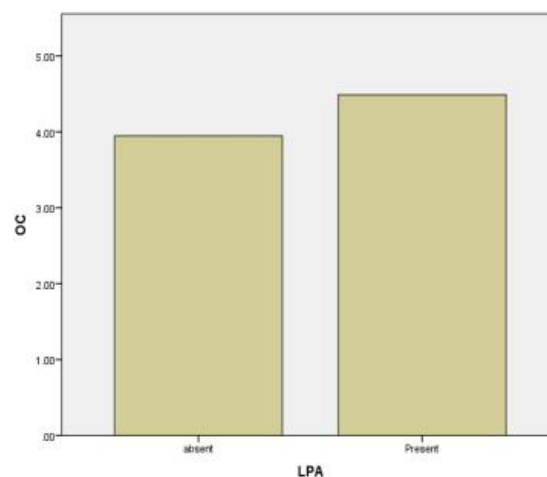


Figure 3. Impact of LPA on OC

3.2 Study 1b: A field experiment to assess the impact of occupational physical activity (OPA) and organizational commitment (OC) (OPA → OC)

3.2.1 Design, sample, procedures and measures

Study 1b was designed to test H1b and employed one-factor between-groups design (occupational physical activity: absent vs. present). 54 professors of a reputed business school located in the National Capital Region of India participated in the study. For the occupational physical activity absent condition, 29 professors who did not have any scheduled classes during the semester and were devoting their time mainly to their research writing (in mostly sedentary environments that required sitting for prolonged periods in offices) were requested to respond to a series of questions after about 2 hours of negligible physical activity. For the physical activity present condition, 25 professors, who had completed 90 minutes of class each that required walking from the office to the designated lecture theatres, walking and/or standing throughout the delivery of the lecture and then walking back to their respective offices, were requested to respond to the same set of questions asked to the first group of professors. The questions asked were the same as in Study 1a.

3.2.2 Analysis and results

Before testing the effect of OPA on organizational commitment, the assumption about the homogeneity of variance was tested using Levene's test for equality of error variances, and the results showed that the assumption was fulfilled ($F=0.178$; $p = .675$). The results showed a significant main effect of OPA on organizational commitment ($F = 4.046$; $p = 0.050$, partial $\eta^2 = 0.076$, indicating a medium effect size with an observed power of 0.505). None of the covariates had a significant impact on organizational commitment. See Figure 2b.

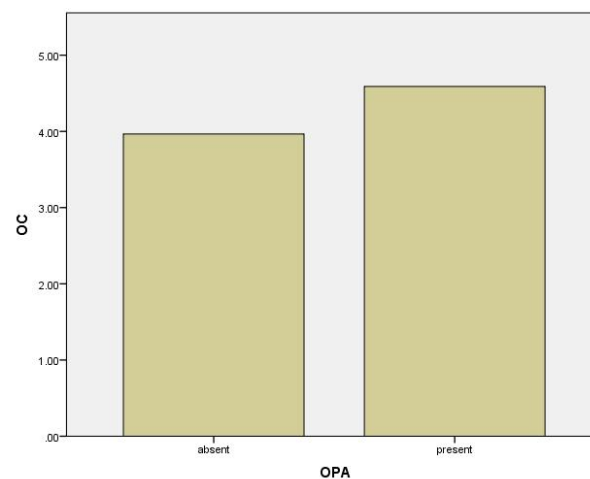


Figure 4. Impact of OPA on OC

3.3 Discussion of the results of Study 1a and 1b

Results from study 1a establish a direct causal impact of LPA on employee OC. Engaging in leisure physical activity can have a positive impact on organizational commitment, which refers to an individual's psychological attachment and loyalty to an organization. These results support and enhance previous studies that establish the positive impact of LPA on employees' workplace outcomes (e.g. Ten Brummelhuis et al., 2022; Grimani et al., 2019). Results from study 1b show that OPA also has a causal effect in enhancing employees' OC, thus providing evidence in support of incorporating OPA while designing employee job roles. While White et al. (2020) found that OPA increased psychological distress among women occupied across multiple occupations, our findings are rather contrasting, and show that individuals' psychological attachment and loyalty to an organization are enhanced when they engage in OPA.

