Influence of Parental Encouragement on the Educational and Career Choices of Their Children

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Abstract:

Traditional gender stereotypes often affect educational and career choices. Instead of getting higher education and building a career, girls are supposed to marry young and give birth to many children. Similarly, boys are expected to focus on earning. Parental encouragement influences the choices of their children too. Therefore, this basic qualitative cross-sectional case study is conducted within a conflict theoretical framework to highlight the experiences of university students about the influence of parental encouragement on their educational and career choices. The convenient sampling method was used to select respondents with a sample size of twenty students from a university. A semi-structured interview guide was used as a data collection tool. In-depth interviews were conducted for data collection. In this study, the universe is Karachi. Data was analyzed through the thematic analysis method. It is concluded that parents are influencing their children's educational and career choices. Many parents pressurize their children to pursue those careers that are stable and secure in parents' eyes. Even if these careers are not aligned with their children's interests or talents. This can lead to children being unhappy and unfulfilled in their work. However, there are some generational differences in how parents approach traditional gender. Younger parents are more likely to be open to breaking established gender roles. Parents should provide emotional support and encouragement. Parents should let children explore their interests and talents without limits. Stakeholders should establish dedicated career counselling centers in schools. Revise the curriculum to include career guidance. Involve parents in the career counselling process. Further research is recommended to explore the cultural variances in these dynamics.

Keywords: Parental encouragement, gender stereotypes, education, career.

Introduction

Educational and career choices are often affected by traditional gender stereotypes in all over the world. **Educational and career choices mean children should have the freedom to choose the field of education that best fits them.** Parental encouragement influences the choices of their children. **Parental encouragement implies the treatment provided by parents to their children, which can nurture their hidden potential.** It can be in the form of guidance, concern, care, or approval by them, and it can act as a driving force for the children to make a particular

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decision in life. Parents' guidance, care, and support, especially in the area of education, can make or mar the career of the children (Narad & Abdullah, 2016).

In our society, instead of getting higher education and building a career, girls are supposed to marry young and give birth to many children. Similarly, boys are expected to focus on earning. In recent years, with the feminist movement, the impact of gender stereotypes has become less apparent. However, it is undeniable that there are still many negative effects of it (Wang, 2023). The WEF analysis examined gender inequality in 146 countries. Pakistan is ranked 145th in economic participation and opportunity and 135th in educational attainment (Zahidi, 2022). A parent's timely support and guidance can work wonders. In fact, parental encouragement can help the child overcome various difficulties in life, especially in the area of academics (Narad & Abdullah, 2016).

Parents may influence the academic success of their children in many ways. A meta-analysis assessed concurrent and longitudinal associations between parental educational expectations and child achievement, and factors that mediate the effect of expectations on achievement (Pinquart & Ebeling, 2019). Reviewed studies showed that the beliefs of parents have a potential in explaining variations in students' achievement motivation, performance, and career choices (Šimunović & Babarović, 2020). However, there is a lack of research about the influence of parental encouragement on the educational and career choices of their children on university level in Karachi, Pakistan. Therefore, the researchers conducted this research to highlight the experiences of university students about the influence of parental encouragement on the educational and career choices of their children.

Research Questions
- What role do parents play in reinforcing traditional gender stereotypes when it comes to their children's educational and career choices?
- What role do parents play in challenging traditional gender stereotypes when it comes to their children's educational and career choices?

Literature Review
Hussain et al. (2023) have examined the current state of career counselling services in Pakistani schools and explored students' and parents' perceptions of these services. They have offered knowledge of the obstacles and opportunities associated with school-based career counselling and have recommended solutions to improve service delivery. According to him, there is scarcity of trained career counsellors in schools. Students and parents have lack of understanding about the benefits of career counselling. The academic curriculum's concentration is on traditional courses rather than career aid. According to Hu et al. (2023), there is still inequality in family education values, family education investments, and family education expectations in our society. To a certain extent, it causes a difference in the types of career options and income between women and men.

Makino (2022) has investigated whether providing parents with information on earning opportunities for young women is effective in changing parental attitudes towards women working outside the home. The provision of information about working conditions and environments was effective in influencing positive changes in parental attitudes towards women working in factories. According to Abe, E. N., and Chikoko, V. (2020), STEM students approach their career decisions from different perspectives and experiences. Similarly, the effects of interpersonal and intrapersonal factors are examined at different levels and for different reasons, and interestingly, family emerged as an important influencing factor among the other categories found in this study.

