

# Curriculum and gender spaces in high schools in Eswatini

<sup>1</sup>Gibson Makamure, & <sup>2</sup>Phumuzani Mpofu

# Abstract

This article makes a social constructionist exploration of student experiences of socially constructed curriculum in school spaces in high schools in Eswatini. The study utilised a qualitative narrative inquiry methodology. Individual semi-structured interviews and focus group were used to generate data. The participants were 24 purposively selected students (12 boys and 12 girls) from four high schools in Hhohho region. Participants ranged in age from 16 to 18 years. Contexts of subject knowledge and socially constructed curricula have shaped ideas about what constitutes a suitable education for girls and boys, as well as what subjects they should study. Subject suitability criteria have evolved, but there are still strong curriculum roots that drive the gender problem and disparities in accomplishment, where specific information has historically been associated with various groups. The study found that learners in other schools were free to choose subjects according to their abilities and without any influences from teachers. In those schools, girls even took up subjects perceived to be masculine, like agriculture and technical drawing. However, in other schools, teachers heavily influenced the subjects the learners chose. In most cases, the subjects were chosen according to femininity and masculinity. According to the social constructionism theory that guides this study, societal and interpersonal influences shape how people live their lives, as such, and subject selection by boys and girls is thus formed and informed across many settings and societies by cultural and social values.

Keywords: curriculum, gender, gendered spaces, masculinity and femininity

## **Article History:**

Received: June 9, 2024 Accepted: August 3, 2024 Revised: July 31, 2024 Published online: August 19, 2024

## **Suggested Citation**:

Makamure, G. & Mpofu, P. (2024). Curriculum and gender spaces in high schools in Eswatini. *International Journal of Educational Management and Development Studies*, 5(3), 74-91. https://doi.org/10.53378/ijemds.353087

## About the authors:

<sup>1</sup>Corresponding Author: University of KwaZulu-Natal, South Africa. Email: <u>makamuregibson@gmail.com</u>

<sup>2</sup>School of Human and Community Development University of Witwatersrand, South Africa

© The author (s). Published by Institute of Industry and Academic Research Incorporated. This is an open-access article published under the Creative Commons Attribution (CC BY 4.0) license, which grants anyone to reproduce, redistribute and transform, commercially or non-commercially, with proper attribution. Read full license details here: <u>https://creativecommons.org/licenses/by/4.0/</u>.

# **1. Introduction**

Young students perceive the "socially constructed curriculum in schools" through subjects (Elwood, 2016). Contexts of subject knowledge and socially constructed curricula have shaped ideas about what constitutes a suitable education for girls and boys, as well as what subjects they should study. Subject suitability criteria have evolved over time, but there are still strong curriculum roots that drive the gender problem and disparities in accomplishment (Parmaxi et al., 2024; Buenestado-Fernández et al., 2023; Kuteesa et al., 2024; Llorens et al., 2021; Sevilla et al., 2023; Xie & Liu, 2023), where specific information has historically been associated with various groups (Murphy, 2008; Eisenmann, 2023; Lundberg, 2020; Hadjar et al., 2014; Lahelma et al., 2023).

Galbin (2014) asserts that social constructionism, also referred as social construction of reality, is a knowledge theory in sociology and communication that explores cooperatively constructed understanding of the world. Social constructionism is a "theoretical perspective that looks into how reality is negotiated through people's everyday life interactions and through sets of discourses," (James & James, 2008, p. 122). In social constructionism, gender is "created and re-constructed out of human interactions, out of social life, and it is the texture and order of that social life," (Lorber, 1994, p. 54). According to human genitalia (Lorber, 1994), feminine and masculine identities are based on cultural ideologies and represent socially constructed views of what it means to be a girl or a boy in a specific culture and context, respectively (Berger & Luckmann, 1996; Lorber, 2011; Hagedorn, 2019; Kachel et al., 2016; Mazzuca et al., 2024; Davis, 2018; Bermúdez Figueroa et al., 2023; Cislaghi & Heise, 2020). However, feminine identities are based on cultural ideologies and reflect socially constructed views of what it means to be a girl in a particular culture and setting (West & Zimmerman, 2009). In addition to social context, structural contexts for gender constructions, performances, and experiences are provided by children's gendered experiences (Elmore, Crouch & Chowdhury, 2020). Due to its tendency to promote masculinities while subserviently placing girls, social constructionism offers analytical insights into the intricate processes of gendered spaces and gendered experiences of children (Pitikoe, 2017). As a result, this study focused on the students' gendered experiences of the social school spaces in high schools.

