Journal of Public and Private Management
Vol. 8, No. 4, March 2022, pp. 1–13
ISSN 2189–2490

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A Preliminary Study to Develop a Cross-Cultural Learning Style Measurement

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Received: 7, January, 2022

Abstract

Although cross-cultural learning has been studied extensively in various contexts, how an individual approaches learning in cross-cultural situations remains unclear. To better understand individuals' learning in such situations, we modified Kolb's Learning Style Inventory to fit respondents in a cross-cultural setting. The modified questionnaire was tested in a graduate school in Japan, with a sample of 37 administrative employees in a cross-cultural working environment. Results indicated that the six key learning style variables based on Kolb's learning theory were significantly correlated in terms of two types of learning style dimensions. Additionally, results empirically supported Kolb's theory, showing that a relative preference for one learning mode over another in one dimension was independent of that in the other dimension. Furthermore, results revealed that variables relevant to the learning dimension of concrete experience vs. abstract conceptualization were significantly related to gender, congruent with previous research. All of these results suggest that the cross-cultural learning style questionnaire could be further developed.

Keywords : cross-cultural learning style, scale development, cross-cultural situations, higher educational contexts, Japan

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Introduction

Cross-cultural learning has drawn much attention from multiple study areas that include management learning and education (Mujtaba & Thomas, 2005; Napier, 2006; Yamazaki & Kayes, 2004), higher education (Apfelthaler et al., 2006; Foster, 2017; Rienties et al., 2015), adult learning (Virjee, 2010), e-learning (Kayumova & Sadykova, 2016), and design education (Montana-Hoyos et al., 2015). Cross-cultural environments are so complex that individuals often face culture shock (Ward et al., 2001). Since individuals have a preferred way of learning in learning environments (Kolb, 1984; Kolb & Kolb, 2017), they may attempt to apply a learning strategy to learn something important or necessary in cross-cultural situations. Yet, their preferred way of learning, which is called a learning style, might become ineffective due to a large cultural distance between home and host cultures (Yamazaki & Kayes, 2007). Past studies indicated a theoretical and empirical connection between learning style and culture (Yamazaki, 2005), suggesting that a dominant learning style in one country may not work smoothly in another country. A critical step to handle this challenge is knowing one's learning style when engaging in cross-cultural situations. The present study aimed to measure the cross-cultural learning style of those who work in cross-cultural contexts.

Many studies that have examined learning style differences among countries and cultures have employed a bottom-up approach (Joy & Kolb, 2009; Yamazaki, 2005). Such studies typically involve research participants in their own country's culture; thus, findings can demonstrate cultural differences in learning style between countries. To identify learning style based on those studies, it is assumed that learning situations are embedded in the culture of research participants, which differs from cross-cultural contexts, intercultural situations, or culturally different learning environments. Apfelthaler et al. (2006) pointed out that the term *intercultural* relates to interaction between individuals with different cultures or between individuals who handle a matter outside their own cultures. Because cross-cultural learning style entails cross-cultural learning situations, cross-cultural learning style should be investigated among individuals who face cross-cultural or intercultural situations, who have had cross-cultural learning experiences, or who can at least consider cross-cultural contexts where they encounter cultural differences.

A representative case of this cross-cultural situation is global appointments like expatriation, inpatriation, transpatriation, and repatriation. To the best of our knowledge, very few studies on learning style have been conducted in cross-cultural contexts where individuals face cultural differences in their jobs or in their interactions with local people. One exception is the study of Yamazaki and Kayes (2007) that investigated learning style changes

in expatriates, who adopted a more suitable learning style for their work context. However, the measures used in that study related to general, integrative learning situations rather than cross-cultural situations. Since cross-cultural learning style focuses on cross-cultural environments, it seems important to specify cross-cultural learning situations in the measure. By doing so, the measure can examine how individuals respond to such situations. In this study, we attempted to explore cross-cultural learning by examining cross-cultural learning situations and applying the lens of Kolb's (1984) experiential learning theory.

