



Improving Employee Engagement Through Organization Development Intervention: An action research study in XW Construction Company, China

Changlong Li and Leasing Lu

Faculty of Business and Advanced Technology Management, Assumption University, Thailand

E-mail: lcl2012long@163.com, ORCID ID: <https://orcid.org/0009-0001-2838-1904>

E-mail: leelu@mail.com, ORCID ID: <https://orcid.org/0000-0002-4818-1440>

Received 18/03/2025

Revised 31/03/2025

Accepted 01/05/2025

Abstract

Background and Aim: Increased competition within China's construction industry. The demographic dividend is gradually diminishing, resulting in increased labor demand and rising labor costs. Employee engagement is a vital factor in determining both organizational success and competitiveness. This study analyzes the XW Construction Company in China, comparing differences in employee engagement, effective communication, supervisor support, team collaboration, motivation, and job satisfaction before and after the ODI. The research employs a Participatory Action Research (PAR) to identify and enhance the factors influencing employee engagement.

Materials and Methods: The researcher establishes theoretical connections and builds relationships between variables through social exchange, JD-R, and Habermas theories. Using quantitative and qualitative research methods. This study employed interviews and questionnaires to survey XW Construction Company employees, investigating ways to enhance employee engagement. The study aimed to improve employee engagement factors by employing Participatory Action Research (PAR). The study used a survey instrument to collect data from 50 project employees of XW Construction Company, analyzing variables such as supervisor support, effective communication, teamwork, motivation, job satisfaction, and employee engagement.

Results: The results of the study showed that ODI activities effectively demonstrated the impact of the intervention on supervisor support, effective communication, teamwork, motivation, employee satisfaction, and employee engagement.

Conclusion: The researchers recommended increasing the length of ODIs, collecting and analyzing data regularly, and adjusting the intervention duration accordingly. This intervention method is more effective in enhancing the variables in a favorable direction, thereby allowing for improved employee engagement in construction companies. In practical terms, it offers an organizational development program that identifies the factors influencing employee engagement in construction firms and highlights key considerations for HR departments moving forward.

Keywords: Effective Communication; Team Collaboration; Job Satisfaction; Employee Engagement

Introduction

Organizations are undergoing significant transformations and must respond to the diverse challenges presented by a dynamic business environment. Navigating these multifaceted challenges can indeed be daunting. Loyal and motivated employees are essential for success in today's business landscape. As more individuals come to understand that an organization's greatest asset is its workforce, companies are placing great emphasis on enhancing employee engagement. Employee engagement is a vital factor in determining both organizational success and competitiveness. Dedication, as an essential indicator of corporate robustness, is increasingly emphasized by Chinese construction companies. To cope with the enormous external pressure in an increasingly competitive environment, Chinese construction companies must leverage their talent advantages and mobilize their employees' dedication to meet market demand (Chen, 2018). However, the low level of employee engagement in the construction industry has led construction companies to believe that employee engagement has become a critical issue of concern for the company (Chen, 2018).

In recent years, competition within China's construction industry has intensified. The demographic dividend is gradually diminishing, resulting in increased labor demand and rising labor costs. Consequently, construction companies are beginning to place greater emphasis on their employees and the importance of employee engagement. XW Construction was established in February 2010 and has become a reputable construction company. It has completed numerous projects and earned a strong standing in the industry. The company primarily focuses on building homes and municipal projects while expanding its operations



with new initiatives. Equipped with advanced and reliable machinery, it effectively meets the demands of construction sites. Adhering to its commitment to customer service, the company prioritizes high-quality project creation and emphasizes the importance of constructing safe and well-managed sites. Its corporate philosophy revolves around integrity, innovation, cooperation, and mutual success. The company currently employs 55 individuals. While the engineering sector is experiencing growth, it faces challenges as employee engagement is declining, making it difficult to meet its growth requirements. Employee engagement is recognized as a vital factor in determining an organization's success and competitiveness, as it is believed to enhance productivity, improve customer service, and foster a more competitive environment (Men & Bowen, 2016; Ruck, 2015; Welch, 2011). It is an essential tool for organizations striving for a competitive edge (Anitha, 2014). Consequently, the company is increasingly focusing on employee engagement and actively addressing the issues surrounding low engagement levels.

Objectives

1. Examine the current state of employee engagement within the company.
2. Design effective organizational development interventions to enhance employee engagement.
3. Compare the differences in employee engagement, effective communication, supervisor support, team collaboration, motivation, and job satisfaction before and after the ODI.
4. Gather and analyze insights from key informants and participants throughout the pre-ODI (organizational diagnosis), ODI process, and post-ODI.

Literature Review

Supervisor Support

Supervisor support is a multifaceted concept encompassing various types of support, such as emotional and instrumental. In this research, supervisor support is emotional, and job support is provided to subordinates.

Supervisor support, also known as Perceived Supervisor Support (PSS), reflects employees' overall perceptions of how much managers appreciate their contributions to the organization and their well-being.

The researcher investigates the influence of rewards, recognition, and supervisor support on employee engagement. The study population consisted of employees from the Muslim Commercial Bank and the State Bank of Pakistan. A questionnaire was employed to gather valid data from 100 employees in Multan. The study found that recognition of rewards and supervisor support can enhance employee engagement.

According to Social Exchange Theory (SET), trust and devoted relationships can develop between employers and employees in a work environment characterized by reciprocal social and economic interactions. Specifically, supervisor support can have a positive impact on an employee's behavior and attitude toward their work.

It is suggested that employees who perceive their supervisor and employer as supportive are more likely to reciprocate that support. Therefore, this exchange relationship will likely influence employees' behaviors to reflect the "goodwill and helpfulness" they have received in supporting the organization.

Some researchers have found that across various levels and types of social exchange relationships in the workplace, the greater the social exchange, the more the employee contributes. As social exchange increases, the employee's dedication intensifies, leading to improved performance.

Effective Communication

The term "communication effectiveness" is commonly referred to as "effective communication". The researcher defines employee engagement as "how positively the employee thinks about the organization, feels about the organization, and is proactive about achieving organizational goals for customers, colleagues, and other stakeholders".

In this research, employee engagement refers to the degree to which an employee is proactive in achieving organizational objectives for coworkers, departments, organizations, and other stakeholders.

Effective communication drives employee engagement, commitment, retention, and productivity, improving business performance and superior financial returns.

Concise and honest communication is a vital tool for enhancing employee engagement. Effective communication, whether within or outside the organization, fosters employee engagement and motivation. Effective communication has a significant impact on employee engagement.

