

# Exploring the Effects of Learners' Motivational Profiles on their Pragmalinguistic Awareness

動機づけ学習者プロフィールと語用言語学的気づき

TAKAHASHI Satomi

高橋亜美  
TAKAHASHI Satomi



動機づけ、学習者プロフィール、語用言語学的気づき、依頼

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## Abstract

Focusing on motivation, this study examined the effects of learners' profiles on their awareness of six pragmalinguistic forms in an English request-realization discourse. The study involved 80 Japanese EFL learners. They first filled out motivation questionnaires. In the treatment, learners identified native-speaker expressions that were distinctive from those of English learners in request role-plays. The role-play input included the target pragmalinguistic forms as learners' attentional targets. The degree of awareness of the target forms was assessed through a retrospective awareness questionnaire. The following four combinations of motivational dispositions were focused on in this study: "Intrinsic/Attitudes/Affiliative," "Intrinsic/Attitudes," "Intrinsic/Affiliative," and "Attitudes/Affiliative." A cluster analysis was performed for each combination, indicating the emergence of three learner profiles. Two-way repeated measures ANOVAs were further performed for each combination with the target forms as a within-subject variable and the learner profiles as a between-subject variable. The dependent variable was the awareness rate for the target forms. The results indicated that only the learner profiles identified for the "Attitudes/Affiliative" dimension differentially influenced learners' awareness of the target pragmalinguistic features. Further, it could be contended that the formal characteristics of the target pragmalinguistic features are more critical determinants for the learners' awareness of them than learner motivation.

## 1. Introduction

In an effort to understand the role of individual difference (ID) variables in pragmatic attention and awareness, Takahashi (2005) explored the effects of Japanese EFL learners' motivation and proficiency on their awareness of six pragmalinguistic features in English request discourse. The results revealed that from among the motivation subscales identified from the factor analysis, intrinsic motivation was most likely to constrain learners' pragmalinguistic awareness, whereas no proficiency effects were observed.

While the findings of my 2005 study provides deep insight into the nature of IDs and pragmalinguistic awareness, the research design adopted in the study only presents information on the effects of *isolated ID factors* on the criterion measure. These effects fail to demonstrate whether or to what extent learners possessing different degrees of a particular *combination of ID dispositions* are able to notice the target form–function mappings. In other words, the effects of IDs on pragmalinguistic awareness must also be investigated in terms of learner profiles.

Focusing on L2 motivation, this study aims to examine the effects of Japanese EFL learners' motivational profiles on their awareness of the six pragmalinguistic forms in English request–realization discourse. For this purpose, I will reanalyze the data from Takahashi (2005) using a cluster analysis—a statistical procedure that makes it possible to distinguish several learner profiles. Thus, it is expected that the findings of this new analysis will allow me to reexamine the nature of the interaction of IDs with L2 pragmalinguistic awareness from different perspectives.

## 2. Background

### 2. 1. Attention and Awareness in Second Language Acquisition and Individual Differences

In an effort to lend theoretical or empirical support to Schmidt's (1995, 2001) noticing hypothesis, a number of second language acquisition (SLA) researchers have substantiated the significant role of consciousness in noticing and have identified the effects of different levels of awareness on L2 learning (e.g., Gass, Svetics, & Lemelin, 2003; Leow, 2000; Philp, 2003; Rosa & Leow, 2004; see also Leow, 2007). However, whether or to what extent the observed attentional allocation in L2 learning is constrained by ID variables has not been adequately explored (Simard & Wong, 2001). Among the relatively small number of researchers who have been involved in this underexplored line of research is Robinson (1996, 1997, 2002). In the framework of what he calls the "ID–treatment interaction,"

Robinson has been investing his efforts in examining the differential effectiveness of the conscious and unconscious learning of L2 rules. Robinson (1996, 1997), for instance, examined the effect of aptitude (grammatical sensitivity and rote memory) on the treatment tasks for artificial grammar learning in four input conditions—implicit, incidental, rule-search, and instructed conditions. It was found that, with the exception of the incidental condition, grammatical sensitivity was significantly and positively correlated with the level of awareness during treatment, and this tendency was particularly prominent for the implicit condition. On the other hand, Robinson's (2002) study, which dealt with the learning of Samoan, obtained somewhat conflicting results: in the six-month delayed posttest, the awareness of the participants in the incidental condition was significantly and positively related to aptitude and working memory but not to intelligence (see Robinson (2007) for an overview).

Mackey, Philp, Egi, Fujii, and Tatsumi (2002) also reported findings that support the significant effects of ID variables on attention and awareness. They examined the relationship between learners' working memory, their noticing of interactional feedback, and their L2 development. While identifying complex relationships between working memory capacity and the noticing of L2 forms, they concluded that attention and awareness in L2 learning may not be constrained only by the working memory capacity and that other factors such as grammatical sensitivity, field independence, and sociopsychological factors may also be involved in L2 processes.

In view of such significant findings of the ID-treatment interaction research, we can strongly claim that this research framework has been providing a great impetus to research on the role of ID variables in L2 attentional allocation. However, we should also note that the previous research on ID-treatment interaction focused exclusively on morphosyntactic features and mostly dealt with aptitude. This undoubtedly encourages us to pursue this line of research by focusing on other ID variables and linguistic features, particularly pragmatic features, thereby contributing to the comprehensive understanding of attention and awareness in SLA.

