Gender Differences and Similarities in Reading Motivation from the Perspective of Social Cognitive Theory

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Abstract

The pertinent literature lacks a comprehensive theoretical framework to explain gender differences and similarities in reading motivation. Research on the role of gender in reading motivation has yielded inconclusive results with no consensus. Additionally, theoretical research to interpret the mixed results in reading motivation are scarce, especially from the perspective of social cognitive theory (SCT). This study aimed to clarify these mixed results by providing a theoretical explanation covering the broad range of gender differences and similarities in reading motivation from the SCT perspective. This analysis of the manifestation of gender roles through observational model learning and the triadic reciprocal interaction between personal, behavioural, and environmental processes provided new insights into the nuanced complexities of gender roles in reading motivation.

Keywords: Social cognitive theory; gender differences; gender similarities; reading motivation; reading outcomes

1. Introduction

Gender is a powerful factor and key component of being human (Griffiths, 2018; McGeown et al., 2012). Gender has a pervasive influence and affects various domains, such as cognition, behaviour, and social interactions (Eagly & Wood, 2013). Significantly, gender is a critical variable in numerous quantitative studies, where it frequently interacts with other factors that should be closely examined (Creswell & Creswell, 2017; Griffiths & Soruç 2020). Among these interactions, research has focused on the relationship between gender and motivation, specifically in reading (Griffiths & Soruç 2020).

Gender is an important factor in reading behaviour and outcomes (Xiao et al., 2024). Researchers have conducted substantial research on the influence of gender in reading motivation. Yeung et al. (2022) highlighted the significant role of gender in reading motivation. Furthermore, the influence of gender on reading motivation is a concern in many countries (Marinak & Gambrell, 2010; OECD, 2010).

Reading motivation is a crucial factor in enhancing individuals' reading performance by fostering reading engagement (Tanaka, 2017; Cantrell et al., 2018; Davis et al., 2018; Kavanagh, 2019; Yaghi et al., 2019; Barber & Klauda, 2020; Maghsoudi et al., 2021; Jádrez et al., 2023). Notably, if gender differences exist in reading motivation (one gender exhibits lower motivation than the other), it suggests that the less motivated gender may face greater challenges in engaging with reading activities and thus might require more support. Crucially, educators and teachers should consider gender differences when designing teaching strategies and interventions.

Despite extensive research, the role of gender in reading motivation continues to be debated. A comprehensive literature synthesis on the role of gender in reading motivation does not enable definite conclusions. Some studies unequivocally demonstrated gender differences in reading motivation that favoured girls (Becker & McElvany, 2018; Espinoza & Strasser, 2020; Gambrell et al., 2018; Griffin, et al., 2020; Kavanagh, 2019; Quirk et al., 2020; Yau & Lee, 2018), whereas others reported no gender differences (Kambara & Lin, 2021; Styck et al., 2020; Vaknin- Nusbaum & Tuckwiller, 2023; Wang & Gan, 2021). The varied results encouraged further research. Kambara and Lin (2021) proposed conducting more studies across diverse cultural contexts.

Hyde (2005) proposed the gender similarities hypothesis to challenge the idea of substantial gender differences in psychological traits. Hyde (2005) stated that men and women are substantially similar across most psychological domains, specifically cognitive factors. A review of 46 meta-analyses supported the assertion, where it revealed limited evidence of gender differences on most psychological scales, with small effect sizes ($d \leq 0.35$). Hyde reinforced the hypothesis in 2014, where the considerable overlaps in cognitive abilities, dispositions, and behavioural patterns between men and women were highlighted. The gender differences generally had small effect sizes, and there were significant overlaps between men and women. Zell et al. (2015) validated the results and confirmed Hyde's hypothesis with a meta-synthesis of 106 meta-analyses that emphasised the frequently neglected commonalities between the genders.

Some studies on gender differences or similarities in reading motivation lacked a theoretical perspective (Kambara & Lin, 2021; Miyamoto, 2023; Styck et al., 2020; Vaknin-Nusbaum & Tuckwiller, 2023; Wang & Gan, 2021). These studies did not specify a

theoretical perspective explicitly, and this oversight hampered the interpretation and understanding of the role of gender in reading motivation. Some studies interpreted gender differences in first language (L1) reading motivation using the expectancy-value theory. For example, Becker and McElvany (2018) examined the gender differences in L1 intrinsic reading motivation of adolescents using the expectancy-value theory. Furthermore, van Hek and Kraaykamp (2023) investigated the relationship between family and school reading socialisation and the gender differences in L1 intrinsic reading motivation among students under 15 years old based on Bronfenbrenner's (1977) socio-ecological theory and social learning theory (Bandura & Walters, 1977). Nevertheless, comprehensive theoretical explanations for the wide range of gender differences and similarities in educational outcomes are lacking (Riegle-Crumb et al., 2018).