Habermas introduced the concept of communicative action with the ultimate aim of presenting his theory of rationality. Communicative rationality refers to the mutual coordination among participants in communication, and the level of communicative rationality is determined by the degree of development among them. According to Habermas, four conditions must be met for communication to be effective: the requirement of intelligibility (the choice of explicit expressions so that both speaker and listener can understand each other), the requirement of truthfulness (the provision of truthful statements of intention), the requirement of sincerity (the genuine expression of intention so that the listener can trust the speaker's words), and the requirement of correctness (the selection of inherently appropriate discourse so that the listener can accept it). These are the conditions for effective communication, and communication that meets these requirements is deemed effective.

Habermas's concept of action focuses on interactive language exchanges, such as dialogue or conversation. These exchanges utilize shared background knowledge and language media, adhering to the standard rules of language interaction. All this occurs within an ideal speech situation characterized by mutual respect, trust, and sincere communication, aimed at achieving understanding and ultimately fostering cooperation. In sociology, language is considered a form of "social capital."

Human language activities possess all the characteristics of social exchange. The most basic language activity is a conversation, which involves two people communicating.

Formally, this resembles exchanging words, but fundamentally, it is the sharing of information, representing a typical exchange behavior. We observe that "language exchange" reflects the nature and characteristics of "social exchange".

Similar to other social exchanges, language exchange can occur in one-on-one interpersonal interactions and become more intricate within the broader social structure.

Second, regardless of its form, linguistic exchange incorporates factors of interaction, interests, power, dependence, and context found in social exchange analysis. Various actors can use language as a medium to express their opinions through speech and action.

The Cambridge Dictionary defines communication as the exchange of information and the expression of emotions, indicating that individuals can convey their views. According to Habermas, communication is an action performed by various actors to coordinate their relationships. In social activities, communication serves as a means to solve various problems.

The researchers applied Social Exchange Theory to demonstrate that effective communication positively affects employee engagement.

Team Collaboration

Team Collaboration: The interplay between communication, coordination, and cooperation.

Definition of team collaboration: a deeply collaborative endeavor involving interactions from different professions, coordination, and cooperation. In this research, team collaboration refers to a profound interaction, coordination, and cooperation among different professions or teams.

The researcher surveyed 209 Indian "Generation Y" employees in the Information Technology industry. Structural equation modeling was employed to test the research hypotheses. The results demonstrated that collaboration improves Gen Y employee engagement.

Collaboration is regarded as a component of social exchange and a means for social interaction. According to Social Exchange Theory (SET), individuals develop and maintain social connections by gradually providing mutual benefits to each other. This collaborative effort can yield significant outcomes. Specifically, collaboration aids in achieving shared objectives. Reaching these goals enhances employees' sense of accomplishment and recognition, which boosts their engagement. Previous research has examined

how supportive leadership and collaboration can enhance employee engagement and creativity through the dynamics of social exchange. Social exchange is a collective effort in which two or more participants aim to generate greater benefits than they could achieve individually or in other relationships. Collaboration can provide more advantages for everyone involved, which is more conducive to employee engagement.

Job Satisfaction

Job satisfaction is relative to an individual's overall life satisfaction. It specifically refers to the level of satisfaction a person feels about their professional role. Job satisfaction involves an employee's assessment of their satisfaction after comparing expectations regarding salary, work environment, and other job factors with their experience of these elements. In this research, job satisfaction reflects an employee's evaluation of the satisfaction derived from comparing their expectations of job aspects and the work environment with the actual conditions of those aspects.

Job satisfaction has a significant and positive impact on employee engagement, indicating that greater work satisfaction leads to increased employee involvement. When work satisfaction rises, so does employee engagement.

The research findings highlight the considerable and beneficial influence of job satisfaction on employee engagement, offering valuable insights into the field.

Social Exchange Theory (SET) has been widely utilized to explain employee attitudes and behaviors. It encompasses a series of interdependent interactions in which individuals feel motivated to reciprocate positively due to the obligations arising from the beneficial behaviors of others.

This theory suggests that employees can establish multiple social exchange relationships with their employers, coworkers, suppliers, customers, and supervisors. The norm of reciprocity, which promotes the idea that individuals should repay kindness and avoid harming those who have assisted them, significantly bolsters social structures. When employees feel a sense of indebtedness, they are more likely to contribute positively to the organization in response to fair treatment.

Researchers have identified job satisfaction as a predictor of employee engagement, drawing insights from organizations through social exchange theory.

Motivation

Motivation is the process that initiates, guides, and maintains goal-oriented behaviors. It causes us to act and involves the biological, emotional, social, and cognitive forces that activate behavior.

In this research, motivation refers to the behavioral process of acquiring new knowledge and sustaining goal-oriented career development. It is the driving force behind employees' actions.

On the other hand, substantial research has revealed that motivation has a direct, positive impact on employee engagement (Froiland & Worrell, 2016). When compared with extrinsic motivation, intrinsic motivation was more conducive to achieving sustained engagement, and extrinsic motivation had less influence on job engagement than intrinsic motivation. This conclusion is similar to that made by Walker et al.

There may be an order of influence to promote more positive motivation and engagement. Previous researchers have established a connection between motivation and employee engagement, with many studies identifying a relationship between the two.

Findings from various studies on the JD-R model provide insights into the motivational potential of job resources in fostering employee engagement. Prior research indicates that job resources can intrinsically motivate employees by promoting their growth, learning, and development. Additionally, job resources play an extrinsic motivational role, as they are instrumental in helping employees achieve their work goals.

It improves engagement through a motivational process.

The JD-R Model suggests that job resources can serve as intrinsic and extrinsic motivation. This motivational process can influence psychological outcomes (e.g., engagement) either directly or indirectly. The JD-R model suggests that job resources can serve as extrinsic motivation, as they promote compensatory efforts to mitigate work demands and achieve goals. At the same time, these resources may represent intrinsic motivation because they satisfy fundamental human needs for autonomy, relatedness,

and competence. In both cases, this motivational process encourages a positive and rewarding work-related mindset (i.e., employee engagement). Thus, both motivational states can enhance employee engagement.

Employee Engagement

The researcher defines employee engagement as "how positively the employee thinks about the organization, feels about the organization, and is proactive about achieving organizational goals for customers, colleagues, and other stakeholders". The primary purpose of employee engagement is for workers to exceed expectations and align with business goals. In this research, employee engagement is the degree to which an employee is proactive in achieving organizational goals for coworkers, departments, organizations, and other stakeholders.

Saks states, "Social exchange theory (SET) provides a strong theoretical rationale for explaining employee engagement.". Employee engagement has been defined as an individual employee's cognitive, emotional, and behavioral state directed toward desired organizational outcomes. (Shuck & Wollard, 2010) Employee engagement is a psychological state that occurs when employees closely identify with their work and organization, both physically and emotionally. The primary purpose of employee engagement is for workers to exceed expectations and align with business goals. Cook (2012) defines employee engagement as "how positively the employee thinks about the organization, feels about the organization, and is proactive about achieving organizational goals for customers, colleagues, and other stakeholders."

