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## ADAPTATION AND VALIDATION OF THE READING MOTIVATION QUESTIONNAIRE FOR CHINESE UNIVERSITY EFL LEARNERS

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### Abstract:

Reading motivation is a key factor in sustaining engagement and persistence in reading. However, most existing instruments were developed for first language learners and have rarely been rigorously validated in English as a foreign language (EFL) context. Guided by Self-Determination Theory, this study adapted the Self-Regulation Questionnaire for Reading Motivation (SRQ-Reading Motivation; De Naeghel et al., 2012) and validated it in a Chinese EFL learners. A total of 718 valid responses were collected from students at a regional university in Central China. The sample was randomly divided for exploratory factor analysis (EFA; N = 366) and confirmatory factor analysis (CFA; N = 352). EFA yielded a three-factor structure comprising 15 items, representing intrinsic motivation, identified motivation, and controlled motivation for EFL reading. This structure accounted for 73.89% of the total variance, with factor loadings ranging from 0.558 to 0.926. After one item with a low factor loading was removed, CFA indicated that the three-factor model demonstrated a good fit (GFI = 2.642, GFI = 0.927, CFI = 0.967, IFI = 0.967, TLI = 0.959, NF = 0.948, RMSEA = 0.068). The adapted version of the questionnaire was named SRQ-EFL Reading Motivation. This study provides a theoretically coherent and psychometrically sound tool for assessing EFL reading motivation among Chinese university students. Practically, the validated questionnaire can support motivation diagnosis and inform the design of instructional practices that foster autonomous forms of EFL reading motivation in tertiary EFL contexts.

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## Introduction

English reading is a major source of language input in English as a Foreign Language (EFL) context and plays a crucial role in learners' academic development and future career opportunities, especially for university students, as English serves as the primary language of science, technology, and research (Grabe & Yamashita, 2022). However, sustaining extensive reading in English requires strong motivation because students generally perceive English reading as more demanding than reading in their first language. Learners who are more motivated to read not only engage more actively with texts but also demonstrate higher levels of comprehension (Han, 2021; Li & Gan, 2022; Miyamoto, 2023). Understanding and assessing students' English reading motivation is therefore essential for gaining deeper insights into their reading behaviour and for improving instructional practices.

Self-Determination Theory (SDT) provides a systematic framework for understanding motivation. According to SDT, learners' motivation varies along a continuum ranging from amotivation, controlled forms of regulation to autonomous forms of regulation (Ryan & Deci, 2000). Motivation becomes more autonomous when people's basic psychological needs for autonomy, competence, and relatedness are satisfied (Ryan & Deci, 2017). This perspective has been widely applied in educational psychology and L2 learning research (Al-Hoorie, 2022; Ryan & Deci, 2020), offering a robust lens through which to examine how learners' motivation can be supported and sustained.

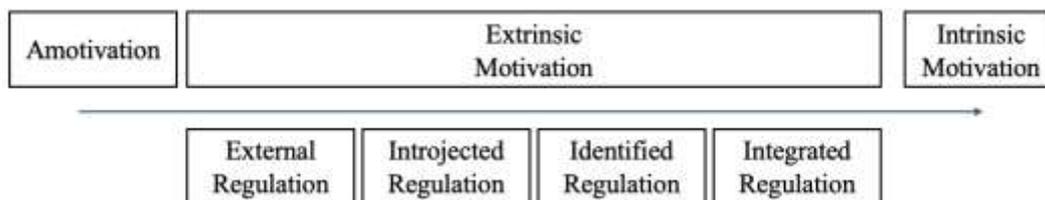
Despite significant theoretical advancements, gaps remain in the measurement of EFL reading motivation. Most existing instruments for measuring reading motivation have been developed for first language (L1) learners, particularly children in elementary school (Davis, et al., 2018). Instruments adapted for second language (L2) contexts show some limitations, for example, some have not undergone confirmatory factor analysis (Mori, 2002; Kim, 2011; Takase, 2007); others, although developed for L2 learners, have been validated primarily with learners of English as a second language (ESL) or with high-school EFL learners rather than with Chinese university EFL students (Komiyama, 2013; Wang & Gan, 2021). Moreover, few existing instruments assessing reading motivation in L2 contexts have been explicitly grounded in SDT. To address this gap, the present study aims to adapt the Self-Regulation Questionnaire for Reading Motivation (SRQ-Reading Motivation), originally grounded in SDT and designed for elementary school students in L1 contexts, and validate its use among Chinese university students in EFL contexts.

