

Research Article

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Raising awareness about gender and language among teacher-training students: A cross-cultural approach

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Abstract: In accordance with the Education 2030 agenda for sustainable development goals, the aim of this study is to contribute to gender-sensitive teacher training and learning environments using matched guise-inspired methods. The article offers an account of activities aimed at raising awareness of issues related to linguistic gender stereotyping among teacher trainees in Sweden and the Seychelles. The cross-cultural comparative approach also provided an opportunity to raise students' awareness of how gender stereotyping is culture-related, and therefore may differ depending on cultural context. Results show that there seems to be significant differences in how Swedish and Seychellois teacher trainees stereotype men and women. While both groups seem to associate typically feminine linguistic behaviour with features accommodated under Cuddy et al.'s (2008, "Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map." *Advances in Experimental Social Psychology* 40, 61–149) "warmth dimension" (signalling interest, for example), behaviours typically associated with agentic behaviour and the competence dimension, such as taking space in a conversation and forcefully arguing one's case, seem to be regarded as relatively masculine in Sweden, but not in the Seychelles, arguably a result of a generally negative construction of masculinity in the Seychelles. Based on the responses from a post-survey, it is evident that a majority of those who participated in the exercise gained new insights into the mechanisms of gender stereotyping, knowledge that they also could relate to *themselves* and their *own* behaviour.

1 Introduction

The enforcement of gender equality constitutes the fifth goal of the United Nations Agenda 2030 sustainable development goals, and also features as a fundamental principle in many education systems in the world, including the two under investigation here, namely Sweden and the Seychelles. The Education 2030 Agenda recognises that gender equality requires an approach that "ensures that girls and boys, women and men not only gain access to and complete education cycles, but are empowered equally in and through education" (UNESCO 2016, 12). In this pursuit, gender bias and stereotyping are recognised as serious threats:

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To ensure gender equality, education systems must act explicitly to eliminate gender bias and discrimination resulting from social and cultural attitudes and practices and economic status. Governments and partners need to put in place gender-sensitive policies, planning and learning environments; mainstream gender issues in teacher training and curricula monitoring processes, and eliminate gender-based discrimination and violence in education institutions to ensure that teaching and learning have an equal impact on girls and boys, women and men, and to eliminate gender stereotypes and advance gender equality. (World Bank Group 2016. *Incheon declaration*: 32)

The central role of language in the establishment, communication, and maintenance of social category-based stereotyping has long been recognised (Burgers and Beukeboom 2020, Collins and Clément 2012, Sutton and Douglas 2008). For example, Collins and Clément (2012, 379) conceptualise language “as a lens that directs and distorts cognition,” with “transformative power on attention, thought, and memory,” while Burgers and Beukeboom (2020, 439) describe the relationship between stereotyping and language use as “two-directional,” involving “stereotypes [being] reflected in the language use of speakers, and language use in turn [feeding] social-category stereotypes in message recipients.” In this way, linguistic stereotyping involves both language users in their linguistic choices and language recipients in their linguistic expectations and interpretations. In the pursuit of gender equality in education, an awareness of such language-related processes is particularly important for teachers, who not only constitute primary role models for learners but also play a central role in managing classroom communication.

The current study approaches some of these challenges. Our broad aim is to contribute to the realisation of gender-sensitive teacher training and learning environments through the development of methods aimed at raising practitioners’ awareness of linguistic gender stereotyping and bias effects (see also Deutschmann and Steinval 2020a). In this pursuit, we employed a matched-guise inspired intervention, where we reveal respondent groups’ (teacher trainees) stereotypical behaviours, and then use these results as the starting point for group discussions. In this particular set-up, we were also interested in raising awareness of how the nature of such stereotyping may be culture-specific, and how stereotypes may tend to vary between cultures. With these ambitions in mind, we have compared outcomes from awareness raising activities conducted in Sweden and the Seychelles, a small island nation off the east coast of Africa often described as matrifocal, and introduced this comparative element in the awareness-raising group discussion activities.

1.1 Language and gender stereotypes in education

There is substantial evidence suggesting that gender expectations and stereotypes play an important role in shaping learners’ domain-specific ability self-concepts. For example, several studies from Europe and the US indicate that girls are stereotypically believed by teachers to have higher language-related abilities than boys, while boys are believed to be better at mathematics. Such constructs seem to have a direct effect on corresponding student ability self-concepts (Durik et al. 2006, Ireson and Hallam 2009, Retelsdorf et al. 2015). In sum, it seems that stereotypes surrounding gender-specific abilities help to shape learners’ ability self-concepts, which in turn are partly self-fulfilling and strengthened over time (Archambault et al. 2010, Jacobs et al. 2002).

Teachers’ conscious or unconscious biases play a crucial role in strengthening or counteracting stereotype effects in the classroom. For example, in a longitudinal study, Retelsdorf et al. (2015, 191) found that teachers’ negative gender stereotypes of boys’ L1 reading abilities had a significant impact on this group’s self-concepts and resulted in more negative self-concepts than was motivated by actual performance. Further, as pointed out by Aronson and Steele (2005), teachers’ stereotypes help shape social interactions in the classroom consciously or unconsciously, leading to self-fulfilling prophecy effects. Illustrations include studies that show tendencies for schoolteachers to give more attention (primarily negative) to boys than girls (Chen and Rao 2011, Sunderland 2000) even when they think that they are being more attentive to the girls (Sunderland 2000, 160). Sunderland also notes differential tendencies in the quality of attention given to boys and girls. In her study of a lower secondary German as an FL classroom, girls were

more likely to receive positive attention and so-called academic solicits that encourage elaboration than boys, who tended to receive more negative attention – reprimands and critical feedback, for example. Such differences in communicative patterns may in part be socially constructed from expectation-based stereotypical gendered profiling, in turn a result of a “gendered differences” discourse in educational contexts that has established girls as “good language learners” and “better” than boys (Sunderland 2004, 93).