Employee engagement can be understood from the perspective of SET. Saks states, "Social exchange theory (SET) provides a strong theoretical rationale for explaining employee engagement.". Social exchange theory offers a theoretical foundation for understanding why workers become more or less involved in their jobs. This theory can serve as a framework for understanding the structure of employee engagement. Previous scholarly research has demonstrated that social exchange theory can be employed to study employee engagement, providing a theoretical basis for this concept.

Conceptual Framework

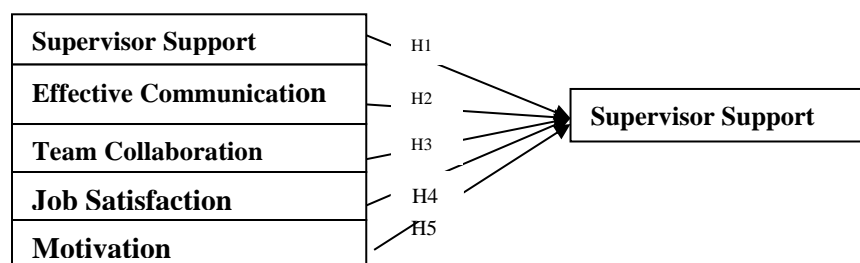


Figure 1 Conceptual framework

H10: There is no statistically significant difference in supervisor support between pre- and post-ODI.
H1a: There is a statistically significant difference in supervisor support between pre- and post-ODI.
H20: There is no statistically significant difference in effective communication between pre- and post-ODI.

H2a: There is a statistically significant difference in effective communication between pre- and post-ODI.

H30: There is no statistically significant difference in team collaboration between pre- and post-ODI.

H3a: There is a statistically significant difference in team collaboration between pre- and post-ODI.

H40: There is no statistically significant difference in job satisfaction between pre- and post-ODI.

H4a: There is a statistically significant difference in job satisfaction between pre- and post-ODI.

H50: There is no statistically significant difference in motivation between pre- and post-ODI.

H5a: There is a statistically significant difference in motivation between pre- and post-ODI.



H60: There is no statistically significant difference in employee engagement between pre- and post-ODI.

H6a: There is a statistically significant difference in employee engagement between pre- and post-ODI.

Methodology

Research Design

This study will employ both qualitative and quantitative methods. Qualitative methods were used to collect interview data, while quantitative research gathered questionnaire data. Data from the questionnaires were collected using the Wenjuanxing website. Before administering the questionnaire, the researchers conducted validity tests. Five experts were invited to evaluate the questions. To assess their validity, the researcher initially tested the reliability of the questions with individuals experienced in building construction projects. Validity and reliability tests were performed using SPSS software. The two methods were separated into two phases: Pre-ODI and Post-ODI. Pre-ODI: Questionnaire and Interview; ODI: Intervention and Interview; Post-ODI: Questionnaire and Interview.

Research Sample

Qualitative research methods were used to gather interview data. Before the ODI, interviews were conducted with the general manager, the human resources director, two project managers, and three employees. During the ODI, interviews included three project managers and three employees. After the ODI, three project managers were randomly selected from the five available to participate in interviews using lottery software. Additionally, 12 employees were randomly selected from the project staff for interviews using lottery software to gather information from all participants. The quantitative research method was employed to collect questionnaires from 50 project staff members in the company, and all the questionnaires from these staff members served as the basis for the quantitative analysis in this research.

ODI Design Process

Pre-ODI Stage

Before the organizational development intervention, pre-interviews were conducted with XW Construction personnel to gather data for the interviews. Combined with the SWOT and SOAR organizational diagnostic models, the research variables of effective communication, supervisor support, teamwork, job satisfaction, and employee engagement were identified. Project personnel are at the executive level of the company and are focused on its growth; therefore, this study centered on the intervention involving all project personnel.

The researcher carried out a quantitative study by distributing questionnaires to 50 project employees within the company. SPSS was utilized to collect and analyze the data. Effective communication, supervisor support, teamwork, job satisfaction, and employee engagement were assessed at this stage. The researcher established the primary objectives of this organizational development intervention to enhance communication effectiveness, supervisor support, teamwork, employee satisfaction, and, as a result, employee engagement.

ODI Stage

The researcher met with the company's General Manager and HR Director to discuss the ODI activities for all the project employees. The general manager and HR director recognized the importance of the intervention and said they would fully cooperate with the activities.

Activity 1: Group Dynamics

The organization utilizes group dynamics to promote communication and stimulate interest among the 50 team members. According to Schrujijer (2021), this approach involves self-reflection through sharing experiences and striving toward a common goal.

Objectives: This activity aims to improve communication between coworkers.

Time: This activity was chosen to take place on May 13, 2024 (length: 170 minutes)

Group dynamics lasted 80 minutes, and the World Café session took 90 minutes.



Location: Corporate Headquarters

Participants: All project team members of the company, the human resources director, and the researcher

Activity Flow

The program was divided into two phases: the first phase focused on group dynamics, while the second phase featured the World Café. Team members and five project managers were organized into five groups of ten people each, with project members randomly assigned to each group. They then participated in the two phases that followed.

During the first phase, "Group Dynamics," each group chose a topic to discuss, and all members were encouraged to share their ideas. Each employee had five minutes to speak to enhance understanding among colleagues, and this activity lasted 80 minutes.

The second phase, "World Café," involved the five groups discussing various life topics and setting small life goals as determined by the project manager. The project manager documented the discussion topics, and every 15 minutes, team members rotated to a new topic led by a different project manager to continue the conversation. The project manager remained stationary throughout the activity while team members rotated to one of five conference tables for discussions. After the session, all participants were allowed to discuss each topic. The last 15 minutes were reserved for free discussion among everyone; this activity lasted 90 minutes.

Results

These activities encourage employees to communicate positively and improve their communication skills and team collaboration.

Activity 2: World Cafe

The organization utilizes group dynamics to promote communication and cultivate interest among its 50 team members. According to Schruijer (2021), this approach encompasses self-reflection through sharing experiences and working toward a common goal.

Objectives: This activity aims to enhance communication between coworkers.

Time: This activity is scheduled for May 13, 2024 (170 minutes).

Group dynamics will take 80 minutes, and World Café will take 90 minutes.

Location: Corporate Headquarters

Participants: All project team members of the company, the human resources director, and the researcher

Activity Flow

The program was divided into two phases: the first phase focused on group dynamics, and the second phase involved the World Café. Team members and five project managers were divided into five groups of 10 people each, with project members randomly assigned to each group. They then participated in the two phases.