## Literature Review

### *Self-determination Theory*

SDT, widely regarded as one of the most influential frameworks of motivation (Dörnyei & Ushioda, 2021), places emphasis on people's internal motivational tendency to learning and personal growth, as well as how this tendency can be fostered through supportive conditions (Ryan & Deci, 2020).

Within this framework, two fundamental types of motivation are distinguished: intrinsic and extrinsic motivation. Intrinsic motivation refers to engaging in activities "because it is inherently interesting or enjoyable" (Ryan & Deci, 2020, p. 2), whereas extrinsic motivation concerns "doing something because it leads to a separable outcome," rather than for the inherent satisfaction of the activity itself (Ryan & Deci, 2020, p. 2). Importantly, SDT posits that extrinsic motivation is not necessarily devoid of autonomy. Instead, it can be progressively internalized and become more self-determined. To capture this process, SDT situates the four types of extrinsic motivation, external regulation, introjected regulation, identified regulation, and integrated regulation, along a broader motivational continuum. As shown in Figure 1, this continuum ranges from amotivation at one end, through the four forms of extrinsic motivation, to intrinsic motivation at the other end. The ordering illustrates the relative autonomy of each type of regulation, with amotivation being the least autonomous and intrinsic motivation the most autonomous form. The more internalized or autonomous the regulation, the more self-determined and engaged individuals are likely to be (Ryan & Deci, 2020).



**Figure 1: Self-Determination Theory's Taxonomy of Motivation**

Source: Adapted from Ryan and Deci (2020)

Building on this continuum, SDT further groups motivation into two broad categories: autonomous motivation and controlled motivation. Autonomous motivation refers to engaging in activities out of genuine interest, personal values, or a deep sense of identification with the behaviour, which fosters a sense of volition and self-endorsement. In theory, it comprises intrinsic motivation, identified regulation, and integrated regulation. However, empirical studies have often failed to detect integrated regulation as a distinct factor on the continuum (Howard et al., 2017). As a result, in practice, autonomous motivation usually includes intrinsic motivation and identified regulation. Controlled motivation, in contrast, refers to engaging in activities due to external demands, social pressures, or internalized feelings of guilt and obligation. It encompasses two types of extrinsic regulation: external and introjected regulation.

According to SDT, motivation is not a fixed trait but a dynamic process that can be shaped by environmental conditions. Individuals become more autonomously motivated and self-determined when their basic psychological needs for autonomy, competence, and relatedness are satisfied (Ryan & Deci, 2020).

SDT has strong relevance to education. Numerous studies have found that autonomous motivation is strongly related to learning engagement and achievement while controlled motivation is negatively related or unrelated with them (Alamer et al., 2025; Howard et al., 2021; McEown & Oga-Baldwin, 2019; Ryan & Deci, 2020). Furthermore, when learning environments are structured to support students' autonomy, competence and relatedness, there is notable enhancement in students' autonomous motivation would show up, leading to improved achievement (Ryan & Deci, 2020).

### ***Existing Instruments for L1 Reading Motivation***

Reading motivation represents an important aspect of learning motivation. In the L1 setting, reading motivation is defined as “the individual’s personal goals, values, and beliefs with regards to the topics, processes, and outcomes of reading” (Guthrie & Wigfield, 2000, p. 405). A number of questionnaires have been developed for L1 contexts. Davis et al. (2018) reviewed 16 instruments designed to assess students’ motivation for reading in their first language. Among these was the Motivation for Reading Questionnaire (MRQ). Drawing on insights from general motivation theories, literacy motivation research, and findings from a qualitative study involving interviews with 20 elementary students, Wigfield and Guthrie (1995, 1997) developed the MRQ. The instrument contains 53 items assessing 11 dimensions of reading motivation: reading self-efficacy, reading challenge, reading curiosity, reading involvement, importance of reading, recognition for reading, reading for grades, social reasons for reading, competition in reading, compliance, and reading work avoidance.