## 2. 2. The Issue of Attention and Awareness in L2 Motivation Research

The micro perspective of motivation research proposed by Crookes and Schmidt (1991) has greatly impacted the goals and methods of investigating motivation in L2 learning. They argued that the relationship between learner motivation and the cognitive processing of L2 stimuli should be explored substantially in order to grasp the nature of language learning behaviors in various classroom settings. This position is in contrast to the social-psychological approach adopted by Gardner (1985) in his socio-educational

model, which stresses *integrative motivation* as its central construct and deals with L2 motivation as a driving force behind successful interethnic communications and affiliations in multicultural environments (Dörnyei, 2001, 2003; Gardner, 2001). While acknowledging the importance of this macro perspective of L2 motivation, many SLA researchers have echoed Crookes and Schmidt's proposal for micro-level motivation research (e.g., Dörnyei, 1990; Julkunen, 2001; Oxford & Shearin, 1994). In fact, since the 1990s, efforts have been made for exploring the constraints of motivation on language learning processes at various conceptual levels (e.g., Csizér & Dörnyei, 2005; Dörnyei, 2002, 2005; MacIntyre, Baker, Clément, & Donovan, 2002; Masgoret & Gardner, 2003; Noels, 2001; Noels, Pelletier, Clément, & Vallerand, 2000; Schmidt & Watanabe, 2001; Ushioda, 2001; Vandergrift, 2005).

Pursuing this line of research on L2 motivation, Crookes and Schmidt (1991) strongly addressed the issue of the motivation/attention interface. Based on the studies in education and psychology, they contended that learners' motivation to learn their target languages (TLs) is critically involved in the initial stage of attentional allocation when they encounter the L2 input. In other words, since motivation is closely related to the voluntary decision that leads to the allocation of attention, there is a definite link between motivation and attention in input processing. One must admit, however, that the motivation/attention interface has not been explored in a substantial manner, and this may be linked to the deficiencies observed in the research on ID-treatment interaction reviewed above. This suggests that it is imperative to provide some empirical support to the importance of motivation in attention and awareness in SLA.

### 2. 3. Individual Differences and Pragmalinguistic Awareness

In the area of interlanguage pragmatics (ILP), Takahashi (2005) is the only work that systematically explored a potential link between IDs and pragmalinguistic awareness. My 2005 study aimed to investigate the pragmalinguistic awareness of Japanese EFL learners while they inductively processed L2 input and the extent to which the learners' awareness of the target features was constrained by their motivation and proficiency. The target features included in the study are listed in Table 1 (hereafter, request form 1 is referred to as REQ-1, request form 2 as REQ-2, request form 3 as REQ-3, discourse marker as DMA, idiomatic expression as IDE, and non-idiomatic expression as N-IDE). It should be noted that the three request forms (head acts) are all complex bi-clausal forms. Takahashi (2001) verified these as those that were incompletely mastered by Japanese EFL learners despite their greater degree of appropriateness; it was found that the learners favored the use of mono-clausal request forms such as "Will/Would you VP?" in the same request situations. The remaining three target pragmalinguistic forms represent the non-request features.

These six pragmalinguistic features were decided to be included as the targets based on the data obtained from Takahashi's (2001) form-search (FS) condition, one of the three implicit (inductively processed) input conditions dealt with in that study.

**Table 1. Six Target Pragmalinguistic Features in Takahashi (2005)**

Function	Pragmalinguistic Feature	Examples
Request Head Act	Request Form 1 (REQ-1)	"I was wondering if you could VP" (= a mitigated-preparatory statement: <i>The speaker states a preparatory condition by embedding it within another clause</i> )
	Request Form 2 (REQ-2)	"Is it possible to VP?" / "Do you think you could VP?" (= a mitigated-preparatory question: <i>The speaker asks a question concerning preparatory conditions or a permission question by embedding it within another clause</i> )
	Request Form 3 (REQ-3)	"If you could VP" (= a mitigated-want statement (without a main clause): <i>The speaker states his or her want or wish that the hearer will perform the action in hypothetical situations</i> )
Non-Request Features	Discourse Marker (DMA)	"well," "you know," "maybe"
	Idiomatic Expression (IDE)	"This has to do with your daughter," "How ya doin'?", "That sounds good"
	Non-Idiomatic Expression (N-IDE)	"I live next door," "I don't want to bother you"

Following Schmidt (1995, 2001), the concept of noticing was defined as "detection with conscious awareness and subsequent subjective experience," and was linked to learners' subjective experiences with their "interest" in the attended input. Based on the previous literature on attention and awareness in SLA (Leow, 2000; Philp, 2003; Robinson, 1995; Simard & Wong, 2001), I further considered noticing or awareness as a graded phenomenon and operationalized this concept through the interaction between detection of the attentional targets and the degree of interest in them, which entailed the seven-point scale presented in Table 2. The awareness scale thus obtained was then included in the awareness retrospection questionnaire to assess the degree of awareness with respect to the six target pragmalinguistic features that appeared in the treatment task.

**Table 2. Operationalization of Pragmalinguistic Awareness in Takahashi (2005)**

- 3 = I did not detect it at all (and thus was not interested in it at all).
- 2 = I did detect it but was hardly interested in it.
- 1 = I did detect it but was not so interested in it.
- 0 = I did detect it but cannot say whether I was interested in it or not.
- +1 = I did detect it and was a little interested in it.
- +2 = I did detect it and was interested in it.
- +3 = I did detect it and was very interested in it.

Motivation and proficiency were included as the independent variables in Takahashi (2005). The data obtained through the motivation questionnaire was subjected to an exploratory factor analysis (principal component analysis with oblique rotation), and nine factors were identified for motivation (see Table 3). The learners' English proficiency was assessed through a standardized proficiency test (for listening and reading skills).

The statistical analyses using ANOVA and correlation procedures revealed three major findings. First, a very strong main effect of "(pragmalinguistic) feature" was identified, i.e., the learners differentially noticed the six target pragmalinguistic features. Second, from among the nine motivation factors, only three factors—intrinsic motivation, attitudes toward the TL community, and affiliative motive—were found to be significantly correlated with four of the target pragmalinguistic features (see Table 3; see Appendix A for the descriptions of these three factors). The overall conclusion, however, was that intrinsic motivation is central to pragmalinguistic awareness. Third, there were no proficiency effects on the awareness of the six target pragmalinguistic forms (see Table 3).

