

# Developing Hypotheses and Theoretical Verification of Antecedents of Organization Engagement that Contribute to Clarification of Employee Engagement

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## Abstract

Japan's Financial Services Agency (FSA) has required listed companies to disclose their human capital effective from April 2023 so that investors can confirm whether the company has the human resources to execute its growth strategy. Human capital includes employee engagement (EE), whose importance has become widely known. On the other hand, a number of priors have researched on antecedents and clarified many of them in foreign countries where engagement has already been broadly widespread. Furthermore, researches on the antecedents are still ongoing. In order to further clarify the antecedents of EE in Japanese companies, authors have formulated a hypothesis based on a new concept of engagement that supports Bernard's organization theory previously proposed by the authors. Then a model is developed to test the hypothesis. This paper discusses the proposed model and its theoretical verification.

*Keywords:* Antecedent, Employee Engagement, Factor, Organization Engagement, Structural Equation Modeling

## 1 Introduction

The concept of "human capital," which considers the abilities of workers as the company's capital and the source of added value, is gaining popularity among investors. Even an excellent management strategy created by a company will fail to be achieved without "human capital" that executes manage strategy. In June 2022, the Japanese Cabinet Secretariat proposed "Human Capital Disclosure Guidelines" [1]. "Human Capital Disclosure Guidelines" has identified employee engagement (EE) as one of the five key common elements required in a human capital strategy. Public comments on these guidelines were collected. Public commenters suggested that "improving EE should be positioned as an important guideline for improving corporate value and should be actively included in disclosure items (input and output indicators)" [2]. Through administrative disclosure procedures, the FSA has obligated listed companies to disclose information on the current status of human resource investment and development as human capital in their annual securities reports from April 2023 [3]. Thus, EE in the companies is becoming increasingly important.

Meanwhile, the U.S. Securities and Exchange Commission (SEC) has already required listed companies on the U.S. stock market to make disclosure to human capital information beginning in November 2020 [4]. U.S. & Europe companies have started. Human resource consulting services aimed at improving EE prior to Japan. According to an international comparison of

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work engagement data from the Ministry of Health, Labour and Welfare, low scores of Japanese companies have been revealed [5]. Therefore, with usage of the know-how gained in Europe and the U.S. to improve EE, many HR consulting firms are providing services to improve EE in Japan.

One of the reasons for the low engagement scores of Japanese companies may be that the survey items from the U.S. and Europe are directly used in the employee engagement surveys of Japanese companies. The employment structure of Japanese companies is dominated by membership-based employment, where the system is designed on the premise of long-term employment. On the other hand, Western companies employ mostly job-type employees, who are hired based on job descriptions predefined by the company. Therefore, the engagement survey items for Western companies do not necessarily correspond to the employment patterns of Japanese companies. Thus, the survey may not be valid. In order to properly understand engagement among employees in Japanese companies, the survey should clarify the factors that constitute engagement among employees in Japanese companies and conduct a survey based on these characteristics.

In order to further clarify the antecedents of EE in Japanese companies, the authors formulated a hypothesis based on a new concept of organization engagement (OE), supported by Bernard's organizational theory, which the authors had already proposed. Structural Equation Modeling (SEM) was constructed to confirm the hypothesis. This paper discusses the theoretical proposal of the model.

The remainder of this paper is organized as follows. Chapter 2 describes the antecedents of engagement based on previous studies identified in Europe and the United States. Chapter 3 presents a conceptual model of engagement in formal and informal organizations that draws on Bernard's organization theory. In Chapter 4, four hypotheses are developed from the conceptual model in Chapter 3 and the antecedents of engagement from prior research, and the model is developed based on these hypotheses. Finally, Chapter 5 summarizes this paper and discusses future works.

## 2 Prior Research on Antecedents of Engagement

Kahn's concept of personal engagement led to widespread research on engagement. Kahn defined personal engagement as "the harnessing of organizational members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" [6] (p.694). Kahn observed employees and identified three antecedents of personal engagement, "Psychological meaningfulness", "Psychological safety" and "Psychological availability" [6].

