Chapter 9
Measuring Mobile Experience in Chinese Language Learning

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ABSTRACT

After mapping dimensions and directions of experience in applying mobile technologies to Chinese language learning, another key task is to measure different levels of experience in terms of its dimensions and directions of learners' experience in leveraging mobile technologies, mobile learning apps in particular. Equipped with the proposed 6E-r framework of mobile experience, this chapter provides indicators and criteria in measuring mobile learning experience in applying mobile technologies to Chinese language learning around the world. This chapter also developed an online questionnaire for future research reference in order to successfully gauge the different levels of experience in applying mobile technologies to Chinese language learning. Ultimately, this chapter attempted to resolve the research question, that is, how mobile learning experience is enhanced by narrowing the gap between the normative experience and the empirical experience.

INTRODUCING 6E FRAMEWORK OF MOBILE EXPERIENCE

User experience (UX) falls into four types according to different time spans of usage. They are "a user imagination before first usage (anticipated user experience), a user feeling during an interaction (momentary user experience), a user appraisal after a particular usage (episodic user experience) or a user view on a technology as a whole over multiple periods of usages (cumulative user experience)" (Lim, et al., 2017, p. 377; Roto et al., 2011). Mobile experience (MX), which is derived from UX, has

become increasing important since mobile has reached almost every corner of the world and been used in almost all human activities. With the wide application of mobile, it has produced diversified and unique mobile experiences, such as mobile-assisted language learning (MALL) experience. MALL enables learners to learn anywhere and anytime with their mobile devices. The benefits of mobile learning also include but not limited to: 1) accessing information quickly, 2) communication & content collaboration, 3) interact with course contents in various ways, and 4) situated learning (Gikas & Grant, 2013). Meanwhile, "literature on experiential marketing stresses that a [mobile] product should no longer be seen as simply delivering a bundle of functional features and benefits—it provides experiences" (Hassenzahl, 2018, p. 301). In the same vein, we are moving toward to or already at the stage of experience economy, "where experiences supplant services as the predominant economic offering in terms of GDP, employment and especially actual value" (Pine & Gilmore, 2013, p.26). In other words, consumers are paying more attention to both process and outcome of interacting with mobile mediated content, product, service, or their combinations.

The focus of this chapter is to measure *mobile learning experience* in the context of applying mobile technologies, mobile learning apps in particular, to Chinese language learning, and to explore *how mobile learning experience can be enhanced by narrowing the gap between the expected and actual mobile learning experience*. To that end, this chapter follows the working definition of mobile experience proposed by Xu (2018). Mobile experience refers to both a process and an outcome of a user's interaction with mobile mediated products, services, contents, or their different combinations (Xu, 2018). Based on his 6E definition (Xu, 2018), mobile experience consists of six stages, namely Enticement, Entertainment, Engagement, Empowerment, Enlightenment, and Enhancement. Furthermore, the core idea of this stage-centric framework is that "these six stages of mobile experience in learning Chinese should be mapped and measured on both the normative side and the empirical side so as to locate the gap between the two, resulting in a better understanding of what needs to be improved to secure better mobile experience in learning Chinese" (Hu & Xu, 2019, p.189). Additionally, these above-mentioned stages can be re-conceptualised and re-operationalised according to "different learning settings, demographic features, learners' wants and needs, their tastes and preferences" (ibid, p.188).

CONCEPTUALISATION OF MOBILE LEARNING EXPERIENCE

Before measuring mobile learning experience of Chinese language learners, it is essential to locate and conceptualise specific indicators of six stages of mobile

