Impact of Contextualized Mobile Assisted Chinese Learning on Students' Language Learning Motivation: Comprehensive Theoretical Framework

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The role of situated, Contextualized Mobile Assisted Language Learning (CMALL) is known. However, with regards to affective outcomes, a theoretical framework is missing. In light of this challenge we developed a theoretical framework, which explains CMALL influence on language learning motivation. The difficult Chinese language calls for particular attention of CMALL and motivational outcomes. According to the developed framework, real world and real life contexts enhance language learning motivation through mediation of learners' ability to transfer and power to select; learners' self-efficacy; and learners' Chinese learning goals. The proposed framework contributes theoretically by illuminating the relation between CMALL and language learning motivation. Practitioners may also be encouraged to incorporate CMALL.

Keywords: Language learning motivation, mobile assisted language learning, contextualized learning, Chinese learning.

Introduction

Second/foreign language learning (L2) literature (e.g. Pegrum, 2014; Reinders & Pegrum, 2016) has emphasized the learning prominence of situated, Contextualized Mobile Assisted Language Learning (CMALL). With regards to affective outcomes, such as language learning motivation or anxiety, however, exploring reviews of MALL literature (Burston, 2013; Zhang, 2018) suggests the discussion is mainly general (e.g., learners' interest) and a theoretical framework that specifies contextual definitions, known language learning affective variables and arguments for their relations is missing.

Based on computer science and MALL literature, as well as on an empirical study, Cohen and Ezra, (2018) developed a CMALL model in previous studies. The model defined contextual variables (*Real World* and *Real Life*). A theoretical explanation for CMALL's effect on L2 motivation, embodied by real world and real life CMALL, is proposed based on synthesizing main stream psychology theories of motivation, as well as L2 well-known motivational constructs with SLL (Second Language Learning) theories. Chinese is difficult to learn (Moser, 1991; Spencer, 2015). Therefore, the purpose of this study is to explore contextualized Chinese learning and motivation to study Chinese, aiming at addressing the following theoretical question: Q1. How does real world/real life CMALL enhance language learning motivation?

Chinese Learning Goals and Motivation

Theories of general and language learning motivation examine the sources of motivation, namely the motives to study the language (Dörnyei & Ushioda, 2011). A distinction is drawn between the goals, and the effort or persistence which is referred to as motivation and comprises elements such as motivational intensity (effort) and desire to learn the L2 (Gardner & Lambert, 1972; Gardner, 2001). Discussed goals constitute: *language attainment* (Eccles, 2007; Ames, 1992); *social goals* (Wentzel, 2000); *integrative or instrumental orientations* (Gardner & Lambert's, 1972); *intrinsic* and *extrinsic* motivation (Ryan & Deci, 2000); i*deal L2 self,* and *ought-to L2 self* (Dörnyei & Ushioda, 2009); finally, language learners' needs, from the very basic ones (Oxford & Shearin, 1994) which in this study are termed *Functional Need Goals*. Notably, different *Chinese goals* may potentially be present, or may co-exist (Dörnyei & Ushioda, 2011).

According to achievement motivation theory, the motivation to engage in a task and its performance (Dörnyei & Ushioda, 2011) are determined by *expectancy of success* and *incentive value* attached to these tasks (Atkinson & Raynor, 1974). Increase of expectancy or value for the learners should be linked to an increase in motivation to perform the task. Goal setting theory of motivation is compatible, in that commitment to goals is enhanced when people believe the goals are possible and important (Locke, 1996). In congruence with both theories, the Chinese goals have expectancy and value attached to them. CMALL, embodied by real world and real life contexts, is likely

to increase the expectancy and value of these diverse Chinese goals, consequently increasing the motivation to study the language. In light of different learners' personal goals, which may not necessarily constitute language attainment (Colpaert, 2010; Magnan & Lafford, 2012), CMALL's suggested comprehensive contribution becomes prominent.

CMALL Factor 1: Learners' Ability to Transfer
When language learners perform a CMALL event, they are able to transfer knowledge and skills to the real world or real life contexts (Klopfer, 2008). They also promote their procedural-automatized, context-specific knowledge (DeKeyser, 2015). From a language development perspective, they are moving up on the learning curve from possessing abstract, declarative knowledge (metalinguistic knowledge such as words or rules) towards possessing the more context specific procedural-automatized knowledge which is essential to further advance towards language automatization (Marsden, Mitchell, & Myles, 2013). Thus, being able to transfer the knowledge to the real world and real life contexts can raise the language learners' feeling of success in their ability to transfer in Chinese. It may also increase their sense of progress from declarative ability to declarative-procedural-automatized ability in Chinese. Given that students' self-efficacy can be promoted by feedback on performance (Schunk, 1991), such as feeling of success (Oxford & Shearin, 1994) as well as sense of progress (Schunk, 2012), therefore feeling successful in transfer of Chinese or sensing progress in the learning continuum can develop the students' self-efficacy.

