

Factors Influencing University Readers' Reading Intention: A Self-Determination Theory Perspective (Postprint)

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Abstract

[Purpose/Significance] Investigating the influencing factors of university readers' reading intention and conducting targeted reading promotion activities positively contributes to enhancing the effectiveness of reading promotion initiatives in university libraries. [Methods/Process] This study introduces self-determination theory into reading motivation research, constructs a theoretical model of the influencing factors of university readers' reading intention based on reading motivation, and employs scale questionnaires and structural equation modeling for empirical research to validate the model's effectiveness. [Results/Conclusions] The data analysis results indicate that readers' autonomous motivation and satisfaction of basic psychological needs exert a positive influence on their extracurricular reading intention, whereas controlled motivation does not affect extracurricular reading intention. These findings assist university libraries in understanding the factors influencing readers' reading intention and provide certain guidance for the implementation of reading promotion work.

Full Text

Preamble

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Exploring Influencing Factors of University Readers' Reading Willingness from the Perspective of Self-Determination Theory

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Abstract

[Purpose/Significance] Investigating the influencing factors of university readers' reading willingness and conducting targeted reading promotion

activities can positively enhance the effectiveness of university library reading promotion initiatives. **[Method/Process]** This study introduces self-determination theory into reading motivation research and constructs a theoretical model of influencing factors for university readers' reading willingness based on reading motivation. The model's validity is verified through empirical research using scale questionnaires and structural equation modeling. **[Result/Conclusion]** Data analysis results indicate that readers' autonomous motivation and satisfaction of basic psychological needs positively influence their extracurricular reading willingness, while controlled motivation shows no significant effect. These findings help university libraries understand the factors affecting readers' reading willingness and provide guidance for reading promotion work.

Keywords: self-determination theory; university readers; reading willingness; influencing factors

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Against the backdrop of promoting nationwide reading, theoretical and practical research related to reading promotion has experienced explosive growth. Readers are the main subjects of reading and the service targets of reading promotion work. Readers' reading behaviors are driven by their motivations. Analyzing the influencing factors of reading willingness based on reading motivation can not only enrich theoretical research on reading promotion but also provide scientific guidance for practice and improve the effectiveness of reading promotion activities.

Self-determination theory (SDT) is a motivational theory proposed by American psychologists E.L. Deci and R.M. Ryan. It focuses on the self-determination degree of human behavior, including the relationship between external and internal motivation, environmental factors affecting motivation, and how satisfaction of three innate basic psychological needs influences motivation. Reading motivation is typically divided into internal and external motivation. Self-determination theory categorizes motivation types in detail based on individual autonomy, viewing motivation as a dynamic continuum from external regulation to internal motivation. This approach breaks through the traditional dichotomy of internal versus external motivation and explores conditions for promoting the internalization of external motivation, making the transformation from external to internal motivation possible. Currently, SDT has been widely applied in education, healthcare, sports, and psychotherapy, forming a relatively complete theoretical system and assessment scales, but research achievements in the reading field remain relatively scarce.

This study attempts to address three issues: (1) What insights can self-determination theory offer for research on university readers' reading motivation? (2) How can we construct a model of influencing factors of reading willingness based on self-determination theory? (3) What practical guidance does the conceptual model of reading willingness influencing factors from the

SDT perspective provide for conducting reading promotion activities?

1. Research Status at Home and Abroad

Since its proposal in 1999, self-determination theory has been widely applied in numerous fields both domestically and internationally, though only a few scholars have attempted to introduce it into reading motivation research, with elementary school students as the primary research subjects. J.D. Naegele developed the SRQ (Self-Regulation Questionnaire) reading motivation scale based on SDT to measure elementary students' recreational and academic reading motivation, and used questionnaire results to analyze and elaborate the relationships among reading motivation, reading self-concept, reading behavior (i.e., engagement and frequency), and reading performance (i.e., comprehension). Korean scholar Lee Byeong-ki proposed a reading motivation measurement tool based on self-determination theory comprising 6 dimensions and 30 items, building upon existing motivation scales (including MRQ, MRP, MRP, ERAS, RSCS). G. Frédéric et al. examined elementary school children's motivation in writing, reading, and mathematics from the perspective of self-determination theory. Some foreign scholars have also studied readers' reading willingness based on other theories. B. Lydia examined college students' recreational reading attitudes, intentions, and behaviors according to the theory of reasoned action. C.W. Chen used innovation diffusion theory to study college students' intention to continuously read e-books. H.K. Gholam et al. tested a willingness-to-read (WTR) model based on L2 motivation theory and communication confidence (communication anxiety and competence) through structural equation modeling.

