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Master Thesis

Gender-specific barriers in forestry:
How do Austrian female leaders perceive barriers
and what are their strategies to overcome them?

submitted by

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Affidavit

I hereby declare that I have authored this master thesis independently, and that I have not used any assistance other than that which is permitted. The work contained herein is my own except where explicitly stated otherwise. All ideas taken in wording or in basic content from unpublished sources or from published literature are duly identified and cited, and the precise references included.

I further declare that this master thesis has not been submitted, in whole or in part, in the same or a similar form, to any other educational institution as part of the requirements for an academic degree.

I hereby confirm that I am familiar with the standards of Scientific Integrity and with the guidelines of Good Scientific Practice, and that this work fully complies with these standards and guidelines.

St. Pölten, 17 March 2022

Barbara ÖLLERER (manu propria)

“Also, one of the simplest paths to deep change is for the less powerful to speak as much as they listen, and for the more powerful to listen as much as they speak.”

Gloria Steinem, *My Life on the Road*

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Abstract

Despite efforts to increase the number of women, the Austrian forestry sector remains largely male-dominated, especially in leadership positions. The aim of this thesis is to understand gender-specific barriers in forestry and strategies to overcome them by interviewing women leaders in the Austrian forestry sector about their personal experiences and general perceptions of barriers and strategies. The findings confirm the existence of gender-specific barriers and suggest that external barriers such as structural settings are by far more numerous and impactful than internal barriers. Personal strategies are strongly context-dependent. The results further show that changing the circumstances is crucial to overcome gender-specific barriers in the forestry workplace. These circumstances include the support by those already working in the field, the availability of mentorship programmes and coaching, adapted forest education and training, the introduction of new working models, more women and parents in leadership positions and the equal recognition of women's performance.

Zusammenfassung

Trotz der Bemühungen um eine Erhöhung des Frauenanteils ist die österreichische Forstwirtschaft nach wie vor weitgehend von Männern dominiert, insbesondere in Führungspositionen. Das Ziel dieser Arbeit ist es, genderspezifische Barrieren in der Forstwirtschaft und Strategien zu deren Überwindung zu verstehen, indem Interviews mit weiblichen Führungskräften der höheren Führungsetagen innerhalb der österreichischen Forstwirtschaft zu ihren persönlichen Erfahrungen und allgemeinen Wahrnehmungen von Barrieren und Strategien durchgeführt werden. Die Ergebnisse bestätigen die Existenz geschlechtsspezifischer Barrieren und legen nahe, dass externe Barrieren wie strukturelle Rahmenbedingungen weitaus zahlreicher und bedeutender sind als interne Barrieren. Persönliche Strategien sind stark kontextabhängig. Die Ergebnisse zeigen außerdem, dass die Veränderung von Rahmenbedingungen entscheidend für die Überwindung genderspezifischer Barrieren in der Forstwirtschaft ist. Zu diesen Rahmenbedingungen gehören die Unterstützung durch diejenigen (Männer und Frauen), die bereits in diesem Bereich arbeiten, die Verfügbarkeit von Mentor*innenprogrammen und Coaching, eine angepasste forstliche Ausbildung, die Einführung neuer Arbeitsmodelle, mehr Frauen und Eltern in Führungspositionen und gleiche Möglichkeiten.

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1 Introduction

Forestry is an almost entirely male-dominated sector (Larasatie, Barnett and Hansen, 2020; Vennesland et al., 2020; Ringblom and Johansson, 2019; Andersson and Lidestav, 2016). Historically, forestry work was associated with “difficult conditions and the dangerous, dirty and heavy work [...], which were understood as being unsuitable for women” (Ringblom and Johansson, 2019, p. 340). This male dominance in forestry has mainly persisted until now, despite introducing new technology and the demand for employees with higher education (K. Johansson et al., 2019, Ringblom and Johansson, 2019). As a very mature and traditional sector, forestry is of exceptionally high interest for research on transformational societal changes (Weiß et al., 2011).

Gender equality is commonly seen as a women’s issue rather than one that affects the sector and society at large. Therefore, initiatives to further gender equality in the forestry sector usually aim at women. Similarly, the results of a survey on gender patterns and gender equality in the Swedish forestry sector (M. Johansson and Ringblom, 2017)¹ have shown that the surveyed, regardless of their gender, “perceived gender equality in forestry in terms of increasing the number of women in the sector” (K. Johansson et al., 2019, p. 2). Equating gender equality solely to the presence of women instead of considering gendered power structures, however, demonstrates a depoliticised understanding of gender equality (M. Johansson and Ringblom, 2017) and prevents organisations and the masculine norms within these organisations from being questioned (K. Johansson et al., 2019).

Sex is the term used for the biological gender (biological sphere, e.g. anatomy, physiology), gender refers to the social gender (social sphere, e.g. culture, sociology) (Hehn, 2007). Gender is, therefore, the cultural interpretation of the biological differences between the sexes. While gender is not binary (male/female), for this thesis, only women-identifying people in leadership positions were interviewed.

¹ Deviating from the Harvard style, the first names of Maria Johansson and Kristina Johansson, who have the same last name, are abbreviated. They are significant authors who are repeatedly cited in this thesis, therefore, abbreviating their first names increases clarity.

1.1 Gender-specific barriers in the forestry sector

The underrepresentation of women in forestry, disproportionate to the share of women in the total population, causes gender imbalance and low representation of a considerable share of the population among actors in the forestry sector.

Access to forestry workplaces is not restricted based on gender. On the contrary, the general perception apparently suggests that women's career paths might be easier. In other words: The sector's and employers' visible efforts to increase the number of women through prioritising women when hiring or promoting shapes this perception (K. Johansson et al., 2019). However, the sector remains largely male-dominated, despite such efforts. These conditions point to the remaining existence of gender-specific barriers that prevent women from progressing at the same speed, being fully included in the workplace culture, and attaining the same level of recognition.

Larasatie, Barnett and Hansen (2020) study the experiences of female student leaders in forestry universities. In that context, they outline general categories of barriers for women in leadership. A summary and characterisation of these categories are as follows:

The category "glass ceiling, glass cliff and leadership labyrinth" describes the glass ceiling, i.e. an invisible barrier encountered by women advancing their career (Hymowitz and Schellhardt, 1986), the glass cliff, i.e. the placing of women in leadership positions with a high risk of failure (Ryan and Haslam, 2005) and the leadership labyrinth, i.e. the obstacles and challenges that lead to women having to take more circuitous paths while advancing (Eagly and Carli, 2007). "Perceived role incongruity and double bind" describes the need for women to work harder to gain respect and advance their careers (Eagly and Carli, 2007). "Implicit bias/unconscious bias and second-generation gender bias" refers to the lack of awareness about the role gender plays in the workplace (Diehl and Dzubinski, 2016) and the fact that these biases cause that the status quo is maintained and that men, therefore, remain in leadership positions (Ely, Ibarra and Kolb, 2011). "Male gatekeepers and homophily" describes the power of the male elites, i.e. male gatekeepers, in recruiting processes (Van den Brink and Benshop, 2014) and homophily, i.e. similar people associating with each other (Van den Brink and Benshop, 2014), which both lead to reduced access of women to leadership positions. The "queen bee phenomenon" refers to women leaders who do not support other women or promote their development (Diehl and Dzubinski, 2016) due to their experiences in the male-dominated work environment. "Tokenism and critical mass" refers to the individuals who are in the minority within a group, e.g., regarding gender, being marginalised (Kanter, 1977) unless their number reaches a certain threshold, i.e. the critical mass (Larasatie, Barnett and Hansen, 2020).

The study results show that although respondents perceived an increase in the proportion of women students in forestry higher education, this increase is not proportionately reflected in the forestry workforce (Larasatie, Barnett and Hansen et al., 2020).

Baublyte et al. (2019) have interviewed female leaders at the management level of forest companies in Sweden and Finland to study their perceptions “regarding the state and forms of existing gendered culture that impact their careers at the workplace” (Baublyte et al., 2019, p. 522). The observed challenges include the “existence of masculine networks and homosocial reproduction”, “not being able to participate in certain social events due to gender”, the “abandonment of own gender identity to avoid being discriminated and stereotyped”, an “inconsistency between characteristics attributed to leaders and those attributed to women in general”, “a lack of technical forestry education background” and “social norms regarding childcare arrangement” (Baublyte et al., 2019, p. 525).

A report of the FEM4FOREST Interreg project on the needs and interests of women in the forestry sector addresses, amongst others, challenges for female career development. In an online survey of female forest owners and forestry professionals (n = 880), respondents indicated “roles and stereotypes”, “male-dominated environment”, and “family care” the most often. Other challenges, in order of decreasing frequency, include “lack of self-confidence”, “physical and psychological resilience”, “mobility in professional life”, “lack of qualification”, “part-time work”, “elderly care” and “other” (Böhling et al., 2021, p. 31).

The three studies show that there are remaining barriers. These are reflected in the decreasing share of women in the transition from higher education towards entering the workforce (Larasatie, Barnett and Hansen, 2020) and expressed as challenges in the interviews with female leaders at the management level of forest companies in Sweden and Finland (Baublyte et al., 2019) and the recent survey amongst female forest owners and forestry professionals (Böhling et al., 2021, p.31). However, the studies leave several questions unanswered: How and in what ways are such barriers encountered by women? Are there different degrees of barriers, and most importantly, what led to overcoming the barriers? This thesis first wants to fill these gaps in order to understand the specific barriers in their precise patterns. Second, it aims to contribute to the field of gender research in forestry by outlining the ways how to overcome such barriers. One suitable way is to enquire among women who "made it" and were most successful as forestry professionals in leading positions. Hence, this thesis aims to contribute to the research on gender-specific barriers and how female leaders in forestry perceived the barriers they encountered during their career path with in-depth insights. The objective is to further reveal the strategies that highly

successful women used to overcome these barriers, thereby going beyond mere numbers to measure gender equality (Follo et al., 2017).