Low or absence of CMALL may still promote learners' feeling of success, sense of progress and self-efficacy. However, since learners build upon the abstract declarative rules when encountering new context (DeKeyser, 2015), or, given the contextual changes (Schilit, 1995), when meeting "known" contexts, transferring to the real world or real life contexts works on learners' procedural-automatized language knowledge as well as on their declarative one. Therefore, the higher the CMALL, the higher the self-efficacy in Chinese, as it is the combined increase of both declarative and procedural-automatized self-efficacy.

Self-efficacy is one of the key processes theorized to determine goals expectancy as learners' judge their own competence (Dörnyei & Ushioda, 2011). Furthermore, higher self-efficacy leads to setting higher, more challenging goals where people are more likely to believe they will receive a reward (Locke & Latham, 1990; Oxford & Shearin, 1994). Therefore, the increase in students' self-efficacy in Chinese leads learners to perceive the Chinese goals as more possible and more valuable. Learners may also set new Chinese goals. Therefore, it can be argued, a higher CMALL of learners affects their goals, and consequently their motivation, more strongly. The motivating aspect of learners' ability to transfer is indeed reflected in SDT theory (Ryan & Deci, 2000) noting conditions which support learners' competence as conducive for higher self-determination towards more intrinsic motivation. A deeper examination of specific language learning goals can shed more light on this phenomenon as explained below.

First, learners with higher self-efficacy in Chinese, of both declarative and procedural-automatized abilities, further amplify their language attainment goal as they may attain higher value and expectancy of both types of knowledge, namely tackling two sub-goals of language attainment. Furthermore, there is existing evidence for self-efficacy influence on enjoyment. For example, reading efficacy is found correlated with reading enjoyment (Smith, Smith, Gilmore, & Jameson, 2012); self-efficacy generated during physical activity, particularly one that is hard to achieve, can increase learners' enjoyment (Hu, Motl, McAuley, & Konopack, 2007). These findings may suggest that language learners with higher self-efficacy in the language also enjoy more, therefore are likely to receive more positive feedback on enjoyment and thus increase their self-efficacy (Schunk, 1991), namely, they are more likely to believe they can produce results (Bandura, 2001) of enjoyment in language learning. Thus, higher self-efficacy in Chinese, of both declarative and procedural-automatized abilities, also attains higher self-efficacy in language knowledge enjoyment of both types of knowledge (in addition to efficacy in the language knowledge itself). Consequently, higher value and expectancy of both sub-goals of intrinsic enjoyment during language attainment, either declarative or procedural-automatized, are increased. Second, since tasks gradually become more reliant on procedural-automatized knowledge than declarative (DeKeyser, 2015), it may thus be argued that other non-academic language achievement goals such as social or functional need goals like learning how to order in a restaurant or buy a cup of coffee, require more access to procedural-automatized knowledge. Hence, learners with higher self-efficacy in both declarative and procedural-automatized abilities further amplify these goals as they may attain both higher value and expectancy in the smaller declarative portion of the other goals – which eventually might be limited – and higher value and expectancy in the procedural-automatized portion of the goal which may be boundless. Finally, learners with higher self-efficacy in both declarative and procedural-automatized abilities are perhaps more likely to expand and set new Chinese goals.

CMALL Factor 2: Learners' Power to Select

When language learners perform a CMALL event, they produce their own learner-generated context (Pegrum, 2014). They are freely selecting challenges within the context, which are presumably in balance with their proficiency (Hsu, 2017), therefore, success and progress are likely to be experienced positively. More importantly, they select what they find interesting, resulting in more personalized and meaningful experiences (Comas-Quinn, Mardomingo, & Valentine, 2009). Thus, the higher the CMALL, the more likely events are catered towards the learner goals within the context. This effect is especially strong when the research design is "free" where learners' informal MALL activities are examined. Moreover, providing students with feedback not only on performance but also on goals, further increases their self-efficacy (Bandura & Cervone, 1983). Therefore, the higher the CMALL, the more relevant events are to learners' goals within the context, the more feedback is catered towards one's performance as well as goals, the stronger self-efficacy in Chinese, as learners – in addition to developing the general declarative-procedural-automatized knowledge self-efficacy in Chinese – are also strengthening more specific declarative and procedural-automatized knowledge needed for their other specific goals.

