
Challenge, Skill, and Motivation

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Abstract

This paper reports the results of a study derived from a model of intrinsic motivation that emphasizes the balance between the degree of challenge inherent in a particular activity and the skills that one brings to the activity. Using a method successfully utilized with North American and European populations, the motivational states of Thai learners of English were assessed in language class, at work, at leisure and during maintenance activities. Few relationships were found between the levels of challenge and skill involved in an activity and the reported level of motivation or other affective states. Several reasons why the predictions of the theory were not supported are considered. The most likely explanation is that Thai culture emphasizes different values, with challenge playing a less important a role in motivation than in the other cultures studied using the model.

INTRODUCTION

In the foreign language field, most treatments of the topic of motivation have identified the concept of motivation with attitudes towards the foreign language, native speakers of that language, and their culture. The most important motivational concepts in the foreign language field have been those of integrative and instrumental motivation. Instrumental motivation is identified when a learner wants to learn the language in order to obtain a better job or a promotion or for other reasons of economic or social advancement. In other words, instrumental motivation results from recognition of the practical advantages of learning the language. Integrative motivation, on the other hand, is identified when learners state that they want to learn a foreign language because they are attracted to the target language culture, the language itself, or the target language group. Integrative motivation implies at least an interest in interacting with target language speakers, and a potential willingness to integrate into the target language culture.

The contrast between instrumental and integrative motivation, most closely associated with the work of Gardner (Gardner 1985, 1988), has stimulated a great deal of research in many different settings, usually based on questionnaires with Likertscale items. The instrumental-integrative contrast has also been incorporated into theories of second language acquisition such as those of Krashen (1985) and Schumann (1986). However, a number of criticisms have been raised against this particular view of motivation, as well as some of the hypotheses advanced by Gardner (Au, 1988; Oller, 1981). Two recent reviews of the literature on motivation (Crookes & Schmidt, 1991; Skehan, 1989) independently concluded that Gardner's emphasis on instrumental and integrative motivation has been important and influential, but that the instrumental-integrative conception of motivation is limited compared to the range of possible influences on motivation that exist.

Recent studies of motivation indicate a number of new directions and methodological approaches that should be of some value to the

foreign language field. One interesting trend is the study of motivation in foreign language contexts, as opposed to the second language contexts upon which existing theories have been based (the Canadian context has been particularly influential). An example of a model of motivation specifically designed for foreign language contexts is that of Dornyei (1990). Based on research carried out with learners of English in Hungary (considered a typical European foreign language learning environment), Dornyei has posited a motivational construct consisting of an instrumental subsystem, a weakly integrative subsystem (a multifaceted cluster consisting of general interest in foreign languages, a desire to broaden one's view and avoid provincialism, a desire for new stimuli and challenges, and a travel orientation), need for achievement, and attributions about past failures.

A second recent trend in the study of motivation is a movement away from exclusive reliance on standardized questionnaires towards the use of innovative methods for assessing motivation. Gardner and MacIntyre (1991) have explored the relationship between instrumental and integrative motivation and learning outcomes in a laboratory setting (a computerized language lesson), using study time, viewing time and response times as measures of involvement and learning.

A third trend in the field of motivation is the attempt to link motivation with both cognition and affect, rather than studying motivation in isolation. An example of this is the work of Pintrich (1989), in which motivational variables are seen as influencing the use of both cognitive and metacognitive strategies, which in turn directly affect learning. Although not yet applied to language learning contexts, Pintrich's theory is intended for the study of motivation in educational contexts in general.

A final trend of interest consists of the examination of entirely different conceptions of motivation itself. Much of this work derives from theories proposed a generation ago that distinguished between extrinsic and intrinsic motivation (deCharms, 1968; Deci & Ryan, 1985; Lepper & Greene, 1978). Extrinsic motivation is the motivation to do something because of an external reward that may be obtained, while

intrinsic motivation is demonstrated when we do something because we get rewards enough from the activity itself. The extrinsic-intrinsic distinction is somewhat similar to the instrumental-integrative distinction, but it is not identical. While we might identify integrative motivation in a general way with intrinsic motivation, we can easily imagine a situation in which a learner wants to master a language in order to interact with native speakers of that language (integrative motivation) but nevertheless does not actually enjoy studying the language, an activity for which he or she has only an extrinsic (goal-oriented) motivation.