experience proposed by Xu (2018). Whenever mobile learners start to interact with a CLL product or service, a process is triggered, leading to an outcome. Firstly, they perceive the mobile mediated product or service's features, and construct "a personal version of the apparent product character" (Hassenzahl, 2018, p.302). Secondly, the apparent product character leads to multiple consequences: an intuitive judgment about the product, e.g., enticement (relevant, appeal, easy), emotional consequences, e.g., entertainment (interesting, pleasure, satisfaction), behavioural consequences, e.g., empowerment (clear requirements, success opportunities, learner autonomy), and engagement (searching & selecting, exercising, interacting), cognition consequences, e.g. enlightenment (awareness, understanding, consciousness), and performance consequences, e.g. enhancement (knowledge, skills, abilities). Thus, this chapter modifies Xu's 6E framework slightly, by adding some new indicators and using a hierarchical sequence, according to the specific research context of measuring mobile learning experience of Chinese language learners. The 6E-revised (6E-r) has three stages. They are primary, intermediate and advanced stages. The primary stage involves enticement and entertainment to attract users' attention and to arise and maintain their interests. The intermediate stage consists of empowerment and engagement. The advanced stage includes enlightenment and enhancement of learning outcomes (Xu, 2021)

Being enticed into a CLL app is the first fundamental step for learners to walk into a Mobile-assisted Chinese Language Learning (MACLL) journey. Whether mobile users are enticed or how enticed they are may directly determine whether they will ouse the CLL app. Without being enticed, mobile learners would swift their attention and interest easily to other mobile product, content, service or their combination. Hence, in this chapter, mobile learning experience at the **enticement stage** is located in the following areas: **(a) content relevance, (b) appealing interface, and (c) easy navigating**. Content relevance, which is a content-focused dimension, refers to the consumed CLL content is relevant to learners' learning motivations and outcome expectations, be it, for example, get familiar with Chinese pronunciation, with Chinese characters, or with vocabulary acquisition, or learn how to write Chinese sentences. Appealing interface, which is a design-focused dimension, means the product features of CLL app is simple, easy and attractive for attracting and maintaining learns' attention and interest. Easy navigating, which is a navigation-focused dimension, denotes a simple and easy device-specific navigation mechanism, allowing mobile-assisted Chinese language learners to navigate easily within the app on a smartphone or PDA screen.

After being enticed, learners are expected to be entertained to a different degree depending on their wishes, expectations or needs. This chapter looks into the following three essential dimensions of mobile learning experience at the **entertainment stage: (a) interest-arousing, (d) satisfaction, and (c) pleasure**. By interest-arousing, it

is referring to arouse learners' interests in using a CLL app to learn Chinese. Note that satisfaction and pleasure are viewed as outcomes of experience with or through MACLL. Satisfaction means the confirmation of a desirable event as expected (Ortony et al., 1988), while pleasure refers to sensual gratification which requires no expectations (Hassenzahl, 2018). In other words, "[s]atisfaction is linked to the success in using a [MACLL] product to achieve particular desirable behavioural goals. Pleasure is linked to using a [MACLL] product in a particular situation and encountering something desirable but unexpected" (ibid, p.308). In practice, to give an illustrative example, consider mobile game-based app for Chinese language learning. Leaners might expect that mobile game-learning app might support them to learn Chinese with gamified functions which might help to ease their fear of difficulty of learning Chinese. However, learners unexpectedly but pleased to find out that the gamified functions also facilitate to improve vocabulary learning performance (Chen et al., 2019).

Besides enticed and entertained, learners also expect to be empowered by using CLL app to learn Chinese. Among the important components of a good CLL apps are instant feedback and the opportunity to retry (Ally et al., 2007) and providing supports and tutorials (Pacansky-Brock, 2013). However, "many language-learning apps often provide exercises that test the user without first providing instruction, or they provide only a few very brief examples of use" (Rosell-Aguilar, 2017, p. 244). Thus, at the **empowerment stage**, the following three fundamental components constitute what empowerment stands for **(a) clear requirements, (b) success opportunities, and (c) learner autonomy**. Clear requirements indicate the mobile learning app can provide learners with learning standards and evaluation criteria so that the former can enable the later to establish positive expectations and achieve positive learning outcomes. Success opportunities mean mobile learning app can give learners feedback about their improvements and deficiencies during the learning process so that the former can enable the later to adjust performance till successfully receiving acknowledgement and in-app rewards, e.g. in the format of online points, gifts or rankings. For the third dimension of the entertainment stage, "[t]he degree of learner agency in the learning process will vary depending on multiple factors, some of which the learner can affect, others not" (Godwin-Jones, 2019, p.9).In this chapter, however, we argue that leaners are encouraged to be more active and self-disciplined with the CLL journey so that they could self-control study pace and personalise learning process and content.