Stereotyping has also been shown to influence teachers’ judgements of performance. Campbell’s (2015) study of assessments of over 5,000 primary pupils, for example, suggests that biases based on various social stereotypes, including gender, significantly affected ratings of pupils’ reading abilities. Such differential judgements may be the result of implicit confirmation bias and stereotype effects influencing and distorting listener perceptions of language output in such a way that we unawares notice aspects that match the stereotypes associated with the speaker group membership and overlook those that do not (see for example Deutschmann and Steinvall 2020a, Kang and Rubin 2009, Lindvall-Östling et al. 2020, Strand 1999). Another issue related to evaluation, judgement, and stereotyping are so-called *shifting standards effects* (Biernat 2012, Holder and Kessels 2017), which result in different standards of judgement based on stereotypical preconceptions being applied to members of different social groups. One potential consequence of this is that teachers’ expectations of achievement of boys and girls in different subject domains may differ, which in turn may lead to systematic differences in the demands that teachers put on children depending on what social group they belong to.

When discussing gender stereotypes and expectations in school contexts, it is important to bear in mind that the nature and degree of such expectations vary across cultures (see Akabayashi et al. 2020, Miller et al. 2015). For example, the 2018 PISA results show that, while there seems to be a general gender-gap among 15-year-olds in reading abilities across OECD countries favouring girls, the magnitude of this gap differs greatly from nation to nation. In mathematics, the patterns are less universal. Boys significantly outperformed girls in 32 of the 79 countries studied, while girls significantly outperformed boys in 14 countries (OECD 2020, 143–4). Similar assessment studies from Africa show slightly different trends. Referring to the 2011 CONFEMEN¹-PASEC² assessments from francophone Africa, Saito (2011, 4) points to few gender differences in lower grades (primary 3), but trends that point to boys outperforming girls in both reading and mathematics in primary six in these parts of Africa. According to the same author (Saito 2011, 8), the 2010 studies performed by the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) indicated great gender variations between countries. There were, for example, general significant tendencies for girls to outperform boys in reading achievement in most of the countries investigated. This was, however, not the case for Mozambique, Zambia, Uganda, and Malawi, where the opposite was true. In the subject of mathematics, the general trends pointed in the opposite direction, except for results from Botswana, South Africa, and the Seychelles, where girls outperformed boys. Gender differences in both reading and mathematics were the greatest in the Seychelles, with girls greatly outperforming boys in both of these subject areas. Although other factors may play in, it is reasonable to assume that gendered cultural expectations and stereotypes play some part in these observed gender-gaps. As van der Vleuten et al. (2016, 181) point out, internalised gender expectations as “to what is ‘appropriate’ male and female behaviour” influence how adolescents evaluate their subject competence and preference, factors which in turn influence performance and ultimately future educational track choices.

1.2 Gender constructions and stereotypes in the two cultures

In accordance with Money et al. (1955) and many subsequent scholars (see Eckert and McConnell-Ginet 2013, for example), we see gender as a social construct. In other words, the behaviours, attitudes, and attributes that we consider masculine or feminine are largely shaped by “society” rather than biology.

¹ Conférence des ministres de l’Éducation des États et gouvernements de la Francophonie.

² Programme d’analyse des systèmes éducatifs.

Accordingly, gender can be seen as a performance where the roles are constructed by given norms that surround us, and where we ourselves actively construct those roles. This idea of “doing gender” rather than “being gender” has been under intense debate and scrutiny since the late eighties (e.g. Butler 1990, Messerschmidt 2009, Pecis 2016, Rismann 2009, Thanem and Wallenberg 2016, West and Zimmerman 1987). Gender performativity conceptually leaves us with a continuous axis, where we can place hegemonic masculinity at one end (see Connell 1987, 2005) and hegemonic femininity (see Pyke and Johnson 2003, Schippers 2007) at the other, and with an array of subordinate gender identities positioned between the hegemonic gender roles. Note, however, that considering the trans/cis debate here, which challenges so much that has gone before, is beyond the scope of this study.

While embracing a performative view of gender, the specific focus of this article is perceptions of language use in relation to gender. Thus, it is not the (potentially) gendered performance of language that is at stake, but the perceptions of it and the influence of hegemonic models on those perceptions. In this way, its approach is superficially akin to that of many studies in the 1980s exploring linguistic gender differences from the point of view of the Dominance approach and Difference approach. Like the present one, such studies would focus on conversational features such as interruptions, verbosity (male dominance in speech), questions, and back-channelling in relation to speaker gender (e.g. Fishman 1980, 1983, Thorne et al. 1983, West and Zimmerman 1983, Zimmerman and West 1975, for a historical perspective and a problematised view of these early approaches, see for example Talbot 2020). The important difference is that the present study is not concerned with such features in a dialogue *per se*, but rather the *perception* thereof in relation to the gender of speakers.

It is important to emphasise the fact that if hegemonic gender roles are culturally shaped, they may therefore differ depending on cultural context. This is sometimes overlooked, given the predominant Western focus on gender studies to date, something which has also been criticised (e.g. Oyēwùmí 1997). As pointed out by Connell (2005, 1804), although there is a global dimension to gender constructions that has grown out of the history of imperialism, changes in gender relations do occur on a world scale, and not always in the same direction or at the same pace. It therefore stands to reason that we may find a range of hegemonic gender constructions in different cultures.

Before attempting to describe the hegemonic gender constructions in the cultural contexts studied here, it is relevant to problematise the concept of “culture.” Spencer-Oatey (2008, 3) defines culture as:

a fuzzy set of basic assumptions and values, orientations to life, beliefs, policies, procedures and behavioural conventions that are shared by a group of people, and that influence (but do not determine) each member’s behaviour and his/her interpretations of the “meaning” of other people’s behaviours.

Noteworthy in this quote is that the focus is not on *nationality, ethnicity, country, region*, or any other population-encompassing noun, implying that geographical proximity/distance does not necessarily determine culture. Aspects such as education, socio-economic factors, connectivity, and mobility may be equally important, as is also Community of Practice – within and across nations. This is important to bear in mind when comparing “cultures” based on nationality and geography (as we do here) – we are essentially comparing fuzzy approximations within which there is plenty of variation. Having said this, investigated cultural features are often tied to geographical locations statistically (see e.g. Cuddy et al. 2009).