**Table 3. Correlations between the Awareness of Pragmalinguistic Features and the Motivation Subscales and English Proficiency in Takahashi (2005)**

	REQ-1	REQ-2	REQ-3	DMA	IDE	N-IDE
Factor 1	.094	.153	-.054	.149	.183	.083
Factor 2	-.041	.317**	.275*	.118	.369***	-.024
Factor 3	-.062	-.123	.027	.051	.199	.146
Factor 4	.065	.012	-.175	.002	.045	.130
Factor 5	.015	.011	.128	.225*	.140	.058
Factor 6	.114	.076	.027	-.164	.064	.124
Factor 7	.022	.098	.003	-.008	-.010	-.021
Factor 8	-.126	.067	.031	.071	.143	.090
Factor 9	-.078	.150	-.025	.205	.282*	-.001
Listening	.030	.189	-.147	.038	.003	.016
Reading	.213	.037	-.084	-.005	-.015	.127
Overall Proficiency	.149	.136	-.139	.019	-.008	.088

Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ,  $N = 80$

REQ-1 = 'I wonder if you could VP', REQ-2 = 'Is it possible to VP?'

REQ-3 = 'If you could VP', DMA = discourse marker,

IDE = idiomatic expression, N-IDE = non-idiomatic expression

Factor 1 = Need for achievement, Factor 2 = Intrinsic motivation,

Factor 3 = External expectation, Factor 4 = Class Anxiety,

Factor 5 = Attitudes toward the TL community,

Factor 6 = Self-devaluation, Factor 7 = Test anxiety,

Factor 8 = Interest in the TL culture, Factor 9 = Affiliative motive

As apparent from the above, Takahashi (2005) relied on a design that only allowed for the examination of the association between the isolated ID factors and awareness of the six pragmalinguistic features. Since this design prevented me from investigating the combined effects of ID factors on pragmalinguistic awareness, it can be considered as the limitation of my 2005 study. It could be assumed that combinations of certain ID factors or subscales, which realize several learner profiles, may provide more distinctive configurations with respect to the awareness of pragmalinguistic features (see Csizér & Dörnyei, 2005 for a similar approach).

### 3. Research Questions

The present study is a follow-up to Takahashi's (2005) analysis of the data. It only focuses on motivation as the target ID variable since my previous study found only this ID variable to be associated with pragmalinguistic awareness. The following two research questions will be addressed:

- (1) Do Japanese EFL learners' motivational profiles differentially affect their awareness of the target pragmalinguistic features?
- (2) Are there any distinctive configurations that emerge with respect to the relationship between Japanese EFL learners' motivation and their pragmalinguistic awareness?

These questions will be investigated by reanalyzing Takahashi's (2005) data. Thus, the attentional targets in this study are the six pragmalinguistic features presented in Table 1. They will be presented in the FS input condition during treatment.

A learner's motivational profile is defined here as the combination of more than one motivation subscale or disposition that emerged from the factor analysis. This study only focuses on the following three motivation subscales that were found to be significantly and positively correlated with four of the pragmalinguistic features in Takahashi (2005): intrinsic motivation (hereafter, "Intrinsic"), attitudes toward the TL community (hereafter, "Attitudes"), and affiliative motive (hereafter, "Affiliative"). Accordingly, in this study, learners' motivational profiles will be identified for each of the following four dimensions of dispositional combination by individually applying a cluster analysis:

- (a) "Intrinsic/Attitudes/Affiliative" (for the three-factor profile)
- (b) "Intrinsic/Attitudes" dimension (for the two-factor profile)
- (c) "Intrinsic/Affiliative" dimension (for the two-factor profile)

(d) "Attitudes/Affiliative" dimension (for the two-factor profile)

Hereafter, whenever appropriate, while referring to the combination of motivational factors, "Intrinsic" is abbreviated as "In"; "Attitudes," as "At"; and "Affiliative," as "Af" (e.g., the "InAtAf" dimension refers to the "Intrinsic/Attitudes/Affiliative" dimension). Furthermore, pragmalinguistic awareness will be operationalized by the awareness rates that are computed based on the seven-point scale presented in Table 2.

## 4. Method

### 4. 1. Participants

The participants comprised 80 Japanese college students whose mean age was 19.4 (SD=.870). Of these, 44 were sophomores majoring in mechanical engineering, and 36 were freshmen majoring in agriculture or education. They had received formal English instruction in Japan for seven to eight years, and none of them had lived in an English-speaking country for more than two weeks.

### 4. 2. Materials

The motivation questionnaires (47 items) were constructed based on the motivation measures developed by Schmidt, Boraie, and Kassabgy (1996), which were grounded in the models of motivational and educational psychology that specifically referred to the motivation/attention interface. Since Schmidt et al. developed their questionnaire for Egyptian EFL learners, some of the items were changed so that they were more suitable to the EFL context in Japan (see Appendix A in Takahashi (2005), available at [www.applij.oupjournals.org](http://www.applij.oupjournals.org), for the actual items in the questionnaire). Each questionnaire item was assessed using a six-point rating scale (1=strongly disagree; 6=strongly agree).

The materials prepared for the FS condition of Takahashi (2001) were employed in the treatment session. They included the transcripts of NS-NS open-ended role plays for two treatment request situations, the transcripts of NS-NNS (nonnative speaker) open-ended role plays for the same situations, and the instruction sheet for the treatment task (see Appendices B and C in Takahashi (2005), available at [www.applij.oupjournals.org](http://www.applij.oupjournals.org), for the contents and format of these materials). The two request situations were the "violin" situation (the requester asks her next-door neighbor to stop her daughter from practicing violin at night) and the "questionnaire" situation (the requester asks her next-door neighbor to fill out a questionnaire, which was requested earlier, and to return it as soon as possible). In both situations, requests were made by a person of lower status to one of

higher status, which led the NS requesters to use bi-clausal request forms.