1.2 Representation of women in the Austrian forestry sector

The focal point of this study is the Austrian forestry sector. With a total forest cover of 4.02 million hectares, which equals roughly 48% of the total area, Austria is one of the most densely forested countries in Central Europe (Russ, 2019). On average, the wood reserve grows by 29.7 million cubic metres per year, 26.2 million of which are harvested (Gschwantner, 2019). Therefore, the Austrian domestic wood usage rate is below the growth rate.

In addition, the forest-based sector is highly relevant for the Austrian economy as it generates a gross value added of almost 20.4 billion euros and thus accounts for a share of roughly 5.7% of Austria's total economic output. It further secures 300,000 jobs in the forestry and timber value chain (Kleissner, 2021).

Despite the sector's economic importance, most of the literature on gender aspects in forestry has studied the Nordic forestry sectors, such as the Swedish forestry sector, with limited research based in the Austrian forestry sector. At the University of Natural Resources and Life Sciences, Vienna, the following publications address the topic of gender in the Austrian forestry sector: Ludvig (2021) studied the relationship between the share of women and resilience in the forest-based sector (Ludvig, 2021). Rohrer-Vanzo and Stern (2014) examined the potential of gender marketing in agriculture and forestry, i.e. an approach to marketing where industrial products are adapted to gender-specific needs (Rohrer-Vanzo and Stern, 2014). Rohrer-Vanzo et al. (2014) conducted a literature review focusing on women and forest ownership in Europe and their economic and social potentials (Rohrer-Vanzo et al, 2014). Reisenberger (2013) wrote a Bachelor's thesis on gender and forest ownership (Reisenberger, 2013). The existing research does not answer the questions about gender-specific barriers in the Austrian forestry sector, how female leaders in forestry perceived them and what strategies they used to overcome these barriers - questions this thesis addresses.

According to the most recent industry data published in February 2022 by the Austrian Economic Chambers, the share of women in the wood-based sector is 19.5%. When including those working in marginal employment, this number amounts to 20.0% (WKO,

2022, p. 13). These numbers have slightly increased from 19.3% and 19.8% the year before (WKO, 2021, p. 13).

A study by the Austrian Institute of Economic Research (WIFO) adopts gender-disaggregated data of students enrolled in agricultural and forest education and training between 2014 and 2020 published in the Green Report 2019 (*Grüner Bericht 2019*). According to that data, the share of female students has slightly increased to roughly 30% (WIFO, 2020, p. 52).

The most recent UNECE report concludes that approximately 10% of the workforce in forestry are women. In wood manufacture, women make up around 16% of the workforce, and in paper manufacture, roughly 28%. The share of women in wood and paper manufacture lies at roughly the same level as the European average. However, the percentage in forestry is lower than the European average of approximately 14%. As a basis for those results, EUROSTAT 2016 was used (UNECE, 2020, p. 13). According to the most recent data for sustainable forest management, this trend has continued, with roughly 8% of female employees in the forestry workforce (Linser, 2020, p. 177).

Additionally, the FEM4FOREST Interreg project report states that fewer women are represented in decision-making bodies and interest groups than would correspond to their share in the workforce (Böhling et al., 2021, p. 48).

Furthermore, the 2020 glass-ceiling index, which classifies the environment for working women, puts Austria in 17th place, and thereby only slightly above the average of the Organisation for Economic Co-operation and Development (OECD) (The Economist, 2021). The data shows an apparent underrepresentation of women in the forest-based sector, especially in leadership positions. Thus, there is the need to enquire into the underlying reasons for this thesis.

2 Objectives

The aim of this thesis is the identification of gender-specific barriers that women have encountered in the male-dominated forestry sector when choosing a career in the Austrian forestry sector. The focus here lies in how they perceived and interpreted their experiences in their forestry education and training, and professional paths. It also represents the first time that female leaders of relevant organisations, institutions and companies in the Austrian forestry sector are interviewed about their experiences.

Based on literature and document research, a series of qualitative interviews was conducted with eight of the most prominent female leaders in the Austrian Forestry Sector. All of them are well-known through public media and within the scene. Thus, specific attention was paid to the ethical issue of anonymisation of the interviews (*see section 3.2.2 A word on anonymisation and protection*).

Additionally, this thesis aims to contribute to the literature on women's experiences working in male-dominated sectors. According to K. Johansson et al. (2019), this has mainly been researched in the construction sector and firefighting (K. Johansson et al., 2019).

2.1 Research questions

The thesis answers the following research questions:

1. What gender-specific barriers have female leaders experienced in the Austrian forestry sector?
2. What do they think are the most important gender-specific barriers in general for women trying to enter the forestry sector?
3. What are the personal strategies of female leaders in the Austrian forestry sector to overcome gender-specific barriers?
4. What do female leaders in the Austrian forestry sector think is vital for overcoming gender-specific barriers?

2.2 Structure

The thesis is structured as follows: First, an introduction to gender-specific barriers in forestry and gender in the Austrian forestry sector is given. Second, the materials and methods that were used are presented. Third, the results of the qualitative interviews are presented and, in the last step, discussed with respect to the relevant literature.

3 Materials and methods

The methods applied are literature and document research on gendering in forestry and women working in male-dominated sectors, followed by a series of qualitative interviews with women in leadership positions in the Austrian forestry sector that were then analysed. This chapter describes the used materials and methods.

3.1 Literature and document research

A literature and document research (Flick, 2018) was conducted at the beginning of the research. Books, scientific papers, reports and articles related to the focus of the research, i.e. gender, gender equality in forestry, male-dominated industries, the Austrian forestry sector, were explored. The findings constituted the basis for the overall design of the research and for developing the interview guidelines. The main aspects are presented and discussed in the introduction and discussion of the results.

3.2 Interviews

A series of in-depth, semi-structured qualitative interviews (Gläser and Laudel, 2010) represents the base for this thesis. Whereas a survey generally comes with more participants and more generalisable results, the number of female leaders in the Austrian forestry sector is so small that it is necessary to use qualitative interviews. The qualitative interviews further offer the possibility of understanding the interviewees' lived experiences.

3.2.1 Sample

The sample consists of 8 interviewees who were identified based on personal contacts and snowball sampling².

One commonality was that all interviewees were female stakeholders in leadership positions in the Austrian forestry sector. Most of the interviewees are also publicly known, and they appear regularly in the Austrian forestry-related networks and the Austrian media. The sample was saturated when no more contacts were referred to by the interview partners,

² This is a nonprobability sampling technique where existing study subjects recruit future subjects from among their contacts. The topic of gender and gender-specific barriers is a sensitive one; hence, this technique allows for confidential stability via trusted relations and networks.

and no more key experts were identified from media screening and screening of the organisation charts of relevant forest-related organisations.

Table 1 gives an overview of the professional experience of the interviewees:

Interviewee	Professional background
1	Training and education
2	Public sector
3	Interest group
4	Public sector
5	Private sector
6	Public sector
7	Private sector & Training and education
8	Public sector

Table 1. The professional background of the interviewees.

3.2.1.1 Sectors

With four interviewees working in the public sector, it has the highest representation in the study. One interviewee works for an interest group, one in the training and education sector, one in the private sector, and one in both the private and training and education sectors.

3.2.1.2 Education

In total, five interviewees accomplished their forestry studies at university. One interviewee completed the professional forestry training with a duration of 3 years, and two interviewees did not take forest education but worked in the field at the time of the interview.

3.2.2 A word on anonymisation and protection

The interviews have been strictly anonymised by replacing the interviewees' names with interview numbers (from 1 to 8). Keeping the interviewees anonymous is necessary to preserve their identity and privacy while allowing personal reflection and sharing of the data obtained from the interviews.

According to the Austrian Agency for Research Integrity (OeAWI) Guidelines for Good Scientific Practice (GSP) and the University of Natural Resources and Life Sciences Vienna guidelines for the safeguarding of good scientific practice³, the interviewees were ensured absolute anonymity of their data. A consent form of agreement to the interview was signed in advance. As the interviews gave very personal and intimate insights into the personal experiences of the interviewees, it was made sure from the first steps of data processing (storage of files and transcription) that the data would not become traceable to single identifiable persons. Therefore, the interviews were solely referred to with consecutive numbers (1-8) from the start. The interviewees agreed with the following ethical standards:

- The interview will be recorded, and a transcript will be produced.
- The transcript of the interview will be analysed by MA candidate Barbara Öllerer.
- Access to the transcript will be limited to MA candidate Barbara Öllerer and the two supervisors, Karl Hognl and Alice Ludvig.
- Any summary interview content, or direct quotations from the interview, that are made available through academic publication for other academic outlets will be anonymised so that the interview partner cannot be identified, and care will be taken to ensure that other information in the interview that could identify the person is not revealed.
- The recordings will be destroyed and the anonymised transcripts will be kept for seven years according to the Guidelines for Good Scientific Practice (GSP).