What makes an activity intrinsically motivating? Why are some activities intensely enjoyable, while others make us bored or anxious? One answer to these questions has been given by the psychologist Mihaly Csikszentmihalyi (Csikszentmihalyi & Larson, 1987; Csikszentmihalyi & Nakamura, 1989; Massimini, Csikszentmihalyi & Carli, 1987). Csikszentmihalyi has examined the ebb and flow of psychological states (motivation, concentration, involvement) in daily experience and has proposed a theory in which the challenge of an activity (as perceived by the person doing the activity) and the level of skill brought by the person to the activity (also subjectively evaluated) are the crucial determinants of psychological states. Csikszentmihalyi's theory predicts that motivation, affect, arousal and concentration will all be highest when the levels of challenge and skill are perceived to be about equal and when both are perceived as high. When the challenge of a task is perceived to be high and skills are low, the resulting psychological state is one of anxiety. If challenge is perceived to be low and one's own skills are perceived as high, the outcome is boredom, and when both challenge and skill are perceived as low, the outcome is the negative state of apathy. The model has received support from case studies as well as a number of studies with large sample sizes involving people of various cultures, ages and social classes, in both the United States and Europe, and the relationships among the variables of challenge, skill and motivation (as well as affective, arousal and concentration variables) have been claimed to be universal (Csikszentmihalyi & Nakamura, 1989). This model of motivation has not been applied

previously to the question of motivation for language learning, but it is an attractive one, because it suggests a psychological analogue to Krashen's *i+1* principle for the learning of grammar (Krashen, 1985). Krashen has argued that second language acquisition depends upon input to the learner containing grammatical structures that are just beyond the learner's current competence. Csikszentmihalyi's theory predicts that challenging activities that are just beyond a learner's current level of skill will be intrinsically motivating.

The study reported here differs from traditional studies of the role of motivation in language learning in terms of all four of the dimensions discussed above: it is concerned with foreign language learning (Thai learners of English in Thailand) rather than second language learning; it utilizes a research design that is very different from the typical questionnaire concerning the goals of language study; it explores the relationships among motivation and other aspects of cognition and affect; and it is based on a new conception of motivation, Csikszentmihalyi's model of motivation deriving from the relationship between perceived challenge and perceived skill.

THE STUDY

Informants.

The participants in this study were 16 staff members at the Asian Institute of Technology (AIT) in Bangkok. AIT is an English-medium post-graduate institution with an international faculty and a student body drawn from more than twenty-five Asian countries. The informants' position titles ranged from air-conditioning technician to information scientist. All participants were middle class, educated Thais, except for one Burmese and one Vietnamese, both of whom had lived in Thailand and worked at AIT for many years and had no intention of returning to their home countries. The informants were enrolled in a voluntary English program as part of AIT's staff development program since the language of administration of AIT is English.

In debriefing interviews following data collection, the informants indicated that they used English anywhere from 10-90% of the time at work. Reported use of English in non-work

contexts was much less, ranging from 0-50% of the time. Since enrollment and attendance in the staff English program is completely voluntary, it was assumed that all informants were highly motivated. Several of the informants had participated previously in the program and were continuing, again voluntarily. The participants indicated that their motivation was instrumental, based on a perceived need to upgrade their English skills in order to perform better in their jobs.

Research questions and hypotheses.

The general research question of the study was the following:

How do English language learners describe their English learning experiences in terms of their level of motivation, the emotions they experience, and the challenges and skills involved, in comparison with other activities in which they engage?

The following specific hypotheses were formulated:

1. For self-selected learners, activities associated with learning English (in and out of class) would be ranked high in challenge, motivation, affect, activation/arousal and cognitive efficiency, when compared with work activities, as well as with activities associated with leisure or maintenance.

2. Participants' evaluations of the degree of challenge and skill involved in any particular activity would be a good predictor of motivation, affect, activation and cognitive efficiency, across the whole range of daily activities, as has been found in previous studies and as predicted by Csikszentmihalyi's theory of motivation.

Instrumentation and procedures.

The design of the investigation followed as closely as possible the methodology employed in previous studies motivated by the theoretical model, as described in Csikszentmihalyi & Larson (1987), Csikszentmihalyi & Nakamura (1989), and Massimini et al. (1987). The Experience Sampling Method (ESM) was designed to provide a series of snapshots of daily life. The ESM forms, being a 35-item questionnaire in English, were

explained to the informants prior to the study. Each informant was provided each morning with an alarm wrist-watch that had been programmed by the researchers to ring at a pre-selected time during the workday or early evening. The times were randomly selected, except that on days when participants would be in English class, several watches were purposefully set to ring during that time. When "beeped," informants were instructed to complete the ESM form as quickly as possible (see Appendix A), and to return the watch and questionnaire as soon as convenient.

When the first series of ESM forms were turned in, the researchers went over them carefully with the informants to make sure all items had been understood. As watches and questionnaire forms were returned, new programmed watches and new ESM forms were given out. (final debriefing session focused partly on the degree to which the informants were comfortable with the various items and their responses to them.) Over the course of a week, 169 beep-reports were obtained.

Analysis.

Following Csikszentmihalyi & Larson (1987) and Massimini et al. (1987), responses were combined into four clusters of items: motivation (MOT) i.e. wish to be doing this activity, would not rather be doing something else, control of actions, involved; affect (AFF) i.e. happy, cheerful, sociable; activation (ACT) i.e. alert, active, strong, excited; and cognitive efficiency (COG) i.e. concentration, ease of concentration, unselfconsciousness, clear. The data were normalized, providing *z*-scores for each informant for each item cluster. Numbers above zero register experiences rated better than that particular informant's average for the week; negative *z*-scores indicate experiences below an individual's personal average. The mean *z*-score for all signals is zero (the standard deviation is 1), and any randomly selected subset of signals also produces a mean *z*-score of zero.

