

A Review of a Malaysian Public University Students' Motivational Behaviour in Learning a Foreign Language

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ABSTRACT - The motivation of students to learn Chinese as a foreign language has received considerable research attention. Related research has been conducted by the Universiti Teknologi MARA (UiTM) researchers or lecturers on UiTM students over years. However, there is currently no research investigating the trend, changes, and prospect of UiTM students' motivation in learning Chinese as a foreign language, which retard future enhancement of the field. Thus, this study applied the structured review method to review publications produced by UiTM researchers or lecturers from 2003 to 2023. A total of 8 relevant publications were identified and analysed using PRISMA 2020 guidelines. The review indicated that the number of publications on the related topic is still limited but showing a potential growth. This study discovered a methodological gap that calls for more qualitative and mixed method investigations, as well as population and analysis gap which encourage more comparative studies rather than general investigations. The findings demonstrated both Diploma and Degree students' motivational trend were balanced between instrumental and integrative motivation. Nonetheless, Degree students' motivational behaviour changed more distinctly from intrinsic to extrinsic, compared to Diploma students. This study suggests putting more attention to nurturing students' intrinsic motivation, correlates to extrinsic motivation. This study provides pedagogical implications on the teaching and learning Chinese as a foreign language. Future study on the factors influencing students' change of behaviour, the impact of the behavioural changes, and the reason of the rise of situation-specific motives in elder students and higher foreign language learning level students are required.

ARTICLE HISTORY

Received: 23 October 2023

Revised: 15 March 2024

Accepted: 18 March 2024

Published: 31 March 2024

KEYWORDS

Chinese as a foreign language

Malaysia

Motivational behaviour

Structured review method

University students

1.0 INTRODUCTION

Motivation can be defined as a desire that energises and drives one's behaviour to decide and to do something, persists in doing it, and invests effort into it (Dörnyei, 2014). On the other hand, Wade and Tavris (1998) indicated that a person's motivation is an implied process that might lead him/her to move towards a goal as well as away from an unpleasant situation. Motivation does not differ between different intelligence group, even low intelligence individuals who are highly motivated can succeed more when compared to intelligent individuals who lack motivation (Febriza et al., 2022). Therefore, Gardner (1985) argued that a student who is highly motivated is likely to have something to look forward to, such as a purpose dedicated to objectives or goals.

Motivation triggers goal-directed behaviour and manifests itself in the motivated person's distinctive activities. Concerning the goal of learning a foreign language, motivation can be identified as the students' orientation or attempt to master a new language. Motivation serves as the main stimulant for initial foreign language learning and later serves as the power for continuing the long and intensive language learning process (Yaqoub et al., 2023). Therefore, motivation has been widely acknowledged as one of the most significant determinants of success in acquiring a foreign language (Fryer, 2019; Kata, 2020).

With China's ongoing and comprehensive support of international Chinese language education, Chinese language learning has experienced a worldwide boom. The number of people learning Chinese around the world has grown rapidly. Similar applies to Malaysia, Chinese has become a popular foreign language among the Malay higher education students. In Malaysia, many public and private universities offer Chinese courses to non-native speakers. These Chinese courses are often included as part of the requirement for graduation. Hence, the Chinese courses that are offered at these universities are designed to be as elementary as possible.

Students' motivation to acquire Chinese as a foreign language encompasses a wide range of factors, including academic, social, and economic considerations (Ilonga, 2018). Students' sustained foreign language acquisition in the future is demonstrated by their positive attitude and motivation towards the Chinese language (Yaqoub et al., 2023). However, students' motivational issues in learning Chinese as a foreign language is one of the significant concerns raised by current studies. Zheng et al. (2023) believed that it is necessary to reconsider the suitability of teaching methods and the framework being employed in teaching Chinese as a foreign language to address students' low learning motivation. There are also other factors that need to be carefully considered such as tasks, peers, and examination which could easily affect students' motivation or demotivation in learning Chinese as a foreign language (Zheng

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et al., 2023). Similarly, in the Malaysian context, Chua and Mohammad Affiq Kamarul Azlan (2019) stated that students would only be motivated to learn Chinese as a foreign language if the teaching matches students' demands. Regarding this statement, Cheong et al. (2019) investigated that students are more motivated to learn Chinese if it will help them to be career-ready and enable them to interact with their Chinese friends. Moreover, students' attitude is another factor that correlates with students' motivation and achievement in learning Chinese as a foreign language (Suo et al., 2022).

