Perceptual Learning Style Preferences of Malay ESL Learners at Tertiary Level: A Case Study at UiTM Pahang

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ABSTRACT

This study sets out to identify the perceptual learning style preferences of Malay ESL learners in Jengka Campus, UiTM Pahang. Data analysis from the study revealed that in general, Malay ESL learners in UiTM Pahang have major preferences for kinesthetic auditory individual and tactile learning styles. The present study also reveals that there are no statistical differences between the learning styles of both genders, and levels of achievement. This study has also revealed specific differences in learning styles according to fields of study and geographical backgrounds. A notable difference between rural and urban respondents is that the urban respondents have a major preference to visual learning while the rural respondents only displayed a minor preference for it. The other significant difference is that the rural respondents strongly preferred individual learning style, while the urban respondents only recorded a minor preference. East and West coast learners share similar preferences save for their different preference for visual learning style, which is considered as major for the West Coast and minor for the East Coast. The input according to fields of study, however, recorded some statistically significant differences between the faculties. However, they share almost identical learning style preferences, as they prefer kinesthetic and tactile as well as auditory.

Keywords: learning styles, perceptual learning styles, preferences

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Introduction

Learning styles are described as 'the ways in which an individual characteristically acquires, retains and retrieves information' (Felder & Henriques, 1995, p. 21). According to Sternberg (1994, cited in Reid, 1995), 'a style is a preferred way of using one's abilities. It is not in itself an ability but rather a preference'. As an instructional strategy, it informs the student the cognition, context and content of learning. Each learner, according to Keefe (1987, cited in Reid, 1987) has distinct but consistent preferred ways of perception, organisation and retention of information. These learning styles are characteristics of cognitive, affective, and physiological behaviours that serve as relatively stable indicators of how learners perceive, interact with and respond to the learning environment (Keefe, 1987, cited in Reid, 1987).

Research in second language learning has indicated that individuals vary in the strategies they employ because of the differences in learning styles, affective styles, and cognitive styles (Reid, 1987, p. 91). Reid (1987) further adds that pre-university students, enrolled in intensive English programmes in the U.S., come from a variety of cultural, linguistic, age and educational backgrounds and are taught homogeneously by English teachers who have little knowledge of differing learning styles. Therefore, instructional methods, instructions and materials used are designed with the native speakers in mind. The resulting instances of failures and frustrations, according to Reid, may not stem from the wrong materials used. Instead, they may be due to the different learning styles of the learners and the teaching styles of the teachers. Attending to the differences among students expands the opportunities for students to build upon previous knowledge through a variety of learning activities and experiences (Thompson & Mascazine, 1997).

Introducing the learning style to the students may help them to enhance their language learning skills. The students will be more receptive towards the language learning process, employ better strategies in their approach to language learning and generate greater interest in the learning process as a whole. Thus, the findings of this study can serve as a platform to develop a better understanding on the needs of the learners and provide a significant blueprint for the design and formulation of curriculum for Malay learners.

Literature Review

Reid (1995) defines learning styles as 'an individual's natural, habitual and preferred way(s) of absorbing, processing, and retaining new information and skills. These learning styles persist, regardless of teaching methods and content areas'. Learning style, then, is the way in which each learner begins to concentrate on, process, and retain new and difficult information (Dunn & Dunn, 1992, p. 2).

Reid's Perceptual Learning Style Preference

The perceptual learning styles, as proposed by Reid (1987), are categorised as:

- i. Auditory Learning Style Preference
- ii. Visual Learning Style Preference
- iii. Kinesthetic Learning Style Preference
- iv. Tactile Learning Style Preference
- v. Group Learning Style Preference
- vi. Individual Learning Style Preference

Auditory Learning Style Preference

ESL learners who have major preferences for auditory learning style learn primarily from hearing words and oral explanations (Reid, 1987, p. 206). Kinsella (1995, cited in Reid, 1995) describes auditory learners as being able to relate to words, work well by interacting and discussing with others. In her study, Reid (1987) found that Malay, learners identified auditory as minor learning style preference. Shareena (1995) in her study of Malay ESL learners in a Malaysian university found that Malay learners were less auditory as they only registered minor preference towards auditory learning.