# 2. Methodology

#### 2.1. Research Design

A narrative inquiry design was used in this study. The study employed narrative inquiry to gather participants' accounts (narratives) about their experiences with phenomena (Cowger & Tritz, 2019). Due to the contextual variables affecting space and the gendered experiences of students in the four high schools, narratives proved useful in this study for capturing the subjective voices of the participants. It was also employed to discuss the significance of the participants' own life experiences (Cresswell, 2016). It was also used to discuss the meaning of the personal experiences of the participants. The narrative approach examined the completeness of an experience positioned within the lives and realities of the school children.

#### 2.2. Geographical and Socio-Economic Context of the Study

This research was conducted in four high schools in Eswatini's Hhohho region. Except the east, where it borders Mozambique, Eswatini, officially the Kingdom of Eswatini (formerly known as Swaziland) and also known as kaNgwane, is an independent country that borders South Africa and Mozambique. The people of Eswatini share a common language and uphold a traditional, static way of life based on patriarchy and Christianity (Fielding-Miller et al., 2016). The country is divided into four geographically separate regions: Manzini, Hhohho, Shiselweni, and Lubombo. The study was conducted in the Hhohho area, which is home to Mbabane as its capital. The study selected coeducational schools situated in and around Mbabane, the capital city.

#### 2.3. Data Collection Methods

A qualitative narrative approach served as the foundation for the study's methodological framework. Aspers (2019) states that, in qualitative research, a small distinct group of participants is generally examined to gain an in-depth understanding of the topic, hence a research sample of 24 participants was sufficient. 24 students from four high schools in Form 5 (12 boys and 12 girls), all of whom were between the ages of 16 and 18, participated in the study. Face-to-face individual interviews and focus group discussions were used to collect data. Focus groups helped with "data triangulation" by enabling the researcher to confirm the remarks made by students in one-on-one interviews (Winslow et al., 2002). The researcher encouraged the participants to speak freely, naturally, and openly. As a result, questions were asked, and answers were given in response to the remarks made. Each participant was given the chance to respond to the topics and issues raised while taking into

account group dynamics. On average, at each research site, the researcher spoke with one participant. Neuman (2014) affirms that conducting individual interviews with participants enables them to express their thoughts and open up to thorough study, particularly when it comes to personal accounts of their feelings and experiences. The researcher recorded the conversations on tape and took brief notes as the data was being generated. Participants communicated in both SiSwati and English.

## 2.4. Data Analysis

In this study, thematic analysis was employed. According to Braun and Clarke (2014), thematic analysis is a systematic process used to classify, analyze, and summarize data in a thorough manner with little organization. Tracy (2013) says that thematic analysis allows understanding the potential of any issue more widely and is flexible for many different types of texts. As opposed to narrative analysis which insists on maintaining the integrity of the text being utilised as data and does not break it down into meaning units, the thematic analysis goes beyond counting explicit words or phrases and focuses on identifying and describing both implicit and explicit ideas (Saldaña, 2016). Semi-structured focus group interviews and individual interviews were the main instruments used in the researcher's active participation in data gathering. The length of each interview was between 45 minutes to one hour for individual interviews and between one hour to one and a half hours for focus groups. The aim was to derive from participants their experiences of curriculum and gendered spaces and their views as to the extent of its contribution to their gendered experiences in school. The interviews were done at the four research sites of the study.

The researcher transcribed the audio recordings and translated the recordings to English where necessary. He then typed the information and highlighted it with various colours to present it in visually differentiating ways. All words and phrases that were underlined by the researcher were typed on separate pages. Then, he reviewed the transcript once more to see whether he had missed any other crucial expressions or words. The pages for codes were updated with the words that were left out. Open coding, the first level of coding, allowed for the labelling or tagging of data. It took the researcher several readings of these codes and words before he could classify them into themes. To comprehend the thoughts and concerns that surfaced, the researcher listened to the speech recordings and read the transcripts multiple times. This immersion in the data aided the researcher in absorbing the information and deciphering the meanings and patterns that emerged (Braun & Clarke, 2006, 2014).

researcher listened to the audio recordings again and studied the texts in order to classify and categorise the concerns and ideas that were emerging. The researcher's ability to comprehend the data and make sense of the meanings and patterns that surfaced was assisted by this interaction with the data. From written categories, themes emerged, organized, and linked to the study.