The motivation of students to learn Chinese as a foreign language has obviously been a popular research topic for years. There are 20 national universities in Malaysia, each of which offers Chinese courses. Universiti Teknologi MARA (UiTM) is the largest of the 20 national universities in Malaysia, with 190,000 students. There are 35 main campuses and branch campuses, offering 504 courses. There are 15,000 to 16,000 Malay students and indigenous students learning Chinese at UiTM every semester. Since UiTM is a pioneer in this field and has a solid history, certainly, UiTM also places a significant attention to students' motivation in learning Chinese as a foreign language. Therefore, many related studies have been conducted by the UiTM researchers or lecturers on UiTM students over the years. Among the published research (in different years), some of the research focus or research topics look similar, such as "Motivation of Malay students towards learning Chinese as a foreign language" (Tan & Ooi, 2006), "The motivation of undergraduates learning Chinese as a foreign language" (Tan et al., 2016), and "Motivation in foreign language learning among Malay undergraduates in a Malaysian public university" (Gan et al., 2021). Here come the questions, what is the significant outcomes of repeating the students' learning motivation investigation in different years? Are there any similarities, differences, or changes over the years? There is currently no answer since those relevant publications were not synthesised and analysed until now. Even though motivation is an internal process that activates, directs, and sustains behaviour over time, motivation is dynamic and can change depending on the situations (Gass & Selinker, 2008). It is necessary to investigate the trend, changes, and prospect of UiTM students' motivation in learning Chinese as a foreign language as well as to suggest further actions to enhance the current situation. Since UiTM has such a strong background and it is a pioneer in this field, investigating UiTM Chinese foreign language teaching can probably reflect the actual landscape of Chinese foreign language teaching in Malaysia.

1.1 Dimension of Motivation

Gardner (1985) defined motivation as the combination of effort or desire to achieve the goal of learning and favourable attitudes towards learning. Crookes and Schmidt (1991) defined motivation as the learning orientation about the goal of learning a language. Gardner (1985) divided motivation into two basic types: integrative and instrumental. Deci and Ryan (1985) distinguished motivation into intrinsic and extrinsic motivation.

Integrative motivation is portrayed by the learner's desire to integrate into the target language community. So, an individual with an integrative orientation would exhibit greater motivational effect in second or foreign language learning, and thus, achieve greater competence (Gardner & Lambert, 1972, as cited in Gardner, 1985). Whereas instrumental motivation triggers the goal to gain some social or economic reward through learning the language. Instrumentally motivated learners are more likely to see language learning as enabling them to gain something useful, such as getting a job or promotion to a better position. Studies have shown that learners who prime integrative reasons over instrumental ones as indicative of themselves evidence higher levels of motivational intensity (Gardner & Lambert, 1959; Gordon, 1980, as cited in Gardner, 1985).

There are some researchers who believe in alternative models for understanding language learning motivation. One of the popular models is applying Deci and Ryan's Self-determination theory for understanding language learning motivation. Deci and Ryan (1985) perceived motivation into intrinsic and extrinsic motivation. A person who is intrinsically motivated performs an activity simply for the satisfaction and pleasure that come with the action. It is a behaviour which a person encounters to feel competent and self-determined. Extrinsically motivated behaviours are those actions carried out to achieve some instrumental end; it is driven by the anticipation of an outcome external to the behaviour itself. In summation, while intrinsic and extrinsic motivations maintain their distinct identities, their interaction is symbiotic, not oppositional. The interplay between these two types of motivation, when comprehended and harnessed effectively, holds the promise of optimising educational and individual trajectories (Deckers, 2022). Schmidt et. al (1999) argued that the investigation of learners' language motivation should adopt both integrative-instrumental motivation and intrinsic-extrinsic motivation for a better view. Given the notable gap between motivational theories, concepts, and models, this study attempted to close the gap by investigating students' language learning motivation from both integrative-instrumental motivation and intrinsic-extrinsic motivation aspects.

1.2 Dimension of Motivation in Foreign Language Acquisition

Motivation, a core component driving students towards second or foreign language (L2/FL) proficiency, has long been the focal point of language acquisition research. According to Rost (2006), motivation has been called the "neglected heart" of language teaching, this binary perspective on motivation was pioneering for its time, but as research progressed, the realisation dawned that researching motivation in language learning is complex and multi-faceted (Ionin, 2013; Bower, 2017; Lamb, 2017). With the sociocultural dimension gaining prominence, research by Nikitina (2020) and Kim (2021) underscored the profound impact of societal perceptions and values on foreign language motivation. These new insights complemented Choi and Presslee's (2023) exploration of how personal interest and tangible rewards shape foreign language motivation.

The culmination of these multifarious insights gave rise to the dynamic systems perspective (Dörnyei et al., 2016), emphasising the fluid and interconnected nature of motivation. Consequently, foreign language motivation research has evolved from its early dichotomous roots to intricate frameworks, encapsulating the intricate web of internal drives, external pressures, and sociocultural contexts influencing foreign language acquisition. The landscape of second language acquisition (L2) was transformed with Dörnyei's introduction of the L2 Motivational Self System in 2005, which was later refined in 2009. Dörnyei (2005) introduced the L2 Motivational

Self System, weaving learner identity with constructs of internal aspirations and external obligations, namely, the Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience. The “Ideal L2 Self” is a “desire to reduce the discrepancy between our actual and ideal selves” (Dörnyei, 2009, p. 29). Xu and Ji (2021) underscored its efficacy in driving determination and persistence in foreign language learning. The findings of Csizér and Kormos (2014) as well as Ebn-Abbasi et al. (2023) spotlight the need for curricula that engage the “Ideal L2 Self”, fostering more intrinsic motivation. It has been shown to significantly correlate with integrativeness (Ryan, 2009). Conversely, the “Ought-to L2 Self” is anchored in external obligations or societal expectations (Dörnyei, 2009, p. 29). Previous research has found positive relationships between Ought to L2 Self and extrinsic motivation (Dörnyei, 2005; Dörnyei, 2009).