Kinesthetic Learning Style Preference

According to Kinsella (1995, cited in Reid, 1995), kinesthetic learning involves learning or working with their hands, feeling and touching. Kinesthetic learners, learn best through experiment and being physically involved in the classroom experience (Reid, 1995). Reid (1987) and Shareena (1995) found that Malays showed major preference towards kinesthetic learning.

Tactile Learning Style Preference

Tactile learning involves hands-on experiences with learning materials. Working with models, conducting experiment and laboratory work will suit tactile learners best (Reid, 1995, p. 206). Shareena (1995) in her study of Malay ESL learners in a Malaysian university found that Malay learners are very much into tactile learning. This finding is similar to that of Reid's (1987).

Visual Learning Style Preference

Visual learners learn best by 'seeing the words' and learning is more meaningful if they are able to read the instructions than just listening to them. The Malay ESL learners studied by Reid (1987) and Shareena (1995) indicated visual as their minor learning style preferences.

Group and Individual Learning Style Preference

In group learning, a learner learns easily when studying with at least another person as opposed to individual learner who works best alone. In her study, Reid (1987) found that native speakers showed negative learning style preference for group work. Similarly, Park's (2000) findings on ESL learners in the United States suggest that Caucasians along with Koreans and Armenians dislike group activities (negative learning style preference). Malay learners, however, in a foreign setting (Reid, 1987) and local setting (Shareena, 1995) display almost identical learning style preferences save for the dislike towards group learning in Reid's (1987) study.

Weaknesses of Learning Styles Instruments

Various instruments measure various aspects of style with its own definition of the term. Myer-Briggs Temperament Indicator (MBTI) measures personality traits, Kolb's Learning Style Inventory measures ways we process information and Dunn & Dunn's Learning Style Inventory measures perceptual as well as psychological aspects of styles.

There is confusion on how best to measure a style as most learning style instruments focus on one or two aspects of learning style and none encompasses all aspects (Eliason, 1995 cited in Reid, 1995). Eliason further added that many learning styles instruments have limited theoretical underpinnings and the validity of these tests has been seriously questioned. Perceptual learning style provides a good illustration of the point above as Carbo, Dunn and Dunn (1986) categorised perceptual as visual, kinesthetic, tactile and auditory whereas Felder and Henriques (1995) categorised them as visual, verbal and others (tactile, gustatory and olfactory) and considered kinesthetic as outside the sensory modalities.

The language used in the learning style instrument might become a formidable obstacle for the learners to understand and might require translation. However, even if items are translated appropriately, learners might make different associations, depending on the language they are tested in (Eliason, 1995, cited in Reid, 1995). Furthermore, according to Bonham (1988b, cited in Reid, 1995) the learners themselves bring a certain amount of unpredictability to the learning style evaluation process as most instruments are self reporting and consequently depend on the learners' knowing themselves sufficiently, and being willing to reveal themselves to the evaluator.

Gender and Learning Styles

There do not appear to be overall gender differences with respect to cognitive style. Differences are usually small and non-significant on both dimensions (Riding, 1998, cited in Reid, 1998). However, Oxford (1995, cited in Reid, 1995) found that male learners were more inclined towards tactile and kinesthetic as she argued that these styles might be related to the spatial ability prominent in the male gender. However, the female learners were thought to be more auditory than male learners. Male learners were found to be more field independent than female learners, who were thought to acquire the ability to separate details easily through the use of analysis (Oxford, 1995 in Reid, 1995).

Belenky, Clinchy, Goldberge and Tarule (1986, cited in Reid, 1995) found that males and females might have distinctly different ways of knowing and that males were more objective and thoughtful while females were more subjective and emotional. The finding suggests that both genders took a different route to learning and employed various styles and strategies towards language learning. According to Oxford (1995 cited in Reid, 1995) the male learners might take a more thinking approach, focusing on rules, facts and logic. Female learners, on the other hand, employ a great deal of social interaction, high degree of empathy and cooperative learning. Gender differences in learning styles can be summarised in the table below.