Methodology

It is a basic, qualitative, cross-sectional, case study. It was conducted within a conflict theoretical framework to highlight the experiences of university students about the influence of parental encouragement on their educational and career choices. The convenient sampling method was used to select respondents with a sample size of twelve students from a university. A semi-structured interview guide was used as a data collection tool. In-depth interviews were conducted for data collection. In this study, the universe is Karachi. Data is analyzed through the thematic analysis method.

Results and Discussion

Respondents shared age, socioeconomic status, and family structure as shown in Table 1. The ages of respondents range from 20 to 27. Two types of socioeconomic status are identified, which include:

1.   Middle class
2.   Lower class

Most of the respondents belong to the middle class. Some respondents belong to the lower class. Moreover, three types of family structure are identified, which include:

1.   Extended
2.   Nuclear
3.   Single parent

Table 1: Age, Gender, Socioeconomic status and Family Structure

Case	Age	Gender	Socioeconomic status	Family Structure
1.	27	Female	Middle	Extended
2.	24	Female	Middle	Nuclear
3.	23	Female	Middle	Nuclear
4.	21	Female	Middle	Nuclear
5.	23	Female	Middle	Nuclear
6.	21	Female	Middle	single-parent
7.	21	Female	Lower	single-parent
8.	25	Male	Lower	extended
9.	20	Female	Middle	nuclear
10.	23	Female	Middle	extended
11.	23	Female	Lower	nuclear
12.	21	Male	Middle	nuclear
13.	22	Female	Middle	nuclear
14.	21	Male	Middle	extended
15.	23	Female	Middle	nuclear
16.	21	Female	Middle	nuclear
17.	21	Male	Middle	single-parent
18.	22	Female	Middle	nuclear
19.	20	Female	Middle	extended
20.	21	Female	Middle	nuclear

Family structure of most of the respondents is nuclear. The family structure of some of the respondents is extended. Family structure: three respondents are single parent

Respondents also shared theirs, their father's, and their mother's educational backgrounds as shown in Table 2. Five types of educational background are identified, which include:

1. Enrolled in BS Program (BS)
2. Equivalent to Bachelor's Degree (BD)
3. Equivalent to Associate Degree (AD)
4. Went to School (WS)
5. No Degree (ND)

Table 2: Educational Background (EB)

Case	Your EB	Father's EB	Mother's EB
1.	BS	AD	AD
2.	BS	AD	WS
3.	BS	WS	ND
4.	BS	BD	AD
5.	BS	WS	ND
6.	BS	BD	BD
7.	BS	WS	ND
8.	BS	ND	ND
9.	BS	AD	AD
10.	BS	WS	WS
11.	BS	AD	WS
12.	BS	AD	BD
13.	BS	AD	WS
14.	BS	AD	WS
15.	BS	AD	AD
16.	BS	BD	BD
17.	BS	AD	AD
18.	BS	WS	AD
19.	BS	AD	AD
20.	BS	AD	AD

All respondents are enrolled in the BS program. The fathers of most of the respondents and the mothers of most of the respondents hold equivalent to associate degree. The fathers of some of the respondents and the mothers of one of the respondents hold an equivalent bachelor's degree. Fathers of some of the respondents and mothers of some of the respondents at least went to school. The mothers of some of the respondents hold no degree.

Respondents also shared theirs, their father's, and their mother's generation affiliation as shown in Table 3. Four types of generational affiliation are identified, which include:

1. Silent Generation (SG) (born 1928-1945)
2. Baby Boomers (BB) (born 1946-1964)
3. Generation X (GX) (born 1965-1980)
4. Millennial (M) (born 1981-1996)
5. Generation Z (GZ) (born 1997-2012)

Table 3: Generation Affiliation (GA)

Case	Your GA	Father's GA	Mother's GA
1.	M	BB	GX
2.	GZ	BB	M

3.	GZ	GX	M
4.	GZ	GX	GX
5.	GZ	SG	SG
6.	GZ	GX	M
7.	GZ	GX	M
8.	GZ	GX	GX
9.	GZ	BB	GX
10.	GZ	M	M
11.	GZ	GX	GX
12.	GZ	GX	GX
13.	GZ	M	M
14.	GZ	M	M
15.	GZ	GX	GX
16.	GZ	GX	GX
17.	GZ	GX	GX
18.	GZ	GX	GX
19.	GZ	GX	GX
20.	GZ	BB	M

