Business Professionals' Acceptance of Ikebana

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Abstract

Mindfulness, a type of mental training, is gaining attention among business professionals. This study explored the potential of ikebana as a form of mindfulness practice. Further, it sought to elucidate how ikebana is integrated into personal and business settings. To achieve this, semistructured interviews were conducted with business professionals experienced in ikebana, guided by two research questions. Consequently, we confirmed that participants' words regarding their personal lives, business, and self-perception are related to the ikebana. Additionally, participants noted that ikebana can be a mood-changer in everyday life and promote self-awareness and awareness of others in business contexts.

Keywords: Ikebana, Business professional, Interview, Quantitative Text Analysis

1 Introduction

Mindfulness, a form of mental training, is gaining attention among business individuals. Jon Kabat-Zinn has defined mindfulness as "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" [1]. Ellen Langer describes it as "the process of actively noticing new things" [2]. The American Psychological Association (APA) defines mindfulness as "awareness of one's internal states and surroundings" [3]. From this, mindfulness can be considered the "active awareness of one's internal and external circumstances in the present moment."

Meditation is a well-known method of practicing mindfulness, and mindfulness meditation is also recognized in business settings, with numerous research studies supporting its use. The benefits of mindfulness are said to include "improved concentration," "emotional control during stress," "improved memory," and "improved teamwork" [4]. Ellen Langer categorized previous mindfulness research into three areas: health, business, and education. She summarized the findings in the business sector as showing increased creativity, reduced burnout, and higher productivity[6]. Many studies are being conducted on mindfulness in business.

The authors focused on the potential of ikebana, a traditional Japanese art form, for mindfulness practice. Ikebana is characterized by the importance placed on arranging flowers and plants in a container to express the natural form of the flowers and plants and the concentration and unity of the mind during the arrangement process[5]. Facing and expressing flowers in front of you increases your awareness of your external environment, and becoming absorbed in the flowers leads to the concentration of your awareness of your internal presence. For these reasons, ikebana has the potential to become a mindfulness practice.

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There have been studies related to ikebana and other plants, such as flowers and trees, including one that examined the improvement in quality of life through the practice of ikebana [7] and another that examined the relationship between flowers and plants and stress [8][9]. However, these are studies in the health category, and there is a lack of ikebana research in the business category, which needs to be clarified.

This research aims to clarify how ikebana is accepted in personal and business settings. Specifically, we conducted semi-structured interviews with business professionals with ikebana experience. We analyze and summarize the results and answer the following research questions (RQ):

1. What role does ikebana play in the lives of business professional? (RQ1)

2. What role does ikebana play in the business world of business professional? (RQ2)

The academic significance of this research lies in clarifying the role and connection of ikebana as a mindfulness practice within social life by addressing the above RQ. Additionally, to the best of our knowledge, a qualitative analysis of ikebana in the business context has not been previously conducted, making this study novel. This study focuses on exploratory analysis based on interview surveys.

2 Related Research

This chapter discusses some relevant research, including case studies on ikebana and houseplants and studies related to mindfulness in business settings.

A. Case studies on ikebana and houseplants

Here, we discuss a study that examined the improvement of quality of life (QOL) through the practice of ikebana as a related example and another study that explored the impact of indoor plants on stress reduction in office environments as part of houseplant research.

In a study by Ikenobo et al. [7], ikebana was used in recreational activities for older adult care to improve their QOL. The experiment was conducted on two older adults with no previous ikebana experience. They were evaluated using the NPI scale, which consists of 12 items, and the GBS scale, which consists of six items. Consequently, there was no change in the NPI score; however, the GBS showed an improvement in the participants' emotional state. This suggests that compared to karaoke or watching DVDs, Ikebana has a positive effect on reducing anxiety and restoring calmness. This study examines the stress-reducing effects of ikebana but does not examine the effects of ikebana on social life or business.