The first phase, "Group Dynamics," tasked each group with selecting a favorite topic for discussion, encouraging all members to share their ideas. Each employee spoke for five minutes to enhance understanding among colleagues, and this activity lasted 80 minutes.

The second phase, known as "World Café," involved the five groups discussing several life topics and setting small life goals as determined by the project manager. The project manager recorded the topics of these discussions, and every 15 minutes, group members rotated to a new topic presented by a different project manager. The project manager remained at their station during the activity while other team members rotated to one of the five conference tables for discussion. At the end of the session, all participants could engage in discussions about each topic. The last 15 minutes were reserved for open discussion, allowing everyone to speak freely during this activity.





Results

These activities encourage employees to communicate positively and improve their communication skills and team collaboration.

Activity 3: Team Building and Goal Setting

Objective: This activity aims to improve effective communication among employees and motivation.

Time: This activity will take place from May 14 to July 28, 2024 (duration: two hours per week).

Location: Construction site office

Participants: All project staff of the company, the human resources director, researcher

Activity Flow

This activity is divided into two stages: The first stage is team building and goal-setting. The second stage is Team Building and Goal Setting 2

Team Building and Goal Setting 1.

The company's five project teams hold a weekly 1.5-hour group meeting, during which each employee discusses the project goals, which are critical to their respective teams. The project manager informs the employees about the company's overall goals for the year. Each employee can continue to contribute to other projects, thereby helping the team and the overall company goals. Current progress, quality, and safety are discussed at each meeting, and adjustments are made to the project when there is a deviation from the project's and the overall company's goals.

Team Building and Goal Setting 2.

Each employee on the team formed during the "World Café" phase should also set a small goal in life. Team members can help others realize their small goals and monitor their realization. Employees can allocate half an hour of their weekly work to communicate through the WeChat group and assist other members in achieving their goals. Half an hour of discussion each week.

Employees start to take an interest in the company's growth goals and work collaboratively with coworkers and teams. Everyone is happy when small goals are realized at work or in life, and employee satisfaction increases.

Activity 4: Training

Objective: This activity is designed to improve supervisor support.

Time: This activity has been chosen for May 15, 2024 - May 25, 2024 (total time: 7.5 hours, average 1.5 hours per person)

Location: Construction site office

Participants: Project Manager, General Manager, Researcher, Manpower Director

Activity Process

The general manager trained and coached the five project managers to help them better understand the critical role of support. He summarized their professional growth management experience by discussing the development of project managers and training them.

The general manager also explained and clarified the project managers' supportive role. He emphasized that they should support, assist, and understand their subordinates, nurture their abilities, and gain the support and understanding of the staff. In turn, the subordinates will support the leaders' work, and senior leaders should back their subordinates.

This activity conveys to project managers that support for subordinates is crucial and that they should be more proactive in guiding and assisting them. It also highlights the importance of nurturing talent, enabling managers to cultivate promising individuals for the company and offer valuable guidance on employees' careers.

Project managers devoted more time to supporting their subordinates' work, took the initiative to visit the construction site to guide their subordinates, and began to focus on developing their subordinates' skills. They also started proactively providing career planning for their employees.

Post-ODI Stage



Three of the five project managers and 12 of the 40 project staff were interviewed. The interviews were then collected, organized, and qualitatively analyzed. The researcher subsequently distributed questionnaires to all 50 project employees and received them back. This time, SPSS will analyze the data and compare variable changes before and after the ODI.

Table 1 Paired Samples T-test:

		Paired Differences			t	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean		
Pair 1	Pre-Supervisor Support – Post-Supervisor Support	.944	1.399	.197	4.769	.000
Pair 2	Pre-Effective Communication– Post-Effective Communication	.904	.660	.093	9.677	.000
Pair 3	Pre-Team Collaboration – Post-Team Collaboration	.825	.919	.130	6.346	.000
Pair 4	Pre-Motivation – Post-Motivation	.799	1.019	.144	5.549	.000
Pair 5	Pre-Job Satisfaction – Post-Job Satisfaction	.852	.589	.083	10.221	.000
Pair 6	Pre-Employee Engagement –Post-Employee Engagement	1.045	.602	.085	12.269	.000

The first pair of values was used to compare supervisor support before and after the intervention, showing a mean value of 0.94, a standard deviation of 1.40, a T-value of -4.77, and a P-value of 0.000. This leads to the conclusion that H1o is rejected and H1a is accepted. The results of the paired samples t-test for supervisor support (p-value = 0.000) revealed a significant difference between pre-ODI and post-ODI supervisor support. This indicates that the ODI in this study effectively aims to improve this variable, achieving a significant difference or change.

The second pair of values was used to compare effective communication before and after the intervention, resulting in a mean value of 0.90, a standard deviation of 0.66, a T-value of -9.68, and a P-value of 0.000. This leads to the conclusion that H2O is rejected and H2A is accepted. The results of the paired samples t-test for effective communication (p-value = 0.000) showed a significant difference in effective communication between the pre-ODI and post-ODI stages. This suggests that the ODI in this study, which aimed to improve this variable, is appropriate for achieving a significant difference or change.

The third pair of values was used to compare teamwork before and after the intervention. The results indicated a mean value of 0.83, a standard deviation of 0.92, a T-value of -6.35, and a P-value of 0.000. This leads to the conclusion that H3o is rejected and H3a is accepted. The results from the paired samples t-test for teamwork (p-value = 0.000) displayed a significant difference between pre-ODI and post-ODI teamwork. This implies that the ODI in this study, which aims to enhance this variable, is conducive to achieving a significant difference or change.

The fourth pair of values was used to compare job satisfaction before and after the intervention, revealing a mean value of 0.80, a standard deviation of 1.01, a T-value of -5.55, and a P-value of 0.000. This leads to the conclusion that H4o is rejected and H4a is accepted. The results of the paired samples t-test for job satisfaction (p-value = 0.000) revealed a significant difference between pre-ODI and post-ODI



job satisfaction levels. This suggests that the ODI in this study, which aimed to improve this variable, is suitable for achieving a significant difference or level of change.

The fifth pair of values was used to compare job satisfaction before and after the intervention. The result shows that the mean value is 0.80, the standard deviation is 1.01, the T-value is -5.55, and the P-value is 0.000. This leads to the conclusion that H5o is rejected and H5a is accepted. The results of the paired samples t-test (p-value = 0.000) for job satisfaction showed a significant difference between pre-ODI and post-ODI job satisfaction levels. This indicates that the ODI in this study aimed at improving this variable is appropriate to achieve a significant difference or level of change.