Most of the respondents are affiliated with Generation Z (born 1997–2012). One respondent is affiliated with Millennial (born 1981–1996). The father of most of the respondents and the mother of most of the respondents are affiliated with Generation X (born 1965–1988). The father of some of the respondents and the mother of some of the respondents are affiliated with Millennials (born 1981–1996). The fathers of some of the respondents are affiliated with Baby Boomers (born 1946–1964). The father of one of the respondents and the mother of one of the respondents are affiliated with the Silent Generation (born 1928–1945).

Respondents also shared theirs, their father's, and their mother's employment status, as shown in Table 4. The father of two respondents and the mother of one respondent have passed away, though. Anyhow, five types of employment status are identified, which include:

1. Unemployed
2. Employed full-time
3. Employed part-time
4. Business
5. Retired

Table 4: Employment Status (ES)

Case	Your ES	Father's ES	Mother's ES
1.	Unemployed	Late	Unemployed
2.	Unemployed	Retired	Unemployed
3.	Unemployed	Employed full-time	Unemployed
4.	Unemployed	Employed part-time	Unemployed
5.	Employed part-time	Employed full-time	Unemployed
6.	Unemployed	Retired	Unemployed
7.	Unemployed	Late	Employed full-time
8.	Employed part-time	Unemployed	Late
9.	Unemployed	Business	Unemployed
10.	Unemployed	Business	Unemployed

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11.	Unemployed	Employed full-time	Unemployed
12.	Employed full-time	Business	Unemployed
13.	Unemployed	Employed full-time	Unemployed
14.	Unemployed	Business	Unemployed
15.	Unemployed	Employed part-time	Unemployed
16.	Employed part-time	Employed full-time	Unemployed
17.	Unemployed	Retired	Retired
18.	Unemployed	Employed full-time	Employed part-time
19.	Unemployed	Employed full-time	Unemployed
20.	Employed part-time	Employed full-time	Unemployed

Most of the respondents and their mothers are unemployed. One respondent, the father of most of the respondents, and the mother of one respondent are employed full-time. Some respondents, the father of some of the respondents, and the mother of one respondent are employed part-time. The father of some of the respondents is doing business. The father of three of the respondents and the mother of one respondent are retired.

Respondents also shared theirs, their father's, and their mother's ethnicity, as shown in Table 5. Ten types of ethnicity are identified, which include:

1. Urdu speaking
2. Pathan
3. Hazara
4. Gilgiti
5. Brahui
6. Baloch
7. Sindhi
8. Punjabi
9. Hindko
10. Kashmiri

Table 4: Ethnicity

Case	Your Ethnicity	Father's Ethnicity	Mother's Ethnicity
1.	Urdu speaking	Urdu speaking	Urdu speaking
2.	Urdu speaking	Urdu speaking	Urdu speaking
3.	Pathan	Pathan	Pathan
4.	Urdu speaking	Urdu speaking	Urdu speaking
5.	Hazara	Hazara	Hazara
6.	Gilgiti	Gilgiti	Gilgiti
7.	Hazara	Hazara	Hazara
8.	Brahui	Brahui	Brahui
9.	Urdu speaking	Urdu speaking	Urdu speaking
10.	Sindhi	Sindhi	Sindhi
11.	Hindko	Hindko	Hindko
12.	Punjabi	Punjabi	Punjabi
13.	Pathan	Pathan	Pathan

14.	Sindhi	Sindhi	Sindhi
15.	Gilgiti	Gilgiti	Gilgiti
16.	Urdu speaking	Urdu speaking	Urdu speaking
17.	Baloch	Baloch	Baloch
18.	Kashmiri	Kashmiri	Kashmiri
19.	Pathan	Pathan	Pathan
20.	Urdu speaking	Urdu speaking	Urdu speaking

Most of the respondents and their parents are Urdu speaking. Three respondents and their parents are Pathan. Two respondents and their parents are Hazara. Two respondents and their parents are Gilgiti. One respondent and his parents are Brahui. One respondent and his parents are Baloch. Two respondents and their parents are Sindhi. One respondent and his parents are Punjabi. One respondent and her parents are Hindko. One respondent and her parents are Kashmiri.