MRQ has been translated and adapted into multiple languages and has gained wide popularity across different L1 and L2 contexts (Davis et al., 2018). However, it primarily focuses on identifying different types or reasons for reading rather than the quality of students’ reading motivation, that is, the extent to which students are autonomously motivated to read. Consequently, it does not capture the continuum from controlled to autonomous motivation emphasized in SDT. In this respect, the Self-Regulation Questionnaire-Reading Motivation (SRQ-Reading Motivation) stands out as the only L1 instrument explicitly grounded in SDT. The SRQ-Reading Motivation questionnaire was developed by De Naeghel et al. (2012) in the Belgian context. It was grounded in SDT and designed to assess elementary students’ recreational and academic reading motivation. The SRQ-Reading Motivation questionnaire consists of 2 broad dimensions and 17 items, with 8 items measuring autonomous motivation for reading and 9 items measuring controlled motivation (see Appendix A for all the items of the questionnaire). However, it’s worth noting that factor analysis of the questionnaire failed to confirm a further differentiation into the four subdimensions theoretically suggested by SDT. All items are rated on a Likert 5-point scale ranging from 1 (disagree a lot) to 5 (agree a lot). Internal consistency, estimated using Bentler’s rho (a coefficient comparable to Cronbach’s  $\alpha$ ; Bentler, 2009), was high across the two dimensions in both recreational and academic reading, ranging from .81 to .94. Moreover, its validity was further confirmed by its significant correlation with the MRQ (Wigfield & Guthrie, 1995, 1997), the classic questionnaire in reading motivation discussed previously in this section. SRQ-Reading Motivation is considered “a reliable, valid scale of academic and recreational reading of students in grade

five” (Davis, et al., 2018) and has been widely cited in subsequent studies on reading motivation (Bleukx et al., 2025; Wu et al., 2023).

### ***Existing Instruments for L2 Reading Motivation***

Some scholars drew on MRQ and other related resources, such as motivation theories and interviews with students, to develop questionnaires of L2 reading motivation, seeking to explore the nature of L2 reading motivation, especially in EFL settings.

Early attempts to adapt L1 reading motivation instruments to L2 contexts were made by Mori (2002), Takase (2007), and Kim (2011). All three studies aimed to explore the underlying dimensions of English reading motivation among East Asian EFL learners and were characterized by the use of exploratory factor analysis to identify motivational factors. Despite differences in participant groups and item sources, their instruments drew on MRQ and incorporated elements from L2 motivational theory. Mori (2002) surveyed 447 Japanese female university students and identified four factors: intrinsic value of reading, extrinsic utility value of reading, importance of reading, and reading efficacy, while Takase (2007) examined Japanese high school students and reported dimensions including intrinsic motivation for English reading, entrance exam-related extrinsic motivation, fondness for written materials, and internet-related instrumental motivation & negative attitude toward extensive reading. Building on both studies, Kim (2011) developed a 30-item questionnaire for Korean university students, yielding four factors through exploratory factor analysis: learning goal-oriented motivation for L2 reading, utility values of L2, intrinsic motivation for L2 reading, and avoidance of L2 reading.

These early questionnaires have explored the underly factors of students’ English reading motivation across different educational stages and contexts and laid the groundwork for L2 reading motivation research. However, a common limitation of these early instruments is that they were only subjected to exploratory factor analysis and not validated through confirmatory factor analysis. Therefore, their construct validity has yet to be fully established. Moreover, questionnaires by Mori (2002) and Takase (2007) were used to explore students’ motivation for extensive reading, neglecting motivation in academic setting.

Komiyama (2013) developed the Motivation for Reading in English Questionnaire (MREQ), and surveyed 2018 adult English learners in English for academic purposes settings in the US. The findings suggest a five-factor structure for their English reading motivation. One factor was related to intrinsic reading motivation, and four factors were related to extrinsic reading motivation. MREQ was considered to be “the only reliable and valid L2 English questionnaire for academic English reading motivation” (Grabe & Yamashita, 2022). However, it should be used with caution in EFL settings because it specifically targets the motivation of ESL readers instead of EFL readers.

Using dimensions identified by Mori (2002), Wang and Guthrie (2004), and Wigfield and Guthrie (1997) and data collected from a focus group interview with five students, Wang and Gan (2021) constructed a questionnaire called RMQ-EFL to measure Chinese high school students’ English reading motivation and generated four factors: reading efficacy, reading enjoyment, recognition, involvement, and compliance. RMQ-EFL was found to be valid in the target group. Nevertheless, it is worth noting that the survey employed a relatively limited sample size of 293 students and targeted only Chinese students in grades 10 and 11.

Therefore, it can be concluded that at present there is no questionnaire specifically designed to measure Chinese university students' motivation for academic English reading, nor is there one that is firmly grounded in SDT. Given the relevance of SDT in enhancing students' learning motivation, there is a need for a reliable and valid instrument to assess students' EFL reading motivation and to inform teaching practices. To address this gap, the present study undertook a comprehensive adaptation the SRQ-Reading Motivation and validate it in Chinese EFL contexts, with the aim of establishing a theoretically coherent and psychometrically sound tool for examining the motivational orientations of Chinese university students in EFL reading.