3.2.3 Interview guidelines

The interview guidelines can be found in the appendix (see page 74). The questions were arranged so that the interviewees were first asked about the beginnings of their path in forestry, their family forestry background, forest education and career path to date. The interviewees could answer these questions straightforwardly and without having to reflect in-depth. Therefore, they allowed the interviewees to ease into the conversation while obtaining data about key aspects of their educational and career paths in the forestry sector. These key aspects later functioned as the base for categorising and analysing their statements about gender-specific barriers and strategies.

After the introductory questions, the interviewees were asked about the barriers they had personally experienced along their career path or still experienced and what had helped them deal with or overcome these barriers. In the end, they were asked what they thought were general barriers for women who wanted to enter and work in the forestry sector. The

³ <https://boku.ac.at/en/studienservices/themen/infos-studienabschluss/thesen/gute-wissenschaftliche-praxis> [Last access: 16 March 2022]

reason why they were first asked about personally experienced barriers they had personally experienced along their career path was to allow for them to relate to the topic on a personal level before being asked about general barriers.

Generally, the questions were asked to allow the interviewees to connect with the questions personally. One example is *'How many women were there other than yourself?'* instead of *'How many women studied forestry at that time?'*

The eight interviews took place between 31 March and 16 June 2021. The interviewees were invited to participate via email. All eight interviewees who were contacted accepted the invitation. In general, the interviews were held and recorded via video calls using Zoom, a video teleconferencing software. Meeting online allowed for minimal time commitment by the interviewees and represented a convenient form of communication when lockdowns were implemented due to the COVID-19 pandemic and made in-person meetings impossible. One interview was held over the telephone, based on the interviewee's preferences. All interviews were conducted in German, the mother tongue of all interviewees. Interviews in the mother tongue allow for better narrative flow in sensitive topics such as gender barriers and related personal experiences. The citations used for this thesis were later translated into English.

On average, the interviews lasted approximately 1 hour each (between 0:29 and 1:24 hours), as can be seen in table 2:

Interviewee	Date	Duration	Platform
1	31 March 2021	1:24	Zoom
2	7 April 2021	0:58	Zoom
3	7 April 2021	0:45	Zoom
4	26 April 2021	1:05	Zoom
5	28 April 2021	0:43	Zoom
6	5 May 2021	0:29	Telephone
7	15 May 2021	1:12	Zoom
8	16 June 2021	1:11	Zoom

Table 2. Date, duration and platform of each interview.

The interviews were semi-structured. While the interviewer usually stuck to the prepared set of questions, they followed the flow of the conversation if topics came up in a different order

than planned. To further stimulate the conversation and to obtain the necessary data, the interviewer used the following methods:

- ask the interviewee to clarify or be more specific;
- ask the interviewee for examples to illustrate certain statements;
- repeat interviewee's statements to ensure they were understood correctly.

3.2.4 Transcription and analysis

The interviews were recorded and then transcribed. The qualitative content analysis of interviews comprised the following steps: transcribing recorded interviews, coding and interpretation and description of findings. Transcribing of the interviews was done in MS Office Word. Every word, along with longer pauses or interruptions, was transcribed.

3.3 Categories for analysis

The development of categories for analysis was based on an inductive strategy as used by Mayring (2000) with coding the information from the interview transcripts and hence structuring the results (under consideration of the research interest and the theoretical foundation of the research) according to and Bryman, Bell and Harley (2008). The coding concepts were developed by using AtlasTI/NVivo and Microsoft Excel.

The categories for analysis were developed from four distinct key categories:

1. **Barriers** (as perceived by the interviewees), differentiated into generally perceived ones (e.g. when referring to others or the sector in general) and personally experienced ones (e.g. when narrating personal stories of barriers). The personal barriers are further differentiated according to career path (formerly) and present (current situation).
2. **Strategies** (to overcome barriers), differentiated into generally perceived ones (e.g. when referring to others or the sector in general) and personally applied strategies (when narrating personal stories of counter-actions).
3. **Access to the field:** The narrations all also centre around the access to the field of forestry, which is traditionally perceived as male-dominated, for the women in concern.
4. **Other** information (of interest with respect to the research question).

3.3.1 Original coding scheme



Figure 1. Original coding scheme.

3.3.2 Adaptation of the coding scheme

Seeing as the distinction between barriers along the career path and in the current situation was not unequivocally possible with the developed coding scheme, i.e. when interviewees used examples from the past to illustrate their answers to that question, the original coding scheme was adapted in a second step. All personally experienced barriers were combined into one category, and the order of general and personally experienced barriers, as well as general and personal strategies, was changed. One sub-category each was created for personal strategies (*other factors*) and for general strategies (*circumstances*) in the category strategies (starred).

As can be seen in Figure 2, personally experienced barriers are addressed before general barriers and personal strategies before general strategies (dotted line), as those were the main focus of the interviews, both in terms of thematic focus and time dedicated to answering the respective questions. All accounts of personally experienced barriers, whether during their time in forest education, along their career path or in their current situation, were compiled into one category with its respective sub-categories (solid black line, “Personally experienced barriers” in the adapted coding scheme).

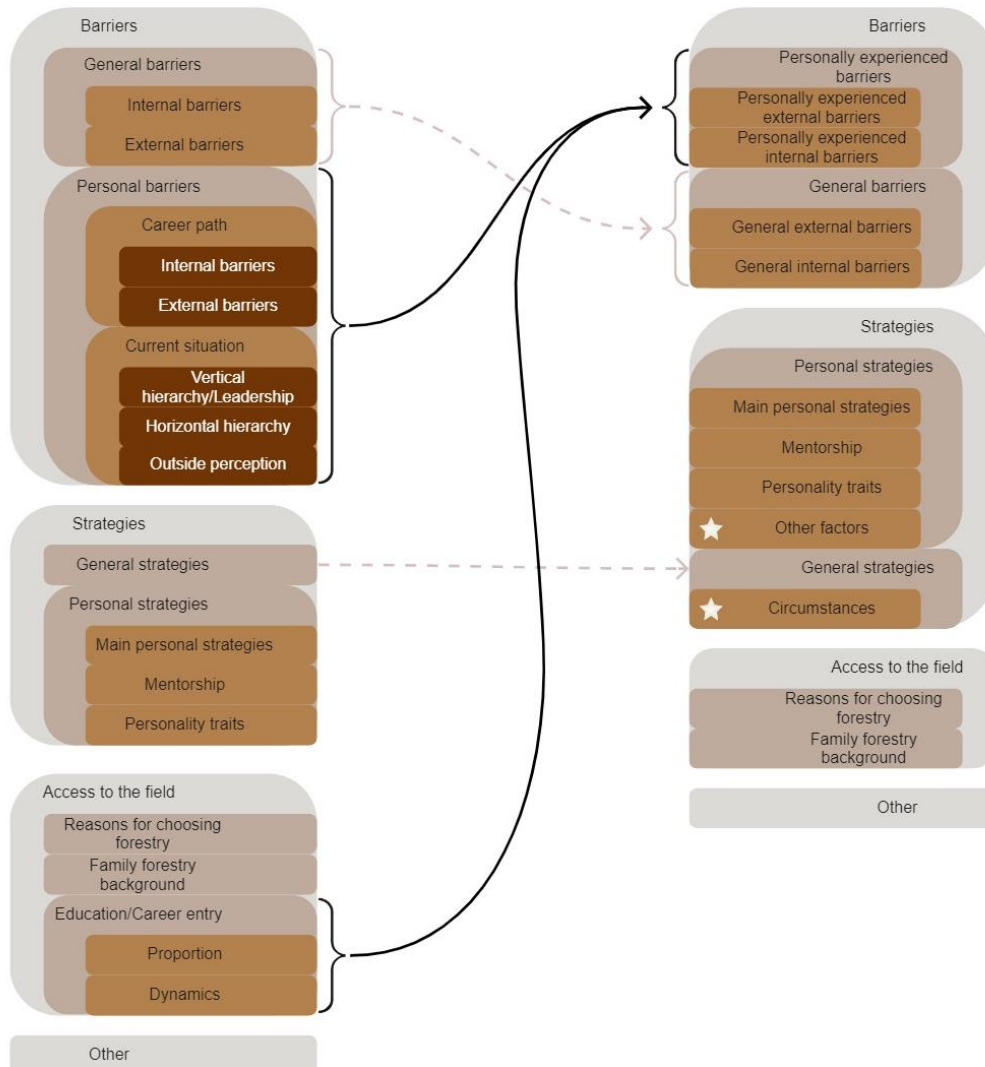


Figure 2. Adaptation process of the coding scheme. Original coding scheme on the left, adapted coding scheme on the right. The arrows and stars indicate the changes.

3.3.3 Adapted coding scheme



Figure 3. Adapted coding scheme.

As becomes apparent from the developed coding schemes (see *Figure 1 and Figure 3*), most of the initial key categories had to be differentiated into further sub-themes and sub-layers. Hence, when it came to the answers of the respondents to the barriers encountered, they most often talked about mixed levels of barriers. These could be coded into “external barriers”, such as structural settings (explicit or implicit), and into internal barriers, such as occurrences of own underestimation of capabilities in certain situations.

As the interview transcripts are German, also the analysis was done in German. All direct quotes used in the thesis were translated from German to English for better fluidity of reading. The German original of especially poignant or striking expressions that the interviewees used can be found in the footnotes.