Themes: After analysis, six themes emerged from the data. Those six themes are:
1. Perception
2. Personal experiences
3. Reinforce the traditional gender roles
4. Challenge the traditional gender roles
5. Impacts of parental stance
6. Generational Differences

Perception: Respondents believe parents influence their children's educational and career choices in terms of traditional gender roles and expectations. According to some respondents, parents did not allow them to make their own decisions about their educational and career choices. Some parents pressurize their children to follow in the footsteps of their siblings or other family members. Parents will often pressure their children to choose a career that they believe is prestigious or successful. Some respondents believe that girls are not given the same opportunities as boys in Pakistani culture. While some respondents believe that fathers pressurize and give less support to boys. For example,

Case 5 said:
"Fathers pressurize and give less support to boys in the majority of society, for example, boys go on the business side even though they are not interested, but they carry on because it can lead to a better future for the whole family."
However, Case 7 said:
"In my experience, girls are not given as much importance in our culture as boys. Girls are not allowed to take subjects and fields of their choice, nor do they have the freedom to choose the institution where they want to complete their studies."

Case 8 said:
"If someone in the family or acquaintance has chosen the medical field or law, then the family members will keep pressuring their child to choose the same field. A field chosen by one's own will remain a headache for the child until they achieve a prominent position in it."
Personal Experiences: Respondents shared some personal experiences and observations regarding how parents may have encouraged or discouraged certain educational or career choices based on gender. Female respondents are often expected to focus on their domestic responsibilities

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and to marry young. They are often not given the same opportunities as boys to pursue their education and careers.

For example, Case 2 said:

"They got me engaged against my will. And against my will, they put me in an educational institution that made me lose interest in my studies, and my grades also got worse."

Case 6 said:

"I accepted a scholarship to study abroad because my cousin is studying in the UK with a scholarship, but my family stopped me by saying that he is a boy and you are a girl. He can adjust anywhere; you learn household chores and settle down after your masters because all your cousins have settled down after studying. Girls, no matter how much they study, have to do housework."

Case 7 said:

'My sister wanted to join the army, but her parents said that it was not a safe place for girls to study for a doctor or teacher because there is no better field than these two for girls."

Case 13 said:

"My cousin, who is an only son, was very athletic and wanted to pursue football professionally, but his father forcefully made him choose law."

Case 20 said:

"Yes, I want to share the story of my family friend's parents, who support their daughter's pursuit of nursing due to traditional gender roles, even though she has a passion for technology. She complied at first but later switched to computer science after secretly taking coding courses. Her parents initially hesitated but eventually supported her choice as they saw her dedication and happiness in her new career path."

Reinforce the traditional gender roles: Respondents shared some common ways in which parents unintentionally reinforce traditional gender roles when it comes to their children's education and career paths. In social pressure, parents do emotional blackmailing, forced marriages, comparison, criticism, and distraction by home chores. For example,

Case 1 said:

"Parents are trying emotional blackmailing. Some parents say females cannot do this in our society because of what people think about you. You are a girl, and this work is not for you etc."

Case 6 said:

"When I told my father that I had a job as an airhostess, he was happy. Then some of our relatives, such as my aunt, said that I would now be working at the airport in tight clothes. They said that it is against our customs for a family girl to work in such a place. Then my father did not allow"

Case 7 said:

"Our parents often try to explain to us by giving examples of others that so-and-so's child has gone very far in this field, and so-and-so's child has gone far in that field. However, each person has different abilities. He can move forward in his chosen field in a better way according to his mind and interest, but they force their children into a field where they have no interest."

Case 13 said:

"When, even though I am busy studying or have an important test, there are guests in the house, my mother tells me to help in the kitchen and serve guests. Even if my brothers are free and doing nothing, they are not asked to help."

Case 17 said:

"My parents wanted me to become a doctor, even though I had no interest in it. I did not share their dreams, so their hearts are broken in a way. They decided that I would never study now. Whenever I sit down to study, they do not let me. They distract me by making me do some other

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tasks instead of studying. They say, 'When you had to study medicine, you didn't study. Now what will you do?'"

Case 18 said:

"No matter how intelligent or clever a girl is, she will always be told to ignore her studies just to be settled down and have kids. I have personally seen this. A girl got a scholarship offer from IBA, but her mother got her married to some person, as it was more appropriate in the family's eyes to see the girl settle down than study and make her life good."