The Seychelles has a population of approximately 100,000. The Seychelles was uninhabited until 1770, when it was colonised by the French, who established a slave-dependent plantation economy (Scarr 2000). The islands came under full British control in the late eighteenth century and since independence in 1976, the country has developed into a prospering market-based diversified economy, characterised by rapidly rising service, public sector, and tourism activities. According to figures from the World Bank Group (2017), Seychelles has one of the highest nominal per capita GDP of any African nation. However, despite its relative prosperity, poverty remains widespread due to high levels of economic inequality and unequal wealth distributions.

The question of gender constructions in the Seychelles is complex. On many levels there is, what most people would call, “gender equality” in the Seychelles. Girls and boys all attend school for at least 9–10

years, and there are no legal, social, or religious pressures that disfavour women or force them into unwanted gender roles. Nevertheless, in many other areas, the Seychelles has quite clear gender divisions that mirror global hegemonic masculinity patterns. For example, many occupational sectors such as fisheries, transportation, engineering, and construction are dominated by men, and gender roles in the home are overall fairly “traditional,” with women tending to have the main, or sole, responsibility for the upbringing of children and household duties. Nevertheless, Seychelles is often referred to as a “matriarchal” or “matrifocal” society (Deutschmann and Steinvall 2020b, Eriksen 2020, Geisler and Pardiwalla 2010), where households tend to be owned and headed by women in their capacity as primary breadwinners and decision-makers, and where women are highly visible in public life – in media, in politics, in the civil service, and in business, for example (Geisler and Pardiwalla 2010). As a general approximation, women are seen as competent, reliable, and responsible in the Seychelles. In contrast, there is a general public portrayal of men as inadequate, lazy, irresponsible, lacking in motivation, and “secondary to women [...] in life generally” (Geisler and Pardiwalla 2010, 63).

Gender constructions in the Seychelles, and explanations thereof, are in many ways similar to those of other ex-plantation/slavery cultures such as the Caribbean. Beckles (2004, 233), for example points to the Caribbean Creole/black stereotypical male construction as lazy, irresponsible, and unreliable being a product of historical circumstances. According to Beckles (2004), such stereotypes were politically and ideologically motivated under the colonial project as a way of emasculating the male slave thereby reducing the potential threat that this group constituted in the colonial project and to retain patriarchal (white) power (see also Mohammed 2004). Male slaves in the Seychelles and the Caribbean were further disempowered by being denied their roles as fathers; female slaves were given the full responsibility and rights over their children (and their homes), and the men had no say over what happened to either their female partners or their children (Borilot 2014, Chang-Him 2002). Apart from these historical explanations for gender constructions in the Seychelles, Choppy (2020) also includes more recent political developments, what she calls a “socialist revolution,” as being instrumental in empowering women, by promoting their role in politics, for example. Choppy also emphasises added complexities as regards gender constructions in the Seychelles. Here she maintains that the traditionally patriarchal system brought in by the colonials still partially works in parallel to the matrifocal system, in the higher socio-economic tiers, where traditional western patriarchal structures apply. The result is that gender stereotypes differ greatly depending on socio-economic class, and the generally negative stereotypes associated with males only really apply to the working class Creole male (see also Deutschmann and Steinvall 2020b).

The general societal gender constructions dealt with above are mirrored in the Seychelles school system. Boys’ relative underachievement and under-participation in primary and secondary state schools have been noted over the past couple of decades, and national examination results and surveys reveal that girls outperform boys at school in all subjects across the curriculum, including Mathematics and Science (Committee on the Elimination of Discrimination against Women CEDAW 2018, Hungi and Thuku 2010). According to Geisler and Pardiwalla (2010, 66), girls are the “preferred gender” among teachers, who hold high expectations of them. Boys, like men, on the other hand, are considered lazy, lacking in motivation, and inadequate. Consequences of these structures are also visible in higher education. According to the CEDAW report (2018) submitted by the Seychelles, more than 76% of the students enrolled in university in the country were women in 2016. Despite the fact that the gender gap in education has been highlighted in the Seychelles over a decade now, to the best of our knowledge, there are no official structured programmes or projects in place to remedy the situation.

In contrast, “norm critical pedagogy” (NCP) has been officially promoted by the Swedish National Agency for Education since 2010, and is part of teacher-training curricula in Sweden today (Frisell Ellburg 2010, Martinsson and Reimers 2014, Skolverket 2009). There are some indications that this approach may have had some effect in dismantling gender stereotypical expectations. For example, Sweden ranks very high in UN and World Economic Forum assessments of gender equality, and research suggests that aspects of what was previously part of the femininity norm (such as being an involved parent) have also become a part of masculinity norms in Sweden (Hearn *et al.* 2012). Johansson and Klinth (2008) argue that this is a clear example of hegemonic masculinity changing: in addition to being stoic, independent,

career-oriented, rational, etc. “men must also show their readiness to engage in child care, their child orientation, and their willingness to live up to the ideal of gender equality” according to the authors (p. 17).

Nevertheless, there are many indications that traditional Western hegemonic masculinity constructions are still relevant in Sweden today. For example, according to Statistics Sweden (2020), although women on average have a higher educational level than men, they have lower salaries, lower incomes, and, eventually, lower pensions than men. Further, according to the same source, merely ten percent of the companies listed on the Stockholm Stock Exchange had women chairpersons.

Gender inequalities are also visible in educational contexts. Statistics Sweden (2020, 38) show huge gender imbalances in upper secondary educational track choices. Girls are overrepresented in the humanities/aesthetic programs and in programs leading to care and health professions, while boys are hugely overrepresented in programs with technical, mechanical, and construction orientation. This is ironic as, just as in the Seychelles, girls generally outperform boys in all subjects, including mathematics and science (OECD 2020). Women are also overrepresented in university education with approximately 60% of all students being female. This trend of females succeeding better in educational contexts may partly be an effect of what Björnsson (2005) claims to be an emerging masculine anti-studying culture, something which however has been strongly questioned as an oversimplification (e.g. Frangeur and Nordberg 2008, Holm 2008).