The gender differences in social, personality, and academic variables might stem from individuals' gender stereotypical beliefs instead of gender (Brosnan, 1998a, 1998b; Harter et al., 1998). Hilton and Von Hippel (1996) concluded that previous research indicated that culturally embedded gender stereotypes contribute to academic and educational outcomes rather than inherent gender differences. Accordingly, it is reasonable to hypothesise that the gender differences in reading motivation and reading outcomes are due to culturally shared reading stereotypes rather than inherent biological differences between genders. Egalitarian gender role beliefs lead to gender similarities in reading, and vice versa. The increased gender stereotypes widened the gender gap, as students of negatively stereotyped genders tended to have a lower self-concept (Andersen & Smith, 2022).

van Hek and Kraaykamp (2023) suggested that the gender difference in reading motivation may lead to reading test score gaps. Thus, if reading gender stereotypes contribute to gender differences in reading motivation rather than inherent biological differences, then addressing these stereotypes might reduce the reading motivation gender disparities and reading outcome gaps. A thorough insight of the role of gender in reading motivation is essential for educators and teachers aiming to develop effective instructional strategies and reading promotion programmes that enhance reading proficiency across all genders.

The pertinent literature provides narrow theoretical explanations for gender similarities. Moreover, theoretical research to interpret the mixed results in reading motivation studies are limited, especially from the social cognitive theory (SCT) perspective. The SCT explains gender differences and similarities in psychology (Petersen, 2018) and has been used extensively in psychology, education, and health (Schunk & DiBenedetto, 2020). The theory takes a comprehensive approach to understanding human behaviour through the interplay of personal, behavioural, and environmental factors. Therefore, the SCT is extremely promising in providing a new perspective for exploring gender differences and similarities in reading motivation. Furthermore, the theory emphasises observational gender-specific learning models, reading self-efficacy gender disparity, and the influence of gender stereotypes in the environment on reading motivation. This study aimed to clarify the mixed results regarding gender differences and similarities in reading motivation by presenting an SCT-based theoretical explanation.

2. Review of Literature on Social Cognitive Theory (SCT)

The SCT emerged from Albert Bandura's (1960) social learning theory (SLT). The SLT suggests that individuals learn through observing and modelling others and reinforcement (Bandura, 1962, 1965; Gross, 2020), where reinforcement and punishment indirectly affect behaviour and learning (Bandura & Walters, 1977). Furthermore, individuals learn by observing the behaviour of others or models, which include peers, family members, or media characters that hold the individual's attention. The SLT states that four processes are indispensable for effective observational learning: attention (individuals need to pay attention to their models' behaviour), retention (the models' gender-appropriate behaviour is memorised and rehearsed), reproduction (individuals can reproduce the observed behaviour), and motivation (individuals are motivated to replicate the observed behaviour) (Bandura & Walters, 1977).

Bandura's (1986) SCT evolved from his SLT and suggested that a dynamic interplay of personal, behavioural, and environmental processes produces human behaviour. These factors have a continuous and reciprocal relationship. The SCT emphasises that personal factors include an individual's emotions, beliefs, perceptions, and attributions, where self-efficacy is the core tenet of personal processes. Bandura (1986, 1997) describes self-efficacy as an individual's judgment of their ability to achieve specific outcomes or complete tasks successfully. Behavioural factors encompass activity selection, persistence in tasks, effort exerted, outcomes achieved, and environmental regulation (Schunk & DiBenedetto, 2020). Lastly, environmental factors involve cultural and social influences, such as cultural norms and teachers', parents', or peers' influence.

The SCT posits that humans tend to imitate behaviours they observe (Bussey & Bandura, 1999). Individuals develop gender by observing and imitating their role models' behaviours, such as parents, peers, and significant people in social, educational, and professional settings (Bussey & Bandura, 1999). Individuals are more likely to imitate models whose behaviour are rewarded, whereas behaviours that lead to negative consequences are rarely copied. Vicarious reinforcement is the influence of rewards and punishments of other people's behaviours on individuals' own behaviours. Such reinforcement occurs when a person observes a model being rewarded for gender-appropriate behaviour and when a model is punished for non-gender conforming behaviours.