Table 1: Overview of Gender Differences in Learning Styles

	Male	Female		
i)	Field independent	i)	Field dependent	
ii)	Analytic	ii)	Global	
iii)	Tactile	iii)	Auditory	
iv)	Kinesthetic	iv)	Reflective	
v)	Impulsive			

Source: Oxford's Gender Differences in Learning Styles in Reid (1995, p. 40)

The Study

Malay ESL learners are generally considered weak in English and it has been a major concern among teachers, academicians and Ministry of Education officials (Ratnawati & Ismail, 2003). The Ministry of Education reported that the first MUET results stated that most of the candidates were unable to speak and write proficiently. The students also failed to respond to complex topics due to the lack of vocabulary and weaknesses in the areas of English Language grammar (Ahmad Kamil, 2001 cited in Mohd Rozaidi, 2003).

Identifying and understanding the learning style preferences of the learners is a way to understand the learners and, in turn, help them to improve their English language proficiency. As such, it is imperative to investigate the preferred learning styles of UiTM students as a measure to enhance the students' level of mastery in English. Data gathered will be pertinent not only in teaching strategies but also more importantly in helping students adopt a more effective learning strategy.

Objectives

The main objectives of the study are to help identify the students' perceptual learning style preferences and to provide vital input to further enhance the effectiveness of teaching and learning. According to Lightbown and Spada (1996, p. 59), learners have strong beliefs and opinions on how their instructions should be delivered. These beliefs are often based on previous learning experiences and assumptions on the best way for them to learn and learners' preference for learning will influence the kinds of strategies they choose in order to learn new materials

(visual or auditory or kinesthetic or tactile). Knowledge of the learners' preferences, according to Lightbown and Spada, will enable teachers to help learners expand their repertoire of learning strategies and, thus, develop greater flexibility in their ways of approaching language learning. This study takes into account possible significant differences in learning styles across the gender, fields of study and levels of achievement. Special consideration is also given to situations where there is any significant difference due to geographical factors in determining the students' learning styles.

Research Questions

The research questions are derived from the need to improve the level of English proficiency among the Malay ESL learners, the need to understand learning styles and improve teaching and learning. The research questions are as follows:

- i. What are the perceptual learning style preferences of the Malay learners?
- ii. To what extent is the relationship between perceptual learning style preference and gender?
- iii. To what extent is the relationship between perceptual learning style preference and level of achievement?
- iv. To what extent is the relationship between perceptual learning style preference and fields of study?

Methodology

The study employed the survey method through the employment of Reid's Perceptual Learning Style Preferences Survey. It identified elements such as gender, geographical background, and levels of achievement and field of study as the independent variables. In addition, the construct listed on the questionnaire was considered as the dependent variables. In terms of data collection, the study used using the cross-sectional approach whereby data was collected at one point in time.

To ensure reliability and validity, a pilot survey was administered to 60 respondents in UiTM Pahang Branch, who were not part of the actual sampling. The accepted reliability index was r = 0.60 and above before the instrument was administered to the actual sampling. During the initial survey, the respondents complained that they found the statements were

difficult to understand. A translated Malay version was added under the original statements and was given out to the same group of respondents after three weeks. The data from the survey yielded a score of r = 0.84 (Cronbach Alpha), which assured the researcher of its high and acceptable reliability index.

Sampling Population

The research involved 133 respondents from Part 1 and Part 2 from three faculties: Business, Engineering and Wood Technology of UiTM Pahang. The age of the respondents ranged between 18-20 years and they were all native Malay speakers. They were taking different levels of English course.

For the purpose of the study, the level of proficiency was determined by the respondents' English results in Sijil Pelajaran Malaysia (SPM). The respondents who scored B3 and higher grades in English for SPM were considered as having a high proficiency level while the respondents who obtained grades below B3 for English in SPM were considered as having a low proficiency level. They were categorised into the following variables; male and female, rural and urban, East Coast and West Coast, levels of achievement and fields of study.

Data Collection

This study had used Reid's 1987 study instrument with some alterations being made to suit the demographical picture of the respondents and background of the study. In addition, a Malay translated version was also made available in order to ensure the respondents understood the statements given and were able to respond accordingly. The translated version in the questionnaire was placed below the original statement in English and was italicised.

The questionnaire had thirty statements, focussing on learners' preferences towards certain learning style. The learning style preferences were Visual, Auditory, Kinesthetic, Tactile, Group, and Individual.