Being empowered does not mean learners would get fully engaged in mobile learning process. How to keep them fully engaged during the learning process produce big challenges to MALL as well as MACLL product, service, or content providers. User engagement can be defined as "a quality user experience when a person was pleased using a particular technology and a desire to use the technology

more frequently (Lim, 2017, p.377). In this vein, mobile learning **engagement** can be located at following aspects: (**a) searching & selecting, (b) exercising and (c) interacting**. To search & select learning content makes mobile learners get fully engaged in learning process with free agency and active involvement. Meanwhile, in-app practicing/exercising would enable learners to stay highly engaged too. For example, if a learner aims at vocabulary development, he or she might search, select, and exercise vocabulary related content or task for his/her own good and get fully engaged with it. Furthermore, the engagement also involves interacting with other learners, sharing learning content or services, and in-app competition. It is believed that social interaction between learners and their peers plays a vital role in language learning (Çakmak, 2019).

In the advanced stage, to be enlightened can be viewed as one of the highest levels of mobile learning experience. At the **enlightenment stage**, three indicators can be located as follows: **(a) inspiration, (b) understanding, and (c) awareness**. After interacting with CLL mobile app, learners have been inspired and obtained a better understanding of Chinese language, e.g. Chinese characters, phrase and pronunciation, in addition to that, learners also increase awareness of the importance of conversation contexts. It is particularly common that same Chinese phrase in different conversation contexts differs. In this vein, the enlightened stage is also very crucial to a second language learners.

Ultimately, mobile learning experience can be located in the **enhancement stage** as following aspects: **(a) knowledge, (b) skills, and (c) abilities.** Specifically speaking, the ultimate highest level of mobile learning experience is to enhance learners' mobile learning experience through enriching and expanding their knowledge, skills, and abilities, for instance to increase the knowledge about Chinese cultural or history behind the language, and to enhance listening, speaking, reading, and writing skills and communication abilities. It is acknowledged that without knowing the history and culture of a foreign country, one cannot fully understand and using its language. In addition, to give an illustrative example, consider mobile game-based app for Chinese language learning again. With continued typing pinyin in a gamified scenario to win the game, learners have become very familiar with pinyin so that they could using pinyin to communicate with Chinese people in reality before they obtained the knowledge of writing Chinese characters. Once they are successfully communicating with local people, learners may feel a sense of being enhanced by the CLL app.

OPERATIONALISATION OF MOBILE LEARNING EXPERIENCE

To investigate how mobile learning experience can be enhanced by narrowing the gap between the normative experience, i.e. expected Mobile Learning Experience (MLX), and the empirical experience, i.e. actual MLX, of CLL, the pressing need is to operationalize mobile learning experience. To measure the normative level of mobile learning experience, the current chapter investigates dimensions and levels of mobile learning experience to be expected by a Chinese language learner via online survey. Meanwhile, mobile learning experience at the empirical level will be measured by using the same sets of indicators of online survey with different wording. Beyond that, in terms of research methods, it should involve a mix of different research methods. "For instance, it may be more accurate and reliable to use a mix of surveys, focus groups, in-depth interviews, content analysis and/or experiments in comparing similarities and differences in mobile use and experience around the world in order to provide more accurate and reliable findings through triangulating and or complementing the results of studies using different research methods" (Xu, 2019, p. 272). Additionally, in a mixed methods design, follow-up case study also can be used to supplement quantitative research, e.g. online survey, and help to analyse research findings into depth. However, it is difficult to measure and compare both normative and empirical experience in a scientific manner without unified criteria for each dimension of 6E-r framework. Thus, next we operationalize each dimension of mobile learning experience in the context of Chinese language learning.

To standardise the quantification of both normative and empirical mobile learning experience, this chapter follows Li & Xu's (2019) method of using a Likert scale to measure each of the six components of mobile learning experience (see Table 1). Both normative and empirical mobile experience can also be measured on both micro and macro levels. Micro level refers to mobile learning experience at each of six stages while macro level denotes the sum of all six stages of mobile learning experience. At the micro level, each component of mobile learning experience can be measured in three ways: (a) the normative measurement of each component of mobile experience, (b) the empirical measurement of each component of mobile experience, and (c) the gap measurement between the normative and empirical level of each component of mobile experience (Xu, 2018).