4 Results

4.1 Barriers

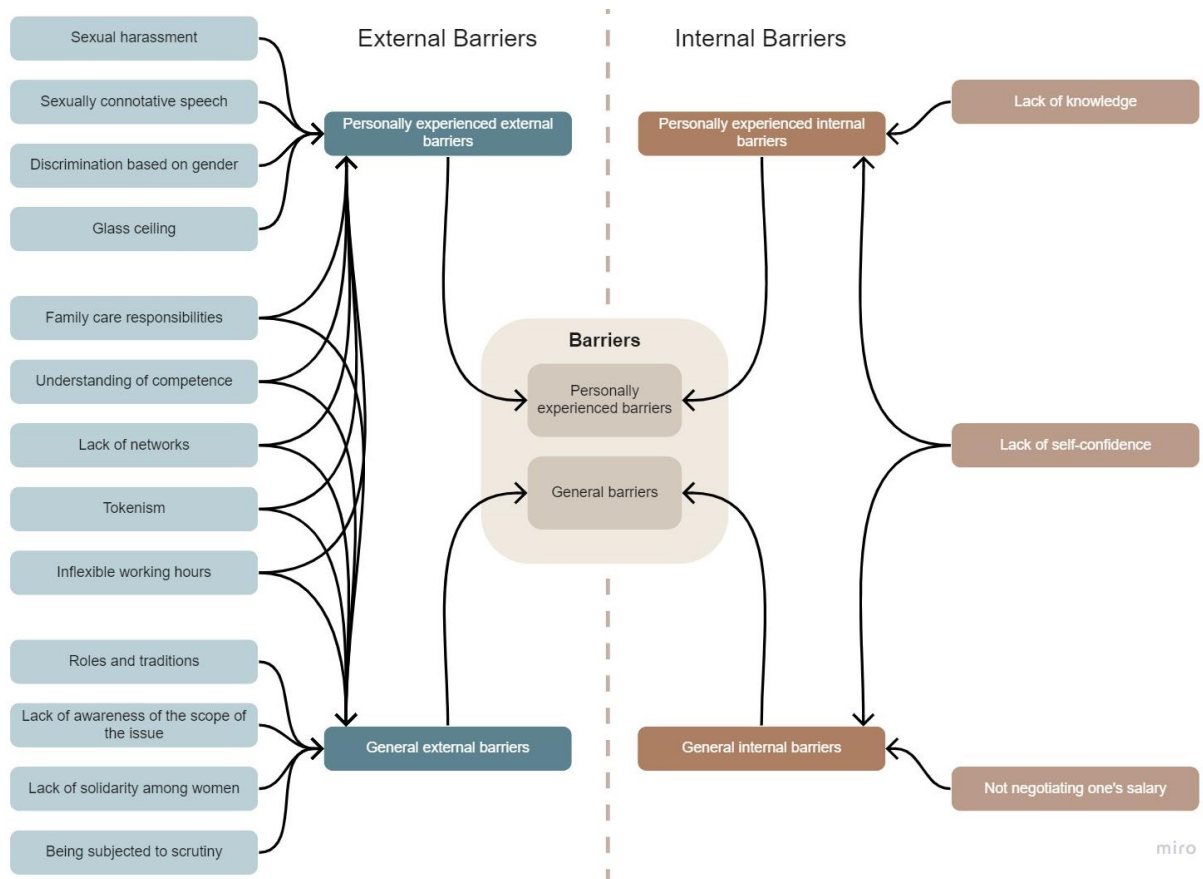


Figure 4. Graphic representation of identified barriers, distinguished between personally experienced and general barriers as well as external and internal barriers (separated by the dotted line).

Figure 4 shows a graphic representation of all barriers perceived by the interviewees. Personally experienced barriers are in the upper half, general barriers in the bottom half. Barriers that were named both as personally experienced and general barriers are connected to both boxes.

The barriers are further sorted into external (left side) and internal (right side), separated by the dotted line. When looking at the distribution of external barriers and internal barriers, it becomes clear that the number of external barriers far outweighs that of internal barriers. This is true for both the personally experienced barriers and the general barriers.

Barrier / Interviewee		1	2	3	4	5	6	7	8	✓	•
External	Sexual harassment		✓		✓					2	
	Sexually connoted speech		✓		✓	✓				3	
	Discrimination based on gender		✓		✓				✓	3	
	Glass ceiling				✓			✓		2	
	Family care responsibilities	✓	✓	✓•	✓•	•	✓	✓•	✓	7	4
	Understanding of competence	•		✓•	✓	✓	✓	✓	•	4	3
	Lack of networks		✓	✓•	✓					2	1
	Tokenism			✓•	•				•	1	3
	Inflexible working hours			•	✓			•		1	2
	Roles and traditions	•	•	•	•				•		5
	Lack of awareness of the scope of the issue				•						1
	Lack of solidarity among women			•							1
	Being subjected to scrutiny								•		1
Internal	Lack of knowledge	✓								1	
	Lack of self-confidence	•	•	✓•	✓•				✓•	3	5
	Not negotiating one's salary								•		1
										Personally experienced barrier	✓
										General barrier	•

Table 3. Distribution of barriers among interviewees, distinguished between personally experienced and general barriers.

Table 3 gives an overview of how the different barriers are distributed among the interviewees. The green checkmarks represent personally experienced barriers, and the blue dots indicate general barriers. The two columns on the right sum up the frequency with which the barriers were mentioned.

4.1.1 Personally experienced barriers

The interviewees, all of them in leadership positions in the forestry sector, were asked to reflect on their education and career paths in the Austrian forestry sector and whether they had personally experienced any barriers along that path, either in the past or the present. Most notably, all of them were able to report about barriers they had personally experienced, and none of them said that they had not encountered any barriers.

Quantified to numbers (retrospectively in the analysis), these amount to the following counted incidents of personally experienced barriers:

1. large number (>5 barriers): encountered by four interviewees (INT 02, INT 04, INT 05, INT 07)
2. medium number (3-5 barriers): encountered by two interviewees (INT 03, INT 08)
3. small number(1-2 barriers): encountered by two interviewees (INT 01, INT 06)

One of the research questions of this thesis is what gender-specific barriers female leaders have experienced in the Austrian forestry sector. Figure 5 gives an overview of all personally experienced barriers identified by the interviewees:

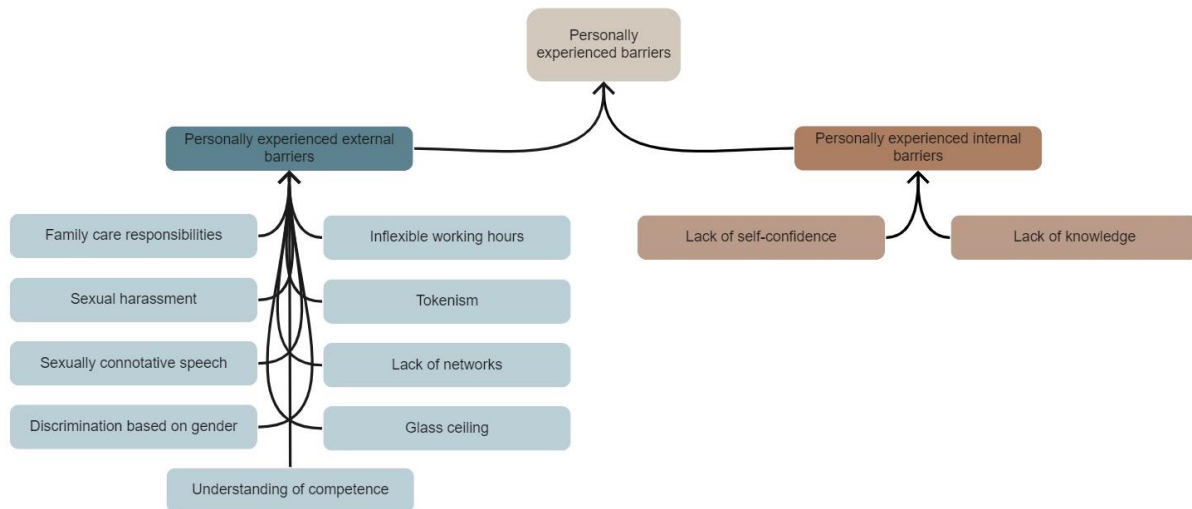


Figure 5. Personally experienced barriers, distinguished between personally experienced external and personally experienced internal barriers.

The interviewees who had studied forestry at university (INT 2, INT 4, INT 6, INT 7, INT 8) did not name any significant barriers they had encountered during their forest education at university. Even though they had been part of the minority group as women, both their teachers and colleagues mainly had been respectful and friendly towards them.

Interviewee 2 stated: “So while studying, in short, I have not had a negative influence as a woman. Mostly” (INT 2, p. 2). Similarly, interviewee 7 said: “Yes, at university, it is still more or less fine, but in reality, it all becomes a bit more difficult [...]” (INT 7, p. 3).

However, the interviewee who had taken the professional forestry training (INT 5) had experienced harassment and sexually connotative speech from both teachers and male colleagues. Her experiences include a teacher who was outraged by her taking the training as a woman, one of her colleagues untruthfully implying that he had had a sexual relationship with her to brag in front of others (see *sexually connotative speech*), and another colleague purposefully trying to harm her, e.g. by taking apart, and tampering with, her chainsaw:

“[...] you always had to clean your chainsaw. Down in the workshop. He completely dismantled [...] my chainsaw. So I always went to my room with my chainsaw. I always took it with me” (INT 5, p. 5).