- Psychological meaningfulness can be seen as a feeling that one is receiving a return on investments of one's self in a currency of physical, cognitive, or emotional energy (p.704).
- Psychological safety was experienced as feeling able to show and employ one's self without fear of negative consequences to self-image, status, or career (p.708).
- Psychological availability is the sense of having the physical, emotional, or psychological resources to personally engage at a particular moment (p.714).

May *et al.* identified three antecedents of personal engagement: “Psychological meaningfulness,” “Psychological safety” and “Psychological availability.” They used a survey of employees of a major insurance company to examine [7]. May *et al.* simultaneously investigated the antecedents of each of the three dimensions of “Psychological meaningfulness,” “Psychological safety” and “Psychological availability” [7]. They found that “Supervisor Relations” and “Coworker Relations” were significantly positively related to “Psychological safety.” They also found that “Coworker Norms” was significantly negatively correlated with “Psychological safety” [7].

- Supervisor relations: The relation with one's immediate manager can have a dramatic impact on an individual's perceptions of the safety of a work environment (p.16).
- Coworker Relations: Co-workers who support each other during tough times at work, have mutual respect for one another and value each others' contributions engender trust and heightened perceptions of psychological safety and engagement (p.16).
- Coworker Norms: Normative rules in teams that employees feel they must follow should lead to feelings of less psychological safety than when employees feel they have more flexibility in their behaviors (p.17).

Schaufeli *et al.* examined the concept of work engagement. They defined work engagement as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” [8] (p.74). Schaufeli *et al.* developed the Utrecht Work Engagement Scale (UWES) to measure the work engagement on the basis of this idea [9]. The UWES has an original version with 17 questions, a shortened version with 9 questions and an ultra-shortened scale version with 3 questions per construct [10]. This scale consists of three components: vigor, dedication, and absorption, and the components are defined as follows [8].

- “Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one’s work, and persistence even in the face of difficulties.” (p.74)
- “Dedication refers to being strongly involved in one’s work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge.” (p.74)
- “Absorption is characterized by being fully concentrated and happily engrossed in one’s work whereby time passes quickly and one has difficulties with detaching oneself from work.” (p.75)

Saks defined EE as “a distinct and unique construct that consists of cognitive, emotional, and behavioral components that are associated with individual role performance” [11] (p.602). Saks split the concept of EE into two categories: job engagement (fulfilling one’s job role) (JE) and organizational engagement (fulfilling one’s role as a member of the organization) (OE). He argued that “The social exchange theory (SET) provides a theoretical foundation to explain why employees choose to become more or less engaged in their work and organization” [11] (p.603). The SET explains how relationships are initiated and maintained through the secure exchange of rewards and imposition of costs between individuals [12]. In order to identify antecedents of JE and OE, Saks surveyed 102 employees in various occupations and organizations. He analyzed

the survey results and concluded that while the two measures of engagement were related, they were also significantly different among participants [11]. He found that “Job characteristics” and “Perceived organizational support (POS)” were significantly positively related to JE [11]. He also confirmed that “POS” and “Procedural justice” were significantly positively related to OE [11].

- Job characteristics: From a SET perspective, one can argue that employees who are provided with enriched and challenging jobs will feel obliged to respond with higher levels of engagement (p.604).
- POS: POS refers to a general belief that one’s organization values their contribution and cares about their well-being (p.605).
- Procedural justice: Employees are more likely to feel obliged to also be fair in how they perform their roles by giving more of themselves through greater levels of engagement (p.606).

Mahon *et al.* deepened Saks’ previous research of OE. They added antecedents related to emotions to the model that were lacking in previous studies. Emotions excite interest, focus attention, alert the need for change, and move people to act [13]. The surveys were conducted for manufacturing companies and community colleges of different enterprise types. The results revealed that shared personal vision, shared positive mood and POS were directly and positively correlated with OE of members. They also found that shared personal vision and POS interact with team members’ emotional intelligence to positively influence engagement [13].