#### 2.5. Ethical Considerations

Ethical considerations were observed to respect the participants' rights (Creswell, 2014). The Ministry of Education and Training in Eswatini was approached for permission through the Education Director's office. Written consent from the school principals was also secured via a written letter describing the study's goal. Before conducting the study, the researcher obtained informed consent from the guardians and parents, as advised by Kaewkungwal (2019). He then asked for informed consent from the parents/guardians via a letter, as supported by Morrow (2016). The researcher did this to try and avoid doing any harm, and to ensure parents and guardians were aware of their children's activities and movements. Each participant was provided adequate information about the research's goals, methodology, and how the data would be used. The letters of consent outlined the issues of confidentiality, privacy, and voluntary involvement. The confidentiality of the participants was safeguarded by pledging that the information they supplied would not be disclosed without their permission. The participants had a choice to participate, not participate or stop participating in the research without any penalties for such an action. For the sake of anonymity, pseudonyms have been employed to represent both the schools and the participants in this study. The ethical clearance was granted for this study by the University of KwaZulu Natal's ethical clearance committee.

## **3. Findings and Discussions**

The study found that learners in other schools were free to choose subjects according to their abilities and without any influences from teachers. In those schools, girls even took up subjects perceived to be masculine, like agriculture and technical drawing. However, in other schools, teachers heavily influenced the subjects the learners chose. In most cases, the subjects were chosen according to femininity and masculinity.

In responding to the question of whether curriculum reflects the needs and life experiences of both boys and girls by providing a varied range of subjects that will provide both with the necessary knowledge and skills needed in adult life, participants had varied views. It is without doubt a factor that plays a major role in defining the space, geography and gendered experiences of children is the curriculum. Bruce (focus group) from site B asserted:

There are a variety of subjects at school. We choose our subjects according to our abilities. Girls also do agriculture and TD and some boys are doing Home Economics. You take subjects according to what you want to be in the future.

The suggestion from this response is that stereotypes in subjects are being done away with. There are no more subjects reserved for boys and girls. Students have an opportunity to shift subjects to fit what they would like to do in the future. A sex-stereotyped view of subjects was associated with sex-stereotyped attitudes towards occupations and roles. Learners whose attitudes were stereotyped and who saw themselves conforming to traditional notions of masculinity and femininity would be more likely to choose sex-appropriate subjects. There are varied and changing dynamism pertaining to gender and curriculum. Tetlow (2016) drawing from Tamboukou and Ball (2006) agrees that children are equated to nomads: as nomads wander, they are "subjects in transition". As such, curriculum influences gender and gender affects the curriculum, hence both affect the gendered spaces and places of boys and girls within the schools and practices.

Ayden (focus group) from site A described whether the curriculum reflects the needs and life experiences of both boys and girls by providing a varied range of subjects that will provide both with necessary knowledge and with skills needed in adult life:

> We do have many subjects to choose from. Some subjects we do not do them because they are not much related to what we experience in life. For example, some left history for ICT because it relates with what we having now. We shift the subjects.

Ayden acknowledges that curriculum provides a variety of subjects from which they can choose from. In the choice of the subjects, some subjects are seen to be more relevant than the others which result in students 'migrating' from one subject to another. He sees ICT to be more relevant than history, maybe due to the fact that technology is dominating educational spaces. This augurs well with the notion of nomadism in curriculum. Tamboukou and Ball (2006) state that nomadism in the curriculum is when learners are afforded an opportunity to try and experience different subjects and then settle for their best. Nomads have the quality of

recreating their homes everywhere, not of homelessness (Tamboukou and Ball, 2006). The threat of spatial transitions and changes is what nomads are always dealing with, as such they do not have security in the spaces they inhabit. This means that students have the ability to change their subjects to fit their circumstances instead of staying in a traditionally ascribed subjects.

Stromquist (2007) alluded that in Sub-Saharan Africa, there are fields in which maleness is fashioned in schools, especially in recognised subjects for boys. This entails that subjects are still studied based on masculinity and femininity. Celiwe (group interview) from site C contradicted the response given by Bruce:

Most of the curriculum (subjects) favour boys. TD, woodwork and agriculture are mostly done by the boys. Girls only do consumer sciences only. The teachers don't want to give us the subjects that boys normally do. They don't say they are for boys but action speaks louder than words.