The sixth pair of values was used to compare employee engagement before and after the intervention, with results indicating a mean value of 1.05, a standard deviation of 0.60, a T-value of -12.27, and a P-value of 0.000. This leads to the conclusion that H6o is rejected and H6a is accepted. The paired samples t-test result for employee engagement (p-value = 0.000) indicates a significant difference in employee engagement between the pre- and post-ODI stages. This suggests that the ODI in this study, aimed at improving this variable, is effective in achieving a significant level of difference or change.

Qualitative Results

Table 2 Themes Results

Variables	Themes from the coders summarize
Supervisor support	1. Resource Coordination 2. Technical support3. Technical support 4. Work guidance 5. Transfer of experience
Effective communication	1. Diverse communication 2. Accurate, Complete communication
Team collaboration	1. Interdisciplinary knowledge exchange, mutual assistance, and sharing. 2. Cross-program mutual support 3. Common goals and a sense of responsibility
Motivation	1. Promotion and career planning, new technologies, and knowledge promotion. 2. Promotion and career planning
Job satisfaction	1. Job content, career development 2. Improved working environment
Employee engagement	1. Clear project and company goals 2. Access to career development and salary advancement opportunities.Fit between individual career goals and company goals

Discussion

1. What is the current status of employee engagement in construction company XW?

The main finding of this action study is a case study on improving employee engagement at XW. The researcher analyzes the organizational structure of XW Construction Company using the SWOT model and the SOAR model, along with interview data. Employee engagement is a pressing issue and critical factor in an organization's success and competitiveness, as it is believed to enhance productivity, improve customer service, and foster a more competitive organization.

2. How can appropriate organizational development interventions be implemented to improve employee engagement in the company?

The researcher has implemented positive and effective interventions to enhance employee dedication within the company. They have implemented group dynamics, World Cafe, team-building, goal-setting, and coaching interventions for the project's workforce.

Based on the pre-ODI study results from XW Construction Company, this research utilized a variety of organizational interventions, primarily focusing on group dynamics, World Cafe, team building, and goal setting. These approaches aimed to improve supervisor support, effective communication, teamwork, motivation, job satisfaction, and employee engagement.

Activity 1: Group Dynamics and World Café

Through this organizational intervention, employees became more active communicators and developed their skills. They used various channels to exchange information, including face-to-face



meetings, phone calls, emails, and WeChat. The communication process was open and interactive, emphasizing the accuracy and completeness of information. Employees have also become more attentive to feedback mechanisms, particularly regarding task progress and strategy adjustments.

This aligns with previous scholarly research. Lewin described how groups and individuals react to changing circumstances as group dynamics.

In group activities, group dynamics serve as an icebreaker to foster communication among members. Some scholars have suggested that group dynamics is a self-reflective technique that involves sharing and listening to others' experiences to achieve common goals.

Activity 2: Team Building and Goal Setting

The researchers noted that employees began to care more about the company's growth objectives, learn from one another, communicate frequently, and collaborate with teammates, which improved motivation. When small goals are set. Within life groups, a sense of happiness emerged, leading people to engage more with each other and enhance effective communication.

This finding is consistent with previous research. As an organizational development intervention, team-building activities help teams enhance task execution by facilitating knowledge sharing, particularly through the application of creative problem-solving approaches. Furthermore, team-building activities help team members refine their interpersonal communication and problem-solving skills, contributing to the accomplishment of the team's action plan.

A team collaborates by coordinating efforts to reach a common goal, relying on the collective skills of all its members (Robbins & Judge, 2013). Consequently, organizations must foster effective communication within their employee structure to ensure individuals feel part of a team and comprehend the company's work and objectives (Mishra et al., 2014).

Previous researchers have asserted that challenging work, increased responsibility, a supportive work environment, high interaction with supervisors, pay raises, promotions, team-building activities, and other factors can enhance motivation. Goal setting provides significant satisfaction for teams.

Previous research has demonstrated that goal setting can be an effective organizational intervention. (Cummings & Worley, 2014). Additionally, researchers argue that goals enable individuals to navigate less-traveled paths, confront their authentic selves more rationally, and plan accordingly, seamlessly integrating goals with personal growth.

Teams collaborate and depend on the combined skills of all team members to achieve shared objectives (Robbins & Judge, 2013). Therefore, organizations should ensure effective communication within their employee structure to instill a sense of belonging to the team, while also fostering an understanding of the company's work and goals (Mishra et al., 2014).

Activity 3: Training

Project managers have devoted more time to supporting the work of their subordinates and have taken the initiative to visit the field to better understand site conditions. They have also begun to provide career guidance to facilitate the improvement of their subordinates' skills.

Strategies for improving supervisor support often involve training, particularly leadership training, which is effective in enhancing support. The training focused on developing the first-line leaders' communicative, relational, and coaching skills to facilitate employees' learning and development characteristics that are also stressed in the leadership literature.

This finding is consistent with previous research. Given the importance of supervisor support, strategies to improve supervisors' abilities to provide support are essential. One standard strategy organizations employ is sending supervisors to training to help them develop desirable and supportive behaviors.

3. What are the differences in supervisor support, effective communication, team collaboration, job satisfaction, and employee engagement between pre- and post-ODI?



Table 3 Descriptive Statistics (Pre-ODI)

Variables	N	Mean	Skewness	
			Statistic	Std. Error
Supervisor support	50	2.580	.681	.662
Effective communication	50	2.692	.538	.662
Team collaboration	50	2.720	.789	.662
Motivation	50	2.786	.364	.662
Job satisfaction	50	2.668	.431	.662
Employee engagement	50	2.600	.271	.662
Valid N (listwise)	50			

Table 4 Descriptive Statistics (Post ODI)

Variables	N	Mean	Skewness	
			Statistic	Std. Error
Supervisor support	50	3.524	.092	.337
Effective communication	50	3.596	.490	.337
Team collaboration	50	3.545	.172	.337
Motivation	50	3.586	.295	.337
Job satisfaction	50	3.520	.277	.337
Employee engagement	50	3.645	.194	.337
Valid N (listwise)	50			

As shown in Tables 3 and 5, the mean values of the six variables increased after the ODI.

The mean value of supervisor support before the ODI was 2.58 and 3.52 after the ODI.

The mean value of effective communication before the ODI was 2.69 and 3.60 after the ODI.

The mean value of team collaboration before the ODI was 2.72, and 3.54 after the ODI.

The mean value of motivation before the ODI was 2.79 and 3.58 after the OD.

The mean value of job satisfaction before the ODI was 2.67 and 3.52 after the ODI.

The mean employee engagement scores were 2.60 before the ODI and 3.64 after the ODI.

This increase indicates that the mean after the ODI is better than before the ODI. This is consistent with previous studies. Participatory action research seeks to address concrete problems and, in doing so, make a positive impact on the lives of both those involved in the research process and those who benefit from it.