We used Kolb's (1984; Kolb & Kolb, 2017) experiential learning model for three reasons. First, the learning model considers human experience as the source of individuals' learning (Kolb, 1984; Kolb & Kolb, 2017). In cross-cultural situations, face-to-face communication with locals and hands-on cross-cultural experiences seem to influence individuals' learning and adaptation to situations. The interplay between people and the world through experience is key. Also, Kayes (2002) illustrated connections between personal knowledge and social knowledge within Kolb's experiential learning theory, suggesting the importance of the outside social world for individuals' learning. In this regard, it appears that Kolb's learning model is a good fit for cross-cultural learning situations. Second, an existing measurement is aligned with Kolb's learning theory to examine individual learning style: Kolb's (1999; Kolb & Kolb, 2013) Learning Style Inventory (KLSI). This is important because the measure is theoretically explained with empirical support (Kolb & Kolb, 2013, 2017). Third, Kolb's theory and measure have been widely applied to cross-cultural investigations to understand how learning style differs with culture (Auyeung & Sands, 1996; Barmeyer, 2004; Holtbrugge & Mohr, 2010; Joy & Kolb, 2009; Yamazaki, 2005; Yamazaki & Kayes, 2007, 2010; Yamazaki & Attrapreyangkul, 2014; Yamazaki et al., 2018). Before further discussing a cross-cultural learning measurement, the next section better explains Kolb's theory and learning styles.

Literature Review

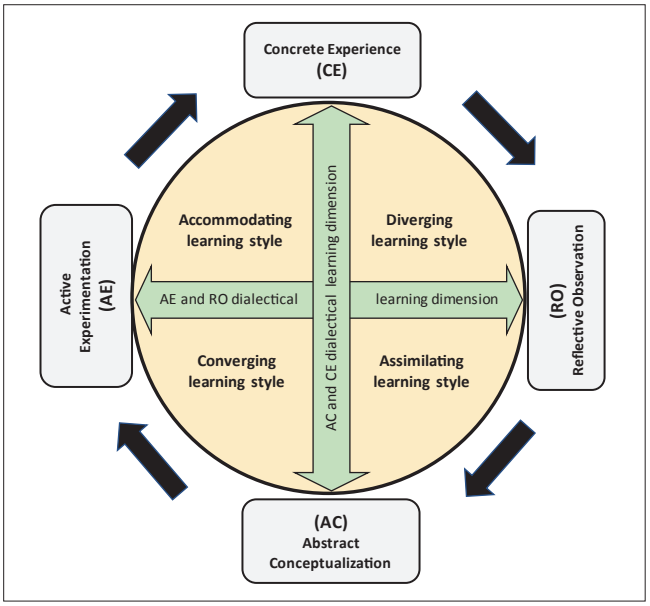
Kolb's Learning Model

Kolb's (1984) experiential learning theory was founded on the research of James, Dewey, Follett, Lewin, Piaget, Vygotsky, Jung, Rogers, and Freire (Kolb & Kolb, 2017). A unique aspect of the learning theory is that individuals' experience plays a pivotal role in learning. This model is composed of the four learning modes of concrete experience (CE), reflective observation (RO), abstract conceptualization (AC), and active experimentation (AE). The CE and AC learning modes both capture human experiences and lead to knowledge creation, but they work differently. The CE mode requires applying feeling and sensing and produces apprehension or tacit knowledge, while the AC mode involves thinking and conceptualizing and generates comprehension or explicit knowledge.

The RO and AE modes both transform one type of knowledge to the other. The RO mode requires reflectively observing knowledge created through the CE mode and changing it as a source for comprehension knowledge relevant to the AC mode. The AE mode requires taking action to test comprehension knowledge generated by the AC mode and transforming it for a new experience that the CE mode can address. In Kolb's learning model, people learn by feeling (CE mode), reflecting (RO mode), thinking (AC mode), and acting (AE mode), which together comprise a learning cycle. The CE mode is dialectically opposed to the AC mode, while the RO mode is dialectically opposed to the AE mode.