3.4 Study 2

3.4.1 Objective

The objective of study 2 was to test the mediating effects of relativism and idealism in the relationship between leisure physical activity and organizational commitment using a cross-sectional survey.

3.4.2 Sampling and data collection

For conducting the survey, we contacted the employees of three reputed fast-moving consumer goods companies in India. We took permission from the HR department of each company and approached the employees during their lunch hours in the cafeteria of the organizational premises. Participants were assured that their responses would be kept anonymous and strictly confidential. The employees included a mix of top, middle and junior-level employees. The employees were requested to fill paper-and-pen questionnaire containing the questions measuring all constructs. They provided information related to the nature and duration of LPAs and/or OPAs that they engaged in on a regular basis followed by their contextual relativism, idealism and organizational commitment. We requested 307 employees to participate and out of those 279 volunteered. After deleting the incomplete responses, we finally received 262 usable responses.

3.4.3 Sample profile

Out of 262 respondents, 162 were males. The ages of the respondents ranged between 23 years and 71 years with an average of 44. The annual incomes of the respondents ranged between INR 11,873,519 to INR 1,876,204 with an average of INR 3,618,739.

3.4.4 Measures

The leisure physical activity (LPA) of respondents was assessed through scores based on self-reported information following Zimmermann and Chakravarti (2022). Scale items measuring employees' contextual relativism (REL) and idealism (IDE) were adapted from Vitell et al. (2001). Organizational commitment (OC) items were adapted from Allen and Meyer (1990). All items are shown in Appendix. OPA based on self-reported information (Zimmermann and Chakravarti, 2022), and sex, age and work commitments (Klien et al., 2012) were taken as the covariates.

3.4.5 Results

To test the mediation, we used model 4 of Hayes's (2017) process macro installed into SPSS 27. We used process version 4.1 with 5000 bootstrapping. The regression models were significant. The results show that LPA significantly impacts relativism (Coefficient = 0.184; SE = 0.030; $t = 6.115$; $p < 0.01$; LLCI = 0.125; ULCI = 0.244) and relativism significantly leads to organizational commitment (Co-efficient = 0.702; SE = 0.106; $t = 6.637$; $p < 0.01$; LLCI = 0.494; ULCI = 0.910). Thus, employee relativism significantly mediates the relationship between LPA and organizational commitment such that engaging in LPA increases employee's relativism in the job context which in turn positively impacts his/her organizational commitment.

The results show that LPA has a significant negative impact on idealism (Co-efficient = - 0.110; SE = 0.042; $t = -2.657$; $p < 0.01$; LLCI = - 0.192; ULCI = - 0.029) which in turn negatively leads to organizational commitment (Co-efficient = - 0.226; SE = 0.077; $t = -2.947$; $p < 0.01$; LLCI = - 0.377; ULCI = - 0.075). The results indicate that engaging in LPA decreases an employees' idealism in a job context which in turn reduces his/her organizational commitment. No covariate was found to be significant.

The contrast test was conducted to compare the mediating effects of relativism and idealism. The results show that relativism is a stronger mediator compared to idealism (REL minus IDE = 0.104; BootSE = 0.033; BootLLCI = 0.043; BootULCI = 0.175). These results partially support H2a which posits that relativism is a stronger mediator compared to idealism in the relationship between leisure time physical activity and organizational commitment. While relativism is indeed a stronger mediator than idealism, idealism emerges as a negative mediator that reduces the impact of LPA on OC.

3.4.6 Discussion of study results

The positive impact of leisure physical activity on organizational commitment via relativism can be explained using the theory of work and leisure which posits that work and leisure attitudes can be positively correlated (Wu and Porell, 2000). Relativism supports taking decisions to perform an action based on rational reasons that must have their source in certain goals (Harman, 1975). As Zimmermann and Chakravarti (2022) state engaging in LPA enhances an individual's rational focus on goal-relevant behaviours, and relativism positively mediates the effect of LPA on organizational commitment through enhancing focus on rational goal-relevant behaviours in a given context. Conversely, people with idealism rigorously follow inviolable moral rules (Dubinsky et al., 2005) and believe that there is a set of universal "right" actions that constitute the ethical code of conduct (Mudrack and Mason, 2020). Hence, idealism does not focus on any contextual goal-relevant behaviours whereas LPA promotes contextual goal-relevant behaviours. This might be a reason why LPA negatively impacts idealism.