At the enticement stage, a 1=the Lowest to 5= the Highest scale is assigned to each of the three dimensions of enticement experience: content relevance, appealing interface, easy navigation, making 15 points for the entire enticement component of mobile learning experience. In both normative and empirical dimensions of enticement, 1-5 points refer to the low range, 6-10 points mean the medium range, and 11-15 points are the high range of enticement. Moreover, the gap between the normative and the empirical can be measured by following formula: the enticement

Table 1. Measuring mobile learning experience: stages, indicators, conceptualisation, measurements and scores

Stages	Indicators	Conceptualisation	Measurement	Normative Scores	Empirical Scores	The Gap Between
Enticed	Content Relevance	Relevant to learning motivations and outcome expectations	1=Lowest ….. 5=Highest			
	Appealing Interface	Simple, easy, and attractive interface	1=Lowest ….. 5=Highest			
	Easy Navigation	Simple, easy, and coherent navigation features	1=Lowest ….. 5=Highest			
			Sub-Total			
Entertained	Interest Arousing	Amusing, entertaining and interesting	1=Lowest ….. 5=Highest			
	Satisfaction	Fulfilment of wishes, expectations or needs	1=Lowest ….. 5=Highest			
	Pleasure	Desirable but unexpected sensual gratification	1=Lowest ….. 5=Highest			
			Sub-Total			
Empowered	Clear Requitements	Learning Standards, Evaluation Criteria, Potential Outcomes	1=Lowest ….. 5=Highest			
	Success Opportunities	Feedback, Improvement, Rewards	1=Lowest ….. 5=Highest			
	Learner Autonomy	Self-discipline, self-directed, Self-control	1=Lowest ….. 5=Highest			
			Sub-Total			
Engaged	Searching & Selecting	To search content is to keep learners engaged in learning, and to select content is to maintain learners' attention and interest.	1=Lowest ….. 5=Highest			
	Exercising	To do and finish exercises enables learners to stay engaged.	1=Lowest ….. 5=Highest			
	Interacting	To interact with peer learners via sharing and exercise competition.	1=Lowest ….. 5=Highest			
			Sub-Total			
Enlightened	Inspiration	Inspired to know general idea about Chinese language, e.g. pinyin, tones, stroke, stroke order etc.	1=Lowest ….. 5=Highest			
	Understanding	Understanding basic meaning and usage of Chinese language	1=Lowest ….. 5=Highest			
	Awareness	Increase awareness of the importance of conversation contexts	1=Lowest ….. 5=Highest			
			Sub-Total			
Enhanced	Knowledge	Become knowledgeable about Chinese language as well as Chinese culture and history behind it.	1=Lowest ….. 5=Highest			
	Skills	Enhance fundamental skills in handling Chinese as second language, e.g. listening speaking, reading, writing skills	1=Lowest ….. 5=Highest			
	Abilities	Enhance abilities in handling Chinese in daily or working environment.	1=Lowest ….. 5=Highest			
			Sub-Total			
			Grand Total			

Source: the author's own contribution based on Xu (2018) and Li & Xu (2019)

gap=the normative enticement (15) - the empirical enticement (15). The smaller the absolute value is, the smaller gap between normative and empirical is, on the contrast, the larger the absolute value is, the larger gap between normative and empirical is. Therefore, there are three major categories of gaps: absolute value within 1-5 points (the narrowest gap), within 6-10 points (the medium gap), and within 11-15 points (the widest gap). Moreover, there are two types of gaps: (1) users' expectation of being enticed by CLL app is higher than actual experience in the case of positive arithmetic result; (2) actual enticement experience is better than users' expectation in the case of negative arithmetic result. Further analysis needs to be conducted in order to explain either of the type.