Given the societal tendency to reward gender-consistent behaviour and punish gender-inconsistent behaviour, girls tend to imitate other girls' behaviours, whereas boys typically imitate other boys' behaviours (Petersen, 2018). The SCT states that children's outcome expectancies and self-efficacy beliefs, which motivate and regulate their gender-appropriate behaviour, are developed through modelling reinforcement. Thus, the theory posits that children learn appropriate gender behaviours by observing the rewards and punishments given to same-gender models. Consequently, they internalise these socially expected gender roles and regulate their behaviour accordingly to conform to gender norms (Drury & Bukowski, 2013). Gender norms influence academic outcomes, specifically, expressed masculinity

might negatively influence boys' academic achievement (Morris, 2012).

3. Discussion

Gender stereotypes are commonly held beliefs and expectations regarding men's and women's attributes, roles, and behaviours considered gender-appropriate (Bussey & Bandura, 1999; Ellemers, 2018). In society, boys and girls may conform to gender stereotypes from an early age, which potentially reinforces societal gender differences (Petersen, 2018). Gender stereotypes tend to be self-reinforcing; therefore, boys' and girls' differing behaviours and self-concepts may stem from their stereotypes and the gender stereotypes held by people around them (Heyder & Kessels, 2013; Plante et al., 2013; van Hek & Kraaykamp, 2023). Individuals voluntarily internalise gender stereotypes, which result in gender role-conforming personality characteristics and behaviours (Li et al., 2022).

The SCT tenets state that males observe other males engaging in activities conventionally aligned with masculinity (sports and video games). Due to its indoor nature aligning with women's cultural norms, reading is frequently perceived as an activity more associated with traditional feminine traits (being quiet, passive, and non-competitive) (Ehrtmann & Wolter, 2018; McGeown et al., 2012; Wolter et al., 2015), which reveals reading gender stereotypes (Becker & McElvany, 2018; Espinoza & Strasser, 2020; Nootens et al., 2019). Children learn gender stereotypes by observing male and female models' differential performances (Bussey & Bandura, 1999).

Espinoza and Strasser (2020) reported that female students in Chile exhibited higher reading motivation, which was influenced by reading gender stereotypes. McGeown and Warhurst (2020) determined that children who identified with feminine characteristics were highly likely to be motivated to read. Males may internalise the belief that reading is more aligned with femininity, which might negatively affect boys' willingness and persistence regarding reading. The stereotype of labelling reading as feminine may discourage boys from reading, which consequently reduces their reading motivation. Boys frequently reported lower reading motivation compared to girls (Trigo Ibáñez & Santos Díaz, 2023). Contrarily, females might observe female role models who read, which supports the idea that reading is a feminine activity and thus enhances their reading motivation. Furthermore, perceiving reading as a feminine endeavour influences motivational beliefs that are crucial for reading success. These beliefs about gender and reading can also influence self-efficacy in reading.

The SCT posits that individual processes (self-efficacy) interact with environmental factors, which include social norms. Social and cultural elements shaped the individual's self-efficacy development. These elements prescribe gender roles and stereotypes that define the appropriate gender behaviours. Gender stereotypes influence individuals' perceptions, judgements, and actions toward others and themselves (Lopez-Zafra & Gartzia, 2014). Additionally, the behaviours and beliefs of significant persons (parents, teachers, and peers) is crucial in shaping students' self-efficacy. The SCT highlights the importance of self-efficacy and environmental influences in learning. These factors affect decision-making, cognitive and self-regulatory processes, and the effort that individuals are willing to invest in achieving their goals. High self-efficacy correlates with stronger personal control, which directly affects outcomes (Bandura, 2001). Conversely, low self-efficacy may result in diminished motivation to initiate or persist in behaviours (Schunk, 1995).

According to the SCT, self-efficacy significantly contributes to the observed gender differences (Hyde, 2014). For example, boys and girls select different courses and exhibit differing judgement of their ability in various academic domains (Halpern, 1992; Hyde et al., 1990), where they apparently judged their abilities in accordance with gender stereotypes (Eccles et al., 1993; Wigfield et al., 1997). Gender stereotypes and significant others' social expectations shape individuals' beliefs, values, self-concept beliefs regarding reading, and reading behaviours (Plante et al., 2013; Reilly et al., 2015; Retelsdorf et al., 2015). Gender stereotypes associate reading with girls, and mathematics with boys (McGeown & Warhurst, 2020). Boys that perceive reading as more appropriate for females might have lower reading self-efficacy. Individuals with high perceptions of their reading competence tended to conduct voluntary reading activities and demonstrated greater persistence compared to their peers with low reading self-efficacy (Smith et al., 2012; Peura et al., 2019). Furthermore, individuals with high reading self-efficacy were more likely to select challenging reading materials (Schiefele et al., 2012). Thus, low reading self-efficacy might contribute to boys' hesitancy to engage in reading, thereby widening the gender gap in reading outcomes.