3.5 Study 3

3.5.1 Objective

The objective of Study 3 was to test the mediating effects of relativism and idealism in the relationship between occupational physical activity and organizational commitment using a cross-sectional survey.

3.5.2 Sampling and Data Collection

For conducting the survey, we contacted the employees working in two reputed private banks in India. We contacted the employees through bank branches. The respondents were a mix of top, middle and junior-level employees. We requested more than 400 employees to participate and out of that 309 volunteered. After deleting the incomplete responses, we finally got 288 usable responses.

3.5.3 Sample profile

Out of 288 respondents, 148 were males. The ages of the respondents ranged between 20 years and 66 years with an average of 37 years. The annual incomes of the respondents ranged between INR 11,572,974 to INR 4,497,164 with an average of INR 2,275,186.

3.5.4 Measures

The occupational physical activity (OPA) of a respondent was assessed based on self-reported information following Zimmermann and Chakravarti (2022). Scale items measuring employees' contextual relativism (REL) and idealism (IDE) and organizational commitment (OC) were the same as in Study 2. LPA was calculated based on self-reported information (Zimmermann and Chakravarti, 2022), age, gender and work commitment (Klien et al., 2012) was taken as co-variates.

3.5.5 Results

To test the mediation, we used model 4 of Hayes's (2017) process macro using SPSS 27. We used process version 4.1 with 5000 bootstrapping. The regression models were significant. The results show that OPA significantly impacts idealism (Co-efficient = 0.630; SE = 0.063; $t = 10.024$; $p < 0.01$; LLCI = 0.506; ULCI = 0.753) and idealism significantly leads to organizational commitment (Co-efficient = 0.913; SE = 0.047; $t = 19.336$; $p < 0.01$; LLCI = 0.820; ULCI = 1.006). Thus, employee idealism significantly mediates the relationship between OPA and organizational commitment such that

engaging in OPA increases employee's idealism in the job context which in turn positively impacts his/her organizational commitment.

Further, OPA has a significant impact on relativism (Co-efficient = 0.375; SE = 0.066; $t = 5.668$; $p < 0.01$; LLCI = 0.245; ULCI = 0.505). However, the effect of relativism on organizational commitment is not significant (Co-efficient = 0.037; SE = 0.045; $t = 0.815$; $p > 0.05$; LLCI = - 0.052; ULCI = 0.125). The results indicate that relativism is not a significant mediator in the relationship between OPA and OC. No co-variate was found to be significant.

The contrast test was conducted to compare the mediating effects of relativism and idealism. The results show that idealism is a stronger mediator compared to relativism (REL minus IDE = - 0.561; BootSE = 0.079; BootLLCI = - 0.717; BootULCI = - 0.407). This supports our H3a which states that idealism is a stronger mediator compared to relativism in the relationship between occupational physical activity and organizational commitment.

3.5.6 Discussion of study results

The study results support that employees' contextual idealism better mediates the effect of occupational physical activity on organizational commitment compared to contextual relativism.

3.6 Pre-test for sample selection for moderation tests

H3a states that the mediation of idealism in the relationship between LPA and OC needs to be strengthened especially among the junior-level employees who largely perform routine and structured jobs and this strengthening happens if the employee engages in deontological evaluation of his/her job. H3b states that the mediation of relativism in the relationship between OPA and OC needs to be strengthened especially among the top-level managers who are largely disposed to give high importance to situational factors while making judgements in an unstructured strategic environment and this strengthening happens if the employee engages in teleological evaluation of his/her job. Accordingly, we conducted a pre-test to select samples with appropriate evaluation orientations towards their jobs for testing H3a and H3b.