Domestic research on self-determination theory mainly concentrates on education, psychology, management, and sports, with no scholars yet applying it to the reading field. Domestic reading motivation research primarily employs expectancy-value theory, achievement goal theory, and other frameworks to study reading motivation scales, influencing factors, and after-effects. University student reading willingness has also been addressed, such as Yang Wenjian's study on mobile reading user behavior in Chongqing, analyzing how factors like gender, educational background, identity characteristics, discipline background, and usage duration influence mobile reading willingness. Gao Chunling et al. targeted teachers and students at Liaoning Normal University to reveal factors influencing users' willingness to read library electronic resources from facility characteristics and user reading behaviors, proposing effective measures to guide users' mobile reading behaviors. Zhang Mei analyzed the formation and changes of college students' reading willingness in relation to social environments and library services. In summary, current research both domestically and internationally on university students' reading motivation and willingness based on self-determination theory remains relatively scarce.

2. Theoretical Foundation

Self-determination theory has been a widely researched ideological system in motivation and psychology for decades, providing a powerful framework to explain many processes influencing behavior in educational and work environments.

2.1 Overview

As a motivational theory, self-determination theory defines internal and diverse external sources of motivation and their roles in individual cognition and development. More importantly, SDT posits that satisfaction of three basic psychological needs—autonomy, competence, and relatedness—can cultivate intrinsic motivation and promote the internalization of extrinsic motivation. SDT originates from the assumption that humans are proactive organisms with innate tendencies to pursue psychological growth and development, conquer external challenges, and integrate new experiences into self-consciousness. However, these innate tendencies do not function automatically; they require satisfaction of three basic psychological needs. These needs are innate, universal, essential for individual health and well-being, and invariant across gender, groups, and cultures. When basic psychological needs are satisfied, individuals can effectively perform functions and develop in healthy ways; when unsatisfied, individuals exhibit pathological and dysfunctional states. All human behaviors can be explained by whether basic psychological needs are satisfied.

2.2 Organic Integration Theory

Organic integration theory primarily elaborates the process by which external motivation develops into internal motivation, viewing motivation as a continuum from amotivation through external motivation to internal motivation. External motivation is further subdivided into four types: (1) External regulation, where individuals exhibit behaviors to meet external needs (e.g., to obtain rewards or avoid punishment). Behavioral reasons come from external sources, with regulation primarily through compliance, rewards, and punishments. (2) Introjected regulation, where individuals absorb external rules without fully accepting them (they accept external rules but do not make them their own), engaging in behaviors to avoid anxiety and guilt or to enhance self-esteem. Individuals feel behavior reasons are still somewhat external. (3) Identified regulation, where individuals identify with the value of activities and feel they are important, with behavior containing elements of self-determination. (4) Integrated regulation, where behavior value is fully internalized and expressed through individual behavior based on identifying with behavior value. Integrated external motivation differs from internal motivation in that internal motivation is based on interest in the behavior itself, while integrated external motivation is based on complete integration and internalization of behavior value. Identified regulation, integrated regulation, and internal regulation are collectively called autonomous motivation, while external regulation and introjected regulation

are called controlled motivation. The framework of organic integration theory is shown in Figure 1 [Figure 1: see original paper].

2.3 Basic Needs Theory

Basic needs theory summarizes three innate basic psychological needs: autonomy, competence, and relatedness. Autonomy refers to organizing one's behavior according to one's needs and abilities, acting from one's own will, and expressing a need for self-organization. Competence refers to an individual's cognition of confidence and "action effectiveness"—the belief in one's ability to achieve expected results, similar to self-efficacy. When individuals feel competent, they seek challenges and opportunities to improve their skills. Therefore, to satisfy competence needs, self-determination environments must provide opportunities to demonstrate and develop abilities. Relatedness refers to the need to feel connected with and understood by others. When external environments can satisfy readers' basic psychological needs, they can both promote the internalization of external motivation and enhance internal motivation, prompting university libraries to consider what external environments should be provided to stimulate readers' reading willingness.

3. Conceptual Model and Research Hypotheses

3.1 Conceptual Model of Influencing Factors of University Readers' Reading Willingness

Based on SDT's organic integration theory and basic needs theory, reading motivation research is no longer simply divided into internal and external motivation. Instead, it can be re-categorized according to readers' autonomy in reading activities, cultivating readers' intrinsic reading motivation and promoting the internalization of extrinsic reading motivation by satisfying readers' three basic psychological needs of autonomy, competence, and relatedness. In summary, the author constructs a conceptual model of influencing factors of university readers' reading willingness, as shown in Figure 2 [Figure 2: see original paper].