Table 5 Paired Samples T-test

Variables	Mean	N	Std. Deviation	Std. Error Mean	Sig. (2-tailed)
Pair1 Pre-Supervisor Support – Post-Supervisor Support	.944	50	1.399	.197	.000
Pair2 Pre-Effective Communication – Post- Effective Communication	.904	50	.660	.093	.000
Pair3 Pre-Team Collaboration – Post-Team Collaboration	.825	50	.919	.130	.000
Pair4 Pre- Pre-Pre-Motivation – Post-Motivation	.799	50	1.019	.1441	.000
Pair5 Pre-Job Satisfaction – Post- Job Satisfaction	.852	50	.589	.0834	.000



Variables	Mean	N	Std. Deviation	Std. Error Mean	Sig. (2-tailed)
Pair6 Pre-Employee Engagement – Post- Employee Engagement	1.045	50	.602	.0851	.000

At the end of the intervention, the researchers assessed and examined the quantitative data for each participant. Paired-sample t-test analyses (Table 5) were used to determine significant differences between pre- and post-ODI values, validating the hypotheses.

H10: There is no statistically significant difference in supervisor support between pre- and post-ODI.

H1a: There is a statistically significant difference in supervisor support between pre- and post-ODI.

The results indicated significant changes in supervisor support after the organizational development intervention, which is consistent with existing research findings. Through interviews and data analysis, the results suggest that supervisor support increased after the intervention, providing resource coordination, technical support, job coaching, experience transfer, trust in independent work, and encouragement for theoretical learning and development. This is consistent with previous studies. Participatory action research seeks to address concrete problems and, in doing so, make a positive impact on the lives of both those involved in the research process and those who benefit from it.

H20: There is no statistically significant difference in effective communication between pre- and post-ODI.

H2a: There is a statistically significant difference in effective communication between pre- and post-ODI.

The results indicate that significant changes in effective communication occurred following the organizational development intervention. This finding is consistent with existing research. Through interviews and data analysis, the results indicated that effective communication improved after the intervention. Communication channels were diversified, and the openness, interactivity, accuracy, and completeness of the communication process were enhanced. This is consistent with previous studies. Participatory action research seeks to address concrete problems and, in doing so, make a positive impact on the lives of both those involved in the research process and those who benefit from it.

H30: There is no statistically significant difference in team collaboration between pre- and post-ODI.

H3a: There is a statistically significant difference in team collaboration between pre- and post-ODI.

The results indicated significant changes in team collaboration following the organizational development intervention. This finding is consistent with existing research. Through interviews and data analysis, the results indicated that post-intervention researchers analyzed the interview results and noted enhanced interprofessional knowledge exchange and mutual support among team members from different professions and programs. Team collaboration improved in terms of mutual support, sharing of responsibilities, and staff working toward common goals. This is consistent with previous studies. Participatory action research seeks to address concrete problems and, in doing so, make a positive impact on the lives of both those involved in the research process and those who benefit from it.

H40: There is no statistically significant difference in job satisfaction between pre- and post-ODI.

H4a: There is a statistically significant difference in job satisfaction between pre- and post-ODI.

The results showed significant changes in job satisfaction after the organizational development intervention, which is consistent with the findings of existing research. Through interviews and data analysis, the results indicated that post-intervention employees felt more satisfied with the content of their jobs, experienced a sense of accomplishment in their programs, and were satisfied with their work environment and well-being. The job satisfaction factor had a significant and favorable impact on employee engagement, indicating that increased job satisfaction is associated with increased employee engagement. This is consistent with previous studies. Participatory action research aims to solve concrete problems and, in so doing, make a positive difference in the lives of those involved in the research process and those who benefit from it (Baldwin, 2012)



H50: There is no statistically significant difference in motivation between pre- and post-ODI.

H5a: There is a statistically significant difference in motivation between pre- and post-ODI.

The results of the study showed that there was a significant change in employee motivation after the organizational development intervention, which is in line with the findings of existing studies. Through interviews and data analysis, the results showed that after the intervention, the company supported employees to learn new skills and knowledge. Employees were given more opportunities for promotion, career planning, and project management. Previous research has established a connection between motivation and employee engagement, with numerous studies confirming this relationship. This is consistent with previous studies. Participatory action research seeks to address concrete problems and, in doing so, make a positive impact on the lives of both those involved in the research process and those who benefit from it.

H60: There is no statistically significant difference in employee engagement between pre- and post-ODI.

H6a: There is a statistically significant difference in employee engagement between pre- and post-ODI.

The results indicated significant changes in employee engagement following the organizational development intervention, which is consistent with existing research. Through interviews and data analysis, the results indicated that team support and motivation increased after the intervention. The team was goal-oriented and eager to develop better programs while seeking greater personal rewards. This is consistent with previous studies. Participatory action research seeks to address concrete problems, thereby making a positive impact on the lives of both those involved in the research process and those who benefit from it.

4. What insights can be gathered and analyzed from key informants and participants during the pre-ODI (organizational diagnosis), ODI process, and post-ODI?

Pre-ODI Stage:

The researcher analyzed the following results through pre-interviews with project employees, which the researcher summarized as effective communication, supervisor support, team collaboration, motivation, job satisfaction, and employee engagement.

Effective Communication:

Per-ODI, employees from the original preference for face-to-face communication, communication between employees, and between employees and project managers sometimes lacked accuracy. During ODI activities, employees realized that effective communication was something that needed attention and improvement. Post-ODI, effective communication was moderately improved. Employees use multiple communication channels to exchange information and emphasize the accuracy and completeness of information.

Supervisor Support:

Per-ODI, the project manager focused on maintaining the relationship between the A and the company and did not pay attention to the employees, nor did not coach them on their work. During ODI activities, the project manager realized that supervisor support needed attention and improvement. Post-ODI, supervisor support was moderately improved. The project manager provided more comprehensive support to the employee in terms of work and emotions. The project manager coaches employees on work techniques and experiences. Project managers cared about employees' emotions and helped to relieve work stress, which enhanced employees' sense of belonging and trust.

Team Collaboration:

Per-ODI, employees did not like to work across teams and were less productive when working with colleagues from other teams. During ODI activities, employees realized that teamwork needed attention and improvement. Post-ODI, team collaboration was moderately improved. Interaction, coordination, and cooperation between team members were closer than before. The process of cooperation between different team members is characterized by mutual support and sharing among members, and the achievement of work goals.



Motivation:

Per-ODI, the skills and knowledge needs of the employees were not attended to, and the employees did not have a good career plan in the company. During ODI activities, employees realized that motivation needs attention and improvement. Post-ODI, motivation was moderately improved. Employees are well supported in their learning and career development, and the company also provides rich career development opportunities for employees.