- Shared personal vision: Employees feel like the organization shares their personal vision for their work and feel positive about and supported by the organization for whom they work, they will likely be more engaged in their role as organizational members (p.2).
- Shared positive mood: Shared positive mood captures how employees feel about their work in the organization and the organization itself (p.3).

Rich *et al.* developed new antecedents interpreting JE as follows. “Psychological meaningfulness” is the congruence between the behaviors expected by an organization and the behaviors that individual employees value as a part of their own self-images [14]. Secondly, for POS it follows from Kahn’s conclusion that employees experience “Psychological safety” partly as a result of supportive management and supportive and trusting interpersonal relationships with coworkers in the organization [6]. A further core self-concept relates to employee confidence, which Kahn argues is the general level of confidence an individual has in his or her own abilities, status, and self-consciousness that has a significant impact on “Psychological availability” [6]. This confidence determines whether there is more or less room for self-investment in role performance. The antecedents of JE were investigated among 245 firefighters and their supervisors. The results revealed that “Value congruence,” “POS” and “Core self- evaluations” were positively correlated with JE [14].

- Value congruence: The congruence between the behaviors expected by an organization and the behaviors that individual employees value as a part of their own self-images (p.621).

- Core self-evaluations: Individuals with high core self-evaluations tend to feel more capable of dealing with work demands, they should also perceive a higher level of availability to invest themselves into their roles (p.622).

Ikemizu *et al.* identified the antecedents of engagement in Japanese companies with data from a worker survey of the 2019 “Survey on Work Styles and the Current Conditions Related to Labor Shortage” conducted by the Japan Institute for Labour Policy and Training [15]. Engagement at this time and JE in Saks were found to be the same based on the questions asked. The results of the analysis showed that “Loyalty” and “Empowerment” were significantly positively correlated with engagement. There was also no correlation with “Workload” [15].

- Loyalty: The concept is a feeling of support and attachment to something [16].
- Empowerment: The concept is the ability to carry out tasks autonomously [17].

As described above, the antecedents of engagement are derived from three of Kahn’s antecedents of personal engagement: “Psychological meaningfulness,” “Psychological safety” and “Psychological availability.” The antecedents have been studied in a way that expands on these.

### 3 New Concept Models in OE

Saks spread EE into two categories, JE and OE, and clarified the antecedents of each. Ikemizu *et al.* developed a conceptual model based on worker survey data and the results of structural equation modelling (SEM) based on the hypotheses found in the model revealed that loyalty and empowerment are antecedents of engagement [15]. The results were similar to Saks’ proposed JE.

On the other hand, for OE, Saks only has examined engagement in SET-based organizations. There was a lack of consideration of the engagement in the relationships between coworker which proposed by May, Gilson and Harter. In this regard, Ikemizu *et al.* categorized organizations into formal and informal organizations and developed a new conceptual model. This section describes the model for OE discovered by Ikemizu *et al.*

Bernard separated the organization into formal and informal organizations in his organization theory and stated the functions of each as follows [18].

- Formal organizations: A system of consciously coordinated activities or forces of two or more persons (p.81). Three elements are necessary for management to establish a formal organization: “common purpose,” “willingness to serve,” and “communication.”
- Informal organizations: The linkage of groups of people, such as naturally occurring personal contacts and interactions. Informal organization has three functions: “communication,” “maintenance of cohesiveness in formal organization,” and “maintenance of the feeling of personal integrity, of self-respect, of independent choice” (p.120), which are closely related to formal organizations.

With support from Bernard's organization theory, OE can be split into the following two types of organizations; OE in formal organization (OE-fo-org) and OE in informal organization (OE-info-org). Ikemizu *et al.* then developed a conceptual model of OE-fo-org and a conceptual model of OE-info-org [19]. Each conceptual model is shown in Figures 1 and 2.