The SCT states that environmental events and personal factors are crucial in shaping individuals' gender-typed behaviours (Leaper, 2015). Gender is not merely the binary categories of biological sex, but is a complex construct influenced by an intricate interaction of biological, psychological, and sociocultural factors (Bussey & Bandura, 1999). Furthermore, gender is not a fixed category but a dynamic social construct, moulded by layers of societal structures, cultural norms, and micro-level interactions (Correll, 2004; Ridgeway & Correll, 2004). Gender difference patterns vary significantly across cultures (Hyde, 2014), which emphasise the predominant influence of cultural environment over biological factors in shaping gender stereotypes and roles (Bussey & Bandura, 1999).

Parents, teachers, and peers in the immediate environment might also affect gender differences in academic achievement and socio-emotional growth (Leaper, 2015). Children's growing social environments broaden from their homes and small peer groups to include more male and female role models and social influencers who promote gender-specific behaviours and traits (Zosuls et al., 2008). The SCT suggests that this increased exposure and an enhanced capacity to process and abstract social information increases children's learning about gender roles (Zosuls et al., 2008).

Social influence is significant in shaping gender differences in how students perceive their abilities in gender-stereotypical subjects, such as language (Andersen & Smith, 2022). Stereotypes shape expectations and behaviours (Retelsdorf et al., 2015). The cultural gender stereotypes serve as the social norms and shape gender-consistent expectations and behaviours (Asbrock et al., 2011; Cuddy et al., 2007). The social context including interactions with peers and teachers, is crucial in the constructing gender roles and competence beliefs in

educational settings. The experiences and opportunities presented in students' familial and educational settings might influence their reading motivation (van Hek & Kraaykamp, 2023). For example, girls are influenced by their parents' reading modelling, which stimulates their intrinsic reading motivation. Conversely, boys benefit from a school climate that fosters competition and teachers' active stimulation of reading engagement, which enhances their intrinsic reading motivation (van Hek & Kraaykamp, 2023).

Reading-related gender stereotypes from significant others (parents, teachers, and peers) affect students' self-efficacy in reading, reading motivation, and reading outcomes (Muntoni & Retelsdorf, 2018, 2019; Muntoni et al., 2021; Retelsdorf et al., 2015; Wolter et al., 2015). For example, teachers' and parents' reading-related gender stereotypes influence their expectations of students' or children's reading abilities, which result in differing boys' and girls' reading ability self-concepts and reading achievements (Muntoni & Retelsdorf, 2018, 2019; Wolter et al., 2015). Teachers' gender stereotypes and classmates favouring girls in language can be detrimental to boys' reading competence beliefs and reading motivation (Muntoni et al., 2021; Retelsdorf et al., 2015).

Boys tend to have lower reading motivation due to the gender stereotype that reading is primarily for girls (Wolter et al., 2015). Wolter et al. (2015) suggested that teachers with traditional gender role attitudes may contribute to boys' lower reading motivation and achievements. Similarly, Muntoni and Retelsdorf (2018) reported that teachers frequently favoured girls in reading, which led to higher expectations and achievements for girls and resulted in lower boys' achievements. Furthermore, Muntoni et al. (2021) reported that classmates' gender stereotypes about reading correlated with students' reading outcomes. These results aligned with other studies demonstrating that teachers' gender stereotypes biased students' judgments (Holder & Kessels, 2017), which paralleled the negative effects of peers' gender-stereotypical beliefs (Muntoni et al., 2021).

According to the SCT, boys' and girls' reading motivation is due to the triadic, continual reciprocal interaction between personal, behavioural, and environmental processes. Children's personal process (reading self-efficacy and their own gender stereotypes) and the environmental processes (modelling and gender stereotypes of parents, peers, teachers, and important persons in social, educational, and occupational contexts) affect their behavioural decision-making process regarding reading behaviour and the effort they are willing to invest in reading. These processes continuously and reciprocally interact with one another.