Toyoda et al. [8] investigated changes in psychological and physiological stress before and after placing indoor plants on employees' desks in an actual office environment. The experiment was divided into a period without plants and when employees looked after the small plants they had chosen. The stress-reducing effect of deliberately looking at plants for three minutes when feeling tired during working hours was also verified. Their results showed that having the opportunity to look at nearby plants deliberately reduced employees' psychological and physiological stress. Here, the stress-reducing effect of houseplants in a business setting is clarified, but the focus is only on the health-related effects of stress reduction, not on ikebana.

B. Case studies on mindfulness and business

Several studies have been conducted on mindfulness. Here, we explain the studies examining mindfulness's effects in the business category.

Lippincott [10] used recent research on the potential of mindfulness to improve leader performance to shed light on the developmental process of mindfulness and provide insights into why leaders should invest in mindfulness training and practice. The study involved interviews with 42 senior organizational leaders from 10 countries with sufficient leadership experience and mindfulness practitioners. The data were analyzed using qualitative analysis and the Emotional and Social Competency Inventory (ESCI). The main finding was that practitioners recognized mindfulness as having a significant impact on behavioral development and changes in awareness concerning improving leadership effectiveness. This directly contributes to workplace outcomes and benefits and helps bring about positive changes in interpersonal skills. It has also been reported that it improves cognitive function in multiple areas, such as attention and decision-making, contributes to emotional intelligence development, and can potentially improve leadership performance.

Good et al. [10] integrated a wide range of studies on mindfulness and summarized them into a framework that can be used as a guideline for management research. This framework states that mindfulness affects cognition, emotions, behavior, and physiological functions through attention. It states that attention is related to improvements in attention's stability, controllability, and efficiency. Concerning cognition, it is suggested that mindfulness improves working memory capacity and that the meditation experience is related to creativity, divergent thinking, and convergent thinking. Mindfulness training reduces negative emotions and strengthens positive emotions. Mindful attention is believed to enable effective behavioral regulation. In terms of physiological function, it is introduced as being related to reducing stress responses and speeding up recovery to baseline levels. These wide-ranging effects have also improved workplace performance, relationships, and well-being.

3 Interview Survey

In this chapter, we describe the participants in the interview survey, the interview survey procedure, and the analysis method.

This interview survey was conducted with the approval of the Life Science Committee of the Japan Advanced Institute of Science and Technology after providing the participants with sufficient explanations and obtaining their consent.

A. Participants

We conducted interviews with five business professionals who have experience in ikebana. Details of the participants are listed in Table 1. All participants were women, ranging in age from their 30s to 60s, and their experience with ikebana ranged from a few times to several decades. A survey by the Agency for Cultural Affairs [12] showed that 90% of individuals learning ikebana were women, and the fact that all participants in the interviews were women reflects the current popularity of ikebana.

ID	Gender	Age	years of Ikebana experience	Ikebana Master Instructor	Status
А	Woman	40s	several times	No	Company employee in software management.Self-employed.
В	Woman	50s	1 year + several times	No	Human resources department of a business company. Executive officer. MBA student.
С	Woman	30s	8 years	Yes	General back office work for an IT company. Self-employed. Associate professor of Ikebana.
D	Woman	40s	27 years	Yes	Former management consultant. Provides ikebana programmes for individuals and organisations. Ikebana artist. Advisor to a certain ikebana school. External director of several companies.
Е	Woman	60s	35 years	Yes	Presides over an ikebana flower arrangement class. The highest position in a certain ikebana school.

Table 1: Basic information on participan	ts
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B. Interview survey procedure

The interviews were conducted between August and September 2024. The interviews were conducted online using an online conferencing system and were one-on-one between the interviewer and interviewee (participant), lasting 30–40 min. A list of questions was prepared for the interviews, and semi-structured interviews were conducted on three main topics. The first topic was basic information, and the main questions were about the participants' career history since becoming working adults and the number of years they had been doing ikebana. The second topic was 'What role does ikebana play in the lives of business professional? (RQ1), and the third, "What role does ikebana play in the business world for business professional? (RQ2)," were conducted to answer each of these questions.

C. Analysis method

We conducted a quantitative content analysis of the interview results using the KH Coder (ver. 3.02c) [13]. Quantitative content analysis is a type of content analysis that uses quantitative methods, including qualitative methods.