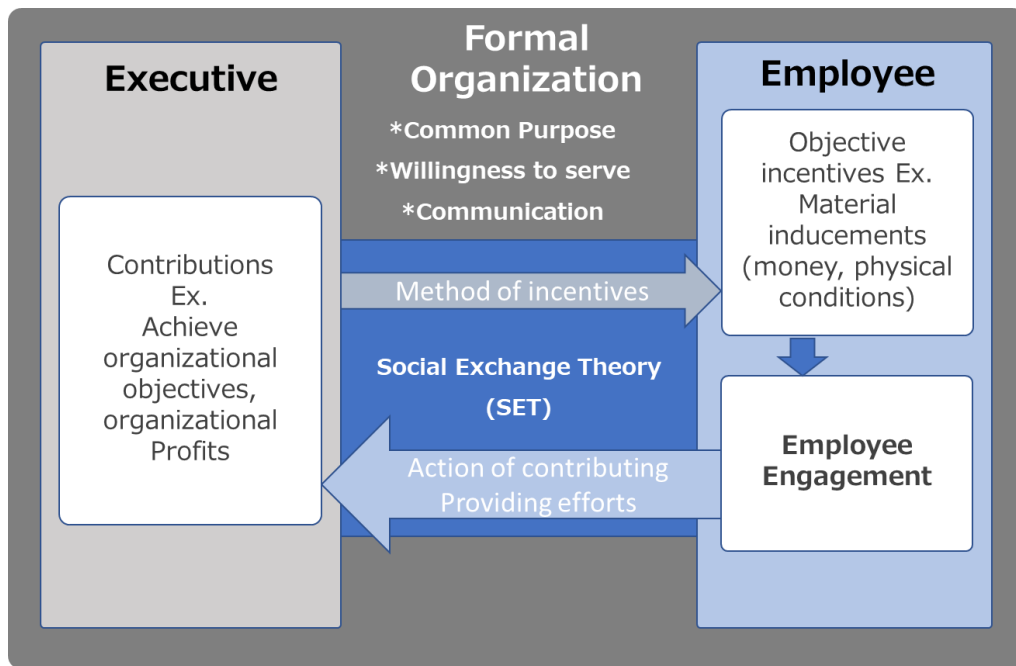


Figure 1: Conceptual model of engagement in formal organizations [19]

In formal organizations, there is a social exchange of incentives and contributions. Ikemizu *et al.* stated as follows [19]:

Employees are motivated to contribute due to their satisfaction about objective incentives; that is, objective incentives create a state of mind to make positive contributions. In other words, engagement is created within employees, who positively contribute to the company and achieve organizational objectives, such as making a contribution to management.