Over the past several decades, the landscape of foreign language learning has experienced transformative changes driven by advancements in linguistic research, pedagogical theories, technological innovations, and the effects of globalisation. It highlights a domain that is dynamic and increasingly integrated, offering tailored and real-world experiences. Thus, “L2 Learning Experience” is associated with “situated executive motives related to the immediate learning environment and experience” (Dörnyei, 2009, p. 29). The learners’ attitudes towards foreign language learning can be influenced by the immediate learning environment and experience or in other words, can be influenced by situation-specific motives. Undeniably, the L2 Motivational Self System serves as a novel and foundational framework for conceptualising second or foreign language learning motivation within the “self” context. Drawing from this, this present study suggests considerable practical implications, opens a novel pathway towards motivating foreign language learners, and broadens the scope of foreign language motivation research.

In relation to the rich theoretical and conceptual background of learners’ motivation for foreign language learning, this study addresses the following questions:

- 1) What are the factors that affect students’ motivation for learning Chinese as a foreign language over years?
- 2) What are the trends and changes of students’ motivational behaviour over years?

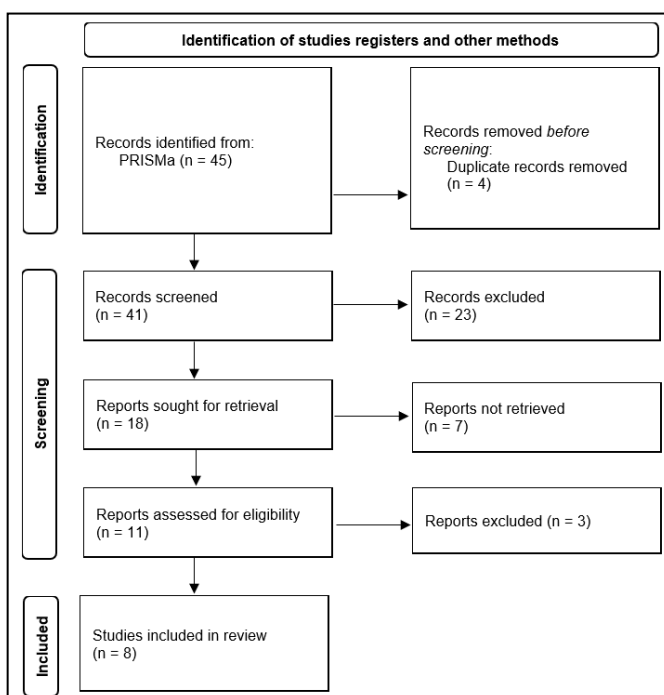
2.0 METHODOLOGY

This paper adopted a structured review method, which aimed to conduct a comprehensive overview of the publications related to UiTM students’ Chinese foreign language learning motivation over 20 years and synthesise the findings (Ahmad et al., 2017). This study investigated students’ Chinese foreign language learning motivation from a narrow perspective, focusing solely on the context of UiTM. From a narrower perspective, it is equally critical to understand the extent to which the research trend of a specific educational institution corresponds with the national or global demands of the field of study at present. UiTM is a pioneer in the field of Malaysian Chinese foreign language learning, therefore, this study focused exclusively on UiTM publications, which are believed to be able to provide a precise picture of the actual Chinese foreign language teaching landscape in Malaysia.

The review follows the PRISMA 2020 guidelines since it uses a standardised, peer-accepted methodology that aids in quality control during the revision process (Page et al., 2021). The PRISMA 2020 flow diagram (see Figure 1) depicts the several phases of this structured review, from the initial number of identified publications to the publications that were ultimately excluded and included.

Figure 1

PRISMA 2020 flowchart



2.1 Data Sources and Search Strategies

This research seeks to identify only works written by UiTM lecturers or researchers who have studied about UiTM students. A systematic search was carried out using PRISMA, a UiTM's comprehensive database management system that offers the most recent information on publication. Keyword searches consisted of the following terms which we included "OR" within each group of key terms and "AND" between those groups: "motivation" AND "foreign language" OR "second language" AND "Mandarin" OR "Chinese". These keywords were selected according to the research scope.

2.2 Eligibility Criteria

This study considered studies published from 2003 to 2023 (20 years) to investigate the similarities, differences, and changes of university students' motivational behaviour in learning Chinese as a foreign language. A publication range of 20 years was established since publications pertaining to the motivational behaviour of students were documented in the UiTM database management system as early as 2003. The inclusion and exclusion criteria employed in the PRISMA 2020 screening procedure are displayed in Table 1.