The flow of the interview analysis is illustrated in Figure 1. First, interviews were conducted, and text data were extracted to prepare the analysis file. Next, the data were cleaned and prepared for import into KH Coder. Once the analysis file is ready, it is imported into the KH Coder, and the analysis begins.

First, for preprocessing, we selected the words for the analysis. In this analysis, we specified "ikebana" and "mindfulness" as vital words but not extracted as single words. Words not used were specified as words often appearing in interviews, such as "I see" and "quite."



Figure 1: Flow of interview analysis

4 **Results and Discussion**

After extracting the interview data from five individuals, 20,384 words were extracted, of which 6,072 were used in the analysis. The interview data were extracted from the interviewer's and interviewee's comments to avoid disrupting the interview context.

Table 2 shows the 20 most frequently occurring words in the participants' comments. As the frequency of word occurrence was calculated from the participants' interview responses only, the interviewer's comments were not included in the frequency count.

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Ranking	extracted word	extracted word (En.)	Number of occurrences	Ranking	extracted word	extracted word (En.)	Number of occurrences
1	人 (hito)	person	109	11	時間 (zikan)	time	30
1		1				1	
2	自分 (zibun)	myself	104	12	力 (tikara)	power	30
3	花 (hana)	flower	60	13	先生 (sensei)	teacher	28
4	生け花 (ikebana)	ikebana	77	14	良い (yoi)	good	28
5	生ける (ikeru)	arrange	67	15	行く (iku)	good	27
6	感じ (kanzi)	feeling	45	16	仕事 (sigoto)	work	27
7	ビジネス (business)	business	32	17	決める (kimeru)	decide	22
8	言う (iu)	say	32	18	持つ (motu)	have	22
9	考える (kangaeru)	think	32	19	出る (deru)	go out	21
10	気づく (kizuku)	notice	31	20	綺麗 (kirei)	beautiful	21

Table 2: Top 20 frequent words of participants (interviewees)

If we exclude the words related to ikebana, such as "ikebana," "ikeru" (arrange), "hana" (flower) and "sensei" (teacher), the words "hito" (person) and "jibun" (myself) appear frequently in the top 20. The word "hito" is often used to mean "tanin" (another person), and we can see that the words "jibun" (myself) and 'tanin' (another person) occur frequently. In addition, the verbs "kangaeru" (think) and "kizuku" (notice) are in the top 10, and there are also many occurrences of words related to the awareness gained through ikebana.

Figure 2 shows the co-occurrence network diagram used to understand the relationships between frequently occurring words. A co-occurrence network is a network diagram that visualizes the relationships between words by connecting words with a strong degree of co-occurrence to a line.



Figure 2: Co-occurrence network diagram of ikebana acceptance

In the co-occurrence network diagram in Figure 2, 10 sub-graphs are shown. The group with the most networks, 01, included the keywords "daily life," "life," "influence," "heart," and "creation."

These words appear in the interview questions, but among the responses, "You do not need to practice that much. You can decorate flowers in your <u>daily life</u>' (E)," It brings out a kind of axis in the person. Hence, it helps to calm the <u>mind</u>" (E), "This is a necessary time for the <u>mind</u>, even if it is not always a pleasant <u>state</u>' (D), I feel that the power of <u>creativity</u> in touching and making things is great' (A), ikebana itself materializes what I imagine. It is like a place where you can express your <u>creativity</u>. (C) From the analysis of the interview responses, it can be seen that ikebana can be used to decorate flowers in everyday life and that it can also help calm the mind. It also appears that the tactile sensation of ikebana stimulates creativity.

Group 02 includes 'business, "workplace" and "skill." From the interview responses, "Looking at things from a distance may be <u>useful</u> in work" (B), "It is also <u>useful</u> when making documents" (B), "One of the skills you can cultivate is the ability to <u>communicate</u>" (E), it seems that looking at things from a distance and the ability to communicate are influential in business situations and business skills.