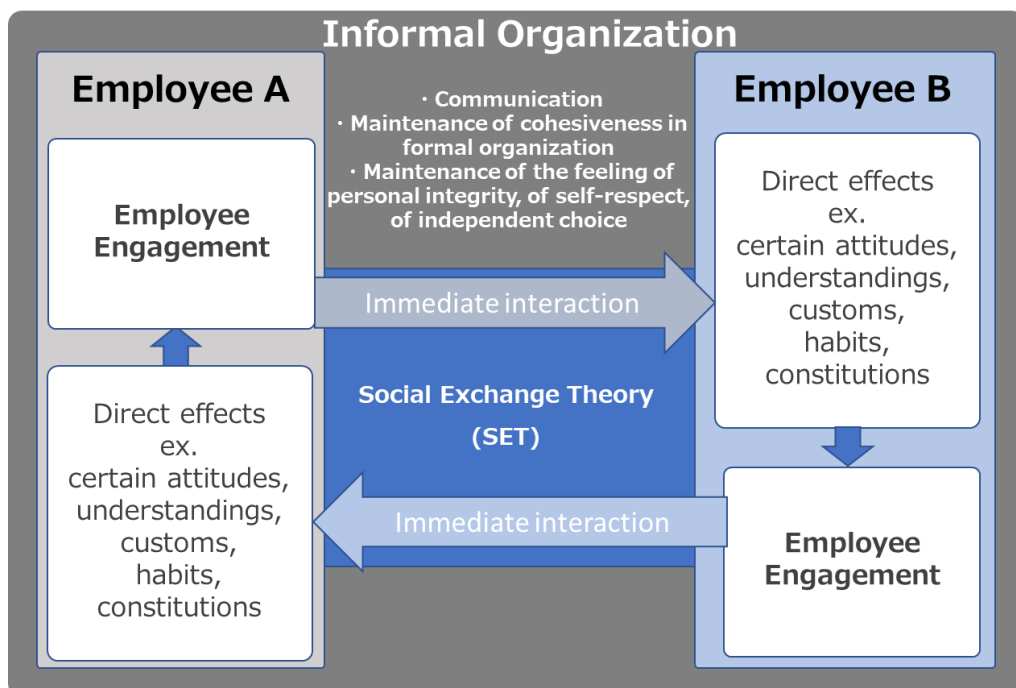


Figure 2: Conceptual model of engagement in informal organizations [19]

In informal organizations, coworkers are connected through personal relationships, which are direct interactions, such as conversations over a meal or talks about the same hobbies (e.g. sports or fishing). Ikemizu *et al.* made the following explanations. [19]

In an informal organization, immediate interactions generate direct results among individual employees, such as coworker’s understanding and conventions. This understanding or custom generates a sense of social cohesion and satisfaction, which in turn motivates further direct interaction and EE to positively enhance the immediate interaction, the end result being further direct consequences.

This distinction between formal and informal organizations has identified differences in OE that had not previously been researched [19].

#### 4 Hypotheses Based on New Conceptual Models and SEM Proposition

As can be seen from the conceptual model proposed in the previous section, through classifying OE-fo-org and OE-info-org, it is assumed that antecedents of engagement can vary according to their respective differences. Once each antecedent is clarified, the antecedents of EE will become clearer.

Using the EE model identified by Saks [11] described in Chapter 2, the constructs of engagement identified by Ikemizu *et al.* [19] and the new conceptual model of OE proposed by Ikemizu *et al.* [15], we propose the SEM shown in Figure 3.

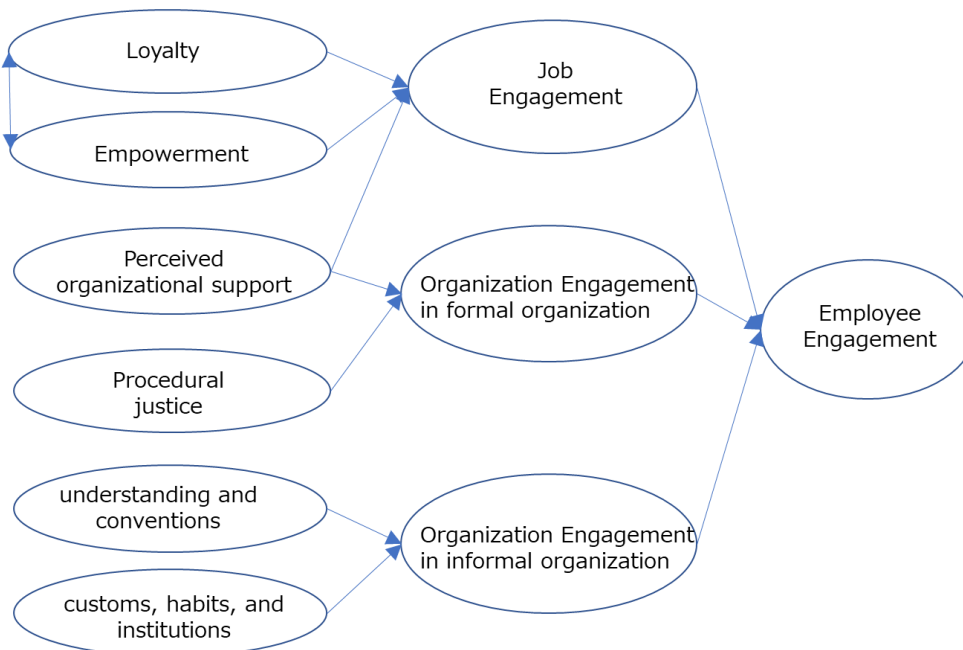


Figure 3: EE of New SEM

#### 4.1 Employee Engagement (EE)

H1: Job engagement, OE-fo-org and OE-info-org are positively correlated with EE.