At the entertainment stage, a 1=the Lowest to 5= the Highest scale is assigned to each of the three dimensions of entertainment experience: interest arousing, satisfaction, pleasure, making 15 points for the entertainment dimension of mobile learning experience. In both normative and empirical dimension of entertainment, 1-5 points refer to the low range, 6-10 points mean the medium range, and 11-15 points are the high range of entertainment. Moreover, the gap between the normative and the empirical can be measured by following formula: the entertainment gap=the normative entertainment (15) - the empirical entertainment (15). The smaller the absolute value is, the smaller gap between normative and empirical is, on the contrast, the larger the absolute value is, the larger gap between normative and empirical is. Therefore, three are three major categories of gaps: absolute value within 1-5 points (the narrowest gap), within 6-10 points (the medium gap), and within 11-15 points (the widest gap). Moreover, there are two types of gaps: (1) users' expectation of being entertained by CLL app is higher than actual experience in the case of positive arithmetic result; (2) actual entertainment experience is better than users' expectation in the case of negative arithmetic result. Further analysis needs to be conducted in order to explain either of the type.

At the empowerment stage, a 1=the Lowest to 5= the Highest scale is assigned to each of the three dimensions of empowerment experience: clear requirements, success opportunities, learner autonomy, making 15 for the empowerment dimension of mobile learning experience. In both normative and empirical dimension of empowerment, 1-5 points refer to the low range, 6-10 points mean the medium range, and 11-15 points are the high range of empowerment. The gap between the normative and the empirical can be measured by following formula: the empowerment gap=the normative empowerment (15) - the empirical empowerment (15). The smaller the absolute value is, the smaller gap between normative and empirical is, on the contrast, the larger the absolute value is, the larger gap between normative and empirical is. Therefore, three are three major categories of gaps: absolute value within 1-5 points (the narrowest gap), within 6-10 points (the medium gap), and within 11-15 points (the widest gap). Moreover, there are two types of gaps: (1)

users' expectation of being empowered by CLL app is higher than actual experience in the case of positive arithmetic result; (2) actual empowerment experience is better than users' expectation in the case of negative arithmetic result. Further analysis needs to be conducted in order to explain either of the type.

At the engagement stage, a 1=the Lowest to 5= the Highest scale is assigned to each of the three dimensions of engagement experience: searching & selecting, exercising, interacting, making 15 for the engagement dimension of mobile learning experience. In both normative and empirical dimension of empowerment, 1-5 points refer to the low range, 6-10 points mean the medium range, and 11-15 points are the high range of engagement. The gap between the normative and the empirical can be measured by following formula: the engagement gap=the normative engagement (15) - the empirical engagement (15). The smaller the absolute value is, the smaller gap between normative and empirical is, on the contrast, the larger the absolute value is, the larger gap between normative and empirical is. Therefore, three are three major categories of gaps: absolute value within 1-5 points (the narrowest gap), within 6-10 points (the medium gap), and within 11-15 points (the widest gap). Moreover, there are two types of gaps: (1) users' expectation of getting engaged in CLL app is higher than actual experience in the case of positive arithmetic result; (2) actual engagement experience is better than users' expectation in the case of negative arithmetic result. Further analysis needs to be conducted in order to explain either of the type.

At the enlightenment stage, 1=the Lowest to 5= the Highest scale is assigned to each of the three dimensions of enlightenment experience: **inspiration, understanding, awareness**, making 15 for the enlightenment dimension of mobile learning experience. In both normative and empirical dimension of empowerment, 1-5 points refer to the low range, 6-10 points mean the medium range, and 11-15 points are the high range of enlightenment. The gap between the normative and the empirical can be measured by following formula: the enticement gap= the normative enticement (15) - the empirical enticement (15). The smaller the absolute value is, the smaller gap between normative and empirical is, on the contrast, the larger the absolute value is, the larger gap between normative and empirical is. Therefore, three are three major categories of gaps: absolute value within 1-5 points (the narrowest gap), within 6-10 points (the medium gap), and within 11-15 points (the widest gap). Moreover, there are two types of gaps: (1) users' expectation of being enlightened by CLL is higher than actual experience in the case of positive arithmetic result; (2) actual enlightenment experience is better than users' expectation in the case of negative arithmetic result. Further analysis needs to be conducted in order to explain either of the type.