Interviewee 5, who works in the private sector, emphasised a difference between barriers in the private sector and the public or research sectors. According to her, the rural population found it hard to accept her and that she was not failing (INT 5, p. 6). She further emphasised that, when looking at women in forestry, it was essential to distinguish forestry institutions and organisations from the private forest sector and especially the work as forest owners. She said it was easier for women in the public or research sectors, even though that was connected to other challenges such as being thought of only as affirmative-action women:

“I think you have to distinguish, especially in the forestry sector, in which areas are you? Are you in public service, [...] or at the university [...], or the federal states [...]? It will be much easier for you, and you will be much more likely to have some opportunity. However, you often notice that if you don't prove yourself there or don't give your best, it comes back to you, well, that's just the affirmative-action woman” (INT 5, p. 7).

Differences in the number and type of barriers within the sectors were also highlighted, most notably the public sector. While one interviewee working in the public sector named a small number of barriers (INT 6), other interviewees working in the public sector named a medium (INT 8) or large number (INT 2, INT 4). The contradictory statements about the number of barriers indicate differences within the public sector and the individual experiences and perceptions of the interviewees.

The barriers the interviewees named can be divided into personally experienced external barriers that come from structural settings, and personally experienced internal barriers, such as occurrences of own underestimation of capabilities in certain situations. There are by far more personally experienced external barriers than internal ones.

4.1.1.1 Personally experienced external barriers

Personally experienced external barriers include family care responsibilities (INT 1, INT 2, INT 3, INT 4, INT 6, INT 7, INT 8), sexual harassment (INT 2, INT 4), sexually connotative speech (INT 2, INT 4, INT 5), discrimination based on gender (INT 2, INT 4, INT 8), understanding of competence (INT 3, INT 4, INT 5, INT 7), glass ceiling (INT 4, INT 7), lack of networks (INT 2, INT 3), tokenism (INT 3) and inflexible working hours (INT 4).

Family care responsibilities

One barrier that six out of eight interviewees experienced was trying to reconcile one's family and career (INT 2, INT 3, INT 4, INT 6, INT 7, INT 8). Even the interviewees who generally

only identified a small number of barriers that had affected their career path, named this one, with interviewee 6 stating that it was the only barrier she had experienced during her career in the forestry sector.

The remaining two interviewees who did not name it as a barrier they had personally been affected by, had witnessed it being a barrier for other women working in the forestry sector (INT 1) or named it as a general barrier (INT 5; see *section 4.1.2.1 External general barriers*). This makes it the most-agreed upon barrier that the interviewed women had encountered or perceived.

The spectrum of how exactly reconciling family and career was perceived as a barrier ranges from forestry sector employers' perception that women with children would be less able to do their work (INT 2, INT 3, INT 4, INT 7, INT 8) to the inner conflict within the women themselves when having to decide whether to put their work before their families (INT 6, INT 8).

Employers' bias that women are less able to do their work once they have children

Two interviewees described their experience of becoming a mother while working in the forestry sector and how they were treated after by saying their roles as forestry professionals were no longer separated from their roles as mothers (INT 4, INT 7).

One of them (INT 4) described how it was like for her to come back after her maternal leave:

“And then I felt, as a woman, [...] if I may say so casually, like a leper⁴, as soon as you have a child, I don't know, you have nothing left in your brain and you are no longer sane, that's how it felt to me. Everyone only talked to me about my [child]. There was nothing professional at all. I was no longer included in any working groups” (INT 4, p. 6).

She then went on to say that while she had been on leave, other women had been included in the working groups and in the eyes of the people responsible for the working groups, it was enough to have one female representative in a working group: “then they said, no, we have a woman already, we don't need her” (INT 4, p. 6). When she spoke up about the issue, “they just put [her] back in somewhere for the sake of being nice” (INT 4, p. 6).

She also shared that she had been startled when a younger female colleague had tried to console her by telling her to instead focus on and enjoy her family life: “No, my colleague at work [...] said, look [name], be happy, take care of [your child] and enjoy your family life, you don't have to put yourself through that stress at the office” (INT 4, p. 10).

⁴ “[...] wenn ich das so salopp sagen darf, wie ein Aussätziger” (INT 4, p. 6)

The other interviewee (INT 7) said that only after she had become a mother she understood how big of an issue gender inequality in the forestry sector still was: “[...] as soon as [...] you're pregnant, you're stamped forever and ever. Yes, it's like that [...] up to that point it was never a serious problem. [...] Afterwards it became difficult” (INT 7, p. 4). She added that the forest owners of the forestry enterprise she worked for did not want her to step up from her position at the time to become the manager of the forestry enterprise. The reason, she said, was that she was a woman and a mother:

“That is a huge problem indeed. The second row [i.e. deputy manager of the forestry enterprise] is accepted by everyone. The first one [i.e. manager of the forestry enterprise] is not. [...] How can I take over the business in about three years? So there really is this glass ceiling that I never believed in, but it's there now. It's not possible to do this with children. They say. The men say” (INT 7, p. 4-5).

She later added: “And children, that's still the case in our society, that when you have them, you're not allowed to do anything else” (INT 7, p. 5) and that in any conversation about higher or different positions that she had been having, the topic had come up: “it's always this stupid question and what do you do with the kids? Sorry, but what I do with them is my problem” (INT 7, p. 5).

Another interviewee talked about similar mechanisms in the hiring process. Some of her female co-workers had shared their concerns about her hiring a high number of women with her. She said that she did not find it appropriate that becoming a mother should be a barrier. Women also had to pay attention not to participate in replicating these stereotypes and mechanisms:

“[...] women also have to be careful. For example, I have now hired almost only women. And I keep hearing, 'you have to be careful, she's 32 now, she's about to have a child'. I say, yes, and the 32-year-old boy, what about him? He might not get pregnant, but...” (INT 3, p. 4).

One of the interviewees (INT 1), who did not explicitly mention that family care responsibilities had been a barrier for her personally, shared a story of another woman whose story she knew well and who she had talked to about her experience in the job application process:

“[...] she recently became a mother and was blatantly told, 'Watch out, we don't want you as a young mother.' [...] you are a young mother, and therefore you are not suitable for the job. That's what they tell her. She doesn't even get to the next round [...]. And you

wouldn't do that with a man. They wouldn't say you became a young father a few weeks or months ago and that's why you're not suitable for the job. And that is why she apparently is not suitable for the job. Not because she is not professionally suitable, but because she has to bear responsibility for the family or the children. You would never say that to a man. Yes, in that respect, women definitely have a more difficult time" (INT 1, p. 11-12).

Interviewee 2 said that employers could not use being a mother, and not even being a single mother, as an excuse for not hiring or promoting women:

"Took my little children with me. [...] When they called me in the evening. I had no other option. The nanny was not there. I still remember putting the little children with their pyjamas in rain jackets, and off we were. That was great. It was a formative experience for them. Because they were allowed to go on the fire trucks and everything. [...] So there's no excuse that single mothers, for example, can't do that" (INT 2, p. 5).

Interviewee 7 who had encountered resistance about her having children several times, said: "I mean, with children, you can't have a better job than we have, can you? They just come along [...]. So what's so difficult about it? I still don't get it" (INT 7, p. 5).

Interviewee 8, however, said that this barrier did not only exist in forestry but in every sector and across different companies (INT 8, p. 3). She further said that, depending on the gender, family care responsibilities were perceived differently, and that especially in management, there was a lack of understanding:

"[...] when an employee, a man, says, I have to leave half an hour earlier today, I have to fetch my child from kindergarten, then everyone says, wow, that's a great father. If a woman leaves half an hour earlier and says, I have to go because I have to pick up my child from kindergarten, then the thinking is, she can't organise it any other way. So, especially at management level, there is zero understanding" (INT 8, p. 3-4).

Conflict of whether to put career or family first

Interviewee 6, who mentioned family care responsibilities as the only barrier she had ever encountered during her career in the forestry sector, argued that reconciling family and career was primarily difficult because of the conflict she had had to solve as a mother when starting to work more hours after a period of part-time work:

"But then if you want to be confident in your profession again it is somehow necessary that you simply work more hours. [...] That's the inner conflict that you have as a mother" (INT 6, p. 3).

She went on to add that both her predecessor and her colleagues had only ever supported her. She said that if in doubt, one should stay home, and that in hindsight, she also should have stayed home longer than she had: “You can always return, and there are always interesting tasks” (INT 6, p. 3).

A second interviewee (INT 8) shared a similar experience:

“But in retrospect, I actually only managed to do everything I did because I neglected my son. Otherwise, it wouldn't have been possible, because in many situations, especially in management jobs, you can't work according to the clock and go home. There are topics that last until 8 pm or longer or start earlier in the morning” (INT 8, p. 5).

To conclude, the perceptions of working mothers range from them stating that it is possible to combine having children and working while encountering resistance from the outside (INT 2, INT 7) to them saying that they had to neglect their family to further their career (INT 6, INT 8).

Sexual harassment

Sexual harassment is defined as “the unwanted imposition of sexual requirements in the context of a relationship of unequal power (MacKinnon, 1979, p. 1). According to Kensbock et al. (2015), sexual harassment ranges “from verbal comments, jokes and sexual gestures, to actions encompassing touching, coercive attempts to establish a sexual interaction and rape” (Kensbock et al., 2015). Therefore, the category “sexual harassment” is strongly linked to the category “sexually connotative speech” (see below).

Two interviewees mentioned that they were sexually harassed by colleagues or supervisors (INT 2, INT 4), with approximately two decades lying in between these instances.