Saks has discovered that JE and OE are antecedents of EE. It would therefore be unassailable that JE has a positive impact on EE. With regard to OE, although OE is separated into OE-fo-org and OE-info-org with Bernard's organization theory, the inclusiveness of the components of OE is ensured. Therefore, the hypothesis can be considered to have a certain validity.

#### 4.2 Job Engagement (JE)

H2: Loyalty, Empowerment and POS are positively correlated with JE

Saks found that job characteristics and POS were significant predictors of JE [11]. Ikemizu *et al.* also identified that Loyalty and Empowerment were antecedents of "engagement" [15]. As the JE and "engagement" questions contain the identical content, it is acceptable to consider the two types of engagement to be the same. It is also safe to assume that Job Characteristics and Empowerment are the same because the Job Characteristics and Empowerment questions contain the identical content. Similarly, Rich *et al.* clarified that POS is positively correlated with JE. Previous researches have made it clear that Loyalty, Empowerment and POS respectively have positive correlations with JE. Therefore, the hypothesis is assumed to have some validity.

#### 4.3 Organization Engagement in Formal Organization (OE-fo-org)

H3: POS and procedural justice would show positive correlations with OE-fo-org

According to Saks, POS and procedural justice were significant predictors of OE [11]. POS is defined as "a general belief that one's organization values their contribution and cares about their well-being [11] (p.605)". Exchanging incentives, one form of assessing contribution and leading employees to the well-being, is a SET that forms the basis of formal organization. In other words, POS is considered to be strongly associated with formal organization. The definition of procedural justice is "the perceived fairness of the means and processes used to determine the amount and distribution of resources" [11] (p.606). The allocation of incentives is one form of resource allocation. The allocation of resources given to work is done by formal organizations. Therefore, procedural fairness is considered to be strongly related to formal organization. Hence, this hypothesis is assumed to have a certain validity.

#### 4.4 Organization Engagement in Informal Organization (OE-info-org)

H4: Mutual understanding and certain attitudes positively correlate with OE-info-org, while habits, customs and institutions negatively correlate with OE-info-org

In organizational theory, mutual understanding and certain attitudes arise in informal organizations through immediate interaction between coworkers [7]. Deepening mutual understanding between colleagues leads to the establishment of trust relationships. Positive attitudes also represent mutual trust. May *et al.* suggested that interpersonal relationships between supportive and reliable coworkers promote psychological safety, which is a precursor to personal engagement [7]. In other words, mutual understanding and certain attitudes are considered to be antecedents. Additionally, in informal organizations, habits, customs and institutions arise between coworkers through immediate interaction [18]. Just as one person develops certain habits over time, many people, i.e. members of a group, unnoticeably form common habits, or practices. These customs



are recognized and institutionalized [20]. Therefore, it is acceptable to treat customs and practices and institutions as a single factor. Coworker norms is “employees feel they must follow should lead to feelings of less psychological safety” [7] (p.17). There is no contradiction in considering that habits, customs and institutions and coworker norms are equivalent. May *et al.* also clarified that coworker norms were negatively correlated with psychological safety [7]. Hence, this hypothesis is assumed to have a certain validity.

The above-mentioned aspects are considered to be valid models, as they realize a more detailed analysis of the antecedents of EE. However, this is a theoretical aspect of the model, not an experimentally proven one. Experimental demonstration can only be left to the subsequent occasion, which is the limitation of this study at the moment.

## 5 Conclusion and Future Works

In order to further clarify the antecedents of employee engagement, four new hypotheses and a new SEM were developed using a conceptual model of OE in formal organizations and OE in informal organizations. Although these have been theoretically propositions, future hypothesis testing from empirical work is required. Questions that can represent the factors needs to be developed with reference to previous studies. A preliminary questionnaire survey must be conducted in the future, confirming the research procedures, etc. After verifying and improving the results of the preliminary survey, the main survey will be conducted to identify the factors that constitute employee engagement in Japanese companies.

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