When people learn, they tend to apply two learning modes: one from AC vs. CE and the other from AE vs. RO (Kolb, 1984, 1999). Combinations of these two modes lead to four basic learning styles: The diverging learning style consists of CE and RO modes; the converging style, AC and AE modes; the assimilating style, AC and RO modes; and the accommodating style, CE and AE modes. Each learning style has a particular feature that relies on the characteristics of the two learning modes. Furthermore, Kolb and Kolb (2005, 2013, 2017) proposed a classification of nine learning styles beyond the four fundamental learning styles. This classification contains a balanced learning style in which people keep a balance between the CE and AC modes or between the RO and AE modes, rather than being inclined towards either one. Thus, with this type of learning style, individuals' learning tendency seems more integrated than specialized. Figure 1 illustrates Kolb's learning model and four basic learning styles.

Figure 1. Kolb's experiential learning model.



Learning Style and Culture

Kolb's learning style is associated with countries' cultures (Yamazaki, 2005), particularly Hofstede's (1991; Hofstede et al., 2010) cultural dimensions (Holtbrugge & Mohr, 2010). Yamazaki (2005) argued that characteristics of individualism or independent self can be seen in a converging learning style, while those of collectivism or interdependent self are observable in a diverging learning style. The research of Holtbrugge and Mohr (2010) as well as Joy and Kolb (2009) largely supported this relationship. Also, strong uncertainty avoidance seems to be related to the RO learning mode, whereas weak uncertainty avoidance tends to be associated with the AE learning mode (Yamazaki, 2005). Similarly, the study of Joy and Kolb (2009) revealed that an assimilating learning style was related to a strong uncertainty avoidance culture.

Past empirical cross-national studies with business and student participants indicated a connection between learning style, based on Kolb's theory, and culture. In business contexts, the study of Yamazaki and Kayes (2007) showed that, overall, U.S. managers had a converging learning style, while Japanese managers had a diverging learning style. Yamazaki and Kayes (2010) compared three countries and found that Japanese managers had a diverging learning style, Chinese managers had an assimilating learning style, and Malaysian managers had a converging learning style. Further, Yamazaki and Attrapreyangkul (2014) showed that Japanese employees had a diverging learning style, while Thai employees had an accommodating learning style. Academic samples also showed cultural differences in learning style. For example, the study of Auyeung and Sands (1996) illustrated that Australian students exhibited a diverging learning style, whereas Hong Kong Chinese and Taiwan students had an assimilating learning style. Also, Barmeyer (2004) reported that, compared with Germans, French and Quebecois students learned more by feeling and acting. The study of Yamazaki et al. (2018) showed that Japanese and Thai students were more likely to have a diverging learning style, while U.S. students were more likely to have an assimilating learning style.

Finally, the study of Yamazaki and Kayes (2007) highlighted the learning style change of Japanese expatriate managers who were assigned to the United States through a cross-sectional research design. The first cohort of Japanese managers (<1 year) preferred to use an assimilating learning style; the second cohort (1 to <2 years), a diverging learning style; the third cohort (2 to <3 years), an accommodating learning style; and the fourth cohort (>3 years), a diverging learning style (Yamazaki & Kayes, 2007). This study suggests that individuals' learning style changes with cross-cultural situations.

Kolb's Learning Style Inventory

The KLSI was developed as a self-diagnostic instrument to assess students' and managers'

learning style (Kayes, 2002) and has become one of the most widely applied tools (Davies et al., 1997; West, 1982). The KLSI was redesigned in 1985 and 1999 (Kayes, 2002), which resulted in improvements in its psychometric properties (Andreou et al., 2015; Kayes, 2005; Veres et al., 1991). Although Version 4 of the KLSI was provided to identify one of nine learning styles for individual respondents (Kolb & Kolb, 2013), this study used Version 3.1 of the KLSI (Kolb, 1999) in a preliminary study of cross-cultural learning style measurement. Many past studies have used Version 3.1, allowing comparisons with results of this study.