Mean *z*-scores were computed for each sphere of life for which we received EMS reports: English language activities (mostly in-class, but with several examples of consulting a dictionary or thinking about English while engaging in other activities), work activities,

leisure activities (e.g. chatting with friends, watching television, relaxing), and maintenance activities (commuting, shopping, preparing meals, etc.).

ESM reports across spheres of activities were combined to produce correlations among the item clusters. The variables of perceived challenge and skill were correlated (separately as well as in combined form) against each of the item clusters.

RESULTS

Variation across situations.

The mean *z*-scores for the variables of challenge, skill and importance (hypothesized to be closely related to challenge) by situation are reported in Figure 1. Mean *z*-scores for the variables of motivation, affect, activation and cognitive efficiency by situation are reported in Figure 2.

As can be seen in Figure 1, our informants found their activities related to learning English to be challenging and important, while they rated their skill in this area relatively low. This is as expected, although due to the small number of signals from this sphere, only the mean *z*-scores for challenge are statistically significant, i.e. significantly higher than the over-all mean of zero ($z = .322, z\bar{x} = 1.81, p < .05$). Leisure activities were rated low in both challenge and skill as expected, but only the low value for the importance of such activities is supported statistically ($z = -.706, z\bar{x} = 2.53, p < .01$). Maintenance activities were also rated low for all three variables, with only the ratings for importance reaching significance ($z = -.449, z\bar{x} = -1.99, p < .05$). Work was rated high in importance ($z = .201, z\bar{x} = 2.46, p < .01$), with the level of skill slightly exceeding that of challenge, though neither of those values were significant.

As can be seen in Figure 2, English learning activities were rated high in both motivation ($z = .635, z\bar{x} = 2.94, p < .01$) and affect ($z = .351, z\bar{x} = 1.68, p < .05$). English activities were rated somewhat lower for the variable of activation and below average for cognitive efficiency, with neither of those values reaching significance. Leisure activities were rated high in motivation ($z = .451, z\bar{x} = 1.77, p < .05$) and low in activation ($z = -.494, z\bar{x} = -2.04, p < .05$); the values for affect and cognitive efficiency were