Group interviews were conducted consisting of 3-4 students per group and a total of thirty (30) respondents out of 133 who responded to the questionnaire were selected. The respondents were selected on the basis that they volunteered and were willing to be interviewed. The interview focused on the respondents' current study habits, course requirements, and the preferred learning styles discovered from the questionnaires. The questions and answers focused more on explaining the reasons behind the preference for a certain learning style.

Data Analysis

The data gathered was tabulated against the independent variables (gender, level of achievement and geographical background) to determine any correlations, and to identify the major and minor learning style preferences. The data were analysed using the SPSS software. The data was further triangulated using data gathered from interviews with the students.

According to Reid (1987), the preference means for each set of variables are set into three ranges: major, minor and negative learning style preferences. The range for major learning preference is 18.00 and above, 16.50-17.99 for minor and 16.49 and below for negative learning preference. A major learning style preference refers to the particular style a learner uses to obtain optimal learning. A minor learning style preference indicates areas where the learner can function well but not as well as a major learning preference. The negative learning style indicates difficulty learning in that way (Reid, 1995, p. 207).

Findings

The study revealed that the Malays had a strong inclination towards kinesthetic and tactile learning style preference. This is shown in Table 2 below.

		`	,	, 	
Audio	Visual	Kinesthetic	Tactile	Individual	Group
18.5 (Major)	17.7 (Minor)	19.3 (Major)	18.2 (Major)	18.1 (Major)	16.2 (Negative)

Table 2: Learning Style Preferences of the Malay ESL Learners (Preference Means)

Only the respondents from the Engineering Faculty and high achievers indicate tactile as a minor learning style (Tables 4 and 5). These findings were similar to that of Shareena's (1995) and Reid's (1987).

The preference for visual learning was only set at the minor preference level for most of the respondents. Shareena's and Reid's findings also suggested that Malay ESL learners are not very much

inclined towards visual learning, although it is not set at the negative level. However, the respondents from urban areas and West Coast in the present study indicate it as a major learning style preference. It can be inferred that the amount of exposure that they might have to the language is greater in comparison to rural or East Coast areas. In addition, the respondents from the Wood Technology Faculty have a major preference towards visual learning style. What can be derived from this is that the respondents are strongly influenced in their preference for a certain learning styles by their course of study. The course requirement for Wood Technology respondents include identifying types of trees and wood and working with heavy machinery that require full visual concentration.

The gender variable in this study produced no statistically significant results as previously indicated in the findings of Reid's (1987) and Shareena's (1995) studies.

Table 3: Comparisons of Preference Means between Male and Female Malay ESL Learners (Preference Means)

	Audio	Visual	Kinesthetic	Tactile	Individual	Group
Male	18.8	17.44	19.21	18.16	18.87	15.71
	(Major)	(Minor)	(Major)	(Major)	(Major)	(Negative)
Female	18.29	17.93	19.32	18.31	17.62	16.72
	(Major)	(Minor)	(Major)	(Major)	(Minor)	(Minor)

Level of achievement indicated a significant difference in the preference for auditory learning styles as the low achievers indicated a major preference for auditory learning style while the high achievers stated only a minor preference. It can be deduced from this that the low achievers are fully utilising the auditory channel to understand the lesson. They concentrated on the way the language is spoken, and how the words are pronounced which they believed would help to improve their proficiency. In contrast, the high achievers, who have adequate proficiency, use minimal auditory learning style for they can understand the language better and, hence, can use other channels for learning.

The fields of study variable produced statistically significant results. It is found that the learners are very much influenced by their course of study. For all the courses in this study (Business Management, Engineering and Wood Technology) the students have a major preference for auditory

 Table 4: Comparisons of Preference Means between High and Low Achievers of Malay ESL Learners (Preference Means)

	Audio	Visual	Kinesthetic	Tactile	Individual	Group
SPM B3 and above (High)		17.60 (Minor)	18.80 (Major)	17.00 (Minor)	18.26 (Major)	16.33 (Negative)
SPM B4 and below (Low)		17.75 (Minor)	19.36 (Major)	18.41 (Major)	18.13 (Major)	16.29 (Negative)

and kinesthetic learning style preference. The major differences occur in visual, group and individual learning style preferences. The Wood Technology students indicated visual as a major preference while the other two courses only indicate it as a minor preference. The individual learning style preference revealed a vast difference between the courses of study as the Engineering respondents indicate it as a major preference while Business as negative and Wood Technology as minor. The course requirement of these courses is different where Wood Technology requires consistent use of visual mode of learning, and an equal balance of group and individual work. Most of their time is spent in the laboratory and workshops working on several projects such as building and making furniture. The Business Management course, on the other hand, requires numerous group work and projects while the Engineering course requires extensive reading and very minimal group effort. These course requirements took up a significant amount of time of these respondents. In contrast, English classes only constitute a minimal part of the entire course of study. Therefore, it can be derived that these respondents are very much influenced by their course of study in determining their learning style preference for their English class.