Furthermore, the awareness retrospection questionnaire was developed for the retrospection session offered immediately after the treatment. The target expressions, which were used in the role plays and were categorized into the six target features (REQ-1, REQ-2, REQ-3, DMA, IDE, and N-IDE), were presented with filler expressions. Following each expression, the seven-point rating scale was provided; it was developed through the process of operationalization of pragmalinguistic awareness. Two forms were created for the "violin" and the "questionnaire" situations, respectively (see Appendix D in Takahashi (2005), available at [www.applij.oupjournals.org](http://www.applij.oupjournals.org), for the actual list of expressions). In addition, to each form, I attached the NS-NS role play transcripts wherein all the expressions included in the awareness retrospection questionnaire were underlined (see Appendix F in Takahashi (2005), available at [www.applij.oupjournals.org](http://www.applij.oupjournals.org), for their format).

### 4. 3. Procedures

The data was collected from my regular general English classes. The motivation questionnaires were administered to the participants at the beginning of the semester. Two weeks later, the participants were asked to participate in the treatment session, which was held over three weeks, amounting to 90 minutes per week. In order to familiarize themselves with the contents of the role plays and the relationships between the interlocutors, the participants' first task was to listen to the role plays while reading the transcripts of the same and to write summaries of the interactions (Week 1). Next, in the following weeks (Weeks 2 and 3), the participants were asked to engage in the FS treatment task; they were instructed to compare the NS English expressions with the NNS English expressions in the corresponding situations and to list any expressions that they consider to be distinctive to native English speakers. Immediately after the task, while the memory of the thought sequences was still available, the participants were asked to fill out the awareness retrospection questionnaires while reading the role play transcripts in which all the questionnaire items were underlined.

### 4. 4. Data Analysis

For each of the four dimensions of the combination of motivational dispositions, a series of cluster analyses was performed to identify the learners' profiles, i.e., "subgroups which are maximally similar to each other, and different from other subgroups" (Ranta, 2002, p. 171). Ward's method of hierarchical clustering was selected to cluster the data using SPSS 14.0. The hierarchical clustering was adopted because the sample size of the current study was small (N=80); Ward's method was used as it can maximally minimize the variances within the cluster and tends to yield clusters having almost equal sample

sizes.

The learner profiles identified for the four dimensions were then included in the subsequent analyses of this study. A two-way repeated measures ANOVA was performed for each dimension with the "profile" as the between-subject variable and the "(pragmalinguistic) feature" as the within-subject variable. The dependent variable was the awareness rate ( $\alpha=.05$ ), which was calculated by averaging the awareness rates of the questionnaire items for each of the six target features.

## 5. Results and Discussion

An examination of the dendrogram that was obtained from the first cluster analysis of each of the four dimensions of dispositional combination led me to conclude that three of the clusters or subgroups of learners were potentially the most relevant. Therefore, it was decided that a three-cluster solution would be followed in the subsequent analyses of all the dimensions.<sup>1)</sup> For each motivational disposition or factor (e.g., "Intrinsic" or "Attitudes") constituting a particular dimension (e.g., "Intrinsic/Attitudes"), a one-way ANOVA was further performed with the "group" as the between-subject variable (three levels).<sup>2)</sup> Further, Tukey's HSD test was applied as a post-hoc test ( $\alpha=.01$ ). Based on the results obtained from these statistical procedures, decisions were made regarding the kind of motivational features that emerged when the dispositions were combined to form a particular learner group. The learners' motivational profiles identified from these cluster analyses are presented in Table 4. Further, it should be noted that because the cluster analyses were run separately for each dimension, each learner was simultaneously characterized differently, depending on which group of the dimension he/she belonged to.

The means and standard deviations of the awareness rates of each group for each pragmalinguistic feature in each dimension are presented in Table 5 (InAtAf), Table 6 (InAt), Table 7 (InAf), and Table 8 (AtAf). The ANOVA tables are presented in Appendix B.

**Table 4. Descriptions of Learners' Motivational Profiles for Three Dimensions**

Dimension	Group 1	Group 2	Group 3
Intrinsic/Attitudes/ Affiliative (InAtAf)	High-InAtAf: N = 30 Intrinsic (4.020 / .717) Attitudes (4.650 / .604) Affiliative (4.178 / .688) <sup>b</sup>	AtAf-Oriented: N = 31 Intrinsic (2.530 / .536) <sup>a</sup> Attitudes (4.016 / .584) Affiliative (4.011 / .399) <sup>b</sup>	Low-InAtAf: N = 19 Intrinsic (2.990 / .694) <sup>a</sup> Attitudes (2.947 / .780) Affiliative (2.719 / .434)
Intrinsic/Attitudes (InAt)	High-InAt: N = 17 Intrinsic (4.530 / .458) Attitudes (4.412 / .441)	At-Oriented: N = 23 Intrinsic (2.844 / .615) <sup>c</sup> Attitudes (4.891 / .499)	Low-InAt: N = 40 Intrinsic (2.835 / .664) <sup>c</sup> Attitudes (3.313 / .657)
Intrinsic/Affiliative (InAf)	High-InAf: N = 18 Intrinsic (4.433 / .528) Affiliative (4.556 / .428)	Af-Oriented: N = 30 Intrinsic (2.500 / .522) Affiliative (4.144 / .358)	In-Oriented: N = 32 Intrinsic (3.156 / .632) Affiliative (2.969 / .474)
Attitudes/Affiliative (AtAf)	High-AtAf: N = 43 Attitudes(4.233 / .710) <sup>d</sup> Affiliative (4.349 / .430)	At-Oriented: N = 21 Attitudes (4.524 / .487) <sup>d</sup> Affiliative (3.286 / .570)	Low-AtAf: N = 16 Attitudes (2.688 / .512) Affiliative (2.833 / .365)

Note. (Mean / SD) In = Intrinsic, At = Attitudes, Af = Affiliative  
a = Significant difference was not observed between "Group2-Intrinsic and Group3-Intrinsic" (InAtAf) (Tukey's HSD,  $\alpha = .01$ ).  
b = Significant difference was not observed between "Group1-Affiliative and Group2-Affiliative" (InAtAf) (Tukey's HSD,  $\alpha = .01$ ).  
c = Significant difference was not observed between "Group2-Intrinsic and Group3-Intrinsic" (InAt) (Tukey's HSD,  $\alpha = .01$ ).  
d = Significant difference was not marginally observed between "Group1-Attitudes and Group2-Attitudes" (AtAf) (Tukey's HSD,  $\alpha = .01$ ).