Job Satisfaction:

Per-ODI, employees felt their work was unimportant and lacked fulfillment. Employees perceived the work environment to be poor. During ODI activities, employees realized that job satisfaction needed attention and improvement. After the ODI, job satisfaction was moderately improved. Post-ODI, employees find value and fulfillment in their work. Employees feel that the work environment has been improved, and they are satisfied with their jobs.

Employee Engagement:

Per-ODI, employees were disengaged, lazy, unfocused, and unable to complete work tasks on time. During ODI activities, employees realized that employee engagement needed attention and improvement. Post-ODI, employee engagement was moderately improved. Employees worked hard and completed their work tasks on time. Employee motivation has also improved.

The researcher used qualitative analysis, and the above analysis illustrates the changes in the variables after the organizational development intervention. Supervisor support, effective communication, team collaboration, motivation, job satisfaction, and employee engagement improved. This is consistent with previous studies. Participatory action research aims to solve concrete problems and, in so doing, make a positive difference in the lives of those involved in the research process and those who benefit from it.

The company's HR department can continue the intervention according to this study's ODI design in the future. The frequency of each activity needs to be adjusted according to the actual situation to maintain or improve the ODI results. The company will adjust its activities according to the company's actual situation in the future.

The consistency between previous scholars' studies and the researcher's findings further confirms the influence of the dependent variable on the independent variable.

Conclusion

This study used participatory action research (PAR) to develop an organizational intervention to increase employee engagement. The researchers recommended increasing the length of ODIs, collecting and analyzing data regularly, and appropriately adjusting the length of time the intervention is used. This intervention method is more effective in enhancing the variables in a favorable direction, thus allowing employee engagement in construction companies to improve. In practical terms, it offers an organizational development program that identifies the factors influencing employee engagement in construction firms and highlights key considerations for HR departments moving forward.

Recommendation

This study goes through specific intervention activities to influence the variables in a favorable direction. Many more intervention activities can influence the variables, and this is a good direction for research.

Many factors affect employee engagement, and there are many studies on employee engagement and there is a lot of room for research on this variable.

References

- Andrew, O. C., & Sofian, S. (2012). Individual factors and work outcomes of employee engagement. *Procedia - Social and Behavioral Sciences*, 40, 498–508.
- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308–323.





- Arief, N. R., Purwana, D., & Saptono, A. (2021). Effect of quality work of life (QWL) and work-life balance on job satisfaction through employee engagement as intervening variables. *The International Journal of Social Sciences World (TIJOSSW)*, 3(1), 259–269.
- Avolio, B. J., Reichard, R. J., Hannah, S. T., Walumbwa, F. O., & Chan, A. (2009). A meta-analytic review of leadership impact research: Experimental and quasi-experimental studies. *The Leadership Quarterly*, 20(5), 764–784.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10(2), 170–180.
- Baldwin, M. (2012). Participatory action research. In M. Gray, J. Midgley, & S. Webb (Eds.), *The SAGE Handbook of Social Work* (pp. 467–481). SAGE Publications.
- Baldwin, M. (2012). Participatory action research. In M. Gray, J. Midgley, & S. Webb (Eds.), *The SAGE handbook of social work* (pp. 467–481). SAGE Publications.
- Baqir, M., Hussain, S., Waseem, R., & Islam, K. A. (2020). Impact of reward and recognition, supervisor support on employee engagement. *International Journal of Management Research and Emerging Sciences*, 10(2), 1–10.
- Bauer, G. F., Hämmig, O., Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the job demands-resources model: Implications for improving work and health. In G. Bauer & O. Hämmig (Eds.), *Bridging Occupational, Organizational and Public Health* (pp. 43–68). Springer.
- Bedarkar, M., & Pandita, D. (2014). A study on the drivers of employee engagement impacting employee performance. *Procedia - Social and Behavioral Sciences*, 133, 106–115.
<https://doi.org/10.1016/j.sbspro.2014.04.174>
- Bellani, E., Ramadhani, S. R., & Tamar, M. (2017). Job satisfaction as a predictor of employee engagement. *Proceedings of the 8th International Conference of Asian Association of Indigenous and Cultural Psychology (ICAAIP 2017)*.
- Bharath, M., & Sreedevi, V. (2021). Zoom in on the levels of employee engagement, perception, satisfaction, and employee roles influenced – healthcare sample study. *Vilakshan - XIMB Journal of Management*, 18(1), 62–75. <https://doi.org/10.1108/XJM-07-2020-0046>
- Blumenfeld, P. C., Kempner, T. M., & Krajcik, J. S. (2006). Motivation and cognitive engagement in learning environments. In R. K. Sawyer (Ed.), *The Cambridge Handbook of the Learning Sciences* (pp. 475–488). Cambridge University Press.
- Chen, Y. (2018). The relationship between job satisfaction and employee engagement in China's construction industry. *Journal of Human Resources and Sustainability Studies*, 6(2), 76–85.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89–136.
- Cook, S. (2012). *The essential guide to employee engagement: Better business performance through staff satisfaction*. Kogan Page.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874–900.
- Cuixia, H., & Xing, Y. (2002). Design and analysis of employee satisfaction questionnaires. *Statistics and Decision*, 3(3), 22–24.
- Cummings, T. G., & Worley, C. G. (2014). *Organization development and change* (10th ed.). Cengage Learning.
- Dysvik, A., & Kuvaas, B. (2013). Intrinsic and extrinsic motivation as predictors of work effort: The moderating role of achievement goals. *British Journal of Social Psychology*, 52(3), 412–430.
- Foley, M., & McCann, K. (2013). Managers vs. employees: The differing effects of communication strength and supervisor support on work engagement. *Proceedings of the National Conference on Undergraduate Research*.
- Froiland, J. M., & Worrell, F. C. (2016). Intrinsic motivation, learning goals, engagement, and achievement in a diverse high school. *Psychology in the Schools*, 53(3), 321–336.
- Fuks, H., Raposo, A., Gerosa, M. A., Pimental, M., & Lucena, C. J. (2008). The 3C collaboration model. In S. Kelsey & K. St. Amant (Eds.), *Encyclopedia of E-Collaboration* (pp. 637–644). IGI Global.
- Gillet, N., Huart, I., Colombat, P., & Fouquereau, E. (2013). Perceived organizational support, motivation, and engagement among police officers. *Professional Psychology: Research and Practice*, 44(1), 46–55.