The suggestion from this response is that there is still gender stereotyping as far as subjects allocated to learners are concerned. Traditionally, masculine subjects are given to boys while traditional female subjects are taken by girls. Gender plays a role in deciding the spaces children occupy in the curriculum. Through their overt and inherent gender norms though, teachers regulate gendered behaviour that reinforces unequal gender relations in Eswatini, hence creating gender inequitable school spaces (Motsa & Morojele, 2018). Elwood (2016) agrees that curriculum is created and informed by cultural and social values, skills, and information that are considered essential for learners to know to prepare them for future work and life in a range of contexts and communities. Stromquist (2007) agrees with Connell (1996) that the curriculum is still separated between girls and boys, with girls learning more about family life and home science and boys learning more about productive skills and sports. This confirms the view that curriculum is a gendered space, and the view that the school is a gendered space. Savard (2016, p. 10) points out that gendered spaces are places where "behaviours that are distinctly male and female occur". In this case, subjects are done based on femininity and masculinity. Social constructionism states that gender is created and recreated out of human interactions, out of social life, and it is the texture and order of that social life.

The responses from this theme show that stereotypes in subjects are being done away with in other schools. There are no more subjects reserved for boys and girls. Students have an opportunity to shift subjects to fit what they would like to do in the future. Findings, however, also show that gender stereotypes still exist in other schools concerning the subjects chosen for students. Boys typically take traditionally masculine subjects, whereas girls typically study traditionally female subjects. The spaces that children occupy in the curriculum are determined in part by their gender.

*Children's geographies in subject choices.* The study found that the children's daily lives were dominated by adults. Their decisions in choosing subjects had much interference from teachers. In some cases, teachers greatly influence learners' subject choices. Subject choices made by teachers were according to tradition. However, in other situations, learners had the freedom to choose their preferred subjects, according to their ability and desire.

Morrow (2011) says that the concept of children's geographies deals with the study of places and spaces for everyday lives for children. As children attend school, they have to decide on which subjects to take. In the Eswatini context, children have the right to choose subjects (Swaziland Education and Training Sector Policy, 2011); however, on the ground, teachers make decisions on behalf of the learners. This puts into context Holloway and Hubbard's (2014) view that children's voices should be heard: they add value to debates, as independent knowing subjects. In responding to a question on the freedom of learners to confidently make subject choices that may not be traditionally male or female subjects, different responses were achieved. Musa (individual interview) from site D alleged:

In my view, boys are capable of doing vocational education. We like doing things like agriculture, mechanics, plumbing and TD. They (teachers) give us geography, history and other such which do not give us skills needed in the near future. For girls is fine because they are doing Home Economics (H E) because they end up being married and should know how to cook and manage the homes. We are boys who will be heads of families we need productive subjects.

This response from Musa suggests that the students are not given a chance to decide on the subjects that they like to do. Social stereotypical perceptions about children and gender therefore guide most schools' and teachers' pedagogic practices in Eswatini. For example, children are perceived to be too young to listen to or understand issues of gender (Nxumalo et al., 2014). Subjects are allocated to them, which means that the voices of the learners are not heard. The response from this participant disapproves the hand of administrators and teachers in deciding subjects for them. There is also the issue of masculine or feminine subjects raised by the participant. This line of argument is supported by Yarwood and Tyrrell (2012) that children's perspectives and experiences were traditionally overlooked in mainstream geography. In the Kingdom of Eswatini, the voices of children are overlooked and adults make decisions on their behalf (Motsa & Morojele, 2019). As such, there is restriction and control in their use of space by adults, legislation and institutions such as schools. Children find it difficult to change or shape their spaces and environment because they do not have the same voice or power as adults. This shows that the boy learners' choice of subjects is limited. In later life, they will not be able to do careers of their choice because they have been shortchanged with the curriculum decided for them by the teachers. Norozi and Moen (2016) assert that children are considered and deliberated as being in a relatively powerless position in relation to adults in deciding on subjects to take. This means that the destiny of the children is in the hands of the teachers and to some degree, the administrators. Social constructionism states that gender 'is created and re-created out of human interactions, out of social life, and it is the texture and order of that social life. It is through children's interactions with teachers that their behaviour is shaped.

Linda (focus group) from site C suggested the hand of teachers in subject selection was based on gender stereotypes:

We have more girls in home economics and more boys in woodwork. Teachers assume that we are lazy to write so we should do woodwork when actually some of us want to cook. The teachers in a way want us to do subjects that boys normally do and not take female subjects.

The suggestion from this participant is that there is stereotyping by teachers in subject choices. Subjects are allocated to students based on tradition. Because curriculum is socially created, it is "*a mirror of both dominant ideas and a space where ideas are restricted or played out through practice, as well as implicated in the defining and formation of gender relations*" (Elwood, 2016, p. 9). Eswatini is a country that is strongly patriarchal where girls and women are viewed as inferior to boys and men (Mabuza, 2017). Women and girls in Eswatini are treated and perceived as second-class citizens and they occupy the lower divisions of hierarchised levels of unequal gendered power relations (Nxumalo et al., 2014). With this,

there is an understanding of how much curriculum promotes or reflects appropriate gender behaviour and perceptions about girls and boys and what/how they should learn. Mugodzwa and Matope (2011) agree that girls are expected to take home economics, while boys are made to take courses such as metalwork, woodwork and mathematics, which are subjects that prepare them for work and to support the family. There are limited spaces for girls in those subjects, while wide and assured spaces are guaranteed for boys. This is a sign that there is gender stereotyping in the choice of subjects.