Interviewee 4 was sexually harassed and groped by her supervisor at her first job after finishing university. The same had happened to a female colleague working there before. How this supervisor behaved and that he sexually harassed the female employees was common knowledge at her workplace:

“[...] and then you go up somewhere steeper, and he pushes you up on your butt. Everyone knew that [...] and my predecessor [...] said, [...] I'm glad, now I don't have to go into the field with him. And she said, [...] she usually takes a male colleague with her” (INT 4, p. 4).

She also shared that the same supervisor took photos of her to use them as a screensaver: “[...] my supervisor [...] took photos and then put them up as a screensaver” (INT 4, p. 4). Looking back, she said that she struggled the most with everyone knowing about this supervisor’s behaviour. Still, no one took any action in order not to expose or report him: “[...] the toughest part was [...] everyone knew, and no one said anything, even from the colleagues, from the guys, from the other bosses [...]” (INT 4, p. 5). Overall, this sexist and offensive work environment was a major reason for her quitting this job: “[...] I had the feeling that I had no room or no space [...]” (INT 4, p. 5).

Interviewee 2 reflected on the early stages of her career and how she had been sexually harassed by co-workers on business trips at the time who showed inappropriate behaviour to the extent that she felt she had to take close combat training so she would be able to defend herself:

“That was the time when I was exposed to absolutely sexist acts. That was impossible. I had to be so careful that they didn’t somehow chase me in the evening and follow me to my room when I was on business trips. It was awful. And then I did close combat training. Really. I felt like ‘fair game’⁵” (INT 2, p. 4).

Sexually connotative speech

Sexually connotative speech describes sexist and demeaning language that men predominantly use to express their dominance. As a form of verbal harassment, it is another dimension of sexual harassment and included in the definition by Kensbock et al. (2015) (see above).

Three interviewees (INT 2, INT 4, INT 5) shared instances of sexually connotative speech. The interviewees’ experiences include sexually connotative speech both in forest education and in the workplace.

Sexually connotative speech in forest education

Interviewee 5 shared that during her professional forestry training, a fellow student lied about having had a sexual relationship with her and bragged about it in front of the other colleagues:

⁵ “Freiwild” (INT 2, p. 4), game that may lawfully be hunted (Collins Dictionary, online).

“And you go your way, and a few are offended right away, and the others accept it, and then there are some who think they are the best and then start saying, yes, you know, you had something going on with her and so on. And [...] I heard about it the next day in the morning when I came downstairs for breakfast [as there was] someone who was bragging. What supposedly went on there [...] Yes, exactly, a sexual relationship. Let's put it this way. Let's call it by its name” (INT 5, p. 4).

Two interviewees (INT 2, 5) shared what people would say about women who studied forestry, irrespective of whether they studied at university or took professional forestry training.

According to interviewee 2, people would say that women only studied forestry at university to find themselves a wealthy, land-owning husband there:

“[...] although they always said that women don't finish their studies. They marry beforehand and they only go to study at [university] so that they can marry a count. [...] And those women who finish their studies are not beautiful enough for a man to want to take them” (INT 2, p. 2).

Interviewee 5 shared a similar quote from back when she took the professional forestry training: “They said that, well, she's only doing it because she's looking for a husband” (INT 5, p. 2).

Sexually connotative speech in the workplace

When applying for jobs in the forestry and agricultural sectors, interviewee 5 got told that she was too pretty to work in a job that required being clever: “And in the personal conversations [...] the outcome always was that no, you are too pretty for the position. I asked what qualification had to do with looks? Yes, you can't get a proper job⁶” (INT 5, p. 5).

Interviewee 4 shared that she had thought about putting on a wedding ring to protect herself from sexually connotative comments:

“[...] just being a young woman and working in the sector and then not being married, [...] I thought I would feel safer with a wedding ring. And then I thought to myself I should just buy a ring and put it on, [...] I've been asked again and again about that. [...] well, who asks a young man, even if he comes straight from university, [...] if he is married? [...] Or why he doesn't have any children” (INT 4, p. 11).

⁶ “Nichts Gescheites” (INT 5, p. 5)

She also reported inappropriate remarks by her superior. He once reacted to her disagreeing with an aspect of their work by asking her whether she was on her period, thereby implying she was irrational and overly emotional: “[...] my immediate superior [...] said, “Why are you so upset, are you on your period or what?” (INT 4, p. 4).

Reflecting on these remarks and the dynamics in the workplace, she said that she “was not able to distinguish between what was normal, what was funny and what was their sense of humour [...]” (INT 4, p. 4).

Discrimination based on gender

Three interviewees (INT 2, INT 4, INT 8) shared instances of discrimination based on their gender. Interviewee 2 said that even though the Equal Treatment Act had been introduced in public service and job offers usually stated that, if equally qualified, the female candidate would be chosen, in her experience, they did not prove effective and were not always followed:

“[...] tinkered⁷ with this job offer, with this application. Yes, as always. A woman must be hired if she has the same qualifications. [...] That means they would have to lower your qualifications so much that you couldn't even be considered. That's what bothers me so much about this. They actually have to prove to you, and the commission proves it, that you are inferiorly qualified in reality and can't do the job at all. So that you don't end up in the same ranking with the man they want to have. That's what annoys me so much. And that's how it's played out to this day” (INT 2, p. 5).

Interviewee 4 shared that in the course of her job interview, she had had to promise not to get pregnant if they hired her:

“[...] at the job interview [...], the department head [...] said, [...] I would like to give you the job, but you have to promise me that you won't get pregnant. [...] I said, no. I mean, of course, I said no” (INT 4, p. 5).

After returning from maternity leave a couple of years later, wanting to return to her previous position and work part-time, she was told that she could not have the position she had had before. She was told that it could not be turned into a part-time position, which turned out not to be true later. However, she returned to a lower position. When she later applied for a promotion, a male colleague, who was not as qualified as her because he had considerably less experience, got it:

⁷ „getrickst“ (INT 2, p. 5).

"[...] they said, no, I'm not allowed to have my old job anymore, because it's not possible to work part-time. This is not true, as I have since found out, but they just didn't want it. Then I was demoted to a worse position [...]. That's where I am now and then I applied again for a better job. And [...] my colleague, who is much younger and doesn't have the same work experience, got it" (INT 4, p. 3).

When she sought arbitration, the explanation was that she and her colleague had been equally qualified and that they had just chosen him. Later, they changed this story to him being better qualified (INT 4, p. 6).

At a later point, after having filed a motion against this discrimination, she was intimidated and put under pressure by people in her working environment and was wondering whether this could have possibly happened to others who had wanted to take legal action as well:

"[...] what made me wonder about the whole thing is that the [Equal Treatment Acts], they are about 20, 30 years old, [...] and there has never been anyone to file such a motion. When they noticed that I was filing it, they said, [...] you're harming us all, and you're the typical women's libber⁸, and you'll never be anything again and the usual. And then I thought to myself, yes, maybe there has been so much intimidation, even with others, that no one has ever taken legal action before" (INT 4, p. 7).

Interviewee 8 shared that people in her work environment tested the limits of how much she could tolerate and set traps to prove she was not a good fit for the position:

"And they put you to the test. How much can she take? When will she collapse? [...] you are bombarded with all kinds of things. This one, that one, that one. There are also traps that are set for you, where you really have to be careful. If you make a certain decision, it's a mistake. And they steer you in that direction because it simply can't be that you are there now on this job. There is no such thing. I would have liked to have it, my friend would have liked to have it, whatever. You are dangerous for us, uncomfortable because you demand too much, we would rather have a comfortable life. So there are many different motivations" (INT 8, p. 5).

Understanding of Competence

Four interviewees (INT 3, INT 4, INT 5, INT 7) shared that one barrier they had personally experienced was the understanding of competence in the forestry sector. According to them and the experiences they had made, being competent was predominantly associated with being a man. At the same time, women got different attributes than men for similar traits and behaviour, were not seen as fit for leadership positions, and had to be better than men to prove themselves constantly.

⁸ "Emanze" (INT 4, p. 7)

Interviewee 3 said that while men are described as persistent, women get different attributes for showing similar traits. As an example, she shared that she had been at a hearing, and while the male candidate was described as persistent, one of the attributes she got was “super prepared” (INT 3, p. 4). Additionally, her personal life was brought into the assessment:

“I just find that people listen less and that when someone vehemently demands something, they are assessed differently as a woman than as a man. [...] men [...] are persistent. But women get different attributes. [...] I was at a hearing and [...] read the minutes afterwards. How I was judged. And what always happened was, [...] she's super prepared, she has competent answers, clear answers. [...] But there was always a “but”: but she has children. [...] And with the man, you didn't hear that” (INT 3, p. 4).

Interviewee 4 shared that when she had once, still as a forestry student, applied for an internship at a forestry enterprise, and the manager invited her. However, when she went there, she was told that there actually was no internship opportunity and that he had just been interested to see a woman who studied forestry: “He invited me, I was thrilled, and then he said, no, I don't have an internship for you. I just wanted to have a look at a woman who [...] studies forestry” (INT 4, p. 16).

Years into her career, she now said that to her it seemed like there was just no room for women in leadership positions in the forestry sector in people's heads and especially in the heads of those in leadership positions: “[...] my bosses are like that, there's no room for a woman in management. There is no room for a woman in their heads, that's how it seems to me” (INT 4, p. 7).