3.2 Research Hypotheses

Readers' controlled reading motivation includes external regulation and introjected regulation stages, where readers read primarily due to external pressure, such as reading credits or exam requirements. Wang Xincan and Xie Xin analyzed the implementation of university reading credit systems domestically and internationally, noting that influenced by exam-oriented education, students' reading skills serve exam needs, and under utilitarian purposes, students lack cultivation of reading interest and self-education awareness. Therefore, university reading credit systems, as remedial and extended measures for early reading education, have "innate defects" that largely affect students' enthusiasm for course selection and reading. Wang Yan and Zhao Chunying found in

their study on extracurricular paper reading characteristics of university students in Shanxi that only 13.3% of students read extracurricular paper books for professional learning. Based on these literature results, we propose:

H1: Readers' controlled reading motivation has no significant effect on readers' extracurricular reading willingness.

Readers' autonomous reading motivation is divided into three stages: identified regulation, integrated regulation, and internal regulation, primarily manifested in readers' recognition and internalization of reading value and their inherent interest in reading. Shi Yilin's questionnaire survey on extracurricular reading among Fudan University students showed that college students' main motivations for extracurricular reading are self-improvement, broadening horizons, increasing knowledge, and satisfying interests. Duan Mei, Cao Bingxia, and Han Ye's survey of extracurricular reading at Nanjing University of Science and Technology found that 62.7% of students read to improve literary cultivation, expand knowledge, and understand history. J.D. Naegele et al.'s research on elementary students' recreational reading motivation confirmed that autonomous recreational reading motivation is associated with more positive reading behaviors and better performance. Based on this literature analysis, we propose:

H2: Readers' autonomous reading motivation positively influences readers' extracurricular reading willingness.

Self-determination theory posits that satisfying individuals' three basic psychological needs can produce more positive behavioral outcomes. Mou Zhijia studied influencing factors of MOOCs learning engagement from the SDT perspective, finding that students' autonomy and competence needs significantly affect learning engagement. Duan Ying's research on college students' reading conditions found that students' reading behaviors are most easily influenced by classmates, reflecting readers' relatedness needs in reading. Based on this literature analysis, we propose:

H3: Satisfaction of readers' three basic psychological needs positively influences readers' extracurricular reading willingness.

4. Empirical Analysis

4.1 Scale Design and Data Collection

To quantitatively analyze the proposed research hypotheses, the author designed a reading willingness measurement scale. The scale includes 3 second-order dimensions and 9 first-order dimensions. The dimension settings, item contents, and references or sources are shown in Table 1. Each first-order dimension consists of a set of statements, each with 5 agreement levels: "strongly agree," "agree," "neutral," "disagree," and "strongly disagree," scored as 5, 4, 3, 2, and 1 respectively.

The questionnaire survey was conducted in January 2018 at three universities

in Shanghai (one 985 university, one 211 non-985 university, and one general municipal university), including one traditional Chinese medicine university and two comprehensive universities. Questionnaires were distributed in library reading rooms and study halls. Respondents completed questionnaires by scanning QR codes or filling out paper forms. A total of 587 questionnaires were distributed, yielding 515 valid questionnaires after excluding incomplete, highly repetitive, or contradictory responses. The sample included 240 male and 275 female students; 317 undergraduates and 198 graduate students; and covered majors including medicine, economics, law, engineering, and management.

4.2 Scale Reliability and Validity Testing

Using SPSS software for reliability analysis of the 515 questionnaires, the Cronbach's alpha coefficient was 0.905, indicating ideal internal reliability. As this study uses a second-order equation model, AMOS software was used for confirmatory factor analysis to test questionnaire validity. Based on initial analysis results, invalid factors of poor quality were deleted from the scale. The second confirmatory factor analysis results are shown in Table 2 . The analysis shows that all factor loadings range from 0.5 to 0.95, composite reliability (CR) meets the requirement of >0.6 , and average variance extracted (AVE) meets the requirement of >0.5 , indicating that the scale's reliability and validity meet requirements.

4.3 Model Fit Testing and Standardized Path Coefficients

Using AMOS software for model fit testing, the analysis yielded overall fit indices (see Table 3) and standardized path coefficients (see Figure 3 [Figure 3: see original paper]). The results show that all parameters meet requirements, indicating good model fit.