## **Methodology**

### ***Source Questionnaire***

The SRQ-Reading Motivation served as the source instrument for the present study. Details about its theoretical background and structure are provided in previous section.

### ***Translating into Chinese***

The English version of the SRQ-Reading Motivation was translated into Chinese following the TRAPD framework (Translation, Review, Adjudication, Pretesting, and Documentation), as recommended by Dörnyei & Dewaele (2023).

First, two applied linguistic experts, who were native speakers of Chinese and fluent in reading and communicating in English, were independently invited to translate the questionnaire. Second, the two versions were compared and discussed in a reconciliation meeting with a reviewer who had expertise in questionnaire design and a strong grounding in SDT. Third, an adjudicator, who was also familiar with survey methodology and the field of second language acquisition, examined the reconciled version and made final decisions on the wording of the Chinese items. Fourth, the preliminary Chinese version was pilot tested with 30 EFL students from the participating university, in order to examine whether the items were clearly worded, easily understood, and culturally appropriate for the target population. Students' questions and comments regarding the questionnaire were collected. Based on the feedback, slight modifications were made to the wording of the questionnaire items, which resulted in the finalized Chinese version of the SRQ-reading motivation. Finally, all steps were documented to ensure transparency of the translation and adaptation process.

### ***Data Collection and Analysis***

The data were collected through the online survey platform-Wenjuanxing. The link of the questionnaire was distributed to students from a regional university in Central China via email or WeChat. The survey lasted for approximately two weeks, yielding a total of 855 responses. After excluding 137 invalid questionnaires based on trap items, response time, and duplicate submissions, 718 valid responses were retained, resulting in an effective response rate of 84%. Of all the 718 adults, aging from 18 years old to 21 years old, there are 346 freshmen (48.19%) and 372 sophomores (51.81%), and 329 female participants (45.82%) and 389 male participants (54.18%).

Statistical analyses were conducted using SPSS 30.0 and AMOS 30.0. To ensure the independence of exploratory and confirmatory analyses and to avoid overfitting, the full dataset was randomly split into two subsamples. First, by using the “Data-Select Cases-Random Sample of Cases” function in SPSS, approximately 50% of the cases were randomly selected to generate Dataset 1 (Sample 1) for exploratory factor analysis (N = 366). Then, the “Data-If condition is satisfied” function in SPSS was employed to generate Dataset 2 (Sample 2) for confirmatory factor analysis (N = 352).

## Results

### *Item Analysis*

To assess item quality, data from Sample 1 were used to conduct item analysis on the initial scale by employing two methods: the independent-samples *t* test between high- and low-score groups and reliability analysis.

First, an independent-samples *t* test was conducted between the high-score group and the low-score group. Total scores for the 17 items were calculated, and participants were ranked accordingly. The top 27% of respondents were classified as the high-score group, while the bottom 27% were classified as the low-score group. Independent-samples *t* tests comparing the two groups revealed that all items showed statistically significant differences ( $p < .001$ ), indicating that the scale items demonstrated good discriminatory power.

Second, the reliability analysis was conducted to assess the internal consistency of the scale, with Cronbach’s alpha used as the key statistical indicator. The analysis yielded a Cronbach’s alpha coefficient of 0.782 across the 17 items, indicating acceptable internal consistency and satisfactory reliability of the scale for Sample 1.

### *Exploratory Factor Analysis (EFA)*

Using the data from Sample 1, an EFA was conducted on the 17 items. Principal component analysis with Kaiser normalization and Promax rotation was employed. The rotation converged after 5 iterations. The results showed that the KMO value was greater than the recommended threshold of 0.70 (KMO = 0.870), and Bartlett’s test of sphericity was significant (approximate  $\chi^2 = 4545.259$ ,  $df = 136$ ,  $p < 0.001$ ), suggesting that the sample data were suitable for factor analysis. In the first round of EFA, three factors with eigenvalues greater than 1 were extracted, accounting for 70.709% of the total variance. However, two items (A7 and C16) loaded on more than one factor with small difference between the two factor loadings ( $< .20$ ). As such cross-loadings reduce the clarity of the factor structure and are inconsistent with the theoretical framework, the two items were deleted from the scale (Hair et al. 2014).