Specifically, with regards to language learning goals, this further increased self-efficacy in Chinese is more strongly affecting the goals, as learners not only improve language attainment (and its intrinsic aspect) or other goals, or perhaps add new Chinese goals as described above, they may also further intensify the value/expectancy increase effect of other specific goals such as social or functional need goals. The motivating aspect of learners' power to select is indeed reflected in Rayen and Decy's SDT theory (2000) noting conditions which support learners' autonomy as conducive for higher self-determination towards intrinsic motivation. Figure 1 illustrates the two feedback factors, their effect on self-efficacy in Chinese, and its consequent effect on Chinese goals and motivation to study Chinese.
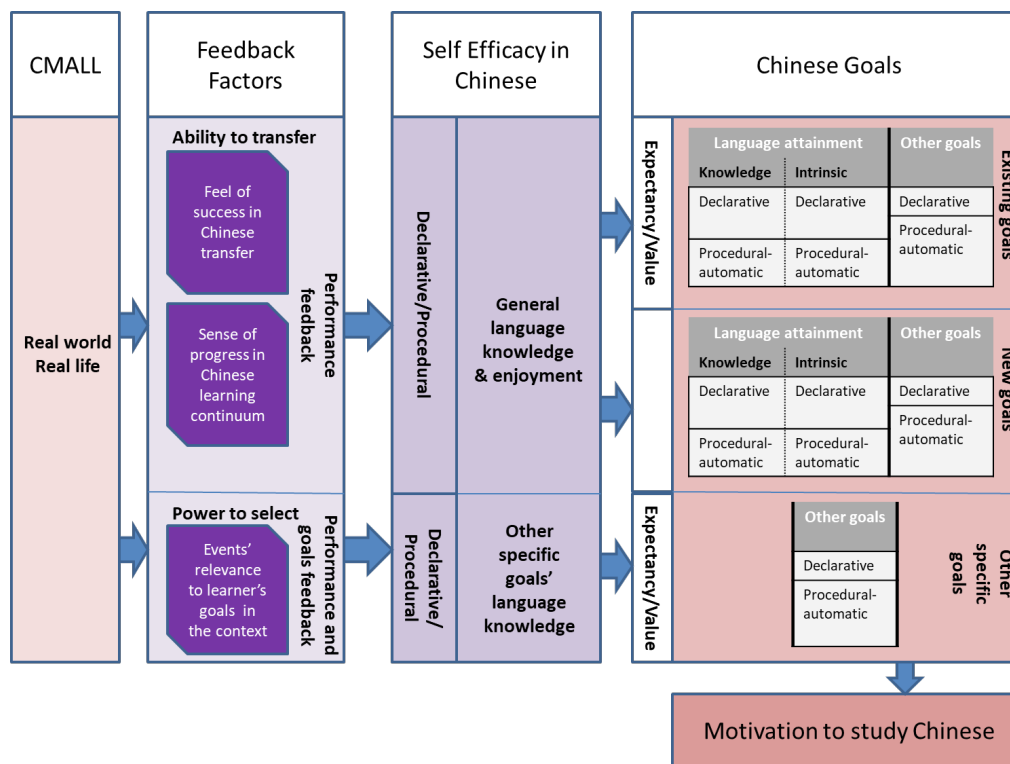

Figure 1. **The proposed CMALL-Motivation Framework**

Discussion

Scholars stress the significance of the learning situation in shaping goals, especially for learners at starting levels, when goals are still not solidified (Ushioda, 2001). In accordance, the present study shows the theoretical effect of CMALL, regardless of what learners' goals are and even when learners' goals are still restricted, for example, to basic functional need goals or even in case learners have no goals yet.

CMALL and Language Learning Motivation – the Dynamic Perspective

Contemporary dynamic perspectives of motivation which investigate contextual factors and individual-contextual interactions (Ushioda & Dörnyei, 2012) stress the importance of studying motivation development through the person's interaction with the context and the self, namely by observing both external and internal factors (Dörnyei & Ushioda, 2011). Given that CMALL involves both external factors related to the real world and real life contexts, as well as learners' internal factors such as success, progress, relevance and self-efficacy, the view presented in this paper of CMALL influence on motivation fits into contemporary perspectives of motivation.

When exploring contextualized MALL cases studies (e.g. Burston, 2013; Zhang, 2018), a focus on motivation with regards to the contextual learning systems (e.g. attitudes towards the system) rather than motivation to learn the language is found. Describing integrative motivation components, Gardner (2001) uses the triad of *Integrativeness* which constituents include amongst other integrative orientations, *Attitudes Towards the Learning Situations,* such as those directed towards course materials, and *Motivation* variables, such as the effort exerted to learn the language. Judging by these standards, it seems current CMALL studies to date and to the best of our knowledge, are mostly restricted to examining attitudes towards the learning situation, specifically to the course material as embodied by the specific contextual system checked. Given the important role of proximal and distal goals in sustaining the long-term language learning process (Dörnyei & Ushioda, 2011), the present framework fills the gap and offers a CMALL examination from a goal-motivation perspective. At a higher level, in line with contemporary dynamic approach of motivation, the framework offers a method for examining how motivation develops as learners' internal factors interact with external contextual factors.

Contribution

This comprehensive theoretical CMALL motivation framework will contribute in deepening the theoretical understanding of CMALL, as well as language learning motivation. Furthermore, language teaching practitioners will be encouraged to consider embedding real world/real life CMALL within their curriculum.

Acknowledgement

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