We contacted both top-level managers and junior-level employees of three IT and four insurance companies operating in India. While requesting to participate in our research assistant gently asked the designation of a respondent and made sure that the respondent belonged to either top management or junior employee level. The current designation was also a mandatory question included in our instrument through which we finally eliminated any middle-level respondents. 1200 employees volunteered to participate. After deleting the cases of extreme responses, outliers, being employed in the current organization for less than 6 months, and a few middle-level employees as per designation, we finally received 857 usable responses.

Respondents rated nominal items (My job designation corresponds to 1. Senior level position; 2. Middle-level position; 3. Junior level position) followed by specific items reflecting the nature of their current jobs on a 7-point Likert type scale like degree of authority to make a decision (Item: I have sufficient authority to make decisions in my job), order giving (Item: I largely give orders to my subordinates to get my job done), order taking (Item: I largely take orders from my superior to get my job done) and long-term strategic importance (Item: My job is critical in terms of implementing long-term strategies for my organization) involved in their respective jobs. These items were included to confirm that the top and junior level employees consciously perceive their respective jobs to be nature-wise different. The questionnaire also included teleological and deontological job evaluation items (Casali, 2011).

Based on a median split of the ratings obtained on authority, order giving, order taking and strategic importance, we selected an initial pool of top managers and junior-level employees out of a total of 857 study participants. We got 367 top managers who scored above the median on authority, order-giving, and strategic importance items and below the median on order-taking items. We also got 402 junior-level employees who scored below the median on authority, order-giving, and strategic importance items and above the median on order-taking items. From the initial pool of 402 junior employees, 290 junior-level employees were finally selected for study 4 who scored above the median on deontological job evaluation items as well as below the median on teleological job evaluation items. From the initial pool of 367 top managers, 285 top-level managers were selected for study 5 who scored above the median on teleological job evaluation items as well as below the median on deontological job evaluation items. Thus, we ensured that the junior-level employees who participated in study 4 largely evaluated their jobs deontologically and top-level managers who participated in study 5 largely evaluated their jobs teleologically. We also conducted t-tests of teleological vs. deontological job evaluation scores across the samples of top-level managers and junior-level employees. For top managers, the mean teleological job evaluation score was significantly higher than the mean deontological job evaluation score ($M_{TEL} = 5.67$; $M_{DEO} = 3.19$; $t = 5.63$; $p < 0.01$). For junior-level employees, the mean deontological job evaluation score was significantly higher than the mean teleological job evaluation score ($M_{TEL} = 3.04$; $M_{DEO} = 5.71$; $t = 4.12$; $p < 0.01$). The results confirm our basic assumptions for testing H3a and H3b that top managers and junior-level employees would be more inclined to evaluate their respective jobs teleologically and deontologically. Studies 4 and 5 are described below.

3.7 Study 4

3.7.1 Objective

The objective of Study 4 was to test the moderating effect of employees' deontological job evaluation on the relationship between LPA, idealism and organizational commitment.

3.7.2 Sampling and data collection

Based on the 'structured' spectrum of Van Hooft et al.'s (2023) job roles context, it has been hypothesized in H3a that mediation strength of idealism in the relationship between LPA and OC should be enhanced through the conditioning of deontological job evaluation among the junior level employees of the organization as they are expected to perform routine jobs. This phase of the survey was conducted among the 290 junior-level employees selected through the pre-test mentioned above.

3.7.3 Sample profile

Out of 290 respondents selected through the pre-test, 219 were males. The ages of the respondents ranged between 18 years and 70 years with an average of 41 years. The annual incomes of the respondents ranged between INR 3,549,726 to INR 1,171,963 with an average of INR 1,776,105.

3.7.4 Measures

LPA, idealism and organizational commitment items were the same as in Study 2. Deontological job evaluation (DJE) items were adapted from the rule deontology items used by Casali (2011). In the questionnaire, the respondents were asked to rate the deontological job evaluation items keeping their

current job descriptions in mind. OPA (Zimmermann and Chakravarti, 2022), age, gender and work commitment (Klien et al., 2012) were taken as covariates.