Although the above only gives a rough approximation of gender structures in Sweden and the Seychelles, there are clear indications that differences, but also similarities, exist between the two cultural contexts investigated, both in terms of the nature and degree of gender structures and expectations. There also appear to be differences between current gender constructions in the two contexts and traditional western gender constructions. According to Cuddy et al. (2008, 76), traditional broad gender stereotypes identified from studies made in Western contexts distinguish stereotypically female communal traits (e.g. warmth, nurturance) from stereotypically male agentic traits (e.g. competent, confident, assertive) (see also Fiske et al. 2002, 882). According to Cuddy et al., men have traditionally been stereotyped as “competent, but not warm,” while the opposite seems to have been the case for women, who have been stereotypically depicted as especially warm but “not particularly competent (or agentic)” (77).

Comparing the gender constructions relevant to the settings investigated in this study with Cuddy et al.’s (2008) model of warmth and competence, there seem to be tendencies for the feminine construction to be placed relatively high on the warmth dimension in both contexts. However, it appears that the Seychelles feminine construction, in particular, also accommodates competence, arguably a result of the negative construction of masculinity. Consequently, the Seychelles male construction seems to be placed relatively low on both the warmth and competence dimensions. Arguably, there are opposite tendencies in Sweden, where the masculine construction increasingly shows tendencies to accommodate both warmth and competence (as does the feminine construction).

Because gender has generally been understood as a binary construction (again note the alternative models presented in trans/cis constructions which are not discussed here), social perception is not only the result of an absolute understanding of one gender but also the result of its contrast with the other. In both contexts, girls seem to be more academically favoured than boys in school and in higher education, but this difference is greater in the Seychelles. Traditional gender roles in terms of occupation seem to prevail in both contexts, but the idea of women as doers – breadwinners, leaders, and responsible agents – seems to be more prominent in the Seychelles than in Sweden, where such roles still seem to be regarded as relatively more masculine. At the same time, the expectations on men to engage in childcare seem to be greater in Sweden. By extension, it is reasonable to assume that gender stereotypes in the two contexts reflect and reconstruct these patterns, and thereby differ.

Exploring such general patterns and contrasting them with those that exist in other cultural contexts is important, we argue, and help teachers and teacher trainees to become aware of their own potentially discriminatory attitudes and behaviours. As Retelsdorf et al. (2015, 92) point out, such awareness helps make teachers resistant to gender stereotypes, which in turn is a prerequisite for an equitable educational system. In this particular case, we have chosen to use a matched-guise design aimed at revealing gender stereotypes regarding linguistic behaviour related to conversational management (aspects such as floor apportionment, interrupting others, signalling interest etc.). As highlighted by Carli and Lukatko (2000),

this particular linguistic aspect of social life is closely connected to the warmth and competence dimensions discussed above, and research based on mixed-sex conversations cited by the authors “generally reveal more competition, assertiveness, and authority by male speakers and more collaboration, agreeableness, and warmth by females” (235). The authors, however, also point to individual variation, and that a speaker’s behaviour will partly be determined by self-assessment of one’s relative power in a given social context (238). Here, however, women often end up in relatively powerless positions, a direct consequence of sex-role norms in (Western³) society, which according to the authors associate men with leadership roles and place requirements on “women to be more communal than men and men to be more agentic than women” (247). These role expectations seem to be slightly different in the Seychelles, and we thus hypothesise that gender stereotypes as regards conversational behaviour may also differ between the two contexts.

2 Aims and research questions

In the present study, we explore some of the aspects discussed above using a matched-guise inspired experimental design. More specifically, we investigate how digital manipulations of voice quality to sound like a male or a female voice (for more details see Lindvall-Östling *et al.* 2020, 575) affect respondents’ impressions of a speaker and his/her language performance in a dialogue, with special reference to pragmatic functions related to conversational management, such as floor apportionment, interruptions, or contradictions. One goal is to find out how linguistic stereotypes differ across the two investigated cultures, and if these in turn influence the respondents’ perceptions of the dialogic gendered guises. The ultimate aim is to investigate the success/failure of this type of matched-guise inspired pedagogical exercise as a method for raising respondents’ awareness of their *own* stereotypical preconceptions and how these may affect their perception and judgement, and also to make them aware of how such effects may be culturally related. More specifically these aims were translated into three specific research questions:

1. How do explicit (i.e. overtly expressed) linguistic stereotypes related to gender and conversational management tend to vary between the two cultural contexts?
2. How do the Swedish and Seychellois respondents tend to perceive and judge the male voice version of the recording compared to the female version? What are the systematic differential tendencies and similarities between the groups’ responses, and do these mirror cultural patterns in general and linguistic gender stereotyping (see question 1)?
3. In what ways did the pedagogical exercise contribute to raising teacher trainees’ self-awareness of the effects of inadvertent linguistic stereotyping?

3 Method

In this section, we only give a brief outline of the methods. For a more thorough general description of the methodological background and framework, see Lindvall-Östling *et al.* (2019) and Deutschmann and Steinvall (2020a). The specific methods used in this particular set-up are described in detail in Lindvall-Östling *et al.* (2020, 572–7).

In short, the overall framework used here is that of a modified matched-guise test (Lambert *et al.* 1960). Starting with a singular recording of a fictional dialogue between two researchers where both speakers were relatively equal in terms of power, the voice quality of Speaker A (a woman in the original recording) was digitally manipulated to sound like a man (for technical details and more information about the script, see Lindvall-Östling *et al.* 2020, 575). This created two distinct gendered versions of the same recording.

³ Our addition.