Table 1

Inclusion and exclusion eligibility criteria

Criteria	Inclusion	Exclusion
Publication timeframe	2003-2023 (20 years)	Before 2003 and after 2023
Type of publication	Scholarly journals' original papers, conference proceedings, a book/ book chapter	Dissertations, a review, notes an editorial, article in newspaper and magazine, newsletters, reports, monographs
Language	Publications in English, Malay, and Chinese languages	Articles published in other languages than English, Malay, and Chinese
Research focus	Articles that focus only on teaching	Articles that focus on other field of teaching and learning
Research field	Chinese as a foreign language	Articles that do not investigate university students Articles that do not investigate learning motivation Articles that do not investigate students' motivation in learning Chinese as a foreign language

2.3 Study Selection and Screening

There is a total of two screening rounds. Titles, abstracts, and keywords were screened in the first round; the full text was screened in the second round. An electronic data extraction table in Microsoft Excel was used to collect the data in both rounds. A numeric coding (Saldana, 2021) of the publications was performed as "(0) excluded" or "(1) included" according to the inclusion and exclusion eligibility criteria stated in Table 1. As a further clarification of Figure 1 that shows the process of study selection and screening, 45 publications were found in the early phase. 41 publications remained after the duplicates were eliminated. By screening the titles, abstracts, and keywords based on the eligibility criteria, irrelevant articles were eliminated. The stage of review was co-defined by two researchers. 18 publications met the inclusion criteria; however, 7 publications were not retrieved due to inability to locate the full text. Three researchers then independently reviewed the full text of the remaining publications to ascertain eligibility. Three researchers conducted independent screenings of the articles before discussing any discrepancies. Disagreements were resolved until full agreement was reached. After the full text was reviewed, 8 publications were determined as eligible and included in this review.

2.4 Data Extraction and Data Analysis

The data extraction process was based on the research questions that this study attempted to address. Table 2 provides a full description of the coding scheme used in this study. High coding reliability was attained by completing three iterative coding cycles that included review, coding, discussion, and clarification. The process yielded an inter-rater reliability value of 0.86, which shows a good agreement between the three reviewers after independently coding the available publications (Landis & Koch, 1977).

Table 2*The coding schemes*

Code	Code justification
Year of publication	Year of publication between 2003-2023
Author	Affiliations of corresponding author and co-author(s)
Title	Publication title
Type of publication	Scholarly journals' original papers, conference proceedings, or a book/book chapter
Content scope	The scope of research founded on students' motivation in learning Chinese as a foreign language
Target group	Participants being investigated and their background
Conceptual and theoretical foundation	Dimension of motivation
Motivational factors	Factors that trigger students' learning motivation based on the dimension of motivation
Research outcome	The findings that conclude students' motivation in learning Chinese as a foreign language

The analysis began by identifying significant variables such as motivational factors and outcomes as initial coding analysis. The data were analysed through directed content analysis (Hsieh & Shannon, 2005) along with the dimension of motivation presented in the publications which serves as the conceptual and theoretical underpinning of students' motivation in learning Chinese as a foreign language. After that, thematic analysis was conducted to identify patterns and themes, which led to the reporting of students' sustainable or changing motivational behaviour over years.

3.0 RESULTS

3.1 Publications of Students' Motivation in Learning Chinese as a Foreign Language

This section discusses the included publications (see Appendix) from three aspects: publication phases, research method and data collection, and sample selection.

3.1.1 Publication phases

This study set the range of publication from 2003 to 2023, but the first publication that explicitly relates to students' motivation in learning Chinese as a foreign language was published in 2006 (e.g., Tan & Ooi, 2006). There was only one publication at the time; however, since 2016, it has gained much attention as four publications have been released in 2016 (e.g., e.g., Tan et al., 2016; Tan, Hairul Nizam Ismail & Ooi, 2016; Tan, Lim & Hoe, 2016; Ting et al., 2016) and one publication has been made available in 2017 (e.g., Tan et al., 2017). The publication in 2017 (Tan et al., 2017) appeared to be an extended version of Tan, Lim & Hoe's (2016) study since the same group of participants took part in both studies. After some years, one related publication was released in 2021 (e.g., Gan et al., 2021) and the most recent one was published in 2023 (e.g., Mohd Azlan Shah Sharifudin et al., 2023). Obviously, there were huge publication gaps between 2006 to 2016 and 2017 to 2021 which divided the investigation into three phases: 2006; 2016 and 2017; 2021 and 2023.

3.1.2 Research method and data collection

With respect to the research methods of included publications (N=8), all publications are empirical studies concerning students' motivation in learning Chinese as a foreign language. Thus, it seems there is a trend for empirical study overall from then until now. Among the empirical studies, seven publications are quantitative studies using questionnaire, only one publication (Tan et al., 2016) used qualitative method to analyse the content of students' written essays. Qualitative or in-depth discovery is severely lacking among the publications. To close the methodological gap, future research should pay more focus on qualitative or mixed method to further investigate students' learning motivation.