**Table 5. Means and Standard Deviations for the "Intrinsic/Attitudes/Affiliative (InAtAf)" Dimension**

Group	REQ-1	REQ-2	REQ-3	DMA	IDE	N-IDE
High-InAtAf	.667 (1.792)	.667 (1.085)	-.100 (1.257)	1.500 (1.375)	1.425 (1.145)	.338 (1.026)
AtAf-Oriented	.387 (2.100)	.161 (1.519)	-.979 (1.279)	1.634 (.795)	.653 (1.186)	.148 (1.280)
Low-InAtAf	.816 (1.346)	-.079 (1.193)	-.316 (.939)	.895 (1.122)	.776 (1.108)	.271 (.990)

Note. ( ) = Standard Deviation  
In = Intrinsic, At = Attitudes, Af = Affiliative  
REQ-1 = 'I wonder if you could VP'; REQ-2 = 'Is it possible to VP?'  
REQ-3 = 'If you could VP'; DMA = discourse marker,  
IDE = idiomatic expression, N-IDE = non-idiomatic expression

**Table 6. Means and Standard Deviations for the “Intrinsic/Attitudes (InAt)” Dimension**

Group	REQ-1	REQ-2	REQ-3	DMA	IDE	N-IDE
High-InAt	.588 (1.533)	.912 (1.019)	-.137 (1.179)	1.784 (1.178)	1.677 (.959)	.135 (.812)
At-Oriented	.674 (2.054)	.087 (1.294)	-.478 (1.445)	1.391 (1.380)	.891 (1.281)	.528 (1.364)
Low-InAt	.550 (1.825)	.150 (1.383)	-.650 (1.155)	1.258 (.959)	.719 (1.137)	.136 (1.061)

Note. ( ) = Standard Deviation  
 In = Intrinsic, At = Attitudes  
 REQ-1 = ‘I wonder if you could VP’; REQ-2 = ‘Is it possible to VP?’  
 REQ-3 = ‘If you could VP’; DMA = discourse marker,  
 IDE = idiomatic expression, N-IDE = non-idiomatic expression

**Table 7. Means and Standard Deviations for the “Intrinsic/Affiliative (InAf)” Dimension**

Group	REQ-1	REQ-2	REQ-3	DMA	IDE	N-IDE
High-InAf	.500 (1.553)	.583 (.879)	.019 (1.117)	1.630 (1.171)	1.722 (.907)	.191 (.811)
Af-Oriented	.433 (2.087)	.217 (1.628)	-1.011 (1.317)	1.644 (.807)	.800 (1.132)	.267 (1.243)
Low-InAf	.797 (1.713)	.203 (1.198)	-.292 (1.103)	1.063 (1.329)	.711 (1.245)	.263 (1.161)

Note. ( ) = Standard Deviation  
 In = Intrinsic, Af = Affiliative  
 REQ-1 = ‘I wonder if you could VP’; REQ-2 = ‘Is it possible to VP?’  
 REQ-3 = ‘If you could VP’; DMA = discourse marker,  
 IDE = idiomatic expression, N-IDE = non-idiomatic expression

**Table 8. Means and Standard Deviations for the “Attitudes/Affiliative (AtAf)” Dimension**

Group	REQ-1	REQ-2	REQ-3	DMA	IDE	N-IDE
High-AtAf	.256 (1.931)	.349 (1.325)	-.620 (1.208)	1.574 (.912)	1.238 (1.115)	.309 (.973)
At-Oriented	1.167 (1.756)	.405 (1.375)	-.444 (1.550)	1.571 (1.539)	.571 (1.292)	.102 (1.470)
Low-AtAf	.750 (1.414)	.000 (1.238)	-.208 (.893)	.750 (.907)	.781 (1.147)	.277 (.975)

Note. ( ) = Standard Deviation  
 At = Attitudes, Af = Affiliative  
 REQ-1 = ‘I wonder if you could VP’; REQ-2 = ‘Is it possible to VP?’  
 REQ-3 = ‘If you could VP’; DMA = discourse marker,  
 IDE = idiomatic expression, N-IDE = non-idiomatic expression

From the results of the ANOVAs, the following three points emerged with respect to the effects of the variables. First, of the four dimensions, only the "AtAf" dimension demonstrated a significant interaction effect of "feature x profile" ( $F(10, 385)=2.149, p<.05$ , using the Greenhouse-Geisser epsilon adjustment). In other words, only the learner profiles of the "AtAf" dimension differentially affected Japanese EFL learners' awareness of the target pragmalinguistic features. Second, the main effects of "profile" were not significant across the four dimensions. Third, in contrast to the second point, the main effects of "feature" were found to be significant at  $p<.001$  for all the dimensions. This indicates that the target pragmalinguistic features were differentially noticed by the learners, irrespective of their motivational profiles.

A closer examination of the interaction pattern observed for the "AtAf" dimension revealed that the "High-AtAf" (Group 1) and "At-Oriented" (Group 2) learners noticed DMA to a similar extent ( $p=.994$ ) and to a significantly greater extent than did the "Low-AtAf" (Group 3) learners ( $p<.05$  for both "Group 1 vs. Group 3" and "Group 2 vs. Group 3"). However, with regard to IDE, the "At-Oriented" learners were significantly less likely to notice this pragmalinguistic feature than were the "High-AtAf" learners ( $p<.05$ ), while there were no significant differences between the "At-Oriented" and "Low-AtAf" learners ( $p=.590$ ) and between the "High-AtAf" and "Low-AtAf" learners ( $p=.186$ ) with respect to the awareness of IDE. From a different perspective, the "At-Oriented" learners noticed DMA to a significantly greater extent than IDE ( $p<.01$ ). Moreover, the learners in this second group demonstrated a unique pattern in that their awareness of REQ-1 was greater than that of IDE, although the difference between their awareness of these two features was not statistically significant ( $p=.167$ ).