At the enhancement stage, a 1=the Lowest to 5= the Highest scale is assigned to each of the three dimensions of enhancement experience: **knowledge, skills, and**

abilities, making 15 for the enhancement dimension of mobile experience. In both normative and empirical dimension of empowerment1-5 points refer to the low range, 6-10 points mean the medium range, and 11-15 points are the high range of enhancement. The gap between the normative and the empirical can be gauged by using this formula: the enhancement gap=the normative enhancement (15) - the empirical enhancement (15). The smaller the absolute value is, the smaller gap between normative and empirical is, on the contrast, the larger the absolute value is, the larger gap between normative and empirical is. Therefore, three are three major categories of gaps: absolute value within 1-5 points (the narrowest gap), within 6-10 points (the medium gap), and within 11-15 points (the widest gap). Moreover, there are two types of gaps: (1) users' expectation of being enhanced by CLL is higher than actual experience in the case of positive arithmetic result; (2) actual enhancement experience is better than users' expectation in the case of negative arithmetic result. Further analysis needs to be conducted in order to explain either of the type.

In addition, mobile learning experience can be measured in three ways at the macro level: (a) measuring the total normative mobile learning experience, (b) measuring the total empirical mobile learning experience, and (c) measuring the gap between the normative and empirical measurement of the total mobile learning experience (Xu, 2018). The overall mobile learning experience gap can be calculated by using the following formula: the overall gap = the total normative mobile experience (90) – the total empirical mobile experience (90). The gap may fall under any of the three categories: the narrowest gap (absolute value within 1-30), the medium gap (absolute value within 31-60) and the widest gap (absolute value within 61-90).

CONCLUSION

Equipped with the proposed 6E-r framework of mobile learning experience, this chapter provided components and criteria in measuring mobile experience in applying mobile technologies, mobile learning apps in particular, to Chinese language learning around the world. Its focus is to operationalise different indicators of each stage, and to offer a feasible solution on how to measure them. After conceptualising and operationalising different indicators of six fundamental and yet hierarchical stages of mobile learning experience, this chapter developed an Online Questionnaire Template (see Appendix B) for future research reference in order to successfully gauge the different levels of experience in applying mobile technologies to Chinese language learning. Ultimately, this chapter attempted to resolve the research question, that is, how mobile learning experience is enhanced by narrowing the gap between the normative experience and the empirical experience. In other words, "the ultimate goal is to produce a better understanding, explanation and prediction of changes and

trends in mobile experience related to learning Chinese" (Hu & Xu, 2019, p.189). Additionally, as mentioned earlier, these six stages as well as their indicators can be re-conceptualised and re-operationalised according to different learning settings, demographic features, learners' expectations and needs, their tastes and preferences. Future research could investigate the impacts of these different contexts on measuring mobile learning experience.

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APPENDIX

Online Questionnaire Template

Measuring the Gap between Normative and
Empirical Mobile Learning Experience

During mobile-assisted Chinese language learning (MACLL) process, we may experience mobile learning through the following six stages: 1. to be enticed, 2. to be entertained, 3. to be empowered, 4 to be engaged. 5. to be enlightened, and 6. to be enhanced. At each stage, we may expect the lowest, the highest or anywhere in between in terms of mobile learning experience. We may also experience the worst, the best or anywhere in between at each stage. Between the expected and the experienced, there lies a gap. And the gap can fall anywhere between the smallest and the biggest.

1. Your Expectation of Mobile Learning Experience

In the following section, rate the level of your expectation of mobile learning experience in using a Chinese Language Learning (CLL) app. Please circle 1=the lowest …………… 5=the highest for each indicator.

a.   Rate the level of your expectation of being enticed by content relevance to your learning motivations and outcome expectations. (1 2 3 4 5)
b.   Rate the level of your expectation of being enticed by the appealing interface of a CLL app. (1 2 3 4 5)
c.   Rate the level of your expectation of being enticed by the easy navigation feature of a CLL app. (1 2 3 4 5)
d.   Rate the level of your expectation of interest arousing in using a CLL app. (1 2 3 4 5)
e.   Rate the level of your expectation of using a CLL app to fulfil wishes, expectations or needs. (1 2 3 4 5)
f.   Rate the level of your expectation of pleasure in using a CLL app. (1 2 3 4 5)
g.   Rate the level of your expectation of being empowered with clear requirements, e.g. learning standards, evaluation criteria, potential outcomes. (1 2 3 4 5)
h.   Rate the level of your expectation of being empowered with success opportunities, e.g. feedback, improvement, or rewards. (1 2 3 4 5)
i.   Rate the level of your expectation of being empowered with learner autonomy, e.g. self-discipline, self-directed, self-control. (1 2 3 4 5)