While the responses show the influence of teachers and administrators in subject choice decisions, research site B seemed to be doing things differently. The following are the responses to the question on subjects' offerings.

Bheka (focus group) asserted:

We chose our subjects according to our abilities. Anyone does what he/she is best at. Teachers support our decisions since that is what we will have chosen. Girls also do agriculture and TD and even some boys do home economics.

This response alludes to the fact that autonomy is given to students to make academic subject choice decisions. It reveals that all subjects are free to all students despite their sexual orientation. Girls are now occupying spaces that were traditionally reserved for boys. This shows that in as much there are still stereotypes in the choice of subjects, but through counseling and training and education, there is a shift from the *status quo*. The submission suggests that teenage learners are happy in choosing subjects for themselves. Viklund and Wikblad (2009, p. 3269) agree that teenagers in schools should be respected "*for their imperfect decision-making abilities*." They deserve constructive support to compensate for their deficiencies from teachers and parents as their social network. Female students now look broadly at the different types of professions than in the past when they choose their subjects (Kring, 2017).

The MOET came up with a project called 'Take your girl child to work', which is meant to encourage the participation of girls in science and technology to encourage girls to take up careers that were male-dominated (National Education and Training Sector Policy, 2018). It is meant to ensure that girls and women are adequately represented in Science, Technology, Engineering, Mathematics (STEM). In response to the question of how the participation and achievement rate of girls in relation to boys in math and science, and boys in disciplines such as literature and history, participants spoke their minds out and their experiences.

Asher (focus group) from site A claimed:

Boys perform better in maths and science. Boys are born mathematicians and scientists. However, there are girls who are also good in these subjects. Boys find it difficult in literature and history. I do get higher marks in maths and sciences than on literature and history.

This submission suggests that boys are better in maths and science than girls. However, girls seem to be also doing well in maths and science. Asher's assertion is supported by Ma (2011), who found that there were small differences in Grades Four and Five in the sciences between boys and girls, but by Grade 12, there were huge and very reasonable differences in favour of the boys.

Of note was participant Adam (focus group) from site A, who averred:

Boys hate reading and enjoy maths and science. They enjoy figures, hate reading and like practical work. Most girls do not like science and maths. They need motivation in those subjects.

From this response, it seems obvious that boys enjoy maths and science, while girls enjoy literature and history. Many studies by Dee (2007) in USA, Roohani and Zarei (2013), in Iran and Quenzel and Hurrelmann (2013) in USA have revealed how subjects categorised in the technologies, sciences and mathematics, have been legitimised and deemed more relevant for boys for a long time as appropriate spheres of learning, whereas mother tongue and foreign languages, a categorisation of languages, arts and humanities, are considered appropriate and relevant for girls. Stromquist (2007) notes that science is associated with hegemonic masculinity, and physics is seen as the most masculine of subjects in the West. Girls are more attached to their homes than boys, and girls are typically associated with writing and reading, despite the assumption that they prefer romance literature. One of the participants Owethu (focus group) from site D declared:

> Girls love reading literature books and magazines. They love romantic novels and this keeps them busy much of the time. That is the reason I think girls do well in literature and history. Boys, on the other hand, are lazy to read; they enjoy calculations and more hands-on subjects like science. One more thing I see here

is that out of all our eight Form Five maths and science teachers, only three are females. Vele ungatsi tifundo tebafana (It's like these subjects are for boys).

Owethu suggests that girls are good in literature because of their love to read magazines and novels, while boys are good in maths and science because they enjoy calculations and are lazy to read. Girls read more than boys and have a wide experience with fiction. Boys undoubtedly spend more time outside, and reading is not considered as particularly masculine among adolescents. It is a sad reality in Eswatini that the education system that is entrusted to bring about equity and equality, supports gender stereotypes that uphold inequalities (Nxumalo et al., 2014). Mcpherson (2012) commented on the under-representation of women in science post-secondary schools in the United States, stating that women are under-represented in the sciences due to the philosophy of home comforts and the social and political conditions of science, rather than a lack of curiosity or aptitude. In all parts of the subject, females tend to perform better than males in the examination of English language. Murphy (2008) notes that the differences in curriculum subject preferences and choices between boys and girls had more to do with access to the range of curriculum on offer as well as the choice of subjects that interact with gender identities and how they are played out in school, rather than natural tendencies with females and males being better in particular subjects, after detailed analyses. This resonates with Owethu's assertion. Pinar (2011) and Slattery (2013) noted that maths and science are predominantly taught by male teachers, which gives the subject an impression of masculinity. The gender stereotypes of those teaching science and maths send the unspoken message, is that mathematics is for males.