Unaware of the set-up design, respondents (teacher trainees) were randomly assigned one or the other of these two versions, and were asked to give their impressions of Speaker A's communicative behaviour by responding to each of the following statements on a seven-point Likert scale:

- Speaker A interrupts the other speaker a lot.
- Speaker A contradicts the other person a lot.
- Speaker A takes up a lot of space in the conversation.
- Speaker A argues in a forceful way.
- Speaker A signals interest in what the other person is saying.
- Speaker A comes across as sympathetic.
- Speaker A comes across as knowledgeable.

The findings from the response phase were then used as the starting point for 90-min long pedagogical discussion/debriefing seminars. These were designed to include the criteria that Lederman (1992) maintains to be essential ingredients for a successful experiential educational activity, i.e. understanding new knowledge, and relating the same to what you already know and yourself – a complex process, according to Lederman, that involves behavioural, affective, and cognitive dimensions. Rather than just discussing stereotyping as a general phenomenon "out there," our design allows for discussions of specific aspects of gender stereotyping revealed by the response patterns generated by the group *themselves*. Arguably, this helps to connect what students already know in theory to their own behaviours and attitudes.

The procedure of the discussion/debriefing sessions followed the three main stages outlined by Lederman (1992, 151–2): (1) systematic reflection and analysis, (2) intensification and personalisation, and (3) generalisation and application. *Systematic reflection and analysis* was primarily carried out in initial whole group debriefings, where the results were made visible using diagrammatic representations and result summaries. Here the group results were also contrasted with those of the parallel groups in Sweden or the Seychelles. In the *intensification and personalisation* phase, respondents were then split into gender balanced smaller groups consisting of 4–5 individuals, and encouraged to discuss the findings from a more personal perspective, including their own experiences of stereotyping, when they may have subjugated others to, or been victims of, stereotyping, for example. The groups were also encouraged to reflect over more concrete and practical implications of their insights, on how stereotyping may affect their future behaviour towards pupils in their professional roles, how such tendencies can be prevented, how gender expectations may differ in different cultures and the implications of this in the multicultural classroom, for example. The group discussions were finally followed by *generalisation and application* phase consisting of whole class discussions, where each group had a chance to communicate their main reflections, and where the teacher and the respondents together then summarised and discussed the general themes and applications that had emerged from the debriefing.

Finally, after the debriefing, each participant was asked to fill in an online post-survey that included: (1) a second statement of informed consent that responses be included in the research database; (2) a brief questionnaire aimed at establishing the groups' gender stereotypical expectations regarding conversational management behavioural strategies such as floor apportionment, interrupting others, and signalling interest; and (3) qualitative evaluations of the learning experience and what they had learnt from it.

3.1 Respondents

All of the response and debriefing sessions that form the basis of the data in this study took place in 2018–2019 in teacher training classes in the Seychelles and in Sweden. Approximately half of the respondents were from the Seychelles, and the other half from Sweden. The response and debriefing sessions were part of ordinary course activities and group sizes ranged from 20 to 40 individuals. The procedures followed in the two contexts (Seychelles/Sweden) were identical. Note that not all respondents who took the post-survey chose to answer the survey about their gender stereotypical expectations. Table 1 summarises the respondent data.

Table 1: Respondents

	Response survey		Post-survey Gender stereotype survey (Both guises)
	Male guise (n = 52)	Female guise (n = 60)	
Swedish respondents			
Female	32	35	54
Male	19	25	36
Others	1		1
Total		112	91
Seychellois respondents			
Female	46	42	80
Male	5	4	8
Total		97	88

3.2 Statistical analysis

Three different statistical models were used to help answer each of the different research questions relevant to this article. In order to determine whether the respondents perceived any specific linguistic feature as typically female or male, a one-sample *t*-test was used; the reference number was zero, as that would indicate that they perceive the feature as neither typically male nor female. This analysis was performed on the two different response groups (Swedish/Seychellois) individually. The second statistical model used was a MANOVA (multivariate analysis of variance) to determine the respondents' perception of the response variables related to the guises. Finally, the third model was a MANCOVA (multivariate analysis of covariance) in order to determine if the perception of the guise (male/female guise) was influenced by the response group (Swedish/Seychellois respondents). Estimated marginal means was used on the dataset when conducting the analyses. For effect sizes, Cohen's *d* is represented as either very small (0.1), small (0.2), mediate (0.5), or large (0.8) where relevant (c.f. Cohen 1988, Sawilowsky 2009). For all statistical analyses, the software IBM SPSS statistics was used.

4 Results

In this section, we report the results related to the three research questions in turn.

4.1 How do explicit linguistic stereotypes related to gender and conversational management differ between the two cultural contexts?

In order to answer this question we asked respondents to rate the following three statements regarding conversational behaviour as either very typically masculine (-2), somewhat masculine (-1), gender neutral (0), somewhat feminine (+1), or very typically feminine (+2):

The tendency to [...]

- take up more space in a conversation than others,
- interrupt other people in conversation,
- signal interest in what others are saying (through back channelling and asking questions, for example).

Note that these chosen features have traditionally been linked to the warmth/feminine (signalling interest) vs competence/masculine (agentic behaviour such as taking space) dimensions (see Section 1.2).