3.7.5 Results

To test the mediation, we used model 7 of Hayes's (2017) Process using SPSS 27. We used process version 4.1 with 5000 bootstrapping and mean-centring the product terms. The regression models were significant. The results support that the interaction of LPA and deontological job evaluation significantly impacts idealism for junior-level employees (Co-efficient = 0.094; SE = 0.042; $t = 2.249$; $p < 0.05$; LLCI = 0.012; ULCI = 0.175) leading to organizational commitment. The test of higher-order unconditional interaction was also significant (R^2 change = 0.012; $F = 5.057$; $p < 0.05$). The conditional effects of focal predictor LPA at different values of moderator deontological job evaluation were all significant which are shown in Table 2. Figure 3 shows the Johnson-Neyman plot. No co-variate was significant. The results support H3a which states that the mediation of idealism between LPA and employees' organizational commitment is strengthened by deontological job evaluation done by an employee

Table 2. The Conditional Effects Table for H3a

DJE level	Effect	SE	T-test	p-value	LLCI	ULCI
-0.94	0.309	0.053	5.856	<0.01	0.205	0.413
-0.11	0.387	0.037	10.458	<0.01	0.314	0.460
0.73	0.466	0.049	9.585	<0.01	0.37	0.561

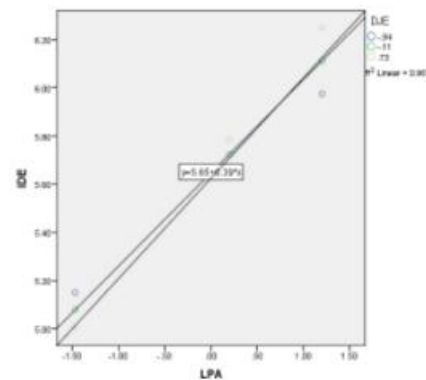


Figure 5. Johnson-Neyman plot for moderation in H_{3a}

3.7.6 Discussion of study results

The study results show that when junior-level employees evaluate their jobs to be deontological in nature, it strengthens the effect of LPA on idealism leading to organizational commitment.

3.8 Study 5

3.8.1 Objective

The objective of Study 5 was to test the moderating effect of senior-level employees' teleological job evaluation on the relationship between OPA, relativism and organizational commitment.

3.8.2 Sampling and data collection

While explicating H3b it was discussed that it would be important for an organization to contextually reinforce relativism as a moral position of senior-level managers. This phase of the survey was conducted among the 285 senior-level employees selected through the pre-test mentioned above.

3.8.3 Sample profile

Out of 285 respondents, 140 were males. The ages of the respondents ranged between 20 years to 70 years with an average of 45 years. The annual incomes of the respondents ranged between INR 17,672,974 to INR 7,376,195 with an average of INR 5,761,863.

3.8.4 Measures

OPA, relativism and organizational commitment items were the same as used in previous studies. Teleological job evaluation items were adapted from the rule utilitarianism items used by Casali (2011). In the questionnaire, the respondents were asked to rate the teleological job evaluation items keeping their current job descriptions in mind. LPA (Zimmermann and Chakravarti, 2022), age, gender and work commitment (Klien et al., 2012) were taken as covariates.

3.8.5 Results

To test the mediation, we used model 7 of Hayes's (2017) process macro using SPSS 27. We used process version 4.1 with 5000 bootstrapping and mean-centring the product terms. The regression models were significant. The results support that the interaction of OPA and teleological job evaluation significantly impacts relativism (Co-efficient = 0.056; SE = 0.028; $t = 2.009$; $p < 0.05$; LLCI = 0.001; ULCI = 0.112) leading to organizational commitment. The test of higher-order unconditional interaction was also significant (R^2 change = 0.010; $F = 4.036$; $p < 0.05$). The conditional effects of focal predictor OPA at different values of moderator teleological job evaluation were all significant which are shown in Table 3. Figure 4 shows the Johnson-Neyman plot. No co-variate was significant. The results support H3b which states that the mediation of relativism between OPA and the employees' organizational commitment is strengthened by the teleological job evaluation of the employee.