Group 03 includes words such as 'ikebana, "arrange," and "myself." From the analysis of

the interview responses, "I can see <u>myself</u> objectively and think about where I am lost" (E), "I can see my surroundings and see <u>myself</u> from a meta-perspective, and I can become <u>aware</u> of my own feelings" (A), "The time spent arranging <u>flowers</u> may have been time spent thinking about <u>myself</u>" (C), and "<u>Ikebana</u> makes me <u>aware</u> of the way my heart is through the <u>flowers</u>" (D). It is thought that arranging flowers makes it easier to become aware of oneself and others around oneself.

The 07 group includes the words "go out," "character," "pattern," and "like. " From the interview results, the "<u>character</u> does come out. I think it is connected to work, too" (B), and "I think it is more of a <u>pattern</u> than a character. The <u>pattern</u> of thought comes out:" (D), it is possible that arranging can bring out a person's character. It is also a thought pattern, and arrangements can lead to self-awareness.

Next, we conducted a correspondence analysis with the external variables as participants (Figure 3). Correspondence analysis has the characteristic that it allows the external variables (years of ikebana experience) to be plotted simultaneously in a two-dimensional scatter diagram, and it allows graphical exploration. In the correspondence analysis plot, the words plotted near the origin (0, 0) are words that do not have any distinctive features in terms of their occurrence patterns, and the further away from the origin, the more distinctive the words are regarding external variables.



Figure 3: Correspondence analysis with participants as the external variable

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The results in Figure 3 show that the characteristic word for those more than 10 years of ikebana experience is leader.

In the case of "Leaders," the answer was that "in an age where good leaders are those who can properly see genius and individuality and think about how to bring these out, doing Ikebana is directly linked to this." This is thought to be connected to the fact that doing ikebana helps you to notice the individuality of the flowers and also notice yourself, and "emotional intelligence, which is said to be very important for leaders, is said to be about noticing yourself and noticing others."

In contrast to other distinctive words, "decide" appears frequently. This is thought to be because ikebana is a continuous decision-making process, such as deciding on a theme or direction.

Table 3 summarizes the participants' comments on each RQ.

ID	RQ1: What role does ikebana play in the lives of businesspeople?	RQ2: What role does ikebana play in the business world of businesspeople?
А	■ It gives you time to think and focus on things ■ It has the role of changing your mood for the better	■ Concentrating on your own senses is the same as concentrating on what is in front of you ■1 think that being able to see things from above and from various angles comes naturally ■ Being able to see what is around you and being aware of your own senses is connected to business ■ The power of creativity in touching and creating things is great
В	■ It's a good way to change your mood ■ When you're doing ikebana, you don't think about anything else. It's a place for concentration	■ There are ways of balancing and maintaining a distance, and you have to think about the overall optimum from an overview ■ The way of thinking in ikebana, which is about looking at the overall connection, is also useful in business ■ adjustments are a chance to notice things ■ Both ikebana and human resources are similar in that there are suitable people for suitable jobs
С	■ You can see your progress ■ A place to realise your ideas and express your creativity	■ The fact that we both think about the other person is a common point ■ The space is wonderful, and there is a concept of 'ma' in ikebana. Ma' is related to thinking about the other person and balance, etc. ■ The time spent arranging flowers is a time to think about oneself
D	■ Ikebana is a physical activity, and if your mind is not in the right place, you won't be able to hear the flowers' voices ■ After finishing an arrangement, you feel refreshed and relaxed, and it's a necessary time for your mind and body ■ Ikebana helps you to see yourself clearly. The flowers bring out the best in you ■ Ikebana makes you aware of yourself. It's like a reset button for your mind, and you feel like everything is in order	■ The individual comes alive when it is in harmony with the beauty of the whole. Always have the perspective of how people with common interests can express their own unique beauty. ■ Through ikebana, I have cultivated self-awareness and awareness of others. When you do ikebana, you become aware of many things ■ In an age where good leaders are those who can see the genius and individuality that each person possesses and think about how to bring it out, doing Ikebana is directly linked to this ■ When you are doing Ikebana, your personality comes out in the patterns you create. Your thought patterns come out in a big way ■ When there are flowers, the act of creating comes into play. And you become aware of yourself (mindfulness), and these two things are exquisitely mixed together
E	■ Ikebana doesn't require much practice, and you can decorate your home with flowers in your everyday life, so it can become rooted in your lifestyle ■ The motivation for attending Ikebana classes is diverse, such as wanting to distance yourself from work or wanting to create a different world ■ The biggest benefit is that you can make your own decisions. You become less resistant to making decisions ■ It's a reset feeling that helps you to get back to yourself. It's a place where you can stay calm and collected without your mind wavering	■ Ikebana has the power to convey, the power to think, the power to carry out, the power to create, the power to respond to change, and the power to recover. ■ Sometimes, ikebana works are conveyed with the image of everyone working together to grow a large tree. No matter what the final role, in order to grow a large tree, you need roots, a trunk, twigs, and flowers. ■ Ikebana is creative. I think it helps you to develop your creative ability. Different people choose different flowers, and that's where you can make big discoveries. You can see how different your own sensibilities are from those of the person next to you ■ There is a connection between ikebana and self-awareness. You can look at yourself objectively ■ Your personality comes out in your ikebana. You can see what kind of patterns you like