The KLSI asks individuals to consider some recent learning situations as they respond to 12 statements (Kolb, 1999, p. 2). Individuals are asked to rank four optional answers relevant to the four learning modes of CE, RO, AC, and AE. An example is completion of the statement "When I learn," with the options of "I am happy" (CE), "I am careful" (RO), "I am fast" (AE), and "I am logical" (AC) (Kolb, 1999). The total score for each learning mode corresponds to a level of learning mode preference. Subtracting the total score of CE from that of AC shows a relative preference for AC over CE or vice versa in the learning dimension of AC vs. CE. Similarly, subtracting the total score of RO from that of AE is interpreted as a relative preference for AE over RO or vice versa in the other learning dimension of AE vs. RO. By calculating these scores, respondents can identify their preferred learning modes and learning style.

Methods

Sample and Procedures

Thirty-seven administrative staff members working for a graduate school in Japan participated in this study. Their working context was characterized as international or cross-cultural. Most graduate students came from foreign countries, and the official language on campus is English. Among the participants, 29 were women and 8 were men. All participants were Japanese except one administrative staff member from the United States. Their average age was 43.6 years (SD = 11.3). They had overseas experiences, with an average of 2.2 months abroad. Nearly two-thirds of the participants were able to speak English or a foreign language at above intermediate level. Almost all staff frequently communicated with non-Japanese individuals; 60% talked to such individuals every day.

To obtain research cooperation from the manager in charge, one of the authors visited the graduate school and explained this study and the voluntary nature of participation. The manager provided a survey packet to administrative staff through an internal distribution system. One month later, the author visited again to collect completed questionnaires, which were anonymous.

Cross-Cultural Learning Style Measures

This preliminary study aimed to develop a measurement of cross-cultural learning mode

and style based on the KLSI Version 3.1 (Kolb, 1999), which is theoretically derived from Kolb's (1984) experiential learning theory (Kolb & Kolb, 2017). We made three types of modifications to the KLSI: (1) modification of instructions to highlight the context of cross-cultural situations, (2) modification of seven statements by adding the term *this situation*, and (3) modification of 34 optional answers out of 48 by adding *this situation*, rephrasing original optional answers, or both.

In terms of the first modification, the instructions were presented as follows: "Think about a cross-cultural situation or a different cultural situation that you encounter. This situation may be seen in a workplace, in a school, in an overseas trip, in living abroad, or in other contexts. Take a few moments to think about this situation." In the second modification, *this situation* was added to the original statement, such as "When I learn in this situation." The third modification was handled very carefully to retain relevance to the four learning modes of Kolb's model: CE, RO, AC, and AE. If options were modified, they were rigorously examined to match with the four learning modes. For example, by adding *this situation*, one option was changed to "I am open to new experiences in this situation." Other optional answers were rephrased, such as "I take action to make things happen." Finally, some optional answers added *this situation* and rephrased the text, such as "I like to organize information gained in this situation." Table 1 summarizes the changes for each statement/question number.

Like the KLSI, the cross-cultural learning style questionnaire required respondents to rank four optional answers as first, second, third, and fourth based on their preference. This response type is important because the individual learning process encompassed in

Table 1. Style of adaptation of Learning Style Inventory questions for a cross-cultural learning context

Question no.	Number of optional answers to be ranked			
	No change	Addition of *this situation*	Rephrasing	Rephrasing and addition of *this situation*
1	3	0	1	0
2	0	0	4	0
3	0	0	4	0
4	4	0	0	0
5	0	1	0	3
6	4	0	0	0
7	0	2	0	2
8	0	0	4	0
9	0	2	0	2
10	3	0	1	0
11	0	3	0	1
12	0	0	4	0

Kolb's experiential learning theory highlights the dialectical quality between the CE and AC modes and between the RO and AE modes.

Analytical Design

To explore the development of this cross-cultural learning style measurement, we split 12 statements into two groups: one group had more original wording optional answers or those with the addition of *this situation* (Nos. 1, 4, 6, 10, 11), while the other had more rephrasing answers or those with the addition of *this situation* (Nos. 2, 3, 5, 8, 12). As this condition created two groups that consisted of five statements, the other two statements (Nos. 7 and 9) were allocated into one group or the other. As a consequence, three groups were generated: the whole questions group, the original wording group (Nos. 1, 4, 6, 9, 10, 11), and the rephrasing group (Nos. 2, 3, 5, 7, 8, 12). This grouping allowed us to evaluate how each of the three groups was effective in examining cross-cultural learning modes and styles of those who engage in cross-cultural situations, with a particular focus on how the rephrasing group differed from the original wording group.