Challenge the Traditional Gender Roles: Respondents noticed examples of parents actively challenging traditional gender roles in their community or among their peers. Parents supported female respondents to continue their studies. Parents of a female respondent permit me to work at night. Some female respondents have gender equality in home chores. For example,

Case 1 said:

"When I passed my matriculation, my father said it was enough. I do not need to take admission to college, but my mother supported me at that time. During my intermediate education, my father fixed my wedding, and then I left my education. However, after marriage, my husband supported me, and then I continued my studies."

Case 14 said:

"In our culture, getting an education for a girl is like a sin. There is a proverb in our Sindhi society that says that women are the decoration of houses. They should not cross the boundaries of houses. However, some rare parents support their daughters and give them the freedom to do what they want. Here is an example of my relative. He has a daughter who supported her and gave her a higher education; now she is a doctor."

Case 15 said:

"My parents went against the community and gave me permission to work at night, and this is the thing that gives me the most courage to face the community, because in my culture it is not allowed to work at night."

Case 16 said:

"In my family, women are allowed to work, go out, have a career, drive a car, and do everything that is permissible according to our religion. My parents or I have never faced any challenges in our community when it comes to challenging gender roles."

Case 17 said:

"In our family, whether it is a boy or a girl, the same importance is given to him. If my sister is studying or preparing for exams, then no one disturbs her at that time. The members of the house do the small tasks themselves so that she can study peacefully."

Impacts of parental stance: Respondents have observed instances where a supportive or challenging parental stance on gender roles has influenced a student's educational or career journey. Some girls have studied in a different field but are now teaching only because their parents do not support them in becoming what they want to become. However, some girls faced challenging parental stances on gender roles. Some boys faced supportive parental stances on gender roles. He found full support from his parents in the field of his choice. But his sister is not allowed by her parents to choose the same field. However, the father of a boy discourages him from studying and tells him to earn money instead. For example,

Case 5 said:

"My friend was having difficult times when, being a girl, she was not allowed to acquire education as her parents thought she would get married soon, so there is no purpose in taking admission at the university level, especially in the coeducational system."

Case 13 said:

"My cousin was very artistic ever since she was a baby. She loved drawing, and her father was supportive of her. He always gave her everything that she needed and helped her get her degree in visual studies, and now she is earning a good sum and helping her father with the expenses in the house."

Case 15 said:

"I have met girls in my community who have studied in a different field but are now teaching only because their parents do not support them in becoming what they want to become."

Case 17 said:

"I have a friend whose father is uneducated and works in a company. He is passionate about studying. However, his father taunts him, saying, 'What are you studying for? Do you think you will become an officer or collector? You are wasting money unnecessarily. It is better to get a job at a company. At least some money will be earned. Here, my money is being spent.'"

Case 19 said:

"As I said before, one of my male cousins is a pilot, and he found full support from his parents, but his own sister was not allowed by her parents to do the same. This negatively influenced her educational and career journey."

Generational Differences: Majority of respondents think there are generational differences in how parents approach traditional gender roles compared to younger generations. However, some respondents think there are not much generational differences. For example,

Case 1 said:

"Parents think according to their knowledge, which they get from their parents or grandparents. They do not even understand that there is a huge difference in the time they continually try to manifest their beliefs and thoughts to a new generation."

Similarly, Case 18 said:

"Parents often think of us as similar to them. They sometimes think the world is still in the 1900s. What they failed to recognize is the big difference between them and us. From our thought processes to our food, everything has changed now. Parents still think that a man has to be the only breadwinner while the woman stays at home cooking and cleaning."

However, Case 2 said:

"Grandparents used to be very strict with their children, saying that you have to go into the field that your parents tell you to. However, today's parents don't believe in strictness, and they tell their children to go into the field of their choice."

Case 11 said:

"My paternal grandfather was a very kind, gentle, and simple man. Because of him, my father studied at the Cadet College. However, my grandfather passed away in the middle, so my father's studies were interrupted. My maternal grandfather was against my mother's education because of my maternal uncle. He thought that girls should not be educated. Because of this, my mother only completed her education up to the 6th grade. That is why my mother wanted her children to study and go far."

Case 17 said:

"My parents' generation was different. They had to work while getting an education. At that time, education was not as valued in society, and they did not have much support. In this generation, everything is available. Education is also important, and today's parents are strict with their children. That is why our course outline should include some topics that will help children convince their parents."