Individuals learn by observing and imitating the behaviour of models around them. The gender stereotypes of parents, peers, teachers, and important persons in the environment affect students' own stereotypes, self-concept of their abilities and their achievement-related behaviour (Plante et al., 2013; Retelsdorf et al., 2015; Tiedemann, 2000). The gender stereotypes held by significant persons (teachers, parents, or classmates) significantly influence students' beliefs in their reading competence, reading motivation, and reading achievement (Muntoni & Retelsdorf, 2018, 2019; Muntoni et al., 2021). The gender belief among significant others that girls outperform boys in reading negatively affects boys' reading self-efficacy, which decreases their reading motivation and widens the gender gap in reading performance (Retelsdorf, 2015).

The SCT might also explain gender similarities (Hyde, 2014). As society becomes more egalitarian, behaviours previously considered gender-inconsistent may be rewarded (Petersen, 2018). Egalitarian roles are modelled differently in different societies and within different subgroups (Bussey & Bandura, 1999). This theory clarifies the inconsistent results on the role of gender in reading motivation. The decline in punishment for gender-inconsistent behaviours might result in boys and girls behaving more similarly (Hyde, 2014). Thus, reading might not be considered a predominantly female activity. As the number of male role models good at reading increases, so does the number of boys who tend to imitate same-gender models and venture into reading, thereby enhancing males' reading self-efficacy.

Reading gender stereotypes are less prevalent in gender-egalitarian societies, and reading may not be considered a predominantly feminine endeavour. For example, boys with egalitarian-minded teachers demonstrated higher reading motivation and reading skills than boys with teachers who have a traditional gender role attitude (Wolter et al., 2015). Thus, the reading motivation gender gap might be smaller. Furthermore, gender-egalitarian countries might have smaller reading performance gender gaps. Eriksson et al. (2020) suggested that countries with stronger gender-egalitarian values have improved boys' reading performance relative to girls.

4. Pedagogical Implications and Suggestions for Further Research

Considering the role of the learner's gender is essential to gain a comprehensive insight into the potential factors that contribute to their reading motivation. These insights enable teachers to implement more effective pedagogical approaches catering specifically to the diverse needs of students of all genders. These approaches potentially enhance their engagement and learning outcomes.

The implications of this study are as follows: First, stakeholders (parents, teachers, classmates, and students) should become more inclusive of gender-non-conforming behaviours and adopt egalitarian values and beliefs about gender roles. Stakeholders could monitor their behaviours and gender-specific reading stereotypes to offset the negative effects of these stereotypes on children's or students' reading outcomes (Muntoni & Retelsdorf, 2018; Retelsdorf et al., 2015; Muntoni et al., 2021). Furthermore, school administrators, teachers, and parents should construct a gender-equitable and gender-inclusive reading environment free from reading stereotyping (Muntoni et al., 2021; Muntoni & Retelsdorf, 2018; Wolter et al., 2015). Schools could also provide diverse reading materials that cater to the varied interests of boys and girls. Furthermore, effective educational policies are indispensable to counteract the pervasive negative effects of gender stereotypes (Trigo Ibáñez & Santos Díaz, 2023).

Teachers might unconsciously display different gender biases in their expectations of students and interactions with students (Frawley, 2005; Berekashvili, 2012). Therefore, teachers should be aware of their potential discriminatory behaviour in the classroom and avoid it

(Retelsdorf et al., 2015). Additionally, promoting gender egalitarian values is essential, as it might reduce gender stereotypes and positively influence students' achievement (Eriksson et al., 2020). Thus, teachers need to adopt an egalitarian gender role belief and carefully monitor their views on gender roles to ensure that they will not reinforce gender-typed behaviours. Furthermore, teachers need to change students' views of reading so that it is perceived as an activity for all genders. For example, teachers might reward boys' reading behaviour. An inspiring teacher might present topics of interest to actively stimulate reading engagement among students of all genders and thus reduce reading motivation gender disparities.

Parents are crucial in countering gender stereotypes by socialising their children without anticipating or enforcing traditional gender-stereotyped behaviours (Muntoni & Retelsdorf, 2019). Parents need to reduce their gender stereotypes in the family environment. Fathers reading to their sons is beneficial (Muntoni et al., 2021). Parents might also reward and encourage children's behaviours that were once considered gender-inconsistent.

Second, as self-efficacy is the central tenet of personal processes, reading self-efficacy will hopefully be emphasised and enhanced among students of all genders. Teachers, parents, peers, and significant others' modelling might provide the vicarious experiences required to develop students' reading self-efficacy (Ortlieb & Schatz, 2020). Students tend to develop self-efficacy when they observe their role models succeeding. Teachers might also enhance boys' reading self-efficacy by altering their views of reading as a feminine activity to one suitable for all genders. This shift can encourage greater engagement in reading among boys. Furthermore, boys who like reading should not be considered unmanly and ridiculed for their apparent lack of masculinity.