4.4 Hypothesis Testing

The structural equation model estimates for this study are shown in Table 4 . If the absolute value of C.R. is greater than 1.96, the estimate reaches significance at $p=0.05$; if greater than 2.58, it reaches significance at $p=0.01$. When significance $P<0.001$, the P column displays "****"; when $P>0.001$, the P value is displayed directly. Table 4 shows that basic psychological needs satisfaction and autonomous motivation both have significant positive effects on reading willingness, while controlled motivation has no significant effect, confirming all three hypotheses proposed in the study.

5. Conclusions and Implications

The results show that readers' autonomous motivation and satisfaction of basic psychological needs have significant positive effects on reading willingness, while controlled motivation has no effect, validating the research hypotheses. These findings partially confirm the applicability of self-determination theory in

the Chinese context and have practical significance for theoretical research and practice in university library reading promotion.

5.1 Enriching Theoretical Research Content for Library Reading Promotion

As an emerging library service, reading promotion activities are flourishing, but theoretical research lags behind. The purpose of reading promotion is to stimulate readers' interest, cultivate reading habits, and promote reading, making the study of reading motivation particularly important. SDT's organic integration theory views motivation as a continuum from external to internal motivation based on individual autonomy, while basic needs theory explores conditions for cultivating internal motivation and transforming external to internal motivation. Cognitive evaluation theory emphasizes the impact of social environments on internal motivation and the key role of competence and autonomy support in cultivating internal motivation, providing new perspectives for reading motivation research.

5.2 Satisfying Readers' Basic Psychological Needs to Stimulate Reading Willingness

The results indicate that satisfaction of readers' basic psychological needs significantly and positively affects reading willingness. According to SDT's basic needs theory, when external environments satisfy readers' basic psychological needs, they can cultivate internal reading motivation and stimulate reading willingness. When readers show negative states, it must be because the external environment fails to meet individual basic psychological needs, hindering internal motivation formation. Therefore, university libraries can create reading environments and provide information support from the perspective of satisfying readers' autonomy, competence, and relatedness needs: (1) Provide rich reading resources, diverse reading formats, and convenient access methods to maximize readers' freedom of choice; (2) Offer scientific guidance, positive feedback, and opportunities for readers to demonstrate and develop reading abilities, enhancing readers' sense of reading competence; (3) In terms of satisfying readers' relatedness needs, university libraries should strive to create a campus reading culture atmosphere, build platforms for sharing and communication among readers, and help them feel understanding and support from peers.

5.3 Enhancing Readers' Recognition of Reading Value and Promoting Integration and Internalization of Reading Value

The results show that readers' autonomous reading motivation has a very significant positive effect on reading willingness. According to autonomy level, autonomous reading motivation is divided into three stages: identified regulation (lowest autonomy), integrated regulation, and internal regulation (highest autonomy). Readers at the identified regulation stage develop reading willingness due to recognition of reading value; those at the integrated regulation stage

have internalized reading value and formed reading habits; those at the internal regulation stage have reading willingness completely based on interest in reading itself. When planning reading promotion activities, university libraries should focus on readers' internal goals, interests, and hobbies, emphasize the manifestation of reading value, and allow readers to integrate and internalize reading value during participation, thereby improving reading willingness.

6. Research Limitations

Self-determination theory has been widely applied in many fields and offers many insights for reading motivation research. This study introduces SDT into reading motivation research, constructs a conceptual model of extracurricular reading willingness influencing factors, proposes research hypotheses, and verifies variable relationships in the model. However, limitations exist: (1) Some items in the empirical analysis scale were developed by the author based on relevant theories and reference to domestic and foreign scales, without undergoing content validity testing; (2) This study limited reading content to extracurricular books, and research on other reading scopes needs further expansion.

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Research on Influencing Factors of University Readers' Willingness to Read: A Perspective of Self-determination Theory

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Abstract: [Purpose/significance] Studying the influencing factors of university readers' willingness to read and carrying out reading promotion activities in a targeted manner have a positive effect on improving the effectiveness of university library reading promotion activities. [Method/process] The article introduces self-determination theory into the study of reading motivation, constructs a theoretical model of influencing factors of university readers' willingness to read based on reading motivation, and finally conducts empirical research with the questionnaire and structural equation model to verify the validity of the model. [Result/conclusion] The results of data analysis show that readers' autonomous motivation and satisfaction of basic psychological needs have a positive effect on extracurricular reading willingness while controlled motivation has no effect on extracurricular reading willingness. The results of the analysis will help the university library to understand the influencing factors of readers' willingness to read and play a guiding role in carrying out the reading promotion.

Keywords: self-determination theory; university readers; reading willingness; influencing factors

Note: Figure translations are in progress. See original paper for figures.

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