In Takahashi (2005), DMA was positively correlated with "Attitudes" ( $r=.225, p<.05$ ); and IDE, with "Affiliative" ( $r=.282, p<.05$ ) (see Table 3). These correlations appear to be reflected in the current results for "AtAf" in three respects. First, it is obvious that of the three learner profiles (groups), the "High-AtAf" learners noticed both DMA and IDE to the greatest extent because their "Attitudes" (related to DMA) and "Affiliative" (related to IDE) were both ranked highest. Second, in the "At-Oriented" group, IDE was noticed to a lesser extent than DMA because the learners' "Attitudes" (related to DMA) was more strongly operative than their "Affiliative" (related to IDE) in their awareness of pragmalinguistic features. Third, the "At-Oriented" learners were similar to the "Low-AtAf" learners with respect to their awareness of IDE because the difference in "Affiliative" (related to IDE) between these two groups was smaller than the difference in "Attitudes" (related to DMA) between them. It is apparent, however, that the simple projection of the significant correlations in my previous study onto the current study is not applicable to the finding that the learners in the "High-AtAf" and "Low-AtAf" groups demonstrated a similar degree

of awareness of IDE. One possible explanation of this would be that “Low-AtAf” happened to be dominated by learners with high intrinsic motivation, which was found to be significantly correlated with the awareness of IDE ( $r=.369, p<.001$ ) in my 2005 study; this might induce the increase in their awareness of IDE to a level that is closer to that of the “High-AtAf” learners.

The effects of the isolated motivation factors found in Takahashi (2005) were thus reconfirmed in the present study, suggesting the influential role of motivation in L2 pragmalinguistic awareness. A question arises here as to why significant interaction effects were not obtained for as many as three motivational-profile dimensions out of the four. This is probably because when more than one motivation subscale are combined to obtain learners’ motivational profiles, the effects inherent to the constituent subscales on the awareness of the pragmalinguistic features tend to average out with each other to some degree, resulting in fewer chances of attaining statistical significance. This tendency might particularly be prompted when the constituent subscales cannot attain sufficiently high correlation with the awareness of the target features, as in the case of Takahashi (2005) (see Table 3). Since, in reality, learners simultaneously possess multiple motivational dispositions in their L2 learning, it would be advisable to pursue the plausibility of this off-set phenomenon in a more rigorous manner in future research.

As opposed to a single instance of the significant interaction effect for the “AtAf” dimension, relatively strong main effects were obtained with respect to “feature” for all the dimensions:  $F(5, 385)=20.887, p<.001$ , for “InAtAf”;  $F(5, 385)=21.285, p<.001$ , for “InAt”;  $F(5, 385)=22.791, p<.001$ , for “InAf”; and  $F(5, 385)=17.137, p<.001$ , for “AtAf” (adjusted with the Greenhouse-Geisser epsilon). A more detailed analysis revealed that the target pragmalinguistic features were ranked in terms of levels of awareness in the following manner (from most to least) (See Appendix B for the means of the awareness for the target features):

For the “InAtAf” dimension:

DMA > IDE > REQ-1 > N-IDE > REQ-2 > REQ-3  
 (n.s.) (n.s.) (n.s.) (n.s.) ( $p<.01$ )

For the “InAt,” “InAf,” and “AtAf” dimensions:

DMA > IDE > REQ-1 > REQ-2 > N-IDE > REQ-3  
 (n.s.) (n.s.) (n.s.) (n.s.) ( $sig.$ )<sup>3</sup>

Slightly different rankings emerged between the three-factor-profile dimension and the two-factor-profile dimensions. However, overall, they led us to the following three points:

(1) DMA was noticed to the greatest extent, immediately followed by IDE, without a significant difference in awareness between these two features; (2) learners were less likely to attend to bi-clausal request forms (REQ-1 and REQ-2) as compared to DMA and IDE; and (3) REQ-3, another bi-clausal request form, was least likely to be noticed by the learners, with significant differences observed between REQ-2 and REQ-3 for the "InAtAf" dimension and between N-IDE and REQ-3 for the three remaining dimensions. It should be noted that the findings here replicate those in Takahashi (2005).

With regard to the lesser degree of awareness of the bi-clausal request forms, as pointed out repeatedly in Takahashi (2001, 2005), this is probably because Japanese EFL learners assumed that they had already attained complete mastery over request realization using mono-clausal request forms, which were judged to be applicable to all request contexts (see Judd, 1999 for a similar observation). Therefore, attention to the form-function mappings of these bi-clausal request forms was more likely to be outside their attentional allocation. This tendency might be particularly strong for REQ-3 because it has an elliptical form and its subjunctive function is more salient for average Japanese EFL learners. In contrast, DMA and IDE became learners' attentional targets. This is because they did recognize that they have inadequate knowledge of the ways of utilizing these forms in real communicative contexts. Specifically, with respect to DMA, the learners might be unable to use these interactional markers in an appropriate manner, and their lack of competence in this regard might arise from fewer chances for them to interact naturally in English and using these markers inside and outside the class in the EFL context of Japan. With regard to IDE, Japanese EFL learners might have encountered these expressions in their classroom learning contexts. However, due to their greater degrees of conventionality, learners apparently lack their confidence as to how these forms can be used in L2 communicative interactions outside the class, more likely resulting in their avoidance of employing them (see Dörnyei, Durow, & Zahran, 2004; Kasper, 2001; Schmitt & Carter, 2004 for similar observations for nonnative speakers). It is likely that, in order to obtain more precise and reliable information on their conventional (and thus native) usage, learners intensively attended to IDE in the treatment input in this study.