First, correlation was analyzed among the six key variables of learning style—CE, AC, RO, AE, AC – CE, and AE – RO—with regard to those three groups. The first investigation concerned how these variables were related based on Kolb's learning theory. Then, we compared the rephrasing group and the original wording group to determine how the rephrasing group was associated with the original wording group through correlation analysis, highlighting the six key learning style variables. Finally, using the independent t test, we examined how gender differed in cross-cultural learning style variables of the three groups. If cross-cultural learning style variables relevant to the new questionnaire were proper and correct, the learning dimension of AC vs. CE would be correlated to gender difference. This perspective is based on past findings on learning style differences by gender. For example, the meta-analysis of Severiens and Ten Dam (1994) indicated that men prefer to use AC more than women do.

Results

First, this study examined how six key learning style variables were related with each other for the whole questions group, the original wording group, and the rephrasing group. Table 2 illustrates relationships between two learning style variables that were significant or insignificant within the three groups. Similar patterns were observed for all three groups: significantly negative relationships between CE and AC, RO and AE, CE and AC – CE, and RO and AE – RO and significantly positive relationships between AC and AC – CE and between AE and AE – RO. Relationships of the other combinations were insignificant. These results align with Kolb's learning theory. That is, a diametrical association between CE and AC and between RO and AE involves a negative relationship. A variable of AC – CE as

a relative preference in the learning dimension of AC vs. CE is based on subtraction of CE from AC, while that of AE – RO as a relative preference in the learning dimension of AE vs. RO is generated by subtracting RO from AE. Accordingly, it can be theoretically postulated that the former variable is positively related to AC and negatively related to CE, whereas the latter variable is positively related to AE and negatively related to RO. Based on these results, it seems that the cross-cultural learning style questions work well. Finally, Kolb's experiential learning theory assumes that a variable of AC – CE is independent of that of AE – RO. Results of the three groups revealed insignificant relationships between them, which empirically supports the theory.

Second, the study investigated how the rephrasing group was associated with the original wording group in terms of six key learning style variables. As depicted in Table 3, CE of the original wording group was significantly positively related to CE of the rephrasing group and significantly negatively

Table 2. Relationships among six learning style variables based on type of adaptation of Learning Style Inventory questions for a cross-cultural learning context

Learning style variables	Mean	S.D.	CE	AC	RO	AE	AC – CE
Whole questions group							
CE	31.49	7.64					
AC	26.73	7.45	–0.70**				
RO	36.89	8.31	–0.25	–0.14			
AE	25.49	8.13	0.01	–0.15	–0.75**		
AC – CE	–4.76	13.89	–0.92**	0.92**	0.06	–0.08	
AE – RO	–11.41	15.39	0.14	0.00	–0.94**	0.94**	–0.08
Original wording group							
CE	15.84	4.51					
AC	13.38	3.75	–0.66**				
RO	18.95	4.97	–0.32	–0.13			
AE	12.43	4.96	0.00	–0.07	–0.76**		
AC – CE	–2.46	7.54	–0.93**	0.89**	0.13	–0.03	
AE – RO	–6.51	9.33	0.17	0.03	–0.94**	0.94**	–0.08
Rephrasing group							
CE	15.65	3.68					
AC	13.35	3.99	–0.59**				
RO	17.95	3.87	–0.23	-0.23			
AE	13.05	3.68	–0.12	-0.25	–0.58**		
AC – CE	–2.30	6.84	–0.88**	0.90**	–0.01	–0.08	
AE – RO	–4.89	6.70	0.06	0.00	–0.89**	0.88**	–0.04

Note. CE = concrete experience, AC = abstract conceptualization, RO = reflective observation, AE = active experimentation, AC – CE = a relative preference for AC over CE, AE – RO = a relative preference for AE over RO; $^{**}p < 0.01$.