Table 3: The Conditional Effects Table for H3b

TJE level	Effect	SE	T-test	p-value	LLCI	ULCI
-1.417	0.322	0.054	6.013	<0.01	0.217	0.428
-0.172	0.392	0.038	10.444	<0.01	0.318	0.466
1.088	0.463	0.049	9.414	<0.01	0.367	0.56

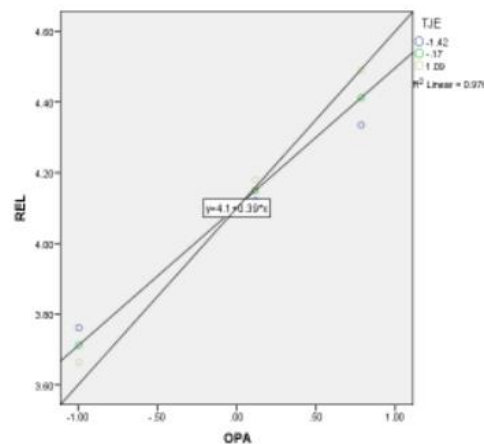


Figure 6. Johnson-Neyman plot for moderation in H3b

3.8.6 Discussion of study results

The results support that the weak impact of occupational physical exercise on relativism is strengthened when a senior-level employee evaluates his/her job highly on the teleological dimension and believes that his/her job generates the greatest benefits for all related stakeholders. Thus, occupational physical exercise can positively impact organizational commitment via eliciting contextual relativism when the senior level employees have a favourable teleological evaluation of their job roles.

4. General discussion of study results

The overall result supports that LPA and OPA both have a positive effect on organizational commitment with LPA having a greater effect size. Relativism is a stronger mediator compared with idealism in the relationship between LPA and OC. Idealism emerges as a negative mediator that reduces the impact of LPA on OC. Employees' idealism significantly mediates the relationship between OPA and OC such that engaging in OPA increases employee's idealism in the job context which in turn positively impacts his/her organizational commitment. Relativism acts as a weak mediator in the relationship between OPA and OC. The results support that the mediation of idealism between LPA and OC is strengthened by deontological job evaluation done by an employee. The results support that the mediation of relativism between OPA and OC is strengthened by the teleological job evaluation of the employee.

5. Theoretical implications

Our effort to extend the effect of physical activity on workplace outcomes enhances the extant literature in the domain in a multitude of ways. First, while recent research has identified several valuable factors such as ambition (Hrischi and Spurr, 2021), organizational support (Takeuchi et al., 2021) and workplace calling (Kim et al., 2023) as determinants of employees' organizational commitment, we add to this body of literature by positing the nuanced impact of employees' physical activity on their organizational commitment. Both LPA and OPA have a positive impact on employees'

organizational commitment, and the results explicate a causal relationship. Furthermore, the literature seems to be divided whether the workplace outcomes of occupational physical activity are similar to leisure physical activity (Holtermann et al., 2021). We demonstrate that OPA also yields outcomes similar to LPA in terms of enhancing workplace outcomes, but follows dissimilar mechanisms. While the impact of LPA on OC is routed through bolstering employees' relativism as their ethical position, the effect of OPA on OC is routed through bolstering employee idealism. In deciphering these distinct mechanisms, we extend the current discourse on Ethics Position Theory (EPT) (Forsyth et al., 2008) which suggests that people's personal ethical beliefs have an impact on how they make judgments, act, and experience emotions in situations that involve ethical dilemmas. We outline that employees engaged in LPA are more likely to adopt the contextual position of relativism, focusing more on the circumstances of the situation and people than on the absolute norms that apply to the concern, while employees engaged in OPA are more likely to view a contextual organizational situation through the lens of idealism, emphasizing the universal "right" actions that constitute the only ethically appropriate code of conduct in the situation. Furthermore, we contribute to the current discourse on employee job-crafting (Miao et al., 2023) by positing the contextual necessity of organizations to bolster idealism (relativism) in senior (junior) level employees, even when they are exposed to pan-organizational LPA (OPA) programs. Our results demonstrate that recruiting senior (junior) level employees who are inclined towards evaluating their jobs on deontological (teleological) parameters would develop organizational commitment through adopting enhanced levels of contextual idealism (relativism) even when exposed to LPA (OPA).