At this stage, in order to capture the nature of learners' motivation with respect to pragmalinguistic awareness in a more in-depth manner, attention should duly be paid to the relative strength of each effect under investigation. Recall here that the effects of "profile" in all the dimensions were not found to be significant, whereas the effects of "feature" were consistently significant across all the dimensions with the average effect size (partial  $\eta^2$ ) of .210. With regard to the interaction effects, the following two points should be noted: (1) a significant effect was found only for "AtAf" and (2) its effect size was relatively small (partial  $\eta^2$ =.053). In this light, it would be reasonable to contend that

some distinctive features of the target forms may be more crucial in learners' pragmalinguistic awareness than the differences in learners' motivational profiles, at least in the context of the present study undertaken in the FS input condition.

## 6. General Discussion and Conclusion

This study was conducted to address the following two research questions: (1) "Do Japanese EFL learners' motivational profiles differentially affect their awareness of the target pragmalinguistic features?" and (2) "Are there any distinctive configurations that emerge with respect to the relationship between Japanese EFL learners' motivation and their pragmalinguistic awareness?" With regard to the first research question, it could be claimed that only the learner profiles identified for the "AtAf" dimension differentially influenced learners' awareness of the target features. In particular, the learners with positive attitudes toward the TL community and a very strong affiliative motive (High-AtAf) and those demonstrating the most positive attitudes toward the TL community but a moderately strong affiliative motive (At-Oriented) noticed DMA (e.g., "well," "you know," "maybe") to a greater extent than did the learners who were least motivated in terms of these two dispositions (Low-AtAf). However, the learners with the most positive attitudes toward the TL community but a moderate affiliative motive (At-Oriented) were far less likely to attend to IDE, such as "That sounds good" and "How ya doin'?" than the most motivated group (High-AtAf). The learners who were most relevantly characterized with the strongest attitudes toward the TL community (At-Oriented) also noticed DMA to a greater extent than IDE. The interpretation attempted in the previous section on the observed tendencies in terms of the strength of association of each constituent disposition with the awareness of the target features as found in Takahashi (2005) appears relatively convincing. In other words, from among the motivational dispositions in this particular dimension, the motivation subscale "Attitudes" may be most deeply involved in the awareness of DMA, while the disposition of "Affiliative" would substantially influence the awareness of IDE. One could definitely claim this here because the three learner profiles for the "AtAf" dimension excluded the effect of learners' intrinsic motivation. It should be recalled here, however, that the high awareness of IDE by the learners with negative attitudes toward the TL community and a very weak affiliative motive (Low-AtAf) might incidentally be influenced by strong intrinsic motivation (related to the awareness of IDE) of some of the learners assigned to this group. In Takahashi (2005), intrinsic motivation, as the isolated factor, was found to contribute the most to the awareness of the pragmalinguistic features (see Table 3). When the motivation subscales are combined to form learners' motivational profiles as done in this study, however, it was

the combination of “Attitudes” and “Affiliative” that detected the phenomenon in which the differential degrees of awareness of the pragmalinguistic features were constrained by the learners' motivation. In this sense, the present study successfully provides the base for addressing the issue of motivation/attention interface from a different perspective.

With regard to the second research question (“Are there any distinctive configurations that emerge with respect to the relationship between Japanese EFL learners' motivation and their pragmalinguistic awareness?”), as discussed in the previous section, it could be argued that the formal characteristics of the target pragmalinguistic features are more critical determinants for the learners' noticing or awareness of them than are the learners' characteristics; thus, the function of learners' motivation appears to be secondary. In fact, irrespective of learners' motivational profiles, the awareness ranking of the target features was very consistent: DMA and IDE were always among the top candidates for learners' attentional allocation, whereas the awareness of the bi-clausal request forms and N-IDE was not prominent compared to that of the former two.

In recent research of formulaic sequences (e.g., Bardovi-Harlig, 2006; Schmitt & Carter, 2004), discourse markers and conventional request forms, including bi-clausal ones, are treated as *formulaic sequences*. In this case, the differences among the target pragmalinguistic forms in the present study are conceived as the differences in their degrees of formulaicity, i.e., semantic transparency or noncompositionality and fixedness (Read & Nation, 2004), which may interact with learners' perception of learning problems, altogether resulting in constraining their pragmalinguistic awareness. In particular, Japanese EFL learners clearly indicated expressions with higher formulaicity (DMA and IDE) as their problematic areas of learning. On the other hand, the bi-clausal request forms that take the form of “lexicalized sentence stems” (Pawley & Syder, 1983) denote lesser degrees of fixedness than DMA and IDE; these bi-clausal forms were, in fact, less likely to be perceived as sources of learners' learning problems and thus outside their attentional allocation. On the whole, however, learners' perception of the formulaicity inherent in the six target forms appeared less likely to interact with their motivation. The results of Schmitt, Dörnyei, Adolphs, and Durow (2004) also suggest that learners' aptitude and attitudes/motivation did not affect the acquisition of formulaic phrases (cf. Dörnyei et al., 2004). Thus, the answer to the second research question in this study could be reformulated as follows: the formulaicity of the target pragmalinguistic forms was possibly overriding the effect of Japanese EFL learners' motivation on their awareness of these forms. Needless to say, the effects of formulaicity in this regard should be rigorously validated in future research.

Despite the insightful findings presented above, two limitations of this study should be noted. The first limitation is concerned with the nature of motivation itself. The

motivational dispositions dealt with in this study were all *generalized, trait motivations*. In reality, however, learners were engaged in a specific task (FS treatment task). Dörnyei (2001, 2002) and Dörnyei and Ottó (1998) argued the significant role of situation-specific factors for task motivation in the framework of their process-oriented approach in motivation research. If we had incorporated *situation-specific motivation* into the current design, some significant effects of motivation might have emerged more explicitly in the learners' pragmalinguistic awareness. Therefore, our future design should include situation-specific motivation.