3.1.3 Sample selection

Based on the description of sample selection among included publications, the recruited participant groups that learn Chinese as a foreign language originated from different disciplines: Business Studies and Islamic Banking (N=1), Office Management and Technology (N=1), Business Management (N=4), Business and Administration (N=2), Engineering (N=1), Administrative Management (N=3), Informative Management (N=2), Art and Design (N=3), Accountancy (N=2), Science (N=1), Hotel and Tourism Management (N=1), Communication and Media (N=1), Computer Science and Mathematics (N=1), Plantation and Agrotechnology (N=1), Social Science and Humanities (N=1), Science and Technology (N=1). Nonetheless, the publications did not consider the variety of discipline among participants as a significant factor that might affect the motivational behaviour of students. Similarly, although the publications

elaborated the differences of participants' disciplines, ages, and Chinese learning levels at the methodological section, they were not significantly related to the study outcome. In other words, the publications discussed students' learning motivation in a general manner, except for the earliest publication, Tan and Ooi (2006) which deliberately related gender and Chinese learning levels to students' motivation.

According to Table 3, most publications clearly targeted either Diploma or Degree students. Publications that investigated both Diploma and Degree students did not anticipate comparative discussion of students' motivation yet tended towards general discussion. Even so, the publications over years welcome a critical comparison investigation for this study, in which students' motivational behaviour changes could be identified from phase to phase:

- 1) Diploma, Phase 1 → Mixed/not stated, Phase 2 → Mixed/not stated, Phase 3; and
- 2) Degree & Mixed/not stated, Phase 2 → Degree & Mixed/not stated, Phase 3

Meanwhile, Diploma and Degree students' motivational behaviour could be compared in that context.

Table 3

Participants distribution in the included publications

Publications	Diploma	Degree	Mixed/Not stated
Phase 1 publication (2006)	L1, L2 (N=1)		
Phase 2 publication (2016 & 2017)		L1, L2, L3 (N=8)	L1, L2, L3 (N=8)
Phase 3 publication (2021 & 2023)		L3 (N=1)	General (N=1)

Note. L1 – Level 1 (elementary level); L2 – Level 2 (intermediate level); L3 – Level 3 (advanced level)

N = number of publications

3.2 Motivational Factors that Influence Students' Learning Motivation

The motivational dimension, which was discussed among the publications over years, primarily focused on two dimensions.: (1) general - instrumental, integrative, intrinsic, extrinsic motivation; (2) second language self-system – Ideal L2 Self, Ought-to L2 Self, L2 Learning Experience. These two major dimensions played a role as the conceptual and theoretical underpinnings for students' learning motivation investigation.

According to the publications, the most common motivational dimension among foreign language students was instrumental motivation. The factor that led to this result was that students learn a new language to satisfy a course or to fulfil the academic requirement of the university and they believe that better communication and understanding of foreign language might be useful for their future career (Tan, Lim & Hoe, 2016; Tan et al., 2016; Tan, Hairul Nizam Ismail & Ooi, 2016; Tan & Ooi, 2006). Ting et al. (2016) and Mohd Azlan Shah Sharifudin et al. (2023) discovered that students' instrumental motivation was aligned with integrative motivation. The factor that supported students' integrative motivation was the social support provided in the learning context that encouraged students' desire to integrate into the target language community and to overcome fear or anxiety.

Interestingly, Gan et al. (2021) indicated that even though students had both high levels of integrative and instrumental motivations, students were more engaged on attitudinal motivation than integrative and instrumental motivations. It means students' attitudes toward the learning situation is a significant factor that affects students' overall performance in foreign language acquisition. Within a variety of learning situations, teacher-specific source was the most dominant factor of attitudinal motivation, which comprised the integral role of teacher such as teaching approach, teacher's competency, and encouraging feedback.

Publications also discovered strong intrinsic motivation among foreign language students (Tan & Ooi, 2006; Tan et al., 2016; Tan, Hairul Nizam Ismail & Ooi, 2016), and the main factors that drove students' intrinsic motivation were their interest, enjoyment, and satisfaction in learning a new language. Nonetheless, students' interest, enjoyment, and satisfaction in learning were decided by other factors such as the difficulty level of lesson or assignments, types of activities, and instructor. Some publications discovered students' inclination towards extrinsic motivation (Tan, Lim & Hoe, 2016; Tan et al., 2017; Ting et al., 2016). The extrinsic motivation was correlated with L2 learning experience which students' learning motivation was strongly related to the immediate learning environment and experience. The factor associated with students' learning experience was their achievement in learning Chinese as a foreign language and the conduciveness of the learning environment.

3.3 Motivational Dimension Distribution Within Publications: Conceptual and Theoretical Underpinnings

Based on the investigation outcomes summarised in Table 4, Diploma students' strongest motivational dimension was instrumental and intrinsic motivation. However, when anxiety or fearsome comes into play as one of the features that affects students' motivation in learning, the discussion of students' motivation inclined towards the dimension of instrumental-integrative and extrinsic motivation, where instrumental motivation remained significant in the context yet corresponded to integrative motivation. There was no significant

motivational behaviour change across the years and publication phases, but according to Tan and Ooi (2006), girls have stronger motivational intensity than boys and students' motivation have high probability to shift from intrinsic to extrinsic when they move to higher level of learning.