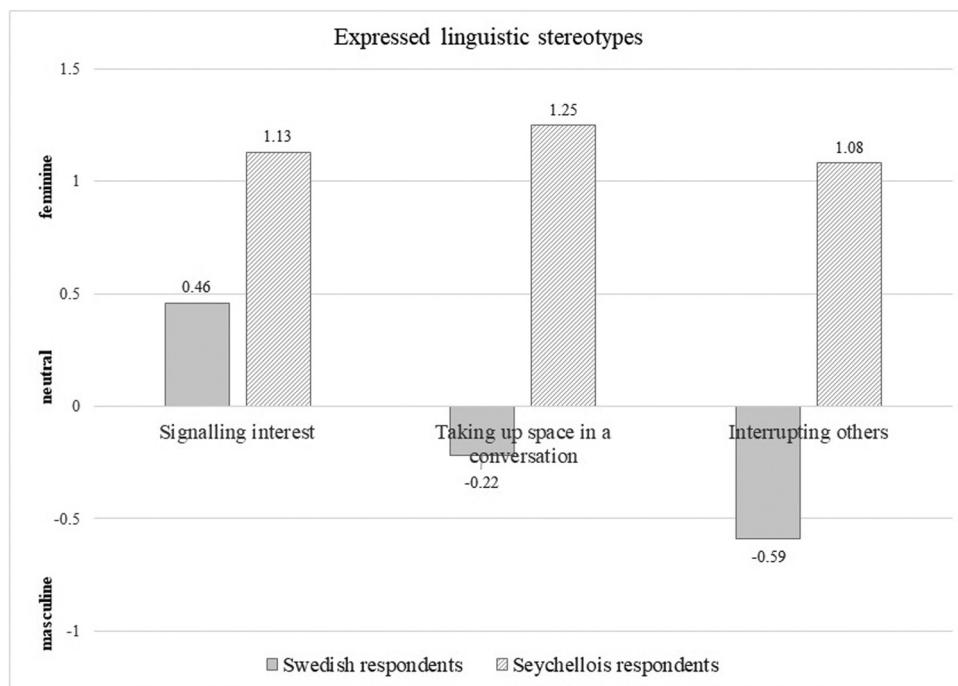


Figure 1: Linguistic gender stereotypes Swedish vs Seychellois respondents.

Testing the observed results against the null hypothesis that there should be no gender stereotypes as regards linguistic behaviours related to conversational management among our respondents (i.e. assuming zero values), we identified the following patterns for the Swedish respondents:

- stereotypical preconceptions whereby taking a lot of space in a conversation and interrupting others were seen as stereotypically male behaviour (negative values).
- signalling interest was seen as stereotypically female behaviour (positive values).

The results are summarised in Figure 1. Although all differences deviated significantly from zero, the effect sizes for all respondents varied from small (taking up space $d = 0.21$) to mediate (interrupting $d = 0.58$), and signalling interest ($d = 0.53$). In other words, while taking up space in a conversation was perceived to be typically gendered behaviour, this was a rather weak tendency (Table 2). The Seychellois respondents as a group had stereotypical preconceptions whereby taking a lot of space in a conversation, interrupting others AND signalling interest were all seen as stereotypically female behaviour (positive values – see Figure 1). The effect sizes were also larger ranging from medium to large (Table 2).

Comparing the Swedish and Seychellois respondents, we find significant differential tendencies between the groups' stereotypical preconceptions. Signalling interest, a feature associated with the dimension "warmth" (Carli and Yukl 2000, Cuddy et al. 2008), is seen as feminine in both groups, but significantly more so in the Seychelles (medium size effect). Taking up space and interrupting, typically associated with competence and competitive behaviour, are seen as typically masculine in the Swedish group but typically feminine in the Seychelles group. These latter differences are highly significant and display large size effects.

4.2 What differences and similarities do we find between how the Swedish and Seychellois respondents perceive and judge the male voice version of the recording compared to the female version?

Analysing the **within** group differences between how the male and the female guises were perceived, the following patterns were found: In the Swedish group there were significant differences in how the male and

Table 2: Linguistic gender stereotypes within and between respondent groups

	Signalling interest						Taking up space						Interrupting					
	Mean	SD	<i>t</i> -test (sig*)	Mean	SD	<i>t</i> -test (sig*)	Mean	SD	<i>t</i> -test (sig*)	Mean	SD	<i>t</i> -test (sig*)	Mean	SD	<i>t</i> -test (sig*)	Mean	SD	<i>t</i> -test (sig*)
Swedish (<i>n</i> = 91)	+0.46	0.72	0.000* [†]	-0.22	1.52	0.049* [†]	-0.59	1.04	0.000* [‡]									
Seychellois (<i>n</i> = 88)	+1.13	1.11	0.000* [‡]	1.02	1.26	0.000* [‡]	0.525	1.08	0.000* [‡]									
Difference (Seychelles–Swedish values)	0.67	0.140	0.000* [‡]		1.286	0.171	0.000* [‡]			1.119	0.162	0.000* [‡]						

^{*}Significant difference ($p < 0.05$) *t*-test.[†]Small effect size ($d = 0.2$ – 0.5).[‡]Mediate effect size ($d = 0.5$ – 0.8).^{*}Large effect size ($d = 0.8$ – 1).

the female guises were perceived for the variables *interrupting* ($p = 0.031$) and *taking up space* ($p = 0.001$). In both cases, the male guise received higher scores than the female counterpart. In the Seychelles group, there were significant differences in how the male and the female guises were perceived for the variables *arguing forcefully* ($p = 0.041$) and *signalling interest* ($p = 0.001$). In both cases, the female guise received higher scores than the male counterpart.

Analysing the **between** group differences between how the male and the female guises were perceived, i.e. comparing the Swedish and Seychelles respondent data, there were significant differences in how Swedish and Seychellois respondents perceived the male and the female guises for the communicative behaviours of *interrupting* ($p = 0.007$) and *taking up space* ($p = 0.002$) in the conversation. In the Swedish data, these variables received higher scores among those respondents who listened to the male guise as opposed to the female guise. The opposite was the case among the Seychelles respondents. The variable *contradicts* followed similar patterns but here the differences were not significant. For the remaining variables, response patterns in the Swedish and Seychelles groups were similar. They varied somewhat in magnitude, but in both groups, and for all the remaining variables, the female guise received higher average scores than the male guise. The results are summarised in Figure 2.

The results from the matched-guise experiment seem to reflect cultural stereotypical gender structures in Sweden and the Seychelles as discussed in Section 1, and which also are apparent from the results in Section 4.1. More specifically, women appear to be associated with conversational behaviours that relate to the “warmth” dimension (Cuddy et al. 2008) in both cultural contexts, but in the Seychelles context, women are also stereotypically associated with the “competence” dimension, a domain that appears to be more stereotypically masculine in Sweden. The results can thus be interpreted as an illustration that both Swedish and Seychellois respondents, especially notice conversational behaviours that match their gender stereotypical preconceptions, and that these preconceptions differ slightly between the cultures (cf. Kang and Rubin 2009, Strand 1999).