A similar study has examined the impact of parental influence on gender stereotypes and career choices among students at the secondary level in Pakistan. It was concluded that parental influence has a greater effect on students' gender stereotyping behavior and career choices (Hassan et al., 2022). According to the conclusion of another study, parents, particularly fathers, play a substantial effect in the educational and career choices of female school leaders. The data also imply that females choose culturally acceptable careers while keeping cultural realities in mind. The study found that women in traditional countries have few educational and career options (Rehman et al., 2021). However, a study found that gender expectations were stricter for boys than for girls and prevented men from entering more feminine career tracks (van der Vleuten et al., 2016).

Conclusion and Recommendations

Perception and personal experience of both genders indicated that parents reinforce traditional gender roles. Many parents pressurize their children to pursue those careers that are stable and secure in parents' eyes. Even if these careers are not aligned with their children's interests or talents. It turns their children into an unsatisfied and less motivated worker in their workplace. However, there are some generational differences in how parents approach traditional gender roles. Younger parents are more likely to be open to breaking traditional gender roles. Moreover, the mothers, who are educated and working women, are more prone towards gender equality. Parents should provide emotional support and encouragement to their children. Parents should let children explore their interests and talents without limits. Media should make such dramas in which children are encouraged to make their educational and career choices. Religious institutions should promote it too by telling people what religion says about it. Stakeholders should establish dedicated career counselling centers in schools. Schools should revise the curriculum to include career guidance, and involve parents in the career counselling process. Further research is recommended to explore the cultural variances in these dynamics.

References

Abe, E. N., & Chikoko, V. "Exploring the factors that influence the career decision of STEM students at a university in South Africa." International Journal of STEM Education, December 1, 2020. https://stemeducationjournal.springeropen.com/articles/10.1186/s40594-020-00256-x.

Hassan, M., Luo, Y., Gu, J., Mushtaque, I., & Rizwan, M. "Investigating the parental and media influence on gender stereotypes and young students' career choices in Pakistan." Frontiers in Psychology 13 (2022). https://doi.org/10.3389/fpsyg.2022.890680.

Hu, J., Lyu, X., Pan, C., & Xu, Q. "The influence of the gender equality in family education on female's future career choices." Journal of Education, Humanities and Social Sciences 8 (2023): 1726–1733. https://doi.org/10.54097/ehss.v8i.4564.

Makino, M. "Labor Market Information and parental attitudes toward women working outside the home: Experimental evidence from rural Pakistan." Economic Development and Cultural Change (2022). https://doi.org/10.1086/722160.

Narad, A., & Abdullah, B. "Academic performance of senior secondary school students: Influence of parental encouragement and school environment." Rupkatha Journal on Interdisciplinary Studies in Humanities 8, no. 2 (2016): 12–19. https://doi.org/10.21659/rupkatha.v8n2.02.

Pinquart, M., & Ebeling, M. "Parental educational expectations and academic achievement in children and adolescents-a meta-analysis." Educational Psychology Review (2019). https://link.springer.com/article/10.1007/s10648-019-09506-z.

Rehman, A.-U., Khan, M. I., & Waheed, Z. "Impact of socially constructed choices on female school heads' educational and career choices in Pakistan: A qualitative study." Eurasian Journal of Educational Research 21, no. 26 (2021). https://doi.org/10.14689/enad.26.10.

Šimunović, M., & Babarović, T. "The role of parents' beliefs in students' motivation, achievement, and choices in the STEM domain: A review and directions for future research." Social Psychology of Education (2020). https://link.springer.com/article/10.1007/s11218-020-09555-1.

van der Vleuten, M., Jaspers, E., Maas, I., & van der Lippe, T. "Boys' and girls' educational choices in secondary education: The role of gender ideology." Educational Studies 42, no. 2 (2016): 181–200. https://doi.org/10.1080/03055698.2016.1160821.

Wang, X. "An investigation on gender stereotypes targeting female role on family, career and characteristics for international students through interview and IAT." Journal of Education, Humanities and Social Sciences 8 (2023): 963–972. https://doi.org/10.54097/ehss.v8i.4387.

Zahidi, S. "Global Gender Gap Report 2022." World Economic Forum, 2022. https://www3.weforum.org/docs/WEF_GGGR_2022.pdf.