Table 4

Motivational dimensions discussed in the included publications

Publications	Phase 1/2/3	Motivational dimension	Outcome
Diploma			
Tan & Ooi (2006)	1	Instrumental, integrative, intrinsic, extrinsic motivation	Strongest motivational dimension: Instrumental & intrinsic motivation Gender: Girls have stronger motivational intensity Chinese learning level: Level 1 students have higher intrinsic motivation than Level 2 students
Tan et al. (2016)	2	Instrumental, integrative, intrinsic, extrinsic motivation	Strongest motivational dimension: Instrumental & intrinsic motivation
Tan, Hairul Nizam Ismail & Ooi (2016)	2	Instrumental, integrative, intrinsic, extrinsic motivation	Strongest motivational dimension: Instrumental & intrinsic motivation
Ting et al. (2016)	2	Anxiety: Instrumental, integrative, intrinsic, extrinsic motivation	Strongest motivational dimension: Instrumental-Integrative & extrinsic motivation
Mohd Azlan Shah Sharifudin et al. (2023)	3	Fear: Instrumental, integrative, intrinsic, extrinsic motivation	Strongest motivational dimension: Instrumental-Integrative motivation
Degree			
Tan et al. (2016)	2	Instrumental, integrative, intrinsic, extrinsic motivation	Strongest motivational dimension: Instrumental & intrinsic motivation
Tan, Hairul Nizam Ismail & Ooi (2016)	2	Instrumental, integrative, intrinsic, extrinsic motivation	Strongest motivational dimension: Instrumental & intrinsic motivation
Tan, Lim & Hoe (2016)	2	Instrumental, integrative, intrinsic, extrinsic motivation L2 motivational self-system: Ideal L2 Self, Ought-to L2 Self, mixture, L2 Learning Experience	Strongest motivational dimension: Instrumental & extrinsic motivation L2 Learning Experience
Ting et al. (2016)	2	Anxiety: Instrumental, integrative, intrinsic, extrinsic motivation	Strongest motivational dimension: Instrumental-Integrative & extrinsic motivation
Tan, Lim & Hoe (2017)	2	Instrumental, integrative, intrinsic, extrinsic motivation L2 motivational self-system: Ideal L2 Self, Ought-to L2 Self, mixture, L2 Learning Experience	Strongest motivational dimension: Extrinsic motivation L2 Learning Experience
Gan et al. (2021)	3	Instrumental, integrative, attitudinal motivation	Strongest motivational dimension: Attitudinal motivation (teacher-specific, course-specific, group-specific)
Mohd Azlan Shah Sharifudin et al. (2023)	3	Fear: Instrumental, integrative, intrinsic, extrinsic motivation	Strongest motivational dimension: Instrumental-Integrative motivation

For Degree students, instrumental motivation remained significant in different phases of study. At the same time, attitudinal motivation emerged to be a crucial motivational dimension that required attention (Gan et al., 2021). Similar to Diploma students, Degree students' motivation inclined towards instrumental-integrative and extrinsic motivational dimension when related to anxiety or fear during foreign language learning. Nonetheless, there was a distinct motivational behaviour change from intrinsic to extrinsic since 2016 to 2017, while publications in 2021 and 2023 did not specifically address this matter. We could summarise that, as time went on, Degree students become more extrinsically driven when compared to Diploma students. We could also anticipate that students'

motivational behaviour in learning Chinese as a foreign language gradually change from intrinsic to extrinsic after shifting from Diploma to Degree.

In brief, anxiety and fearsome consideration emerged since Phase 2 publication, targeting both Diploma and Degree students. These two features have an intimate relationship with students' foreign language learning motivation which calls for more attention and further investigation.

4.0 DISCUSSION

There are three phases of publications which have provided insights into the trend and changes of UiTM students' motivation in learning Chinese as a foreign language. Generally, instrumental motivation remains significant over years and across groups (Diploma and Degree) as it refers to a fundamental and pragmatic reason for language study which keeps students to learn the target language seriously and to strive for achieving desired goal in future career (Siahaan et al., 2022). The finding showed that UiTM students, from then until now, have great awareness of "why" they are required to learn a new language as requested by the university or faculty. It demonstrated that UiTM students have a heightened awareness of language acquisition in comparison to students identified in other research who may not have had a specific intention of learning a new language (Muñoz et al., 2024). Students' foreign language learning effort in complying with the career demands presents a prospective and sustainable growth of Chinese as a foreign language acquisition among higher education students.