After deleting A7 and C16, a total of 15 items were retained, forming a three-factor structure. The communalities of all retained items ranged from 0.590 to 0.857. The final structure showed a KMO value of 0.862, and Bartlett’s test of sphericity was significant (approximate  $\chi^2 = 4069.217$ ,  $df = 105$ ,  $p < .001$ ). Principal component analysis with Kaiser normalization and promax rotation were employed again. The solution converged after five iterations, and three factors were extracted, accounting for 73.890% of the total variance. The specific factor loadings, factor characteristics, and variance explained are presented in Table 2. As shown in Table 2 all factor loadings ranged between 0.558 and 0.926, with items clearly clustered under

three factors. Based on the content of the items and the framework of SDT, the three factors were named F1 (intrinsic motivation for EFL reading), F2 (controlled motivation for EFL reading), and F3 (identified motivation for EFL reading).

**Table 1: Results Of Exploratory Factor Analysis on The Chinese Version Of SRQ-Reading Motivation (N = 366): A Three-Factor Model With 15 Items**

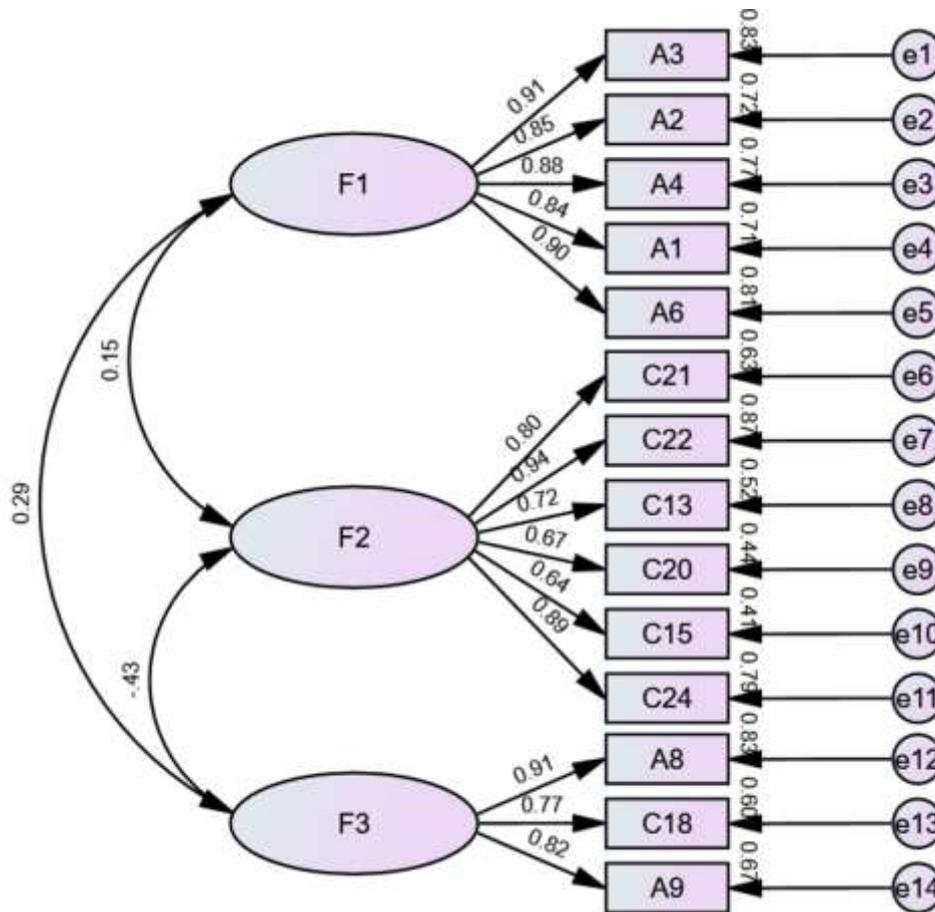
Items	Factor Loadings		
	Factor 1	Factor 2	Factor 3
A 3 I enjoy reading.	.926		
A 2 It's fun to read.	.912		
A 4 I think reading is fascinating.	.904		
A 1 I really like it.	.879		
A 6 I think reading is interesting.	.876		
C 21 Others think that I have to.		.871	
C 22 Others will only reward me if I read.		.859	
C 13 I will feel ashamed of myself if I don't read.		.795	
C 20 That is what others expect me to do.		.738	
C 15 I will feel guilty if I don't do it.		.727	
C 24 Others will punish me if I don't read.		.625	
C 14 I don't want to disappoint others.		.558	
A 8 I think it is very useful for me to read.			.855
C18 I just can be proud of myself if I get good reading grades.			.853
A 9 It is important to me to read.			.850
Eigenvalues	4.632	4.223	2.228
the Percentage of Variance Explained by the Factor (%)	30.883	28.156	14.851

