

# Effect of Gender in SLA, Inspiring Gender Roles SLA Research

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**Abstract:** Gender has been proved to play crucial roles in SLA (second language acquisition) . While there remains controversy in gender effect on SLA. More and more empirical findings suggest the similarities between the two gender outcome differences, which has shifted the view on gender SLA from nature to nurture. The present literature review will first compare most recent studies focus on metacognitive strategies and foreign language anxiety. Then, suggestions on gender role research that can provide extra explanations on previous contradictory gender SLA will be made. This leads to richer understandings of the relations between gender and language learning across societies and communities. Present review can also provide suggestions for understanding the mechanism that sex roles shape language acquisition.

**Keywords:** Gender differences, Gender roles, Second Language Acquisition, Metacognitive strategies, Foreign language anxiety(FLA).

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## 1. Introduction

Gender differences in SLA has been widely accepted by researchers and theorists. The underlying causes to this phenomenon are broadly classified into two categories, cognition and biological construction.

From cognitive perspective, females are believed to possess a more positive attitude towards help-seeking behavior than males, flourishing their development on linguistic competences through receiving assistance. From a biological perspective, differences in SLA performances derive from construction of brain, such as the degree of lateralization, contributes to aptitudes in specific gender dominated-field [1] However, more and more empirical findings show there is no significant differences in terms of their language achievement.

The stereotype “female brain” outperform “male brain” in language learning has already received some critiques. Gender polarization (regard binary male and female as a principle of everyday life) and biological essentialism (factor leads to polarization is biological natures of female and male) [2] cannot adequately account for the controversial findings on sex differences in SLA. One of the most common critiques include it is rather learners’ exposure to stereotyped models in their environment inducing long-term effects on self-concept and skill development of people of the two sexes than its biological integrity[3].Extraordinary successful female learners create role model effects on females while discourage male learners. Educator and parents also play roles, investment and encouragement may varies if stereotyped role models have been accepted, which stop other learners from broadening their skills of counter-stereotyped field. A long-term effect of which is represented with the shortage of female in STEM fields and workplaces.

In this present review, findings of gender themed language learning will be discussed to dig out what is unsolved with dichotomous gender. Predictions on possible aspects that sex roles/gender roles SLA researches can be worked on will be illustrated at the end of present review.

## 2. Theoretical Underpinnings of Gender Role Development

### 2.1. Gender Schema Theory

Gender schema theory explains sex typing as “The process by which a society thus transmutes male and female into masculine and feminine is known as the process of sex typing” [4]. Like any other cognitive construction, gender schema is “a cognitive structure or a network of associations that organizes and guides an individual's perception.” Individual learns to process information base on existing and ever evolving gender schema and always assimilate external information in schema-relevant terms. She proposed a distinct feature of “schematic processing” is “highly selective and enables the individual to impose structure and meaning onto the vast array of incoming stimuli” [4].

### 2.2. Cognitive-developmental Theory

Cognitive-development theory emphasizes the ways in which children socialize in accordance to their self-labeling. As a result of labelling, children perform sex-congruent behavior of males or female [5]. This theory regards gender identity or gender constancy plays crucial role in gender development. A common sequence of which is, once an individual had convinced that she is a girl, she will behave like a girl. This theory also emphasizes that gender identity is a self-initiated motivation of development rather than the result of motivators from external world [6].

### 2.3. Social Role Theory

Social role theory emphasizes explicit rewards or punishments for conducting sex-appropriate behavior or sex-incongruent behavior as well as the learning process of those behavior [7].Gender stereotypes stem from observational learning is a key component of which. In addition, it treats gender behavior and other learning behavior the same way. It is unnecessary to explain gender behavior with specialized psychology principles. Gender behavior is not immutable,

cultural choice, for example, children have lower probability to project gender-specific behavior if a culture has tolerance on blurred gender characteristics.

## 2.4. Social Cognitive Theory

The model of triadic reciprocity was built by Bandura, the underlying principle of social cognitive theory (SCT) in gender development differs from cognitive-developmental theory and gender schema theory to some extent. Factors apart from cognitive ones also merit concerns in SCT, which are motivational, affective, and environmental factors. [8].