After analysing the research outcomes of the included publications, integrative motivation appeared to be as important as instrumental motivation. Both Degree and Diploma students that exhibited high levels of instrumentality and integrativeness had a favourable perspective on the language learning situation (Gardner, 2000). Students had shown openness towards other cultural groups and looked forward to integrating themselves into other cultural community. However, according to Ting et al. (2016), students' anxiety and fear of learning Chinese as foreign language was the negative impact of their great desire of being accepted by the target language user community. Students were anxious and fear of learning Chinese because they do not have sufficient experience with the target community which caused them to be lacking confidence, afraid of making mistakes or misunderstanding, uneasy to express themselves and so on. Consistent with the perspective raised by Gardner (1985), language anxiety has a negative impact on the foreign language learning process. To be specific, communication and comprehension apprehension retarded students' positive attitude and desire to get close to the target language community (Mohd Azlan Shah Sharifudin et al., 2023). In the current context of UiTM foreign language teaching and learning pedagogical approach, features that need to be paid close attention to are to reduce students' language anxiety and fear to enhance their integrative motivation. At present, the studies merely investigated the situation of students' anxiety (Ting et al., 2016) and the relationship between motivation and fear of learning (Mohd Azlan Shah Sharifudin et al., 2023) without looking into the way to overcome it. Future studies are required to close the gap.

There were three publication phases, as being stated in previous section: 2006; 2016 and 2017; 2021 and 2023. There was no significant motivational behaviour change of Diploma students across the years and publication phases. Diploma students were defined to be intrinsically motivated throughout the years of learning Chinese as a foreign language. Nonetheless, the earliest publication stated that girls have stronger motivational intensity than boys (Tan & Ooi, 2006), which students' personal factor, trait, or characteristics that affect their intrinsic motivation in learning foreign language require further discovery since there was no follow-up investigation about that matter until today. Meanwhile, Tan and Ooi (2006) anticipated reducing of students' intrinsic motivation if the learning content becomes more challenging in their next level of learning. In general, we could say Diploma students' motivational behaviour in learning Chinese as a foreign language remained the same over years (intrinsically motivated), but there is still a lack of comparative investigation of Diploma students' change of behaviour within different level of learning (e.g., Level 1, Level 2, Level 3). The comparative investigation may distinctly display students' motivational behaviour changes and suggest clearer direction for students' future language learning motivation development.

Intrinsic motivation that fundamentally embedded in Diploma students persisted until Degree (Tan et al., 2016; Tan, Hairul Nizam Ismail & Ooi, 2016). Among Degree students, however, there was a shift from intrinsic to extrinsic motivation from 2016 to 2017, yet later publications did not specifically address the concern. The motivational behaviour change did not consider the variety of learning levels, which suggested the need for further investigation into this matter. From the broad perspective, Degree students preferred extrinsic motivation related to the immediate learning environment and experience. This finding is supported by previous studies. For instance, Tan, Lim and Hoe (2016; 2017) elaborated that L2 learning experience has a strong dominance among Degree students. The situation-specific motives of students' L2 learning experience involves their engagement with school context, syllabus and materials, tasks, peers, and teacher (Dörnyei, 2019). Attitudinal motivation, proposed by Gan et al. (2021) among the selected publications have intimate correlation with this matter, in which students, particularly third level foreign language students, displayed different attitudes to specific learning situations (e.g., course, teacher, group). In short, the distinct change of students' behaviour requires in-depth discovery of the factors influencing students' change of behaviour, the impact of the behavioural changes on students' foreign language learning, and the reason of the rise of situation-specific motives in elder students and higher foreign language learning level students.

From pedagogical perspective, it is not conclusive that extrinsic motivation will interfere with intrinsic motivation, which some studies found that extrinsic motivation does not negatively affect students' intrinsic motivation (Cameron & Pierce, 1994; Ledford et al., 2013; Mekler et al., 2013) because a strong positive correlation exists between intrinsic and extrinsic motivation (Deckers, 2022; Takahashi, 2018). For example, intrinsic motivation such as interest, enjoyment, and satisfaction in learning drive students' inherent desire to seek out novelty and challenge as well as to develop and grow (Legault, 2016); based on intrinsic motivation, extrinsic motivation that originated from the social learning environment may help in elevating students' intrinsic motivation (Takahashi, 2018).

In the UiTM context, after the changes over years, the current state of students' intrinsic and extrinsic motivation in learning Chinese as a foreign language is unstable. A decline in intrinsic motivation from Diploma to Degree level or from Level 1 to Level 2 might retard students' further mastery of the target language; although extrinsic motivation appears to assist students' learning, increased extrinsic motivation does not indicate that students' intrinsic motivation is supported. However, Degree students' inclination for extrinsic motivation could be preserved through appropriate setting of the immediate learning environment, considering school context, syllabus and materials, tasks, peers, and teacher (Dörnyei, 2019). Whereas intrinsic motivation requires more attention nowadays to ensure a sustained foreign language learning process in the future, regardless of learning levels or personal factors. Marszalek et al. (2022) established substantial support for this assertion.

5.0 CONCLUSION

This study aimed to investigate the trend, changes, and prospect of UiTM students' motivation in learning Chinese as a foreign language. This study also provides insight into students' motivational behaviour and the gap appeared within the included publications. Regarding this matter, this study identified areas that require special attention, anticipated future development of students' motivation in learning, and suggested further action to enhance the pedagogical approaches.