The second limitation is the failure to control for possible effects of frequency of the target forms in the treatment input. Since I employed open-ended role plays, the transcripts of which were analyzed during the treatment, it was impossible to attain the same frequency distribution across the target pragmalinguistic features. Although the awareness rate for each target feature was obtainable by averaging the awareness rates of the forms categorized into a particular pragmalinguistic feature, one cannot deny some effects of different frequency distribution of the target features in the input on learners' pragmalinguistic awareness (for more details on frequency effects on L2 learning, see Bardovi-Harlig, 2002; Ellis, 2002; Gass & Mackey, 2002). Therefore, in order to obtain more accurate information on the effect of the pragmalinguistic features on learners' attentional allocation, it might be necessary to eliminate such frequency effects in future research.

Findings obtained from future studies as mentioned above will surely contribute to our further understanding of not only the relationship between motivation/motivational profiles and pragmalinguistic awareness but also of the nature or process of attentional allocation in L2 input. More convincing and comprehensive theoretical models of attention and awareness in SLA would emerge only through such constant research endeavors.

#### Notes

- 1) After performing the second cluster analysis for each dimension, the chi-square was computed to ascertain the extent to which homogeneity of the sample sizes was achieved across the clusters. It was found that there were no significant differences in the number of participants belonging to the three clusters in the dimensions of "InAtAf" (chi-square=3.325,  $df=2$ ,  $p=.190$ ) and "InAf" (chi-square=4.300,  $df=2$ ,  $p=.116$ ), but significant differences were detected for the "InAt" (chi-square=10.675,  $df=2$ ,  $p<.01$ ) and "AtAf" (chi-square=15.475,  $df=2$ ,  $p<.001$ ) dimensions.
- 2) All the ANOVAs showed significant differences among the three groups ( $p<.001$ ).
- 3) The significance levels varied among these three dimensions:  $p<.01$  for "InAt" and "InAf," and  $p<.05$  for "AtAf."

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## Appendix A

Cronbach Alpha, Factor Loadings, Means, and Standard Deviations of the Questionnaire Items for the "Intrinsic Motivation," "Attitudes toward the TL Community," and "Affiliative Motive"

Factor (F)	Questionnaire items	Mean	SD
F2: Intrinsic Motivation ( $\alpha=.75$ )	2. Learning English is a hobby for me. (.819)	2.812	1.192
	4. I don't enjoy learning English, but I know that learning English is important for me. (reverse coded) (.779)	2.712	1.536
	1. I enjoy learning English very much. (.735)	3.725	1.232
	3. Learning English is a challenge that I enjoy. (.631)	3.612	1.248
	5. I wish I could learn English in an easier way, without going to class. (reverse coded) (.526)	3.125	1.529
F5: Attitudes toward the TL community ( $\alpha=.63$ )	34. Americans are very friendly people. (.794)	3.975	1.180
	37. American culture has contributed a lot to the world. (.597)	4.025	.954
F9: Affiliative motive ( $\alpha=.66$ )	22. My relationship with the teacher in this class is important to me. (.700)	3.575	.991
	30. If I learn a lot in this class, it will be because of the teacher. (.659)	3.750	1.049
	25. This English class will definitely help me improve my English. (.632)	4.000	.981

Note. ( )=factor loading  
Loadings were based on N=131; Means and SDs were based on N=80.  
The Motivation Questionnaire was adapted from Schmidt et al. (1996).  
(1=strongly disagree; 2=disagree; 3=slightly disagree; 4=slightly agree; 5=agree; 6=strongly agree)

## Appendix B-1

Results of the Two-Way Repeated Measures ANOVA for the "Intrinsic/Attitudes/Affiliative (InAtAf)" Dimension

Source	SS	df	MS	F	P-value	$\eta^2_p$
Profile	17.590	2	8.795	2.856	.064	.069
Subject (Group)	237.142	77	3.080			
Feature	151.061	5	30.212	20.887	< .001*	.213
Feature x Profile	22.171	10	2.217	1.533	.143*	.038
Feature x Subject (Group)	556.887	385	1.446			

Note. \*=Greenhouse-Geisser epsilon adjustment

## Appendix B-2

Results of the Two-Way Repeated Measures ANOVA for the "Intrinsic/Attitudes (InAt)" Dimension

Source	SS	df	MS	F	P-value	$\eta^2_p$
Profile	15.560	2	7.780	2.565	.088	.061
Subject (Group)	239.172	77	3.106			
Feature	156.445	5	31.289	21.285	< .001*	.217
Feature x Profile	13.098	10	1.310	.891	.527*	.023
Feature x Subject (Group)	565.961	385	1.470			

Note. \* =Greenhouse-Geisser epsilon adjustment

## Appendix B-3

Results of the Two-Way Repeated Measures ANOVA for the "Intrinsic/Affiliative (InAf)" Dimension

Source	SS	df	MS	F	P-value	$\eta^2_p$
Profile	10.561	2	5.280	1.665	.196	.041
Subject (Group)	244.171	77	3.171			
Feature	163.298	5	32.660	22.791	< .001*	.228
Feature x Profile	27.358	10	2.736	1.909	.056*	.047
Feature x Subject (Group)	551.700	385	1.433			

Note. \* =Greenhouse-Geisser epsilon adjustment

## Appendix B-4

Results of the Two-Way Repeated Measures ANOVA for the "Attitudes/Affiliative (AtAf)" Dimension

Source	SS	df	MS	F	P-value	$\eta^2_p$
Profile	1.584	2	.842	.256	.775	.007
Subject (Group)	253.048	77	3.286			
Feature	122.062	5	24.412	17.137	< .001*	.182
Feature x Profile	30.613	10	3.061	2.149	.029*	.053
Feature x Subject (Group)	548.445	385	1.425			

Note. \* =Greenhouse-Geisser epsilon adjustment