Social cognitive theory attacked some of the ideas of previous theories,

first in social cognitive theory, gender development is neither totally shaped and regulated by environmental forces or by intrapsychic processes. Rather, gender development is explained in terms of triadic reciprocal causation.

Second, unlike cognitive-development theory, which regards gender constancy as precondition of modeling of sex-typed behavior, social cognitive theory posited gender constancy as the product of mimicking same-sex models, children received gender role information from sex role models in home, in schools, even mass media [8].

Moreover, self-efficacy plays an important role in developing gender-linked conduct, rather than gender self-labeling itself guiding gender-typed behavior. An individual understands a gender-congruent behavior, but only he perceives the act practicable or appreciated, such behavior will be carried out. That is how efficacy decides whether gender-linked behavior will ultimately occur.

Third, social cognitive perspective takes both informational and motivational functions of social sanctions into account when explaining the intrapsychological motivation.

## 2.5. Research on Gender Differences in Relation to Cognitive Ability and Emotion Language Learning Strategies (LLS)

Language learning strategies are the conscious thoughts and actions for achieving a learning goal [9]. Oxford grouped LLS into six groups: memory, cognitive, compensatory, metacognitive, affective, and social strategy, [10]. Appropriate strategies benefits language learning by helping them practice, revise and create language [11]. The correlation between strategies and variables such as proficiency, gender, self-efficacy, cultural background, has been actively researched. Research on learning strategies can provide instruction for educators on selecting strategies benefit effective learning.

## 2.6. Reading Strategies

Previous researches on language learning strategies mainly themed around reading strategies. Reading materials are meaningful FL input for learners. Furthermore, better reading strategies predict better understanding of text [12]. Metacognitive strategies were favored by students over all other reading strategies. Metacognitive strategies are conscious and deliberate reading processes involving self-examination and self-regulation [13]. Rianto reported female dominance in EFL online reading tasks in his survey on 426 female and 176 male students who were taking compulsory English course in a Malaysian university. Participants were invited to rate frequency of their application of three metacognitive strategies (global, problem solving, and support) on

localized Online Survey of Reading Strategies (OSORS). Apart from which, participant completed self-ratings on their overall proficiency and were grouped into high or low proficiency group respectively. Reading proficiency were assessed on the basis of TOEFL Reading scoring. Results shows female frequently use significant larger number of all strategies than their male counterparts, higher frequency of usage also correlates to higher English reading proficiency, the findings of girls' dominance support some previous research reading in both offline setting and online reading. His research also explores whether there is gender difference in the use of strategies among skilled and lower proficiency students. A surprising finding is sex difference in strategy use is sensitive to proficiency, skilled readers show no significance. Conversely, significant sex difference was displayed in low level group. However, the finding contrast a number of researches, in which men reported themselves as possessing higher skills, their performance, however, was not statistically different from women's. Wu also researched on online metacognitive strategies, in which electronic reading metacognitive strategies is examined, there is no significant evidence that 15-year-girls outperform boys in the usage of metacognitive strategies. A total number of 34,104 participants from 19 countries and regions were chosen as participants. Furthermore, intercultural factors were well considered. Data were collected from the PISA (Programme for International Student Assessment) 2009 database including scores for ERA (electronic reading assessment) in which participants' ability on "accessing and retrieving, integrating and interpreting, reflecting and evaluating" were examined. For knowledge of strategies, Participants rating usefulness of each reading strategy (illustrated by a concrete example). The result "Girls had consistently better knowledge of metacognitive strategies and better ERA scores [14]" consistent with Rianto's while the gender gap is ignorable since most countries has insignificant gender difference found, which show some disagreement on Rianto's finding. Though, Radwan came up with similar finding with Wu with no significant differences on strategy use among 128 English-major university students in Oman [11]. Similar to Rianto, strategy usages were explained by self-reported frequency, reading ability were also self-reported and reading proficiency were indicated by academic scores.