Table 3: Summary of Participants' Comments on RQ

From Table 3, the results for RQ1 and RQ2 are summarized as follows:

RQ1: What role does ikebana play in the lives of business professional?

- It provides a place and time for focused thinking [A][B]
- It provides a change of pace [A][B][D][E]
- It helps you to become more aware of yourself [C][D]
- It helps you to develop your powers of judgment [E]

RQ2: What role does ikebana play in the business world of business professional?

- It helps you look at things from a bird's eye view and develop a perspective that allows you to see things from a variety of angles [A][B][D].
- It helps you to develop awareness of yourself and others and to improve your emotional intelligence [A][B][C][D][E]
- Looking closely at the other person and thinking about how to draw them out leads to leadership[D]
- Repeatedly arranging flowers helps you to recognize personality and thought patterns[D][E]
- Touching and creating flowers has an effect on creativity[A][D][E]

After dividing the participants into two groups, the above will be considered: one that teaches ikebana (Teaching group: participants D and E) and one that was taught ikebana (Learning group: participants A, B, and C), and also taking into account Figures 1 and 2.

Regarding RQ1, many participants said it was an excellent way to change their mood, .regardless of group. There were many comments from the Learning Group regarding places and times of focused thinking. Co-occurrence network analysis also shows that ikebana can also help calm the mind.

Regarding RQ2, all participants, regardless of group, commented about "awareness of oneself and others." The difference between the groups was that the Teaching group commented about recognizing thought patterns. In contrast, the Learning group commented about personality coming out in ikebana but did not mention thought patterns. Correspondence analysis shows that the characteristic word for those more than 20 years of ikebana experience is leader.

5 Conclusion

This study conducted semi-structured interviews with business professionals with experience with ikebana based on two RQs to clarify how ikebana is accepted in personal and business settings.

We confirmed that participants' words regarding their personal lives, business, and self-perception are related to the ikebana. Moreover, we gained insight into ikebana's role in business individuals' personal lives and business settings as a response to the RQ.

Regarding RQ1, "What role does ikebana play in the lives of business professionals?" Many respondents indicated that doing ikebana was an excellent way to refresh oneself. This is thought to be because, when doing ikebana, you have to concentrate on the flowers in front of you and have the opportunity to create them while touching them.

Regarding RQ2, "What role does ikebana play in the business world for business professionals?" All participants commented on their own awareness of and the awareness of others. This is thought to be due to looking at ikebana works from above, thinking about ikebana working as a whole rather than just as individual flowers, and feeling the differences in sensitivity between oneself and those around oneself through ikebana.

From the above, it was possible to confirm through an analysis of the interview survey the role and connection of ikebana as a mindfulness practice in social life.

Furthermore, this study focused on exploratory research, and it is necessary to increase the number of interview participants further and advance the qualitative analysis in the future.

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