Mean z-scores for challenge, skill & importance by situation

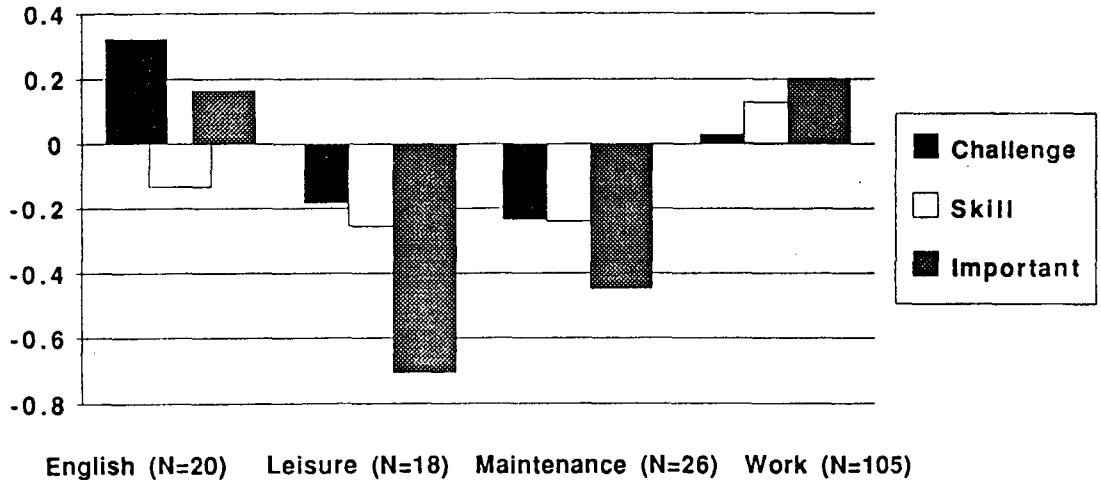


Figure 1

Mean z-scores for MOT, AFF, ACT & COG by situation

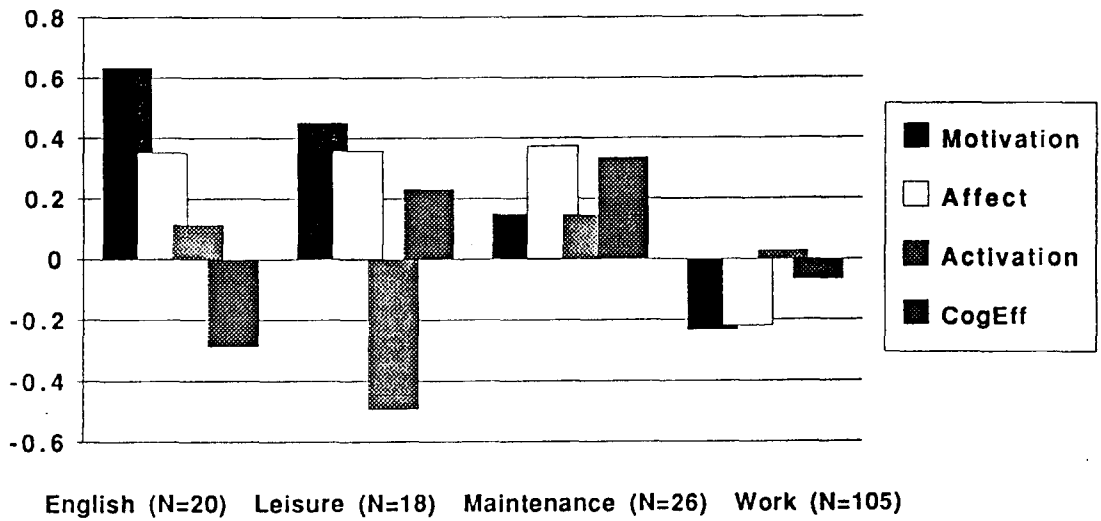


Figure 2

positive but non-significant. Maintenance activities were rated positively for all item clusters, although only the positive values for affect ($z = .373$, $\bar{z} = 2.13$, $p < .05$) and cognitive efficiency ($z = .334$, $\bar{z} = 1.85$, $p < .05$) were significant. Work was rated low in motivation ($z = -.235$, $\bar{z} = -2.57$, $p < .01$) and affect ($z = -.220$, $\bar{z} = -2.37$, $p < .01$), with non-significant values for activation and cognitive efficiency.

None of these variations across situations are surprising. It was expected that this group of informants would rate English learning activities as challenging and important. Given their voluntary enrollment in an English class and their equally voluntary continuation in the courses, in many cases from term to term, it is not surprising that they evaluate their motivation and affect in the class as high. It is not surprising that leisure activities are rated low in importance but high in motivation, or that work activities are viewed as important but relatively low on motivational and affect variables. However, given only the fact that English is viewed as challenging and also as motivating, one cannot conclude that English learning activities are motivating *because* they are challenging. The relationships pictured in Figures 1 and 2 raise some questions concerning the theory that sees motivation and other affective and cognitive variables as determined by challenge and skill. If learners see English as challenging but do not see their English skills as high, why do they show positive affect? The theory predicts anxiety. If they see both leisure and maintenance activities as unimportant, involving neither challenge nor skill, why do they show positive motivation and affect for these activities? The theory predicts low motivation and affect when challenge and skill are both low.

Relationships among variables.

Combining individual z -scores across situations, the four item clusters of motivation, affect, activation and cognitive efficiency were correlated with each other in order to ascertain relationships among variables. With two exceptions, these clusters were all positively and significantly correlated with one another at the .05 level or better. Motivation correlated most strongly with affect ($df=167$, $r = .249$, $p < .01$), less strongly but still positively with activation ($r = .172$, $p < .05$) and cognitive efficiency

($r = .181$, $p < .05$), giving support to a number of theories that relate motivation to both affect and cognitive processing (Crookes & Schmidt, 1990; Gardner, 1985). Affect and activation were positively related ($r = .360$, $p < .01$), but cognitive efficiency failed to correlate significantly with either activation or affect. Examination of the correlations among the individual items of the cognitive efficiency cluster suggests a revision to its theoretical motivation. Csikszentmihalyi has described what he calls the experience of "flow," in which individuals report that they are highly activated and aroused (Csikszentmihalyi & Nakamura, 1989); in such situations, individuals report that they are highly focused, and that their high level of concentration is accompanied by great ease of concentration. Our Thai informants did not report this relationship. Instead, they reported that when they were concentrating intensely it was difficult to maintain such concentration. Level of concentration correlated positively and significantly with the clusters of motivation, affect, and activation, but "ease of concentration" correlated negatively with the same clusters. The cognitive efficiency item cluster was therefore replaced by responses to the single item "how well were you concentrating?" for subsequent analysis.

As expected, the importance of an activity was positively correlated with the perceived level of challenge of the activity ($r = .269$, $p < .01$). However, the most important relationships to be examined are between the variables of challenge and skill, both individually and summed, the clusters of motivation, affect, activation and cognitive efficiency and the single item level of concentration. These are presented in Table 1.

As indicated in Table 1, 9 of the 12 correlations among these variables were non-significant. There were no significant correlations, either positive or negative, between the variable of challenge + skill or the variable of challenge alone and motivation, affect or activation. These results do not support the theory of motivation proposed by Csikszentmihalyi. Challenge + skill and challenge alone did correlate positively and significantly with level of concentration. Skill alone correlated significantly only with motivation, but this was a negative correlation (a reflection of the high percentage of

TABLE 1

	CH + SK	Challenge	Skill
Motivation	-.1036	.0264	-.2335*
Affect	-.0462	.0441	-.0884
Activation	.0582	.1496	-.0374
Concentration	.4060**	.3019**	.0141

N = 169

* $p < .05$

** $p < .01$

Pearson product moment correlations of variables (item clusters), using individual z-scores as input.

work-related activities that were rated as involving high skill but not very motivating).