### **Confirmatory Factor Analysis (CFA)**

The researchers conducted a CFA on Sample 2 (N = 352) using AMOS 30.0 to evaluate the overall model fit of the factor structure. In the initial analysis, item C14 showed a factor loading of 0.48 and Squared Multiple Correlation of 0.23. Both values fell below the commonly recommended thresholds of 0.60 for factor loadings and 0.36 for Squared Multiple Correlation (Hair et al., 2014), suggesting that C14 was not well explained by the potential factor. Because weak items can reduce the clarity and stability of a measurement model, C14 was removed to improve the overall quality of the scale. After deleting the item, the researchers re-estimated the model and proceeded to the next round of analysis.

The modified model with 3 dimensions and 14 items is presented in Figure 2, and the fit indices, together with their recommended cut-off values (Hu & Bentler, 1999; Hair et al., 2014), are summarized in Table 3. Overall, the fit indices of the revised factor structure were well within the acceptable thresholds. Specifically, the chi-square to degrees of freedom ratio ( $\chi^2/df$ ), goodness-of-fit index (GFI), comparative fit index (CFI), incremental fit index (IFI), Tucker-Lewis index (TLI), normed fit index (NFI), and root mean square error of approximation (RMSEA) all met the recommended criteria, indicating a good fit between the model and the

data. Therefore, this adapted version was named the SRQ-EFL Reading Motivation Questionnaire to reflect its contextualization for Chinese university EFL learners.



**Figure 2: Results of Confirmatory Factor Analysis on the Chinese Version of SRQ-Reading Motivation (N=352): a Three-Factor Model with 14 Items**

**Table 2: Model Fit Indices After Modification**

	$\chi^2/df$	GFI	CFI	IFI	TLI	NFI	RMSEA
Reference Values	< 3	> .90	> .90	> .90	> .90	> .90	< .08
After Modification	2.642	.927	.967	.967	.959	.948	.068
Fit Evaluation	Good	Good	Good	Good	Good	Good	Good

## Discussion

This study was conducted to adapt the SRQ-Reading Motivation and validate it (De Naeghel et al., 2012) for use in the Chinese EFL university context. Through a rigorous translation, committee review, and pilot testing procedure, the Chinese version of the SRQ-reading motivation was produced. Its psychometric properties were examined using both exploratory and confirmatory factor analyses. After deleting two items (A7 and C16), results of the EFA suggested a 15-item, three-factor structure consisting of intrinsic motivation, identified motivation, and controlled motivation for EFL reading, with intrinsic motivation explaining the largest variance. Subsequent CFAs supported this three-factor solution; however, one item (C14) was further removed due to a low factor loading, resulting in a final 14-item scale that demonstrated satisfactory model fit. These findings indicate that the newly refined instrument, referred to as the SRQ-EFL Reading Motivation Scale, is a reliable and valid tool for measuring Chinese university students' EFL reading motivation.

Overall, the factor structure of the SRQ- EFL Reading Motivation shares common features with prior research, while also diverging in certain aspects. Each factor will be discussed in turn.

### *Autonomous Motivation for EFL Reading*

While intrinsic and identified motivation emerged as separate factors in the study, they are conceptually regarded as two subdimensions of autonomous motivation within the SDT framework.

### *Intrinsic Motivation for EFL Reading*

The first subfactor that emerged under autonomous motivation was intrinsic motivation. This finding is consistent with SDT (Ryan & Deci, 2000), which conceptualizes intrinsic motivation as engaging in an activity for the inherent pleasure and satisfaction it provides. Similar constructs have also been identified in all the other EFL reading motivation questionnaires. (Mori, 2002; Takase, 2007, Kim, 2011; Wang & Gan, 2021). These findings suggest that intrinsic motivation is not only theoretically expected in SDT but also empirically confirmed across different EFL populations.

Notably, in the present study, intrinsic motivation emerged as the first factor in the EFA and accounted for the largest proportion of variance. This finding is in line with SDT, which positions intrinsic motivation as the highest-quality form of motivation. In the context of Chinese EFL learners, this result highlights the important role of fostering intrinsic interest in reading, suggesting that once students are able to experience the intrinsic enjoyment of reading, such motivation may become one of the strongest sources of their reading behavior.