j.   Rate the level of your expectation of becoming engagement with a CLL app via searching for and selecting of additional information or related content. (1 2 3 4 5)

k.   Rate the level of your expectation of becoming engagement with a CLL app via in-app exercise. (1 2 3 4 5)

l.   Rate the level of your expectation of interacting with peer learners in using a CLL app. (1 2 3 4 5)

m.   Rate the level of your expectation of being Inspired to know about Chinese language, e.g. pinyin, tones, stroke, stroke order etc, via a CLL app. (1 2 3 4 5)

n.   Rate the level of your expectation of obtaining a better understanding of basic meaning and usage of Chinese language via a CLL app. (1 2 3 4 5)

o.   Rate the level of your expectation of becoming more aware of the importance of conversation contexts via a CLL app. (1 2 3 4 5)

p.   Rate the level of your expectation of obtaining more knowledge about Chinese Language via a CLL app. (1 2 3 4 5)

q.   Rate the level of your expectation of enhancing your skills in handle Chinese as second language, e.g. listening speaking, reading, writing skills, via a CLL app. (1 2 3 4 5)

r.   Rate the level of your expectation of enhancing your abilities to handle Chinese in daily or working environment. (1 2 3 4 5)

2. Your Actual Mobile Learning Experience

In the following section, rate the level of your actual mobile learning experience in using a Chinese Language Learning (CLL) app. Please circle 1=the lowest …………… 5=the highest for each indicator.

a.   Rate the level of your real feelings of being enticed by content relevance to your learning motivations and outcome expectations. (1 2 3 4 5)

b.   Rate the level of your real feelings of being enticed by the appealing interface of a CLL app. (1 2 3 4 5)

c.   Rate the level of your real feelings of being enticed by the easy navigation feature of a CLL app. (1 2 3 4 5)

d.   Rate the level of your real feelings of interest arousing in using a CLL app.

e.   Rate the level of your real feelings of using a CLL app to fulfil wishes, expectations or needs. (1 2 3 4 5)

f.   Rate the level of your real feelings of pleasure in using a CLL app. (1 2 3 4 5)

g.   Rate the level of your real feelings of being empowered with clear requirements, e.g. learning standards, evaluation criteria, potential outcomes. (1 2 3 4 5)

h. Rate the level of your real feelings of being empowered with success opportunities, e.g. feedback, improvement, or rewards. (1 2 3 4 5)
i. Rate the level of your real feelings of being empowered with learner autonomy, e.g. self-discipline, self-directed, self-control. (1 2 3 4 5)
j. Rate the level of your real feelings of becoming engagement with a CLL app via searching for and selecting of additional information or related content. (1 2 3 4 5)
k. Rate the level of your real feelings of becoming engagement with a CLL app via in-app exercise. (1 2 3 4 5)
l. Rate the level of your real feelings of interacting with peer learners in using a CLL app. (1 2 3 4 5)
m. Rate the level of your real feelings of being Inspired to know about Chinese language, e.g. pinyin, tones, stroke, stroke order etc, via a CLL app. (1 2 3 4 5)
n. Rate the level of your real feelings of obtaining a better understanding of basic meaning and usage of Chinese language via a CLL app. (1 2 3 4 5)
o. Rate the level of your real feelings of becoming more aware of the importance of conversation contexts via a CLL app. (1 2 3 4 5)
p. Rate the level of your real feelings of obtaining more knowledge about Chinese Language via a CLL app. (1 2 3 4 5)
q. Rate the level of your real feelings of enhancing your skills in handle Chinese as second language, e.g. listening speaking, reading, writing skills, via a CLL app. (1 2 3 4 5)
r. Rate the level of your real feelings of enhancing your abilities to handle Chinese in daily or working environment. (1 2 3 4 5)