Table 3. Comparisons between the rephrasing group and the original wording group for Learning Style Inventory questions in a cross-cultural learning context

Original wording group	Rephrasing group					
	CE	AC	RO	AE	AC – CE	AE – RO
CE	0.74**	–0.63**	–0.09	0.04	–0.76**	0.07
AC	–0.61**	0.85**	–0.20	–0.10	0.82**	0.06
RO	–0.22	0.00	0.76**	–0.58**	0.12	–0.76**
AE	0.09	–0.12	–0.69**	0.76**	–0.12	0.82**
AC – CE	–0.74**	0.80**	–0.05	–0.08	0.87**	–0.02
AE – RO	0.16	–0.06	–0.77**	0.72**	–0.13	0.84**

Note. CE = concrete experience, AC = abstract conceptualization, RO = reflective observation, AE = active experimentation, AC – CE = a relative preference for AC over CE, AE – RO = a relative preference for AE over RO; $^{**}p < 0.01$.

related to AC and AC – CE. In contrast, AC of the original wording group was significantly negatively related to CE of the rephrasing group, while AC was significantly positively associated with AC and AC – CE of that group. Similarly, RO of the original wording group had a significantly positive relation to RO of the rephrasing group and had a significantly negative relation to AE and AE – RO of that group. Conversely, AE of the original wording group was significantly negatively associated with RO, but was significantly positively related to AE and AE – RO of the rephrasing group. As to the remaining two learning style variables of AC – CE and AE – RO of the original wording group, similar patterns appeared: the variable AC – CE had a significant relation to CE, AC, and AC – CE of the rephrasing group, and that of AE – RO had a significant relation to RO, AE, and AE – RO of the rephrasing group. Accordingly, the rephrasing group in the cross-cultural learning style questionnaire appeared to be congruent with the original wording group. Thus, the results seem to support the view that the words in four optional answers in the rephrasing group have proper functions in distinguishing a preferred learning mode from others in cross-cultural learning situations.

Third, we checked whether the learning dimension of AC vs. CE relates to a gender difference in the three groups of the cross-cultural learning style questionnaire. Table 4 summarizes the results of the independent *t*-test between female participants ($N = 29$) and male participants ($N = 8$). The three variables of CE, AC, and AC – CE of all three groups had a significant relationship with gender, indicating that male participants preferred to use more AC (thinking) over CE (feeling) than did female participants. Additionally, effect sizes in the variables of the AC vs. CE learning dimension were over 0.8 of Cohen's *d*, which suggests a large effect (Ellis, 2010) of gender on such variables. When comparing values of the variables of CE, AC, and AC – CE between the original wording group and the rephrasing

Table 4. Effect of gender on learning style based on type of adaptation of Learning Style Inventory questions for a cross-cultural learning context

	Female ($N = 29$)		Male ($N = 8$)			
	Mean	S.D.	Mean	S.D.	T	d
Whole questions group						
CE	33.10	6.87	25.63	7.80	2.64*	1.01
AC	24.93	6.20	33.25	8.33	–3.11**	1.13
RO	38.41	8.13	31.38	6.80	2.24*	0.94
AE	24.14	7.93	30.38	7.33	–2.00	0.82
AC – CE	–8.17	11.86	7.63	14.37	–3.19**	1.20
AE – RO	–14.28	15.10	-1.00	12.18	–2.28*	0.97
Original wording group						
CE	16.72	3.90	12.63	5.37	2.42*	0.87
AC	12.52	3.15	16.50	4.31	–2.92**	1.05
RO	19.79	4.87	15.88	4.32	2.06*	0.85
AE	11.55	4.84	15.63	4.24	–2.16*	0.90
AC – CE	–4.21	6.27	3.88	8.76	–2.96**	1.06
AE – RO	–8.24	9.14	-0.25	7.50	–2.37*	0.96
Rephrasing group						
CE	16.38	3.48	13.00	3.30	2.46*	1.00
AC	12.41	3.43	16.75	4.27	–3.01**	1.12
RO	18.62	3.77	15.50	3.38	2.11*	0.87
AE	12.59	3.67	14.75	3.41	–1.50	0.61
AC – CE	–3.97	6.07	3.75	6.32	–3.16**	1.25
AE – RO	–6.03	6.67	-0.75	5.28	–2.06*	0.88