Audio Visual Kinesthetic Tactile Individual Group 18.4340 18.88 17.90 19.77 14.69 Engineering 16.69 (Major) (Minor) (Major) (Minor) (Major) (Negative) **Business** 18.82 17.82 19.60 18.35 16.44 17.91 Management (Major) (Minor) (Major) (Major) (Negative) (Minor) 16.6571 Wood 18.22 19.17 19.45 18.62 17.88 Technology (Major) (Major) (Major) (Major) (Minor) (Minor)

 Table 5: Comparisons of Preference Means between Fields of Study among

 Malay ESL Learners (Preference Means)

The major differences between this study and that of Reid (1987) and Shareena (1995) are the auditory, group and individual learning style preferences. The Malay learners share kinesthetic and tactile learning style preferences in all three studies in which they indicated as a major preference. The findings in the group/individual analysis are significantly different than those reported by Reid (1987) and Shareena (1995). In both instances, group preference is major while individual is the opposite. However, in the researcher's study group is a minor preference while individual is considered as major. The auditory is considered as a major preference in this study, too, as opposed to the other two studies. The respondents described auditory as a major preference because they like listening to the lectures as they feel that they would be able to learn how the language is spoken, used and pronounced. In addition, the respondents were very much influenced by their course of study whereby they spent a significant amount of time listening to lectures in the classroom.

Furthermore, their course of study also influenced their learning style preferences. Engineering respondents are more inclined to individual learning as significant amount of time is spent studying or working on their own. In contrast, the Business respondents dislike individual learning style preference as most of their coursework entail them to work in groups. Wood Technology respondents have an equal balance of both and all these are manifested in their English learning style preferences.

Discussion

Data analysis from the study suggests that Malay ESL learners have a major preference for kinesthetic, tactile, auditory and individual learning styles. The result is similar to that of Reid's (1987) and Shareena's (1995) studies which reported that Malay ESL learners are kinesthetic and tactile learners. However, additional learning styles were apparent among the Malay ESL learners in UiTM Pahang Branch, which was not found in Reid's and Shareena's study, which is auditory and individual. Malay ESL learners in this study indicate auditory as a major learning style preference. What can be derived from this is the fact that in the English class, the learners are inclined towards listening to the lecture to gain information. This could be attributed to the learners' style of learning for other subjects whereby there are a lot of lecture sessions and auditory is the primary tool to attain information. This preference may be carried over to the English classroom.

Another dissimilarity between the findings derived from the study and that of Reid's and Shareena's who found Malay ESL learners as group learners is that Malay ESL learners in UiTM Pahang indicate individual learning as their major learning style preference. The learners prefer classroom assignments or homework to be done individually. They do not allocate any specific time to do revision on English, thus, any group assignment is seen as a major setback as they need to meet and do work together and they dislike this hassle. They prefer to work on their own at their own free time to complete any English assignment.

A factor worth taking into consideration is that these learners are in their own country and without any real pressure to perform in English let alone use the language on a daily basis. Although the medium of instruction in UiTM is English, this has not been enforced strictly. The learners are not forced to use the language in interacting with teachers or the other learners. Furthermore, the students in UiTM are all Bumiputeras, thus the presence of Bahasa Malaysia is strong. In the case of the Malay ESL learners studied by Reid (1987), the learners are in a foreign setting where the ability to communicate in the target language is essential without which they cannot survive. The drive and motivation to study the language is high and for those who are weak need to work together with those who are proficient in order to grasp the language better. This could in turn result in Malay ESL learners putting group learning as their major learning style preference.