Several additional analyses were performed on the data in order to discover relationships that might exist between challenge and skill and the other item clusters. Analyzing each participant's scores individually, we found considerable variation among them. Analysis of individual scores showed a significant positive correlation between the challenge + skill variable and affect in the responses from two participants and a significant

negative correlation for one informant. There was a significant correlation between challenge + skill and activation for one informant. No individual's scores showed a significant correlation, either positive or negative, between challenge + skill and motivation.

We also considered the possibility that the effect of the combination of challenge and skill on motivation, affect, and activation might not be linear. It could be the case that these psychological states are high when challenge and skill

4-Channel Analysis: MOT, AFF & ACT related to different combinations of challenge and skill

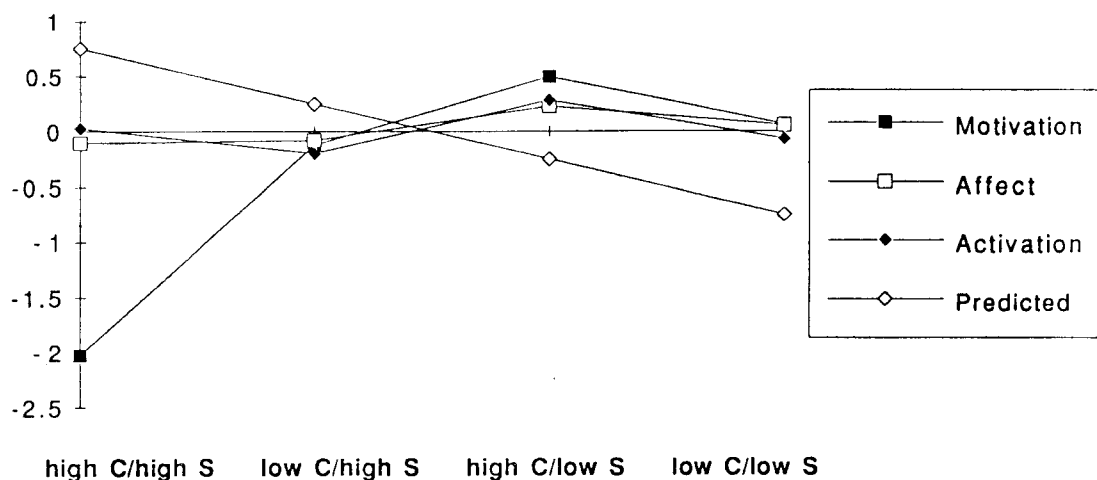


Figure 3

are in balance, either both high or both low, and that motivation and other psychological states are low when the two are unbalanced, either high challenge combined with low skill or low challenge combined with high skill. In order to check for this possibility in the data, we computed mean z-scores for each of the item clusters for a 4-channel analysis ([+challenge, +skill], [+challenge, -skill], [-challenge, +skill], [-challenge, -skill]), as shown in Figure 3.

Little additional insight into possible relationships among these variables emerged from the analysis. As indicated in Figure 3, the distribution of mean z-scores for motivation, activation, and affect in four channels does not fit the pattern predicted by Csikszentmihalyi's theory of motivation. The distribution of these variables across channels is relatively flat, with only two deviations from the overall population mean reaching statistical significance. Motivation was lower than the overall mean for the [+challenge, +skill] channel ($N=59, z=-.021, z_x=2.036, p<.05$). Z-scores for the variable motivation were higher than the population mean for the [+challenge, -skill] channel ($N=32, z=0.49, z_x=2.58, p<.01$). Neither of these results would be predicted either by Csikszentmihalyi's model or by a model based on an optimal balance between challenge and skill.

Considering the results from the correlations between challenge, skill and challenge-plus-skill with the item clusters of motivation, affect, and activation as presented in Table 1, together with the additional lack of findings based on a 4-channel analysis, it appears that, for the informants in this study, there is no straightforward relationship between the levels of perceived challenge and skill involved in a particular activity and the informant's reported motivation to continue engaging in that activity.

DISCUSSION

Explanations and problems.

The informants for this study were a group of self-selected participants in a voluntary English program, who reported strong instrumentally-oriented reasons for continuing to improve their English. We hypothesized that the ESM questionnaire, a method for reporting the ebb and flow of psychological states in real time

and real contexts, would show that activities associated with learning English were accompanied by high motivation, positive affect, positive arousal/activation, and high cognitive efficiency, when compared to the values reported for other activities in daily life. This hypothesis was supported, except for the variable of cognitive efficiency, an item cluster containing two negatively correlated items. Our informants reported that they concentrated hard in English class, but that it was not easy to do so. Our informants also reported that English learning activities were more challenging than most of the activities of daily life.