### *Identified Motivation for EFL Reading*

The third factor identified in the study was identified motivation, representing the second subcomponent of autonomous motivation. This result is consistent with SDT (Ryan & Deci, 2000), which conceptualizes identified motivation as engaging in an activity because one acknowledges its personal importance and value. In the context of EFL reading, identified motivation captures learners' recognition that reading in English is worthwhile for their

academic studies, future career prospects, and broader personal development, even when the reading activity itself may not be intrinsically enjoyable.

It is worth noting that the factor structure identified in the present study differs from that of the original SRQ-Reading Motivation. The original study, conducted with Belgian fifth-grade students by De Naeghel et al. (2012), failed to differentiate the two subdimensions of autonomous motivation. Moreover, autonomous reading motivation was found to be positively associated with three subdimensions of the MRQ: involvement, challenge, and curiosity, all of which reflect intrinsic enjoyment and the tendency to seek novelty and personal interest in reading (Ryan & Deci, 2000). However, the MRQ subscale Importance of Reading, which is conceptually closer to identified motivation, was not mentioned as having a strong correlation with autonomous reading motivation in the original study. This suggests that for Belgian elementary students, autonomous motivation for their L1 reading was primarily defined by intrinsic reasons for reading, and the value-oriented dimension of reading motivation was less salient. One possible explanation for this might be that children at this developmental stage are less able to distinguish between reading for enjoyment and reading for its perceived value. In addition, L1 reading class in primary school may emphasize enjoyment rather than the long-term importance of reading.

By contrast, for the Chinese university students in the present study, the importance of EFL reading could not be more emphasized. First, English proficiency is emphasized as providing opportunities for academic progression, scholarship attainment, and future employment. Second, within English learning itself, reading holds a central position. University curricula are heavily text-based, and reading comprehension constitutes a major component of high-stakes examinations. Moreover, access to academic knowledge in English largely depends on reading ability. In such a context, students are more likely to internalize the value of EFL reading, which strengthens their motivation to read in English.

Similar dimensions have also been reported in previous validation studies of L2 reading motivation questionnaires. For example, Mori (2002) identified the importance of reading among Japanese female university students, while Kim (2011) highlighted the utility value of L2 reading among Korean university students. The two studies and the current one were all situated in Asian tertiary-level foreign language learning contexts, resonating strongly with the dimension of identified motivation. The similarity reflects the same tendency for this group of students to value reading for its instrumental and developmental benefits.

### ***Controlled Motivation for EFL Reading***

The second factor that emerged in the EFA was controlled motivation, which showed no further subdimensions in EFL reading. In the context of EFL reading, this dimension captures students' tendency to read English texts because of requirements from teachers, expectations from parents, the need to achieve good grades, or avoidance of anxiety or guilt for failure, rather than because they find the activity inherently enjoyable or personally valuable. This is consistent with the original questionnaire developed by De Naeghel et al. (2012), which likewise identified controlled motivation for L1 reading as a single undifferentiated dimension. This is also largely consistent with the questionnaire developed by Wang and Lin (2021), which identified compliance as one dimension of Chinese high school students' EFL reading motivation. Compliance refers to learners' tendency to engage in reading primarily to meet external requirements or to avoid negative consequences (Wigfield & Guthrie, 1997). The

validation of controlled motivation as a distinct factor in the present study suggests that, alongside autonomous forms of motivation, externally regulated reasons continue to play an important role in shaping Chinese university students' reading behavior.

However, this result is somewhat different from the proposition of SDT, which distinguishes between external regulation and introjected regulation as two subtypes of controlled motivation. One possible explanation for why the two questionnaires (the SRQ-EFL reading motivation and the original SRQ-reading motivation) failed to distinguish subdimensions of controlled motivation might be that students may often perceive external pressures and internalized obligations as closely intertwined. This result may be related to the particular characteristics of the sample in the present study. As university students who have successfully passed the high-stakes college entrance examination, the participants in this study are more inclined to internalize external pressures as self-imposed pressures such as feelings of guilt, making external regulation and introjected regulation difficult to distinguish in practice. Consequently, in this sample, external regulation and introjected regulation appeared as a continuous whole rather than two distinct motivational dimensions. It should be noted, however, that this conclusion may be specific to the reading domain. Research in other areas of L2 learning, such as vocabulary learning motivation (Li et al., 2022), has demonstrated that external and introjected regulation can be empirically separated.