- Ginanjar, D. R., & Luntungan, I. (2020). The effect of transformational leadership, organizational culture, and job satisfaction on employee engagement. *International Journal of Innovative Science and Research Technology*, 5(10), 1431–1441.
- Gudykunst, W. B. (2005). An anxiety/uncertainty management (AUM) theory of effective communication. In W. B. Gudykunst (Ed.), *Theorizing About Intercultural Communication* (pp. 281–322). SAGE Publications.
- Humphreys, P., Lai, M., & Sculli, D. (2001). An inter-organizational information system for supply chain management. *International Journal of Production Economics*, 70(3), 245–255.
- Idowu, S. A., & Abolade, D. A. (2018). Influence of effective communication and compensation management on employees' engagement in some selected financial institutions in Lagos State, Nigeria. *International Journal of Business and Management Invention*, 7(1), 1–13.
- Inam, A., Ho, J. A., Zafar, H., Khan, U., Sheikh, A. A., & Najam, U. (2021). Fostering creativity and work engagement through perceived organizational support: The interactive role of stressors. *SAGE Open*, 11(3), 21582440211046937.
- Kavya, M., & Padmavathy, G. (2017). Employee engagement: A review of engagement models. *Imperial Journal of Interdisciplinary Research (IJIR)*, 3(2), 871–877.
- Kelloway, E. K., & Barling, J. (2010). Leadership development as an intervention in occupational health psychology. *Work & Stress*, 24(3), 260–279.
- Lawler, E. J., Thye, S. R., & Yoon, J. (2000). Emotion and group cohesion in productive exchange. *American Journal of Sociology*, 106(3), 616–657.
- Lockwood, N. R. (2007). Leveraging employee engagement for competitive advantage: HR's strategic role. *HR Magazine*, 52(3), 1–11.
- Maertz Jr, C. P., Griffeth, R. W., Campbell, N. S., & Allen, D. G. (2007). The effects of perceived organizational support and perceived supervisor support on employee turnover. *Journal of Organizational Behavior*, 28(8), 1059–1075.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety, and availability, and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77(1), 11–37.
- Men, R. L., & Bowen, S. A. (2016). *Excellence in internal communication management*. Business Expert Press.
- Menguc, B., Auh, S., Fisher, M., & Haddad, A. (2013). To be engaged or not to be engaged: The antecedents and consequences of service employee engagement. *Journal of Business Research*, 66(11), 2163–2170.
- Miao, S., Rhee, J., & Jun, I. (2020). How much does extrinsic motivation or intrinsic motivation affect job engagement or turnover intention? A comparison study in China. *Sustainability*, 12(9), 3630.
- Mishra, K., Boynton, L., & Mishra, A. (2014). Driving employee engagement: The expanded role of internal communications. *International Journal of Business Communication*, 51(2), 183–202. <https://doi.org/10.1177/2329488414525399>
- Moen, F., & Federici, R. A. (2012). Perceived leadership self-efficacy and coach competence: Assessing a coaching-based leadership self-efficacy scale. *International Journal of Evidence Based Coaching and Mentoring*, 10(1), 1–16.
- Mohan, M., Sequeira, A. H., & Kumar, M. (2012). Employee engagement and motivation: A case study. *KHOJ – Journal of Indian Management Research and Practices*, 2(1), 13–22.
- Naim, M. F., & Lenka, U. (2017). The impact of social media and collaboration on Gen Y employees' engagement. *International Journal of Development Issues*, 16(3), 289–299.
- Narasimhan, R., Nair, A., Griffith, D. A., Arlbjørn, J. S., & Bendoly, E. (2009). Lock-in situations in supply chains: A social exchange theoretic study of sourcing arrangements in buyer–supplier relationships. *Journal of Operations Management*, 27(5), 374–389.
- Öksüz, M., Tosyalı, H., & Tosyalı, F. (2022). The link between supervisor support, servicing efficacy, and job satisfaction among frontline hotel employees: An investigation in Turkey. *Personnel Review*. <https://doi.org/10.1108/PR-06-2021-0446>
- Patel, H., Pettitt, M., & Wilson, J. R. (2012). Factors of collaborative working: A framework for a collaboration model. *Applied Ergonomics*, 43(1), 1–26.



- Playford, E. D., Dawson, L., Limbert, V., Smith, M., Ward, C., & Wells, R. (2000). Goal-setting in rehabilitation: Report of a workshop to explore professionals' perceptions of goal-setting. *Clinical Rehabilitation*, 14(5), 491–496.
- Putter, S. E. (2013). *Making training stick: A close examination of how trainee readiness, supervisor support, and practice foster transfer in a mobile technology-based training program* [Doctoral dissertation, Colorado State University].
- Robbins, S. P., & Judge, T. A. (2013). *Organizational behavior* (15th ed.). Pearson.
- Ruck, M. K. (2015). *Exploring internal communication: Towards informed employee voice*. Gower Publishing.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619.
- Schruijer, S. G. L. (2021). Whatever happened to group dynamics in the scientific study of groups? *Team Performance Management*, 27(3/4), 229–239.
- Shuck, B., & Wollard, K. (2010). Employee engagement and HRD: A seminal review of the foundations. *Human Resource Development Review*, 9(1), 89–110.
- Sungu, L. J., Weng, Q., & Kitule, J. A. (2019). When organizational support yields both performance and satisfaction: The role of performance ability in the lens of social exchange theory. *Personnel Review*, 48(6), 1410–1428.
- Tabrizi, B. N., & Terrell, M. (2013). *The inside-out effect: A practical guide to transformational leadership*. Evolve Publishing.
- Tepayakul, R., & Rinthaisong, I. (2018). Job satisfaction and employee engagement among human resources staff of Thai private higher education institutions. *The Journal of Behavioral Science*, 13(2), 68–81.
- Van der Klink, M., Gielen, E., & Nauta, C. (2001). Supervisory support is a major condition to enhance transfer. *International Journal of Training and Development*, 5(1), 52–63.
- Walker, C. O., Greene, B. A., & Mansell, R. A. (2006). Identification with academics, intrinsic/extrinsic motivation, and self-efficacy as predictors of cognitive engagement. *Learning and Individual Differences*, 16(1), 1–12.
- Wang, H. (2013). Effective communication for editors of scientific journals—Based on Habermas' communication theory. *Journal of Xi'an Petroleum University*, (4), 96–99.
- Waseem Khan, Y. (2013). *An investigation of the relationship between work motivation (intrinsic & extrinsic) and employee engagement: A study on Allied Bank of Pakistan* [Master's thesis, Umea University].
- Welch, M. (2011). The evolution of the employee engagement concept: Communication implications. *Corporate Communications: An International Journal*, 16(4), 328–346.
- Wu, L., Chuang, C.-H., & Hsu, C.-H. (2014). Information sharing and collaborative behaviors in enabling supply chain performance: A social exchange perspective. *International Journal of Production Economics*, 148, 122–132.
- Xu, D. (2015). A primer on the theory of language exchange. *Journal of Qiongzhou University*, 22(4), 18–20.
- Yates, K. (2006). Internal communication effectiveness enhances bottom-line results. *Journal of Organizational Excellence*, 25(3), 71–79.