The fact that English learning activities were rated as challenging and that they were also seen as enjoyable and motivating suggested some initial support for the idea proposed by Csikszentmihalyi that motivation and other psychological states arise as the result of a match between the perceived challenge of an activity and one's perceived skills for doing the activity. However, looking at all the activities of life reported on informants' ESM questionnaires and using several different types of statistical analysis to identify relationships among variables, we see a clear relationship between challenge-plus-skill and only one other variable, level of concentration. For the informants in this study, there is no clear pattern relating the variables of challenge and skill to the variables of motivation, affect, or activation across the different spheres of daily activities.

There are at least two possible explanations for the lack of results in support of Csikszentmihalyi's model of intrinsic motivation in this study. First, although Csikszentmihalyi and Larson (1987) reported that their studies included adults who spoke little English, this may be the first time in which the ESM questionnaire has been used in a study in which all informants were non-native English speakers. It is possible that some items may have been imperfectly understood (although pains were taken to ensure that all items on the questionnaire were comprehended before the study began), or simply that Thais are not used to reporting their internal psychological states in English. Either of these factors could lead to randomness in responding and lack of support for the theoretical model in question (Oller, 1981). Against this interpretation of our results, we would point out

that it is clear that our informants did not respond randomly or meaninglessly overall. The distribution of values for the items on our questionnaire across the different spheres of life as shown in Figure 1 and 2 shows variation in ways that have considerable face validity.

In our debriefing sessions with the informants, we asked them specifically to comment on those questionnaire items that they found easy or difficult to interpret and also to indicate which of the items they were able to respond to immediately and spontaneously and which required additional thought. In general, our informants felt that participating in the project was enjoyable, that their ESM questionnaires accurately reflected their activities and feelings during the week in which they participated, and that filling out the questionnaire in English was not particularly difficult but was a good English use experience. Several informants indicated that it was always easy to respond to items concerning the level of challenge in an activity and its importance, as well as their level of alertness, concentration, happiness, cheerfulness and sociability. None of the informants identified these as difficult items. However, several informants indicated that they found it difficult to respond to the ESM items "were you succeeding at what you were doing?" and "were you satisfied with how you were doing," commenting that they did not feel comfortable estimating their success or level of satisfaction in an activity until the task had been completed. Since these items are not crucial to the theory being investigated here, we simply omitted them from our analysis. More problematic is the fact that several informants indicated that they could not easily and spontaneously respond to the item asking them to estimate the level of their skills for an activity. The problem in interpretation arose not when the level of challenge was high (in which case, informants found it easy to estimate their skill level also), but when the level of challenge was low. One informant gave us the following example. She is a computer programmer, and when "beeped," she was helping a student solve a routine and (to an expert) uninteresting problem. In that case, she reported the level of challenge as low, but could not decide whether to rate her skill in the activity as high, on the grounds that she is a skilled programmer in general, or low, on the grounds that the particular problem being dealt with was

one that required only low level skills from her larger repertoire. Several other informants raised the same general issue: when we are fully capable of meeting the demands of an undemanding activity, are we exercising high or low skill? For this reason, we have less confidence than we would like in our findings concerning the relationships between skill and the other variable of the study. This reservation does not extend to our findings concerning the apparent unimportance of challenge in determining our informants' psychological states, because our informants indicated unambiguous understanding of the relevant questionnaire item and indicated that they found it easy to respond to in a spontaneous manner.

A second possible explanation for the lack of results in support of Csikszentmihalyi's theory of motivation is that the model is not universal and does not apply to the Thai informants in this study. We think this is the most likely explanation for our findings, and that challenge probably does not play as important a role in determining the motivation of Thai learners of English as Csikszentmihalyi would have it. In Csikszentmihalyi's world view, happiness is hard work. People enjoy what they are doing when the human organism is functioning at its fullest capacity, not when it is relaxed. The model stresses control, autonomy, self-determination, and the pleasure associated with meeting extreme challenges with individual skill and mastering the situation.

These concepts -- autonomy, control, and the pleasure of mastering challenges--represent very Western views of what is important and satisfying in life. According to Fieg (1980), both the Thai temperament and its Buddhist underpinnings contrast with American values at each of these points. (In broad terms, these contrasts can also be extended to a comparison between Thais and Europeans.) Americans place considerable emphasis on being active, keeping busy, and above all, doing something, whereas the traditional Thai view is much lower key. Americans emphasize the importance of work over all other spheres, and carry over their seriousness of purpose even into recreation (e.g. serious jogging, marathon clinics, and the like). Americans are motivated to change and control their environment, whereas Thais are more concerned with making their lives more inwardly comfortable. Specifically with respect to challenge, Fieg comments that this plays a

much less important role for Thais than it does for Americans (Fieg, 1980) and argues, following other anthropologists (e.g. Ayal, 1963), that the lofty place occupied by work in the mental priority list of Americans would be substituted by most Thais with *sanuk* (fun, enjoyment, having a good time) (Fieg, 1980).

Follow-up interviews.