6. Practical implications

In today's work environment, individuals are consistently driven to find purpose in their jobs that goes beyond mere financial compensation (Kim et al., 2023). Supporting the proverb "All work and no play makes Jack a dull boy", past literature is replete with evidence that suggests the importance of physical activity-based interventions in enhancing employees' workplace outcomes (e.g. Friedman, 2014; Grimani et al., 2019). The current study suggests that both leisure physical activity and occupational physical activity, enhance employees' organizational commitment. These findings have significant implications for job design and crafting (Chan et al., 2022). Organizations must craft work breaks to incorporate leisure physical activity-based interventions. This could be well achieved by providing the employees access to facilities and/or programs that enable them to engage in LPA. One example is to design a gym or a workout studio within the organizational premises. Organizations could also set up 'walking/biking/dance/aerobics clubs', and promote group-based physical activity interventions, as such groups are proven to be more effective in achieving the best benefits from exercise-based interventions, as socialising makes these interventions more fun (Friedman, 2014). Moreover, "Recovery is not only achieved through break taking as many might assume. It is also managed through the work itself" (Chan et al., 2022). As such, organizations must design the job roles as well as the workplace to incorporate built-in physical activity in a person's occupation itself. For example, when setting up a new office, organizations can choose locations that allow employees to walk or use bikes for commuting.

The insights from the current study also indicate that workplace physical activity shapes employees' contextual ethical position, with LPA boosting relativism and OPA boosting idealism. Combined with the understanding that senior (junior) level employees have job roles that would benefit best from developing relativism (idealism) as an ethical position, there are job recruitment and team

assignment-based implications that emerge. While organizations may not afford to be selective in implementing LPA and/or OPA-based programs, and these programs have to be pan-organizational in their outreach, job recruitment, as well as group assignments, should be done to focus on recruiting/assigning senior (junior) level employees that primarily engage in teleological (deontological) job evaluation in a role, to ensure that any physical activity based intervention bolsters an ethical position of relativism (idealism) would ensure best person-job-physical activity fit.

7. Limitations and future research directions

We would like to acknowledge that the evidence that supports the causal relationship between physical activity and organizational commitment from our experimental studies is preliminary, and more experimental studies need to be undertaken before concluding the findings to be definitive. While we did attempt to control for key confounding variables while teasing out the impact of physical activity on OC, other factors, such as job satisfaction, autonomy, leadership, and organizational support also play significant roles in shaping an individual's commitment to an organization, and should be accounted for. Second, a deeper analysis of the intertwining links of relativism and idealism as employees' contextual ethical positions is required, in terms of assessing the longitudinal evolution of the constructs. This was not accounted for in our model as it was beyond the scope of the current study. Future studies could utilise wave study designs to assess the longitudinal evolution of the processes specified in the model. Finally, though the current study is based on analysing the insights from multiple samples, all our samples are from India. Cross-cultural assessment of the findings from the current research with diverse samples taken from different countries can help to understand the similarities and/or differences that physical activity-based interventions may have on employees' OC across cultures in a better way.

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Data Availability Statement

The data presented in this study are available upon request from the corresponding author.

Ethics Statement

The authors declare no conflicts of interest.

Conflicts of Interest

The authors declare no conflicts of interest.

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About Author(s)

Juhi Gahlot Sarkar is an assistant professor at the Institute of Management Technology Ghaziabad, India. Articles authored by her have appeared in reputed international journals such as *International*

Journal of Hospitality Management, European Journal of Marketing, Journal of Business Research, and Psychology & Marketing among others.

Abhigyan Sarkar is an associate professor at the Institute of Management Technology Ghaziabad, India. Articles authored by him have appeared in reputed international journals such as *International Journal of Hospitality Management, European Journal of Marketing, Journal of Business Research, Information Technology and People*, and *Psychology & Marketing*.