Interviewee 8 shared an experience that underlines this:

“A key experience was that [my predecessor] introduced me to some retired forester [...]. [...] he greeted him, and I stood next to him like such a fool, [...] he completely ignored me. [...] And then my predecessor said, [...] by the way, this is my successor. He then shook my hand absentmindedly [...], looked at my predecessor, still had my hand in his hand and said to him, [...] you're not serious, weren't there any [...] men for this job?” (INT 8, p. 8).

Working in the forestry sector and doing practical forestry work, interviewee 5 was still seen as less competent as a woman: “I mean, whether it's cutting trees, whether it's forest road construction. [...] The image on the outside or from the outside has always been so derogatory - what, a woman” (INT 5, p. 1). She shared that she felt like she always had to prove herself by being better than her fellow students during her professional forestry

training: “And then you have to prove yourself. And then you have to be good. Better than your fellow students” (INT 5, p. 5).

Similarly, interviewee 7 says that as a woman, you always have to prove yourself, while men enjoy the benefit of the doubt: “Yes, it's as simple as that, a woman, she always has to prove that she can do it. A man has to prove that he can't” (INT 7, p. 5).

She goes on to add that people do not expect women to have a degree in forestry: “[...] in normal everyday life, you just don't trust a woman to have a forestry university degree” (INT 7, p. 5).

Glass ceiling

The glass ceiling is described as an invisible barrier encountered by women advancing their career, especially regarding leadership positions (Hymowitz and Schellhardt, 1986). Two interviewees (INT 4, INT 7) mentioned that they had already hit a glass ceiling when trying to improve their position at work (INT 4, p. 12; INT 7, p. 4-5).

Interviewee 7, who had never believed that a glass ceiling existed, hit it when she was told she could not step up and become the manager of the forestry enterprise she worked for did not want her to step up from her position at the time to become the manager of the forestry enterprise as woman and mother (INT 7, p. 4-5; see *family care responsibilities*).

Interviewee 4 also shared that after she had not been promoted, she felt like she had hit a glass ceiling (INT 4, p. 12).

Interviewee 8 said that at one company, it was simply impossible for her to reach the same payment level as her predecessor:

“[...] it didn't matter at all how big your area of responsibility was. Which was much bigger with me than with him. [...] It was simply like that. But there was just no chance. ‘If that's not enough for you, then you don't have to do the job.’” (INT 8, p. 4).

Lack of networks

Two interviewees had experienced a lack of networks as a barrier (INT 2, INT 3). This lack of networks was identified as a lack of women's networks (INT 3), a lack of professional networks in general that the interviewee was able to join, and no time for networking because of family care responsibilities (INT 2).

Both interviewees (INT 2, INT 3) named a lack of networks back when they established their careers in forestry as one of the barriers they had encountered.

Interviewee 3 felt there was a lack of women's networks back when she started and said that she did not know any women's networks she could join: "And I didn't have a network with women back then either" (INT 3, p. 2).

Interviewee 2 said that there were no professional or influential networks she was able to join as a woman: "[...] that there was no network for me to go to. [...] Not even one network, let alone a powerful one" (INT 2, p. 6).

Interviewee 2 further said that as a mother, she also had no time for networking and drinking with her co-workers after work because of family responsibility and having to take care of her children at home:

"They used to tell me that I was somehow without humour. [...] Take it easy. Can you take it easy when you have children at home? And when you have such stress at home after work anyway? No, that made me mad. How they always said, take it easy. Yeah, yeah, let's go get a beer" (INT 2, p. 7).

Tokenism

Tokenism appears, e.g. for minority representatives of their gender in the workplace where they are often treated as symbols rather than individuals (Kanter, 1977). The accompanying "practice of publicly making small concessions to a minority group to deflect accusations of prejudice and discrimination" (Hogg and Vaughan, 2013, p. 368) in the context of the workplace could look like hiring staff to appear inclusive in view of e.g. gender or racial equality.

Interviewee 3 identified tokenism as a barrier. She said that while being the only woman or one of few came with increased visibility, it also meant that one was constantly in the spotlight and had to assert oneself even more:

"But as a woman, I was exotic. And when I was invited to speak, there were eight men and me. And that's not good. So as a woman - and [...] this was certainly the case 20 years ago - you are more seen as a woman. Yes, you are seen more, but it is certainly more difficult for you. [...] you have to prove your expertise three times more" (INT 3, p. 1).

Inflexible working hours

As already mentioned above (see *discrimination based on gender*), interviewee 4 was told that it was not possible to work part-time in her previous position after coming back from maternity leave (INT 4, p. 3).

Interviewee 6, however, emphasised that inflexible working hours had never been a problem at her job. After becoming a mother, she worked part-time for a while before starting to work full-time again:

“I mean, [they] are very generous when it comes to hourly regulations anyway. You can find an agreement on the hours. They are very accommodating” (INT 6, p. 3).

4.1.1.2 Personally experienced internal barriers

Personally experienced internal barriers include lack of self-confidence (INT 3, INT 4) and lack of knowledge (INT 1).

Lack of self-confidence

When asked whether they had ever had to overcome any barriers that did not come from the outside but stemmed from within themselves, two interviewees confirmed this (INT 3, INT 4).

Interviewee 3 said that she was very familiar with self-doubts: “I have a completely different perception of my abilities and what I think I can do than others think of me. So I hear that again and again, they don't believe that I have such doubts” (INT 3, p. 4)

Interviewee 4 shared that after graduating, a higher position had been open. Still, she had not had enough self-confidence to apply at the time. It was the very same position that her colleague who was less qualified got instead of her later:

“[...] the position of head of the department [...] was open and [...] I should have applied straight away and I had the same qualifications as my colleague who [...] would have gotten the job now and I didn't think I could do it, because I thought to myself, no, I'm not that good yet [...]. So I should have just gone ahead from the beginning [...]” (INT 4, p. 9).

Interviewee 8 said that while she could advocate for others without problems, she struggled speaking up for herself: “I've [...] found that I can't do it. It's really hard for me to demand these things. I can do all kinds of things for someone else, but it's difficult for myself” (INT 8, p. 4).

Lack of knowledge

One of the interviewees without forest education (INT 1) perceived that she had not studied forestry at university as a barrier, as this made certain things more difficult in her experience:

“One barrier I found is that I didn't study forestry. [...] So even now, [...] I realise that if I had more technical knowledge, we might or might not find it easier to do certain things. [...] So I feel it's a shortcoming that I didn't study forestry” (INT 1, p. 8).

4.1.2 General barriers

As the interview started with questions about their career path, the barriers they had personally encountered, and the strategies they had used to overcome them, the interviewees had already had the opportunity to reflect on gender-specific barriers in the forestry sector throughout the conversation by the time they were asked what the biggest barriers for women who wanted to enter the forestry sector were. Therefore, their answers came from a well-reflected location. At the same time, this means that the personally experienced and the general barriers cannot be understood isolated from each other, but must be read together.

7 out of 8 interviewees stated that there were general barriers (INT 1, INT 2, INT 3, INT 4, INT 5, INT 7, INT 8), but some of them said that they had already mentioned many of these issues throughout the interview and did not repeat all of the problems that they had discussed before. Therefore it is important to keep the personally experienced barriers in mind when reading those that were named as general barriers. Interviewee 6 did not name any general barriers (INT 6).

One of the research questions is to find out what, according to female leaders in the forestry sector, the most significant gender-specific barriers in general are for women trying to enter the forestry sector. Figure 6 gives an overview of all general barriers identified by the interviewees:

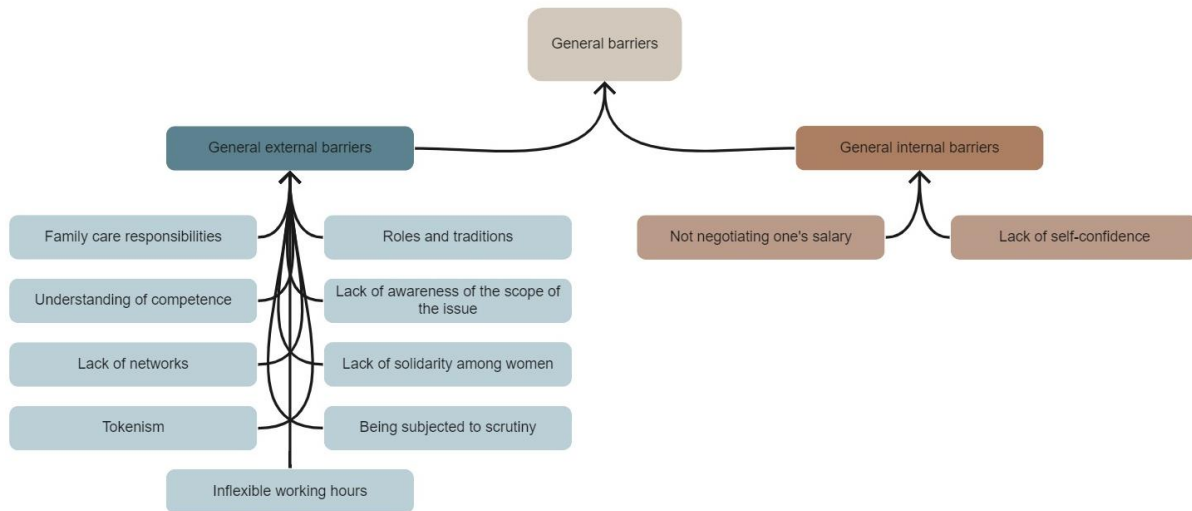


Figure 6. General barriers, distinguished between general external and general internal barriers.