## 2.7. Discussion on the Findings of Metacognitive Researches

First, in terms of participants, Rianto and Radwan focus on university students, the former reported significant difference despite a small effect size, the latter shows no significant differences, gender imbalance can cause this inconsistency since number of female participants almost tripled that of males in Rianto's research. In addition, proficiency also offsets the effect of gender in Radwan's research since the participants were all English major students with comparatively higher levels and knowledge of strategies than the others. Wu's research adopted students' ratings on usefulness of each strategy differs from previous widely applied frequency survey one problem of usefulness survey is there is no causality between students' belief on usefulness and actual engagement. To conclude, we can infer that 1) girls have higher probability on having better knowledge of reading strategies but we do not know whether they use these strategies more than males 2) if both sex group participants

reach comparatively high proficiency on EFL reading, sex differences will reduce 3) Increased learning abilities nullified gender difference.

### 3. Foreign Language Learning Anxiety

#### 3.1. FLA(Foreign Language Anxiety)

Gender differences in SLA are also reflected by FLA (foreign language anxiety. MacIntyre defines it as “the worry and negative emotional reaction aroused when learning or using a second language” [15]. Horwitz defines FLA as “a distinctive complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” [16]. Anxiety on SLA have received considerable attention since anxiety may cause crippling effect on language learning. Some researches focus on the sources of FLA. Others investigate relationship between FLA and learner’s variable such as proficiency levels, L1 background etc. Despite there are also emerging literatures on gender and FLA, vast body of literature only regard gender as supplementary subject or identifier of participants. Additionally, existent results are inconsistent. Gender research requires and merits adequate investigation. The present review will only focus on the most recent literature since perception of anxiety is closer to how people define it at present.

The research question of Bensalem’s research dealt with the relationship between gender and FLCAS (foreign language class anxiety). He conducted both quantitative and qualitative researches, to test the correlation between gender and level of anxiety and to collect open-ended narratives as qualitative data for causes of FLCAS. Participants were EFL learners (340 females, 147 males), who were receiving tertiary education during the year in Saudi Arabia. He adapted items from FLCAS (Foreign Language Classroom Anxiety Scale), a high reliability and validity scale used frequently. His study shows no significant on anxiety between gender. However, the other research has spotted significant difference as females were more likely to feel stressed. Dewaele’s research finding will be a useful reference to Bensalem since both of them conduct similar procedure. For measuring tool, they both selected items from FLCAS to measure anxiety degrees and degrees of enjoyment, and they both classified students’ proficiency through self-report, and test the correlation between anxiety levels and proficiency. However, Dewaele focuses on an international level with 1287 females and 449 males from 90 regions, aging from 11-75 [17] while Bensalem only conduct research in Saudi Arabia, this gap makes having a glance at gender difference in anxiety under various culture setting possible. More precisely, how a male-dominated culture affects language learning belief or attitudes e.g. Arabic setting. There is also a research focus on Asian foreign language learners, Park also measured participants’ anxiety by the Foreign Language Classroom Anxiety Scale (FLCAS) and L2 performance was determined by the final grade of 948 university students learning English in Korea rather than self-report. The results indicated that females reported higher levels of anxiety, which harmonious with Bensalem’s finding but contrasted Dewaele’s research, in which no significance was found. Their research on Korean university students reveals another interesting phenomenon that participants with high anxiety outperform their low anxiety counterparts in final exam grade on English course [18].

In conclusion, Bensalem and Park reported no significant

differences between gender, Dewaele, instead, reported significant difference with girls have higher degree of anxiety. Two of the three researches conduct under single male-dominated cultural background (Saudi Arabia and Korea) and their participants are university students. The three research both discover that females endorsed particular items such as getting nervous when being questioned (park), afraid to speak in front of class.

#### 3.2. Discussion on researches of FLCAS and gender

As a reflection on the three mentioned studies, Bensalem’s finding suggests there was no significant difference between intensity of anxiety among male and female learners except two questionnaire items in relation to speaking in class shown significant gender [19]. Dewaele observed female learners with both significant more positive and more mild negative emotions. Women’s heightened emotionality may benefit the acquisition and production of the FL [17]. Bensalem speculate underlying factors that have caused conflicting finding was culture. For example, women are discouraged by the social norms that Arabic female should be reserved, which may even discourage female learners in SLA. The low social status also limits their interaction with people. Therefore, the effect of gender on anxiety may be neutralized and show no significant differences [19]. However, the research on Korean participants show significant differences with females more intense emotion. Korean culture also resemble male-dominated culture. The explanation to this phenomenon including females’ lack of confidence and in social activities.