Note. CE = concrete experience, AC = abstract conceptualization, RO = reflective observation, AE = active experimentation, AC – CE = a relative preference for AC over CE, AE – RO = a relative preference for AE over RO; $^{**}p < 0.01$, $^{*}p < 0.05$.

group, the effect sizes of the rephrasing group were slightly larger than those of the original wording group. Thus, the rephrasing group might be better able to capture a gender effect on those variables in cross-cultural learning situations.

Discussion

This study preliminarily explored a cross-cultural learning style questionnaire based on Kolb's experiential learning theory (Kolb & Kolb, 2017). We modified Version 3.1 of the KLSI (Kolb, 1999) to fit cross-cultural learning situations. The modified version seemed to examine those working in cross-cultural work settings in terms of four learning modes of CE, AC, RO, and AE. Particularly, the rephrasing group that contained different wording from the original group may be somewhat better in assessing cross-cultural learning modes of those who engage in cross-cultural learning situations. It showed a slightly higher effect size.

This study was considered a preliminary

phase for further developing a cross-cultural learning style questionnaire. Before proceeding with future research on this issue, several limitations of the present study should be discussed. The first limitation concerns the division into three groups. The original wording group as well as the rephrasing group were not 100% complete conditions, as shown in Table 1. Although both groups had effective correlational results among six learning style variables, it is unknown to what extent the incomplete condition affected such results. The second limitation is the small sample size of 37 administrative staff. To not only confirm the eligibility of the cross-cultural learning style questionnaire but also advance it, a larger sample size should be used. The third limitation is also related to the research sample. The study sample was relatively homogeneous, with nearly all Japanese participants, though their work and context were cross-cultural. The mean scores of AC – CE and AE – RO of the three groups were below zero, which suggests that participants prefer to learn by feeling and reflecting rather than by thinking and acting. These learning style features typically correspond with a Japanese learning style (Yamazaki, 2005)—or having a Japanese culture. To better develop a cross-cultural learning style questionnaire, more diverse samples are necessary. Despite these limitations, this preliminary investigation is an important step towards developing a measurement of cross-cultural learning style—which is needed but not yet available.

Acknowledgment

This study was supported by JSPS KAKENHI (grant no. 19K01893).

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経営論集
Vol. 8, No. 4, March 2022, pp. 1–13
ISSN 2189-2490

異文化学習スタイル尺度を開発するための予備調査

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概要

異文化学習はさまざまな学習状況で広く研究されてきたが、個人が異文化状況でどのように学習しているか依然として不明である。異文化状況において個人の学習をより理解するために、異文化環境下で適切に回答できるようにKolbの学習スタイル質問票を修正し、異文化環境における学習スタイル尺度の開発を探求した。この修正された質問票を分析するために、異文化環境の職場で働いている37人の大学院職員をサンプルとし調査した。Kolbの学習理論は6つの主要な学習スタイル変数があり、理論的に3変数ずつ2つの学習軸に分類されるが、今回の調査結果で同一軸内の3変数間で有意に相関していることを示した。また、この2つの学習軸は理論的に独立しているが、本研究の結果も独立していることを示した。さらに、この1つの学習軸に関連した具体的な経験と抽象的な概念化の変数は、男女の違いによる有意差を示した。この学習スタイル変数と性別に関する結果は過去の研究結果と一致している。これらの結果は、異文化学習スタイル質問票の研究をさらに進めることができる可能性を示唆している。

キーワード：異文化学習スタイル、尺度開発、異文化状況、高等教育環境、日本

（投稿日　2022年1月7日）

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経営論集 Vol.8, No.4

ISSN 2189-2490

2022年 3 月31日発行

発行者　文教大学経営学部　石塚　浩

編集　　文教大学経営学部　研究推進委員会

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