## 4. Conclusion

As regards to children's geographies in subject choices, this study found that students are not given a chance to decide on the subjects that they like to take. They are allocated certain subjects, so the students' voices are not taken into consideration in some schools. However, in other schools, autonomy is given to students to make academic subject choice decisions despite sexual orientation. Girls are now occupying spaces that were traditionally reserved for boys because they have the freedom to choose subjects they want.

For the high school students in Eswatini, curriculum is formed and informed across many settings and societies by cultural and social values, skills and knowledge, that are considered essential for young people to know and which prepare them for future work and life. The school curriculum plays an important role in preparing girls and boys for their different traditional social roles and therefore helps to maintain a division of labour founded on sexual differences. Hence, pre-service training and in-service workshops should be held where teachers would be skilled on how to deconstruct dominant constructions of gender through the curriculum because of the implications it has on the children's own constructions of gender and general well-being at the schools. Similarly, children should be given full autonomy to select the subjects they want to take in high schools to allow them to develop within their area of choice.

**Disclosure statement** No potential conflict of interest was reported by the author(s).

**Funding** This work was not supported by any funding.

#### ORCID

Gibson Makamure - <u>https://orcid.org/0000-0001-7761-1588</u> Phumuzani Mpofu – https://orcid.org/0000-0002-5671-9263

## References

- Aspers, P., & Corte, U. (2019). What is qualitative in qualitative research. *Qualitative Sociology*, *42*, 139-160.
- Braun, V., & Clarke, V. (2014). What can "thematic analysis" offer health and wellbeing researchers? *International journal of qualitative studies on health and well-being*, 9(1), 26152.
- Berger, P.L. & Luckmann, T. (1996). *The social construction of reality: A treatise in the sociology of knowledge*. Doubleday & Company.
- Bermúdez Figueroa, E., Dabetić, V., Yuste, R.P., & Saeidzadeh, Z. (2023). Gender and structural inequalities from a socio-legal perspective. In: Vujadinović, D., Fröhlich, M.,

Giegerich, T. (eds) *Gender-Competent Legal Education*. Springer Textbooks in Law. Springer, Cham. https://doi.org/10.1007/978-3-031-14360-1\_4

- Buenestado-Fernández, M., Ibarra-Vazquez, G., Patiño, A., & Ramírez-Montoya, M. S. (2023). Stories about gender inequalities and influence factors: a science club case study. *International Journal of Science Education*, 46(5), 403–420. <u>https://doi.org/10.1080/09500693.2023.2235456</u>
- Cislaghi, B. & Heise, L. (2020). Gender norms and social norms: differences, similarities and why they matter in prevention science. *Sociol Health Illn*, 42(2), 407-422. <u>https://doi.org/10.1111/1467-9566.13008</u>
- Cowger, T., & Tritz, J. (2019). Narrative analysis research: A tool for extension educators. *The Journal of Extension*, 57(6), 1.
- Creswell, J. W (2016). Research design: Qualitative, quantitative, and mixed methods approaches. SAGE Publications.
- Davis, B. (2018). *Exploring the social construction of masculinity and its differential expression in culturally different populations using a mixed method approach*. Theses and Dissertations. <u>https://corescholar.libraries.wright.edu/etd\_all/1988</u>
- Dee, T. (2007). Teachers and the gender gap in student achievement. *Journal of Human Resources*. 42(3), 528-554. <u>https://doi.org/10.3102/1076998610396885</u>
- Eisenmann, L. (2023). Historical Considerations of Women and Gender in Higher Education.
  In: Perna, L.W. (eds) *Higher Education: Handbook of Theory and Research*, vol 38.
  Springer, Cham. https://doi.org/10.1007/978-3-031-06696-2\_6
- Elwood, R. W. (2016). Defining probability in sex offender risk assessment. *International Journal of Offender Therapy and Comparative Criminology*, 60(16), 1928–1941. https://doi.org/10.1177/0306624X15587912.
- Elmore, A. L., Crouch, E., & Chowdhury, M. A. K. (2020). The interaction of adverse childhood experiences and resiliency on the outcome of depression among children and youth, 8-17 year olds. *Child Abuse & Neglect*, 107, 104616. <u>https://doi.org/10.1016/j.chiabu.2020.104616</u>