### 4. Inspiration on Gender Role SLA Research

A few studies have already shifted from binary gender to gender as a social construct, for cognitive ability that has already been discussed, this transition from essentialized gender is reflected in the research on the moderating effect of gender role between gender and cognitive ability. Reilly’s research was inspired by sex-roles mediation hypothesis from Nash, who suggested that “cultural myths are translated into personality beliefs which can affect cognitive functioning in sex-typed intellectual domains” [20]. Thus, sex-roles identification of female and male can promote the development of language ability and spatial ability respectively. Their respondents were divided into four gender roles types according to their according to Ben sex-roles inventory, their score on items related to feminine and masculine personal trait, every participants will be one of the four gender role type: masculine, feminine, androgynous and undifferentiated. Findings reveal that masculine sex-roles partially mediated the relationship between sex and spatial ability, while feminine sex-roles completely mediated the relationship between sex and verbal ability [21]. A number of researchers also came up with similar. All of those results suggest that sex-role orientation have greater utility in explaining individual differences in cognitive performance than using biological sex alone [20].

In a similar way, researchers now accepted that sex differences in SLA are resulted from biological and sociocultural factors rather than any single factor [22]. Based on on-going findings, this review will present some potential dimensions that will be taken into consideration in

relationship between gender roles and language learning.

First, for emotions in SLA, MacIntyre (1995) viewed language anxiety under context of society, which brings affective, cognitive, and behavioral consequences to learners [23], future researches may keep cultural differences in mind when considering language anxiety in class and language teaching [24]. Research conducted under male dominated context may lead to difference in level of FLA compared to a society where female and male gain similar status. This proves that the definition of FLA from learners is influenced by culture and society. Female and male with interpret and react to anxiety in different way as Chaplin & Aldao claims that “female react more intensively to both negative and positive emotion” [25], but how a society educated their children to interpret anxiety and how a learners internalize and cope anxiety has not been tested enough.

In addition, according to the source of anxiety, how a society labels SLA learners and how SLA learners label himself will also affect their emotion on SLA. One of the sources of anxiety is the reinforcement of gender stereotype, recognizing and promoting the perceptions on females' aptitude in language and males in spatiality. People's negative comments will also cause language anxiety [18]. Gender stereotypes beget the correspondent choice on activities that confirm the stereotypes. Again, the criteria of classification of gender role are how respondent rated their attribute in relation to masculine or feminine, since some researches have discovered the positive relationship between femininity and language performance. Will a series of experience about anxiety affected by gender-role congruent or gender stereotype activated behaviors or mentally reaction?

Back to gender role and cognitive ability, if a male learners with feminine identification receives higher scores on language tests, will this result from his feminine personality traits but not the construction of brains? Such as those facilitating interaction and allow feminine learners to effectively cooperate (e.g. sympathy, react to others' demands). In addition, self-efficacy's mediation in relationship between gender role and language learning performance at present had figured out self-efficacy mediate gender role and language achievements, however, findings are polarized though feminine and androgyn predicts higher linguistic attainments though some researchers suggest a positive relationship between femininity, androgynous and higher test scores in language subject. People tend to internalize gender norms, conduct behaviors that congruent with gender roles that affect their actual motivation and performances. Learners perceived their low self-efficacy on foreign language learning since language is female-stereotypic while men are at disadvantage at communal tasks. Some researches rejected a feminine gender role's dominance. Will it similar to the controversial findings of gender and anxiety, will biological gender's effect neutralize that of socially constructed gender? Will it just because feminine learners are normally more open and willing to communicate and support their peers, which lay a solid foundation of successful language performance. Since effects from environment or learners themselves are intertwined. Future research on gender roles and SLA will make progress on how gender related factors affect SLA and ultimate benefit learners.

## 5. Conclusion

The relationship between gender and SLA functions with a

variety of variables of learners. In this literature review. Researches on metacognitive strategies or foreign language anxiety are compared and analyzed. There is no a conclusive finding with such many contradictory results, which make understanding on sex differences in SLA should be lie under the context with society and culture. Personal traits, such as femininity and masculinity can be analyzed to provide a full picture of differences resulted from nature and nurture. Especially for how learners influenced by the judgement on gender-appropriateness activities or specific skills, which subtly bring effects on learners belief and learning activities.

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