## **Implications**

### ***Theoretical Implications***

This study extends the application of SDT to the field of EFL reading among Chinese university students by adapting and validating the SRQ-Reading Motivation questionnaire in this context. The findings support the distinction between autonomous and controlled motivation. The former one was further divided into intrinsic and identified motivation, while the latter did not separate into the subdimensions of external regulation and introjected regulation among this population. This reflects the influence of educational and cultural context on the internalization process. Moreover, the three-factor structure identified in this study offers a theoretically coherent and empirically grounded framework for examining EFL reading motivation, contributing to a more precise understanding of motivational orientations in English reading.

### ***Practical Implications***

The findings also have important practical implications for English reading teaching in China and similar EFL contexts. First, the modified instrument, SRQ- EFL reading motivation, provides educators and researchers with a reliable and valid instrument to diagnose students' EFL reading motivation. Teachers can use this tool to better understand the motivational profiles of their learners and to design targeted interventions that enhance both intrinsic and identified forms of autonomous motivation.

Second, the prominence of intrinsic motivation in the present study, emerging as the first factor in the EFA, highlights its crucial role in sustaining students' engagement in academic English reading. In practice, this suggests that teachers should create learning environments that foster students' enjoyment and personal interest in reading. Providing choice of texts and encouraging curiosity can help cultivate intrinsic motivation, which in turn may lead to more persistent and effective reading behaviors.

Third, the emergence of identified motivation as a distinct factor underscores the need to emphasize the value and utility of English reading in classroom practice. Teachers and curriculum designers can explicitly link reading materials and tasks to students' lives or their academic and professional goals, thereby helping learners internalize the importance of reading as personally meaningful.

Fourth, although controlled motivation, which emerged as the second factor in the EFA, remains a salient driver of reading in the Chinese EFL context, overreliance on external demands such as examinations and parental expectations may undermine long-term performance in learning as previous studies showed a negative relation between controlled motivation and learning performance. Therefore, educators should strive to balance extrinsic requirements with opportunities that foster genuine interest and personal relevance.

### **Limitations and Future Directions**

This study is subject to several limitations. First, the participants were drawn from a regional university in China, and their overall English proficiency was relatively low, which restricts the generalizability of the findings to students in other types of institutions or at different proficiency levels. Second, the study was conducted in a specific cultural and educational context, and the results may not be directly applicable to learners in different sociocultural settings. Third, the instrument relied solely on self-report measures, which are susceptible to social desirability bias and may not fully capture the complexity of learners' reading motivation. Future studies should therefore include more diverse samples, extend the validation to cross-cultural contexts, and employ multiple data sources to strengthen the robustness of the findings.

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**Appendix A**

## Items of the SRQ-Reading Motivation

I read in English because . . .

Factors	Items
Autonomous reading motivation	<p>A1. I really like it.</p> <p>A2. It's fun to read.</p> <p>A3. I enjoy reading.</p> <p>A4. I think reading is fascinating.</p> <p>A6. I think reading is interesting.</p> <p>A7. I think reading is meaningful.</p> <p>A8. I think it is very useful for me to read.</p> <p>A9. It is important to me to read.</p>
Controlled reading motivation	<p>C13. I will feel ashamed of myself if I don't read.</p> <p>C14. I don't want to disappoint others.</p> <p>C15. I will feel guilty if I don't do it.</p> <p>C16. I have to prove myself that I can get good reading grades.</p> <p>C18. I just can be proud of myself if I get good reading grades.</p> <p>C20. That is what others expect me to do.</p> <p>C21. Others think that I have to.</p> <p>C22. Others will only reward me if I read.</p> <p>C24. Others will punish me if I don't read.</p>

**Appendix B**

## Items of the SRQ-EFL Reading Motivation

I read in English because . . .

Factors	Items
Intrinsic motivation	<p>1. I really like it.</p> <p>2. It's fun to read.</p> <p>3. I enjoy reading.</p> <p>4. I think reading is fascinating.</p> <p>5. I think reading is interesting.</p>
Identified motivation	<p>6. I think it is very useful for me to read.</p> <p>7. It is important to me to read.</p>

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Controlled motivation

8. I just can be proud of myself if I get good reading grades.
  9. I will feel ashamed of myself if I don't read.
  10. I will feel guilty if I don't do it.
  11. That is what others expect me to do.
  12. Others think that I have to.
  13. Others will only reward me if I read.
  14. Others will punish me if I don't read.
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