To find out what makes an activity motivating if it is not the level of challenge involved, we returned to 13 of our informants (three had gone on to jobs outside AIT). In the follow-up interviews, before asking about motivation, we checked our findings on two of the spheres of daily activity: those involving leisure and those related to English learning. On the finding that leisure activities were low in challenge, did not require much skill and were relatively low in importance, eight informants agreed completely, two agreed but thought high skill was needed for sports, and three agreed but felt that some leisure activities were important. Regarding the finding that English learning activities were challenging and important with skill level lower than the level of challenge, eleven agreed but two did not think their skill was low for some English learning activities. This variation was not unexpected, as it reflects the variation found in the analysis of individual scores. We then asked our informants three questions:

"Why do leisure and maintenance activities show positive motivation?" The three most common reactions to this question were that they are necessary, they are relaxing, and they occur irregularly due to time limitations. One person also said that it is because they are done with other people. We posed this question to look for sources of reported motivation in daily activity spheres other than those involving work or English learning and to determine if there was any relation between these sources and those reported for English learning activities.

"Why are English learning activities motivating?" The responses to this question fell into three distinct categories. First, with only three exceptions, all informants reported that part of their motivation to participate in the staff language program was to improve their communication ability and performance at work, confirming our assumption of participants'

instrumentally-oriented motivation. The second area mentioned concerned the atmosphere of the classroom: relaxed, engaging, and fun (*sanuk*). The final category of response related to features of the language program's methodological approach, specifically:

--the course content is immediately relevant to work-related language needs, since it is primarily drawn from real work situations;

--the content and instruction are, for the most part, just beyond most participant's current level of ability;

--all skill areas are covered;

--frequent small group work allows for interaction;

--discussions help clarify new ideas;

--individuals have opportunities to express themselves;

--the metacognitive elements of the course are useful outside of class; and

--the use of video and photography are motivating.

"What makes an activity sanuk?" Three responses were mentioned most commonly: if it's done with other people, if it's relaxing, and if it is challenging and can be done well.

These responses indicate that the balance between the challenge of an activity and one's ability level is a factor contributing to motivation and that whether an activity is perceived as *sanuk* is another, but that neither is of overwhelming importance. Instead of arising from a single variable that outweighs all others, whether or not an activity is considered enjoyable and intrinsically motivating seems to depend on a number of factors. This is compatible with the analysis of Komin (1990), who has identified nine different value clusters that function as sources of motivation for Thais, listed from high to low on a continuum of psychological importance as follows:

(1) Ego orientation. Thais have a deep sense of independence, pride, and dignity. Preserving one another's ego is the basic rule of all Thai social interactions.

(2) Grateful relationship orientation, an orien-

tation characterized by the psychological bonds between two person based on past assistance and the readiness to reciprocate.

- (3) Smooth interpersonal relationship orientation, emphasizing other-directed social interactions that maintain surface harmony.
- (4) Flexibility and adjustment orientation. Komin argues that Thais are situation-oriented, rather than ideologically or system-oriented.
- (5) Religio-psychical orientation.
- (6) Education and competence orientation, characterized primarily by a perception of education as a means to climb the social ladder.
- (7) Interdependence orientation, reflecting a community collaboration spirit.
- (8) The fun-pleasure orientation, which Komin views as a mechanism to support and maintain the more important smooth interpersonal interaction value.
- (9) Achievement-task orientation, emphasizing the internal drive towards achievement through hard work. Komin emphasizes that the consistently low ranking of the achievement-task orientation by Thais should not be misinterpreted as a finding that Thais abhor hard work and will not engage in any activity unless it is *sanuk* (a misunderstanding common among Western observers). Seen in the cultural context, the correct interpretation of these findings is simply that hard work alone is not enough, because social relations are of utmost importance. Work remains a necessary means, but task-mastery is not by itself a value of the highest rank.

Our informants' responses concerning what it is that makes English class and other activities motivating can be related to all of these value orientations except the religio-psychical orientation and the grateful relationship orientation. Participation in the language program in order to improve language-dependent efficiency at work supports the education and competence orientation directly. The staff language program's methodology stresses genuine interaction based on immediately relevant content and an emphasis on independent self-directed learning, an approach that allows scope for the ego orientation (note informants' comments on the desirability of allowing personal expression) as well as the smooth

interpersonal relationship and interdependence orientations (comments concerning group activities in English classes, the relaxed atmosphere of the classes and the importance of doing things with other people across spheres of activity). The approach used in the staff language program differs from what most participants have experienced in previous classroom language learning contexts, and in some cultures this might be a source of major resistance to educational innovation, leading to low motivation. That innovation does not have such negative results in this case may reflect the fact that the program supports important Thai values, as well as the fact that flexibility/adjustment is itself a core Thai value.

CONCLUSIONS

In this study, the Experience Sampling Method was used to provide psychological snapshots of daily life across a number of spheres: English learning activities, work-related activities, and leisure and maintenance activities. The goals of the research were to find out how activities associated with learning English are perceived by learners in terms of motivation, associated cognitive and emotional factors, and the challenges and skills involved, and to investigate the relationships among these factors across the spheres of life. Based on a model of intrinsic motivation proposed by Csikszentmihalyi, it was hypothesized (1) that activities associated with learning English would be ranked high in challenge, motivation, affect, activation/arousal and cognitive efficiency, and (2) that subjective evaluations of the degree of challenge and skill involved in any particular activity would be a good predictor of motivation and other psychological variables across spheres of life.