4.3 In what ways did the pedagogical exercise contribute to raising teacher trainees’ self-awareness of the effects of inadvertent linguistic stereotyping?

The results below are a summary of the themes that emerged from open-ended queries in the post-survey as to what (if anything) respondents had learnt from the experiment. A total of 153 of the 177 respondents who answered the post-survey filled in this part of the survey. The responses were analysed using a stepwise, thematic analysis (Braun and Clarke 2006). Through a full reading and re-reading of all responses, a tentative set of topic themes were identified, which were then reviewed and checked for accuracy and relevancy through individual close readings and subsequent comparisons of our individual findings. Finally, we selected representative examples which illustrate the views of the students that were revealed in the data. It should be noted that since similar themes emerged from both the Swedish and Seychelles groups, we have analysed all the responses as one data set. We have noted those cases where there were imbalances between the groups below. Moreover, one response could include more than one theme, explaining why the percentages given below add up to more than 100%. Finally, nine single-word responses (for example “*a lot*,” “*knowledge*” and one example of “*nothing*”) were not included in the thematic categorisation. The following themes emerged from the analysis.

4.3.1 New insights

Many of the respondents’ comments (approximately 70%) included references as to how the activity had led to new general insights regarding the impact of stereotyping. The greatest insight seemed to be that respondents not only were made aware of stereotyping but also realised that they themselves were affected

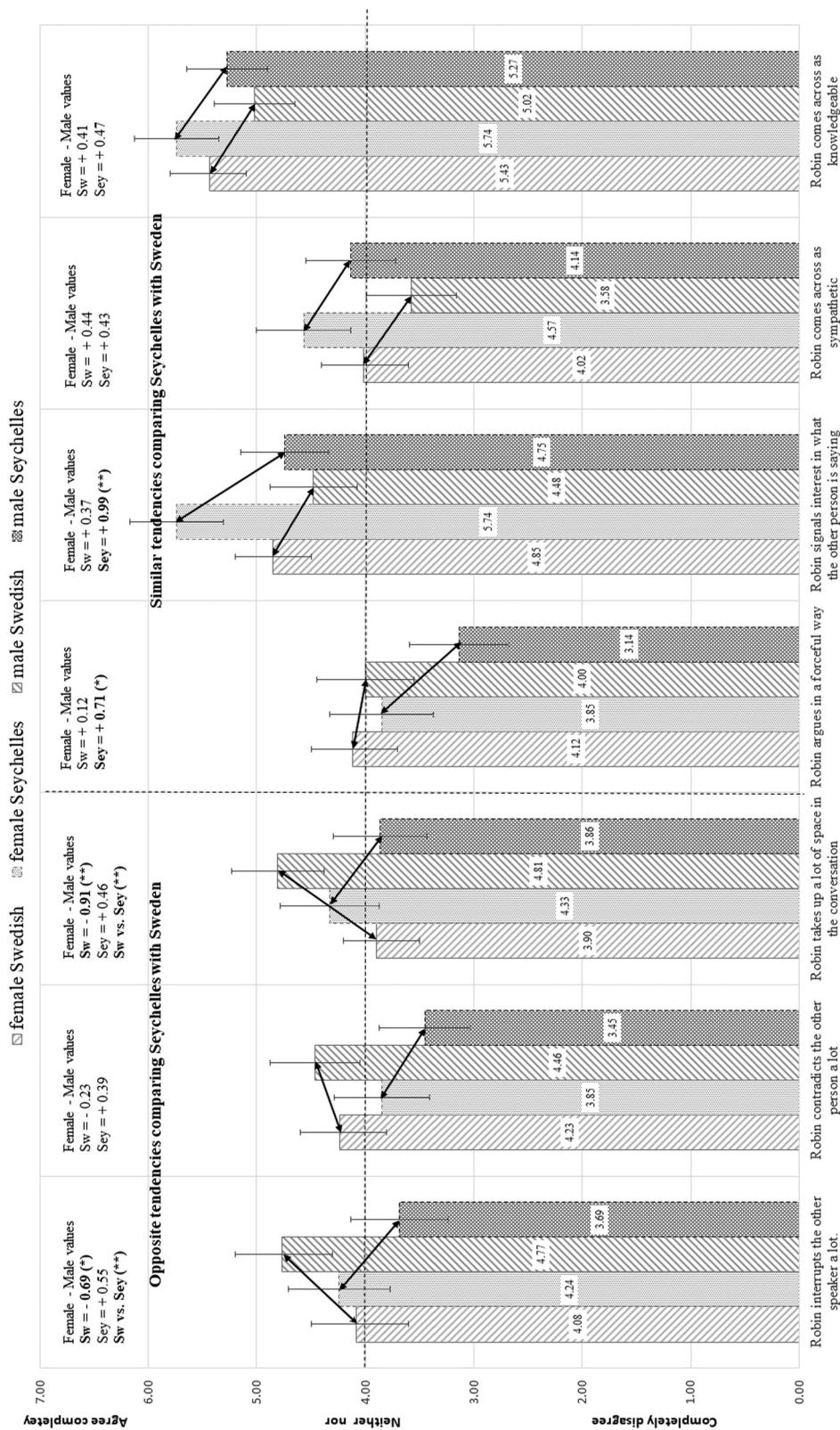


Figure 2: Seychelles and Swedish response data in matched-guise experiment. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

by these structures unawares. Many of the responses in this theme also included elements expressing surprise/revelation:

- *I loved it! It was an eye opener on how preconceived notions tend to affect our perception and judgment.* (Seychelles respondent)
- *The experiment made me more aware of how I am affected by norms.* (Swedish respondent)
- *It has raised my self-awareness of how I am a product of my times when it comes to norms.* (Swedish respondent)
- *The surprise and self-criticism at finding out how I responded will stay with me for a long time!* (Swedish respondent)
- *The experiment made me realise that stereotypes exist no matter what we do. It is within us.* (Seychelles respondent)
- *This experiment really got me thinking! I learnt how much stereotyping could influence me and how dangerous it could be.* (Seychelles respondent)

4.3.1.1 Applications of new insights (general and professional)

Another recurring common theme (67%) was how the insights identified above would/should be applied to future behaviour. Many responses (approximately 35%) referred to general aspects:

- *I have to be more cautious before drawing conclusions.* (Swedish respondent)
- *This taught me not to judge somebody just by the way they look or speak.* (Seychelles respondent)
- *The experiment taught me to not judge people by any stereotypical thoughts I might have of them.* (Seychelles respondent)

An equal number of responses (32%) made specific reference to how new insights would lead to behaviour checks in professional contexts:

- *I believe that being conscious of stereotyping as a teacher can aid in creating a teaching environment where students become more aware of our way of categorising people. As it is often done unconsciously, bringing it to light could make the students think and hopefully keep in mind that it is natural to categorise people, but that we need to be careful sometimes.* (Swedish respondent)
- *I will be more alert in the classroom. I will look at how my students speak to each other but also how I speak to my students.* (Swedish respondent)
- *We need to stop the stereotypical thinking especially if we are using it in our everyday job with the pupils.* (Seychelles respondent)
- *The experiment has made me aware that I should keep gender preconceptions in mind when interacting with pupils.* (Swedish respondent)
- *I have learnt quite a lot that I can apply at my school, for example I will try to listen more to boys too when they complain.* (Seychelles respondent)

4.3.2 Gender and stereotyping

As the last two examples in the previous theme illustrate, there were a number of responses (approximately 20%) that made specific reference to gender bias and stereotyping, and the importance of avoiding such tendencies. Other examples include the following responses:

- *We expect girls to be good at writing, so we perceive them as such. Avoid these instances of bias confirmation.* (Swedish respondent)
- *We need to look at behaviour in a conversation from different perspectives. You should not always think that men/women will behave in a certain way.* (Swedish respondent)
- *I will see each individual as a single unit, not with a pre-conceptualised view of men/women.* (Swedish respondent)

- *I learnt that sometimes we don't even realise that we always put women on top and men at the bottom! We always assume men or boys are lying while women or girls are being truthful.* (Seychelles respondent)
- *Yes – at times we judge men too harshly.* (Seychelles respondent)

4.3.3 Cross-cultural aspects

The final theme that emerged from the data was insights as regards the culture-specific nature of stereotyping. This theme was not as salient as the other themes discussed above, and only 9% of the responses (14 in all) referred to this aspect. Most of these (10/14) were made by Seychellois respondents. Many of the responses (9) made general reference to culture as an influencing factor, while a few of the comments specifically mentioned the other culture that had been referred to in the debriefing (i.e. Sweden or the Seychelles):

- *I learnt that gender stereotyping does exist everywhere, but that each one of us constructs our own stereotyping depending on the context and culture we are from.* (Seychelles respondent)
- *We need to be aware that different cultures may have different stereotypical preconceptions.* (Seychelles respondent)
- *The culture of a particular country has a big role to play in stereotyping.* (Seychelles respondent)
- *Not all of us shared the same views. Our views did not reflect those of Sweden.* (Seychelles respondent)
- *It was very interesting to compare our results with those of the Seychelles.* (Swedish respondent)

Overall, then, the comments in the post-survey were encouraging and revealed that awareness regarding stereotyping had been raised in various ways.

5 Discussion

With reference to research questions 1 and 2, it was evident that there were some significant cultural differences in the linguistic gender stereotypes as regards conversational management. Some differences, as well as similarities, were also found between the two respondent groups' perceptions and judgements of the male voice version of the recording vs the female version. These results mirrored some of the structural differences and similarities between the two cultural contexts illustrated by the results in Section 4.1, and also seen in the previous research discussed in Section 1. Furthermore, the results also support studies that suggest that stereotypes affect our perception and interpretation of other individuals' linguistic behaviour in a way that matches the stereotypical preconceptions associated with the speaker group membership (see for example Deutschmann and Steinvall 2020a, Kang and Rubin 2009, Lindvall-Östling *et al.* 2020, Strand 1999). While these results are interesting as sociolinguistic phenomena *per se*, our main focus here was rather on how the revelations of such patterns could be used as a pedagogical tool.

The "ultimate aim" of this exercise was to contribute to the development of a method for raising respondents' awareness of their own stereotypical preconceptions and how these may affect their perception. We also wanted to make respondents aware of how such effects may be culturally bound. With reference to these ambitions, we can conclude that we were partially successful. Based on the responses from the post-survey, it is evident that a majority of those who participated in the exercise did not only gain new knowledge, but that they also could relate this knowledge to *themselves* and their own behaviour (cf. Lederman 1992). What was particularly encouraging was the fact that so many respondents also actively reflected over how the new knowledge could be instrumental in modifying their future behaviour. Almost half of these reflections included specific references to future professional situations, i.e. on how the knowledge could be translated into classroom practice. Many of the respondents (approximately 20%) specifically related their reflections to gender issues, which was positive given the focus of this particular exercise. The cultural dimension of stereotyping that we tried to highlight by showing results from similar set-ups conducted in a different cultural context (Sweden or the Seychelles) seemed to have less of an impact. Arguably, this might have been a result of us trying to do "too much," and in order to really bring

home the cultural dimension of stereotyping, it is probably not enough just to show some data from another context. One could, for example, strengthen this dimension by complementary activities such as bringing student groups together in cross-cultural online discussions after the event. In spite of this shortcoming, we would argue that the type of matched-guise set-up described above can be a very powerful tool indeed to raise awareness about mainstream gender issues in teacher training, and thereby also an important first step in the pursuit of gender equality according to many (cf. Retelsdorf et al. 2015 and World bank group 2016 in Section 1).

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