This study investigated the related publications from three phases: 2006; 2016 and 2017; 2021 and 2023. Regarding publications, this study discovered methodological gap that calls for more qualitative and mixed method investigations on the subject matter in the future. Furthermore, population and analysis gap were identified as if the included publications merely analysing students' learning motivation in a general way. This study suggests a consideration on the possible impact of different genders, Chinese learning levels, disciplines, and other related factors on the research outcomes, as highlighted in a foreign language study conducted by Yusri et al. (2012). More comparative studies are encouraged and recommended to investigate different motivational behaviour among Diploma and Degree students to relate, anticipate, and improve.

On the aspect of students' motivational behaviour trend and changes, this study identified the significance of both instrumental and integrative motivation on students' foreign language learning, regardless of their educational levels. Therefore, maintaining students' awareness regarding the acquisition of a new language is essential to aid in their endeavours to meet the requirements of their prospective careers and to assist their integration into a particular community. However, anxiety and fear of learning had been raised, recommending further action to sustain students' instrumental and integrative motivation through overcoming anxiety and fear of learning rather than merely focusing on the current situation of students' anxiety and the superficial relationship between motivation and fear of learning.

Within the three distinct publication phases (2006; 2016 and 2017; 2021 and 2023), although Diploma students inclined towards the dimension of instrumental-integrative and extrinsic motivation to deal with anxiety and fear of learning, overall, Diploma students' motivational behaviour trend in learning Chinese as a foreign language remained intrinsically motivated over years. However, distinct change from intrinsic to extrinsic motivation occurred when students shifted from Diploma to Degree, as highlighted in the 2016 and 2017 publications on Degree students' foreign language learning motivation. Actions must be taken to close the publication gaps since there was no further discussion on students' change of motivational behaviour after 2017. This study recommends further investigation on the factors influencing students' change of behaviour, the impact of the behavioural changes on students' foreign language learning, and the reason of the raise of situation-specific motives in elder students and higher foreign language learning level students. At the same time, fostering intrinsic motivation in different educational level students requires more attention nowadays in order to close the gap between intrinsic and extrinsic motivational dimensions because they are supposed to correlate and support each other (Deckers, 2022; Takahashi, 2018).

The number of publications on the related topic is still limited but we can see a potential growth of publication. Given the scope of the study, the limited number of publications included was evidently a great limitation of this study. It indicates the needs of expanding the research at a wider range of national or international institutions, as well as for expanding the study at different educational levels by including more related studies from different research databases. As a contribution of this study, future studies could take this study's suggestions into consideration to expand the research area. Moreover, this study provides pedagogical implications on the teaching and learning Chinese as a foreign language in university context.

ACKNOWLEDGEMENTS

This study was not supported by any grants from funding bodies in the public, private, or not-for-profit sectors.

CONFLICT OF INTEREST

The author declares no conflicts of interest regarding the publication of this paper.

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APPENDIX

List of Publications Included in the Review

No.	Author/ Year	Title	Type of publication	Content scope	Target group	L1	L2	L3	Significant participant criteria
Phase 1 publication									
1	Tan & Ooi (2006)	Motivation of Malay students towards learning Mandarin as a third language	Book chapter	Motivation	UiTM Diploma students: Business Studies and Islamic Banking	√	√	-	Gender Chinese learning level
Phase 2 publication									
2	Tan et al. (2016)	The motivation of undergraduates learning Mandarin as a foreign language	Journal article	Motivation	UiTM students: - Office Management and Technology - Business Management - Engineering	√	√	√	-
3	Tan, Hairul Nizam Ismail & Ooi (2016)	Exploratory factor analysis: Blended motivation of Malay students learning mandarin as a foreign language	Journal article	Motivation	UiTM students	√	√	√	-
4	Tan, Lim & Hoe (2016)	L2 motivational system of Malay students who learn Mandarin as a foreign language	Proceedings	Motivation	UiTM Degree students: - Administrative Management - Business Management - Informative Management - Art and Design	√	√	√	-

5	Ting et al. (2016)	Mandarin language learning anxiety among non-Chinese learners: A case of University Teknologi MARA	Journal article	Motivation & anxiety	UiTM students: - Administrative Management - Business Management - Accountancy - Science	√	√	√	-
6	Tan, Lim & Hoe (2017)	Analyzing the relationship between L2 motivational self-system and achievement in Mandarin	Journal article	Motivation & achievement	UiTM Degree students: Administrative Management Business Management Informative Management Art and Design	√	√	√	-
Phase 3 publication									
7	Gan et al. (2021)	Motivation in foreign language learning among Malay undergraduates in a Malaysian public university	Journal article	Motivation	UiTM Degree students: Business and Administration Art and Design Accountancy Hotel and Tourism Management Communication and Media Computer Science and Mathematics Plantation and Agrotechnology	-	-	√	-
8	Mohd Azlan Shah Sharifudin et al. (2023)	Is there a relationship between motivation and fear of learning a foreign language?	Journal article	Motivation & fear	UiTM Diploma and Degree students: Social Sciences and Humanities Business and Administration Science and Technology	-	-	-	-

Note. L1 – Level 1 (elementary level); L2 – Level 2 (intermediate level); L3 – Level 3 (advanced level)