The first of these hypotheses was generally supported; the second was not. Informants characterized their psychological states when engaging in English learning activities (whether in class or out of class) as high in motivation, positive affect, activation and concentration. They viewed these activities as challenging and important. They rated their skills in this area lower than the level of challenge involved, although follow-up interviews indicated that they perceive the content and instruction to be optimally challenging for the most part, just beyond most participant's current level of ability. However,

this study does not support Csikszentmihalyi's claim that the relationship between challenge and skill predicts motivation and other psychological states and functions as the primary determinant of intrinsic motivation. Our informants rated leisure activities low in importance and challenge, but high in motivation. Maintenance activities were rated low in importance, but high in affect. Work activities were ranked relatively high in importance, challenge and skill (though neither of the latter two values were statistically higher than the weekly average for all activities) but low in motivation. Across all situations, the combination of challenge-plus-skill correlated positively and significantly with only one variable, level of concentration. There were no other significant relationships, either positive or negative, between the challenge/skill relationship and variables associated with motivation, affect, or activation/arousal. Follow-up interviews with our informants indicated that the challenge/skill relationship was only one of several aspects of the staff English program that contributed to high motivation.

Based on these findings, it seems that Csikszentmihalyi's model of intrinsic motivation

is deficient on two counts. It is simplistic, and it is ethnocentric. The model is simplistic because it seems that intrinsic motivation and its associated psychological states arise from many interacting factors, not one. It is ethnocentric because of the assumption that the psychological sources of motivation are universal rather than culturally specific. Komin (1990) comments that since people's values and belief systems are culturally conditioned, authors of theories of motivation are no exception. "Thus, American theories reflect American culture, and Italian theories reflect Italian culture, etc." (Komin, 1990: 702). In this study, some evidence has been presented that one theory of motivation based on Western values is ill-fitted to the Thai context. For those in the language teaching profession, suspicion should also be aroused with respect to claims concerning any universal effects on motivation of such varied features of language pedagogy as corrective feedback, teacher centered versus student-centered classes, group and pair work, and cooperative vs. competitive learning structures. Each of these is a likely candidate for having some influence on learner motivation, but it cannot be assumed that the motivational effect of any of them will be constant across cultures.

Notes

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APPENDIX A : Experience Sampling Method Questionnaire

Code Name : **Time beeped:** **am/pm** **Time filled out:** **am/pm**

As you were beeped.....

What were you thinking about ? _____

Where were you ? _____

What was the MAIN thing you were doing ? _____

What other things were you doing ? _____

WHY were you doing this particular activity ?

- I had to I wanted to do it I had nothing else to do

	not at all		some what			quite		very		
How well were you concentrating ?	0	1	2	3	4	5	6	7	8	9
Was it hard to concentrate?	0	1	2	3	4	5	6	7	8	9
How self-conscious were you ?	0	1	2	3	4	5	6	7	8	9
Did you feel good about yourself ?	0	1	2	3	4	5	6	7	8	9
Were you in control of the situation ?	0	1	2	3	4	5	6	7	8	9
Were you living up to your own expectations ?	0	1	2	3	4	5	6	7	8	9
Were you living up to expectations of others	0	1	2	3	4	5	6	7	8	9

Describe your mood as you were beeped :

	very	quite	some	some	quite	very		
alert	0	1	2	3	4	5	6	drowsy
happy	0	1	2	3	4	5	6	sad
irritable	0	1	2	3	4	5	6	cheerful
strong	0	1	2	3	4	5	6	weak
active	0	1	2	3	4	5	6	passive
lonely	0	1	2	3	4	5	6	sociable
ashamed	0	1	2	3	4	5	6	proud
involved	0	1	2	3	4	5	6	detached
excited	0	1	2	3	4	5	6	bored
closed	0	1	2	3	4	5	6	open
clear	0	1	2	3	4	5	6	confused
tense	0	1	2	3	4	5	6	relaxed
competitive	0	1	2	3	4	5	6	cooperative

Indicate how you felt about your activity :

	<i>low</i>									<i>high</i>
Challenges of the activity	0	1	2	3	4	5	6	7	8	9
Your skills in the activity	0	1	2	3	4	5	6	7	8	9
	<i>not at all</i>									<i>very much</i>
Was this activity important to you ?	0	1	2	3	4	5	6	7	8	9
Was this activity important to others ?	0	1	2	3	4	5	6	7	8	9
Were you succeeding at what you were doing ?	0	1	2	3	4	5	6	7	8	9
Do you wish you had been doing something else ?	0	1	2	3	4	5	6	7	8	9
Were you satisfied with how you were doing ?	0	1	2	3	4	5	6	7	8	9
How important was this activity in relation to your overall goals ?	0	1	2	3	4	5	6	7	8	9

If you had a choice, what would you be doing ? _____

Since you were last beeped, has anything happened or have you done anything which could have affected the way you feel ?

Comments : ?