This conceptual analysis study explored the role of gender in reading motivation from a new theoretical perspective. Nevertheless, additional qualitative and mixed-methods empirical studies are needed to clarify and validate the influence of gender in reading motivation. The potential relationship between gender and reading motivation with other variables should be investigated. Such studies may expand the existing literature. Furthermore, quasi-experimental research is also necessary. Longitudinal studies can be conducted to explore the interactions between gender, reading motivation, and learning outcomes.

Research should focus on the role of gender in reading motivation across different countries, as studies have primarily been conducted in the United Kingdom and the United States (McGeown, 2015; Quirk et al., 2020), with fewer investigations in East Asia (Kambara & Lin, 2021). Compared to the substantial research on the gender differences and similarities in L1 reading motivation studies, investigations of the effects of gender on reading motivation in the English as a foreign language (EFL) learning context are limited (An, 2023; Yau & Lee, 2018). Nevertheless, foreign language (FL) learners require more time, effort, and persistence to achieve a higher proficiency in a second language (L2) compared to L1 (Lou & Noels, 2020). Linguistic differences, rhetorical strategies, and cultural barriers contribute significantly to learning challenges, which affect learners' motivation and self-perception of abilities (Namaziandost et al., 2019; Shimanskaya & Slobakova, 2019). Additionally, the motivational dynamics vary significantly between L1 and L2 contexts, with L2 motivation demonstrating unique characteristics (Wang & Gan, 2021; Akbari et al., 2019). Therefore, the influence of gender on reading motivation in EFL or English as a second language (ESL) should be examined.

5. Conclusion

This study used the SCT to examine the role of gender in reading motivation from the aspects of behavioural modelling, self-efficacy, and the socio-cultural environment. First, the SCT emphasises the role of modelling in learning behaviours, where role models are parents, teachers, peers, or significant others. Individuals tend to observe and imitate the reading behaviours of same-gender role models, which contributes to differences in how they value and engage with reading. Gender-specific modelling (observing gender-conforming behaviours from these models) is related to students' reading self-efficacy, reading motivation, and reading outcomes.

Second, the SCT states that self-efficacy is the crucial tenet of personal processes. Reading self-efficacy is crucial in motivating individuals to engage in reading activities. Girls typically have higher reading self-efficacy, which is associated with higher intrinsic motivation to participate in reading activities. This differing self-efficacy might explain the observed gender differences in reading motivation and performance, with girls frequently performing better than boys.

Third, the SCT suggests that societal norms about gender roles might significantly influence reading motivation. Society and parents expect boys and girls to fulfil their gender roles (Li & McLellan, 2021), where social gender norms influence parents' expectations of their children's academic knowledge. Female reading stereotypes stem from traditional gender role beliefs. For example, girls may develop stronger intrinsic reading motivation due to societal expectations that align reading with feminine traits, such as empathy and communication, which are frequently emphasised in reading activities.

The complexity of the role of gender in reading motivation lies in the fact that there might not be a gender difference. Gender similarities can also be explained from the SCT perspective. The changes in the environment, such as society becoming more egalitarian, might contribute to social norm shifts. For example, boys receive more opportunities in reading as society increasingly sees the benefits of encouraging reading in boys. These changes in rewarded behaviours may reduce the reading motivation and reading achievement gender gaps.

The insights of this study can guide educational instructions that address specific reading motivation in different genders to enhance reading engagement and achievement in all students. Educators and researchers can better understand and approach the nuanced role of gender in reading motivation, which potentially leads to more targeted interventions and a learning environment that fosters reading.

Furthermore, educators and teachers might develop more inclusive teaching strategies to enhance all students' reading motivation. For example, teachers might modify classroom activities and reading materials to better meet the needs of students of different genders.

In conclusion, the SCT is extremely promising as it provides a new perspective for exploring the role of gender in reading motivation. The theory posits that learning occurs within a social context through a dynamic, reciprocal interaction among personal, behavioural, and environmental factors. Thus, the SCT presents a valuable theoretical perspective for understanding the complexities of gender differences and similarities in reading motivation by considering the roles of behavioural modelling, self-efficacy, and the socio-cultural context. Lastly, the theory can be used to interpret the inconsistent results of the role of gender in reading motivation.

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