This study found no significant differences between male and female Malay ESL learners in UiTM in terms of learning style preferences. Both genders indicate similar preference that is audio, kinesthetic and tactile. Shareena (1995) and Reid (1987) shared similar findings in their study, as they found no statistical differences between the genders. The level of achievement variable in this study also yielded no statistical differences and learners showed similar preference, for kinesthetic and individual learning as major learning style preferences but the low achievers recorded a significantly higher preference means as opposed to the high achievers.

The input from fields of study recorded some statistically significant differences between the faculties. Group and Individual and Visual learning indicate statistically significant differences between the faculties. However, they share almost identical learning style preferences, as they prefer kinesthetic and tactile as well as auditory. A notable difference is that Engineering students showed a stronger preference towards individual learning as opposed to the other two faculties who indicated

individual learning as minor (Wood Technology) and negative (Business Management) preference. A factor that could attribute to this is that most Engineering courses or subjects require a lot of reading and working on individual reports. A majority of the learners (Engineering respondents) interviewed stated that it was better to study alone than being involved in group work because this would minimise 'talk time' and increase 'study time'. The Business respondents, on the other hand, disliked individual learning as they spent a lot of time working in groups in their course of study. The Wood Technology respondents indicate that there was an equal balance of individual and group work in their course of study, which could account for their minor preference for individual as well as group study. Another significant difference is the preference for visual learning style by the Wood Technology respondents. These respondents require a high degree of visual concentration in the course of study as it involves identifying trees, suitable wood and also working on heavy machineries.

Geographical areas yielded two areas, which have statistical differences which are group and auditory for the Rural/Urban analysis. The urban learners seemed to have a strong preference for all learning styles but recorded minor preferences for group and individual learning. Rural learners displayed preferences for kinesthetic, tactile, auditory and individual learning and scored low for group preference. A notable difference between rural and urban respondents is their preference for visual learning style preference. The urban respondents have a major preference to visual learning while the rural respondents only displayed a minor preference for it. A possible explanation being that the urban respondents are more exposed to the language in various forms in comparison to their rural counterparts. The other significant difference is the preference for individual learning style, which is strongly preferred by the rural respondents while the urban only recorded a minor preference for it. A contributing factor could be that the rural respondents are more reserved than their urban counterparts in learning the language and exposing themselves as having low or inadequate proficiency, thus, explaining their strong preference for individual learning style. East and West coast learners share similar preferences save for their different preference for visual learning style, which is considered as major for the West Coast and Minor for the East Coast.

Pedagogical Implications for English Language Teaching

Nelson (1995, cited in Reid, 1995) suggests that ESL teachers take into perspectives cultural variation, as cultural groups with the same learning style dimension may have pedagogical variation, when considering the type of pedagogical approach to be used in the classroom (Reid, 1995). For the Malay learners, they may have different pedagogical variation when it comes to language learning. Different geographical areas may require different approaches as the study showed there are differences in their learning style preferences. Thus, as Nelson (1995, cited in Reid, 1995) suggests, an ESL teacher needs to learn the home culture of the learners in order to become an effective teacher. Their learning style preferences should serve as a guide towards preparing the right pedagogical approach.

In the case of UiTM ESL learners, teachers should diagnose the learners' learning style preferences. Through understanding the learners' preferences the teachers can, hopefully, develop a better pedagogical approach in the classroom, which will serve the learners better. Learners who have a strong preference for auditory, should be given tasks that involve listening either to a playback or interacting in a group. Those with a major preference for individual learning should be given a chance to explore the language by themselves, without forcing to work in groups and interact with other learners. The present study has shown, as seen also in Shareena (1995) and Reid (1987) that the Malay learners are kinesthetic and tactile learners. Therefore, teachers should develop lessons that involve a high number of activities that would help not only to improve proficiency but also increase their interest in learning the language. On the other hand, the learners themselves need to be made aware of their own learning style preferences to allow them to prepare appropriate learning strategies.

Conclusion

Perceptual learning style preference does not provide conclusive findings as to the real profile of Malay ESL learners whether from rural, urban, East or West Coast. Perceptual learning style preferences only indicate the learners' preferences for language learning style without providing much input on the characteristics of the learners themselves. There are other aspects of the rural learners, which may not be identified in this study. These aspects should be looked into in order to determine a better profile of the Malay learners and the data collected could be used to provide measures to enhance their language learning abilities.

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