- Fielding-Miller, R., Dunkle, K. L., Cooper, H. L., Windle, M., & Hadley, C. (2016). Cultural consensus modeling to measure transactional sex in Swaziland: Scale building and validation. *Social Science & Medicine*, 148, 25-33. <u>https://doi.org/10.1016/j.socscimed.2015.11.024</u>
- Galbin, A. (2014). An introduction to social constructionism. *Social research reports*, 26, 82-92.
- Hadjar, A., Krolak-Schwerdt, S., Priem, K., & Glock, S. (2014). Gender and educational achievement. *Educational Research*, 56(2), 117–125. https://doi.org/10.1080/00131881.2014.898908
- Hagedorn, G. (2019). The socialization process of masculinity, and its manifestation at DePauw University: How race, media, and gender contribute to the malleability of masculinity. Honor Scholar Theses. 109, Scholarly and Creative Work from DePauw University. https://scholarship.depauw.edu/studentresearch/109
- Holloway, L., & Hubbard, P. (2014). *People and place: the extraordinary geographies of everyday life*. Routledge.
- James, A., & James, A. (2008). Key concepts in childhood studies (2nd ed.). SAGE Publications.
- Kachel, S., Steffens, M.C. & Niedlich, C. (2016). Traditional masculinity and femininity: Validation of a new scale assessing gender roles. *Front. Psychol.* 7, 956. <u>https://doi.org/10.3389/fpsyg.2016.00956</u>
- Kring, S. A. (2017). Gender in employment policies and programmes: What works for women? Employment Working Paper No. 235. ILO.
- Kuteesa, K.N., Akpuokwe, C.U. & Udeh, C.A. (2024). Gender equity in education: Addressing challenges and promoting opportunities for social empowerment. International Journal of Applied Research in Social Sciences, 6(4), 631-641. <a href="https://doi.org/10.51594/ijarss.v6i4.1034">https://doi.org/10.51594/ijarss.v6i4.1034</a>
- Lahelma, E. (2023). Controversies and challenges in the history of gender discourses in education in Finland. In: Thrupp, M., Seppänen, P., Kauko, J., Kosunen, S. (eds)

*Finland's Famous Education System.* Springer, Singapore. https://doi.org/10.1007/978-981-19-8241-5\_16

- Llorens, A., Tzovara, A., Bellier, L., Bhaya-Grossman, I., Bidet-Caulet, A., Chang, W.K., Cross, Z.R., Dominguez-Faus, R., Flinker, A., Fonken, Y., Gorenstein, M.A., Holdgraf, C., Hoy, C.W., Ivanova, M.V., Jimenez, R.T., Jun, S., Kam, J.W.Y., Kidd, C., Marcelle, E., Marciano, D. ... (2021). Gender bias in academia: A lifetime problem that needs solutions. *Neuron*, 109(13), 2047-2074. <u>https://doi.org/10.1016/j.neuron.2021.06.002</u>
- Lorber, J. (1994). Paradoxes of gender. Yale University Press.
- Lorber, J. (2011). *The social construction of gender*  $(2^{nd} ed)$ . Routledge.
- Lundberg, S. (2020). Educational gender gaps. *South Econ J.*, 87(2), 416-439. <u>https://doi.org/10.1002/soej.12460</u>
- Ma, Y. (2011). Gender differences in the paths leading to a STEM baccalaureate. *Social Science* Quarterly, 92(5), 1169-1190. <u>https://doi.org/10.1111/j.1540-6237.2011.00813.x</u>
- Mazzuca, C., Borghi, A.M., van Putten, S., Lugli, L., Nicoletti, R. & Majid, A. (2024). Gender is conceptualized in different ways across cultures. *Language and Cognition*, 16(2), 353-379. <u>https://doi.org/10.1017/langcog.2023.40</u>
- Matope, N., Maruzani, N., & Mukoni, M. (2011). *Introduction to gender studies*. Booklove Publishers.
- Mbabane, Eswatini. (2018). Eswatini Nation Education and Training Sector Policy.
- Mcpherson, E.M. (2012). Undergraduate African American women narratives in persistency in Science majors at PWI.[ Doctor of Philosophy in educational policy studies, University of Illinois]
- Morrow, V. (2011). *Understanding children and childhood* (2nd ed.). Centre for Children and Young People, Southern Cross University.
- Motsa, N. D. & Morojele, P.J. (2019). Vulnerable masculinities: implications of gender socialisation in three rural Swazi primary schools. SAJCE, 9(1), 1-11. <u>http://.doi.org/10.4102/sajce.v9i1.580</u>

- Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches* (7<sup>th</sup> ed.). Pearson.
- Norozi, S.A., & Moen, T. (2016). Childhood as a social construction. *Journal of educational* and social research, 6(2). https://doi.org/10.5901/jesr.2016.v6n2p75
- Nxumalo, K., Okeke, C. & Mammen, J. (2014). Cultural beliefs and practices towards HIV/AIDS amongst high school learners in Swaziland. *Studies and Ethno-Medicine* 8(2), 135–146. <u>https://doi.org/10.1080/09735070.2014.11917628</u>
- Parmaxi, A., Christou, E., Fernández Valdés, J., Hevia, D., Perifanou, M., Economides, A.A., Mazaj, J. & Manchenko, M. (2024). Gender equality in science, technology, engineering and mathematics: industrial vis-a-vis academic perspective. *Discov Educ* 3, 3 (2024). https://doi.org/10.1007/s44217-023-00082-7
- Pinar, W. (2011). What is curriculum theory? (2nd ed.). Routledge.
- Pitikoe, S. (2017). Basotho herders learn through culture and social interaction. *Learning, Culture and Social Interaction, 13*, 104-112. <u>https://doi.org/10.1016/j.lcsi.2017.03.003</u>
- Quenzel, G., & Hurrelmann, K. (2013). The growing gender gap in education. *International Journal of Adolescence and Youth*, 18(2). 69-84. https://ecommons.aku.edu/pakistan\_ied\_pdck/4
- Roohani, A., & Zarei, M. (2013). Evaluating gender bias in the Iranian pre university English textbooks, *Indonesian journal of Applied Linguistics* 3(1); 115. <u>https://doi.org/10.17509/ijal.v3i1.194</u>
- Saldaña, J. (2016). The coding manual for qualitative researchers (3rd ed.). Sage.
- Savard, D.M. (2016). The effect of gendered spaces on the gender gap in victimization: implications for private and public security. Wayne State University Dissertations 1586.
- Sevilla, M.P., Luengo-Aravena, D. & Farías, M. (2023). Gender gap in STEM pathways: the role of secondary curricula in a highly differentiated school system—the case of Chile. *IJ STEM Ed*, 10, 58. <u>https://doi.org/10.1186/s40594-023-00450-7</u>

- Slattery, P. (2013). Curriculum development in the postmodern era: Teaching and learning in an age of accountability. Routledge
- Stromquist, N.P. (2007). The gender socialisation process in schools: a cross national Comparison: Radical shifts in university environments. *Higher Education* 53(1): 81– 105. <u>https://unesdoc.unesco.org/ark:/48223/pf0000155587</u>
- Tamboukou, M., & Ball, S, (2006). Nomadic subjects: young black women in Britain. Discourse: Studies in the Cultural Politics of Education. 23 (3), pp. 267- 284. https://doi.org/10.1080/0159630022000029777
- Tetlow, S. (2018). Unruly School Spaces: An ethnographic exploration of year 8 students' experiences of space, gender and well-being in South Wales secondary school. The Open University.
- Tracy, S. J. (2013). Qualitative research methods: Collecting evidence, crafting analysis, communicating impact. Wiley-Blackwell. http://www.123library.org/book\_details/?id=63971
- Viklund, G., & Wikblad, K. (2009). Teenager's perceptions of factors affecting decision making competence in the management of type 1 diabetes. *Journal of Clinical, Nursing*, 18, 3262-3270. <u>https://doi.org/10.1111/j.1365-2702.2009.02963.x</u>
- West, C., & Zimmerman, D. H. (2009). Accounting for doing gender. *Gender & society*, 23(1), 112-122. <u>https://doi.org/10.1177/0891243208326529</u>
- Winslow, W.W., Honein, G., & Elzubeir, M. A. (2002). Seeking Emirati women's voices: The use of focus groups with an Arab population. *Qualitative Health Research*, 12(4), 566-575. https://doi.org/10.1177/104973202129119991
- Xie, G. & Liu, X. (2023). Gender in mathematics: how gender role perception influences mathematical capability in junior high school. J. Chin. Sociol, 10, 10. <u>https://doi.org/10.1186/s40711-023-00188-3</u>
- Yarwood, R., &Tyrell, N. (2012). Why children's geographies? *Geography*, 97(3), 123–128. https://doi.org/10.1080/00167487.2012.12094350