Following the same structure as the personally experienced barriers, the general barriers the interviewees named are divided into general external barriers that come from structural settings, and general internal barriers, e.g. underestimation of one's own capabilities. The general external barriers outnumber the internal ones by far.

4.1.2.1 External general barriers

External general barriers include family care responsibilities (INT 3, INT 4, INT 5, INT 7), understanding of competence (INT 1, INT 3, INT 8), a lack of networks (INT 3), inflexible working hours (INT 3, INT 7), roles and traditions (INT 1, INT 2, INT 3, INT 4, INT 8), lack of awareness of the scope of the issue (INT 4), tokenism (INT 3, INT 4, INT 8), a lack of solidarity among women (INT 3), and being subjected to scrutiny (INT 8).

Family care responsibilities

Family care responsibilities, already mentioned as a personally experienced barrier, were also named as a major general barrier in the forestry sector. Four out of eight interviewees (INT 3, INT 4, INT 5, INT 7) identified family care responsibilities as a general barrier.

Interviewee 3 said that in her opinion, it was necessary to convince employers that working mothers were just as good at their jobs as their male colleagues: “And also to convey, even though I have a child, I am at least as good as my colleague” (INT 3, p. 8).

Regarding the lack of gender balance in leadership, she said that one cause for that was the fact that women were still largely responsible for raising children and doing care work:

“[...] Women know that if they want to have children, certain functions are just really difficult. And that goes to the point of self-sacrifice. Because when you have a 60-hour job and you still have to do the food shop. You still have to look after the children, and you still have to make sure they get to the paediatrician. It's madness” (INT 3, p. 4).

Interviewee 7 identified family care responsibilities as one of the biggest gender-specific barriers in the forestry sector as many women were missing out on important years in the early stages of their career when choosing to have children while men could progress in their careers:

“[...] either you inherit a forestry enterprise [...] or you simply have little chance as a woman, simply because of the prejudices on the one hand and on the other hand because you simply have children in the time where men are working [...]. [...] the early 30s to the mid-30s, which are actually the decisive years, that are simply postponed for us. And always postponed means, well, you're too old after anyway” (INT 7, p. 8).

She further said that she feared that the distribution of family care responsibilities would not change much in the near future: “I mean, as a woman you are mainly responsible for the family and I think that won't necessarily change in the next 100 years, that's just my feeling” (INT 7, p. 7).

One of the two interviewees who did not explicitly mention that family care responsibilities had been a barrier for them personally (INT 5), reflected on why there were only few female forest owners visible and actively engaged in interest groups in the private sector. About motherhood, family and the distribution of care work, she said that many women who work in their agricultural and forestry business but are not seen because they do not have the capacity to become visible:

“If you do practical forestry work - and I think there are a lot of women who do that / But you don't see them. Because they go into the forest and then go home and cook for the children and do the laundry for their husband. And then they're actually too tired [...]. That they step forward and become visible is hardly the case. Still not. And many of them will certainly not say, well, now I have worked all day and now I'm giving up my free time so that I can continue to fight” (INT 5, p. 7-8).

Interviewee 4 shared how she had also seen this barrier in the forestry sector from another perspective when it was not easy for her male colleagues to equally go on parental leave:

“[...] there are also male colleagues who would have loved to go on parental leave. Some of them fought their way through the courts to go on parental leave because they were told that no, [...] foresters are not allowed to go on parental leave and [...] that's insane and they simply have a legal right to it, thank God by now. And then they just did it, but there were huge dramas [...]” (INT 4, p. 5)

Understanding of competence

Three interviewees (INT 1, INT 3, INT 8) identified the understanding of competence as a general barrier in the forestry sector. Being competent is, according to them, predominantly associated with being a man.

Interviewee 1 said that, like in many jobs, women in the forestry sector were taken less seriously than men:

“And of course, as a woman, you are not taken quite as seriously in the sector as a man. [...] But that's the case with all jobs. [...] Of course, you are also sometimes sent for coffee. [...] But you have to put up with that” (INT 1, p. 3).

She added that women needed to be better, work harder, be more present and could not make mistakes to prove that they were competent:

“And as a woman, you can certainly gain respect and prestige. It's just that, unfortunately, women have always had a harder time because they tend to have different prejudices than men. It takes longer, and you have to work harder. You have to be more present. You can't afford to make mistakes. Whereas a man just muddles through, with a woman you say, [...] we knew anyway that a woman couldn't do that” (INT 1, p. 4).

Similarly, interviewee 8 said that as a woman, you had to be better:

“You simply have to be better than the men. ‘Women are given preference if they are equally qualified, as if. Yes, you can forget about that saying. It should say ‘Women are only given preference if they are better qualified’” (INT 8, p. 10).

Interviewee 3 stated that one of the biggest gender-specific barriers in the forestry sector was for women “to be taken seriously” (INT 3, p. 8) and that she “[saw] every day how women who run an enterprise [were] talked about” (INT 3, p. 8).

Lack of Networks

Interviewee 3 identified “a lack of networks” (INT 3, p. 7) as a major general barrier.

Inflexible working hours

Two interviewees (INT 3, INT 7) saw inflexible working hours as a general barrier.

Interviewee 7 argued that a major barrier was inflexible working hours in the forestry sector that became apparent in the lack of part-time jobs, which in turn excluded women who prefer not to work full-time: “The problem is again related to the fact that it is a male-dominated industry, there are no part-time jobs. [...] They are all either 100% or nothing at all” (INT 7, p. 9).

Interviewee 3 said that one barrier was the large time commitment needed for leadership positions: [...] this expectation of a person in a leadership position to be available 24/7” (INT 3, p. 8)

Roles and traditions

The understanding of roles, the expectations they come with and the traditions that reinforce them were named by five interviewees (INT 1, INT 2, INT 3, INT 4, INT 8).

Interviewee 2 stated that the biggest barrier was the traditional understanding of roles and traditionally masculine values associated with forestry connected to hunting and rituals: “I think the biggest difficulty is this strongly traditional understanding of roles⁹. You know, connected with hunting and [...] the masculine and all the rituals” (INT 2, p.10).

Similarly, interviewee 4 said that “[...] the image of women [...]” (INT 4, p. 13) was the biggest barrier. According to her, this image was widespread and ingrained in forestry due to tradition: “In general, I do believe that because of tradition, the old image [...] is even more deeply rooted in forestry” (INT 4, p. 14).

Interviewee 8 argued that this was not just an issue in the forestry sector, but of society at large: “I think it's a societal problem. Simply because this cliché is still so entrenched in

⁹ “Rollenbild” (INT 2, p.10)

society. Women don't belong in this role" (INT 8, p. 6). She added that women tend to fill the roles that society expects them to instead of standing up for what they want due to this being a societal issue (INT 8, p. 7).

Interviewee 1 said that there were still men who thought that forestry was a man's job: "Well, there are certainly still men who, like my father, think that forestry is a man's job. Women can't do it" (INT 1, p. 12).

Interviewee 3 doubted whether women who did not conform to the understanding of roles would be just as celebrated as men by giving the example of men working in early childhood education, usually a female-dominated field: "If he's a kindergarten school teacher, he's celebrated. But, if a woman is in forestry, I don't know if that is celebrated equally" (INT 3, p. 3).

Lack of awareness of the scope of the issue

Interviewee 4 stated that one barrier was that despite affirmative actions and support programmes existing, they are not effective as long as stakeholders in the forestry sector do not commit to fulfilling them:

"Obviously, you can only do it through legal action, you can only do it through strikes, you can only do it through precedents because otherwise, nothing will change, because no one is getting together, okay, we have a women's support programme, where there is a quota [...] of [...] 40 per cent, and it is far from being fulfilled up to the management positions. And nothing happens. That is simply seen as a trivial offence, or I don't know what" (INT 4, p. 7).

She added that another barrier was that there was no support from men in the forestry sector, e.g. in the case of sexual harassment. As an example, she used that, even though everyone knew what her boss did to her, no one did anything about it:

"[...] also that [there is] simply no support on the outside, that's insane. The [...] men are not sensitised in this direction, [in my case], everyone knew that one of the bosses was [...] lewd so to say and everyone knew it, and no one said anything, or they just laughed [...]. So there was no support at all [...] and I think in, [...] a bunch of men, it's even tougher. It makes you feel very alien" (INT 4, p. 13)

Tokenism

Tokenism describes instances where, e.g. minority representatives of their gender in the workplace are treated as symbols rather than individuals (Kanter, 1977). Three interviewees (INT 3, INT 4, INT 8) identified tokenism as a general barrier.

According to the experience of interviewee 4, there were “model women” or “affirmative-action women” in her workplace who were supported. While they were treated as symbols or tokens for “all women”, they did usually not promote gender equality or challenge the norms:

“I mean, of course, there are individual women who are supported. They are the model women¹⁰. There is always a model woman and the good little sheep, so to speak, that's what I call it now, and she is supported and doesn't harm anyone and so on. And then there is the affirmative-action woman, who is part of everything anyway, but who criticises less and so on” (INT 4, p. 9).

Tokenism usually implies that there are only a few employees of a minority group who, in turn, have high visibility. Interviewee 3 said that women often do not apply for leadership positions in the forestry sector because of the presence it comes with: “Women don't apply there, because I don't think they always want this presence either” (INT 3, p. 4).

Interviewee 8 reflected on how increased visibility of a few can be of a disadvantage when those make mistakes or fail as it falls back on the entire group:

“So when someone does a job like that and fails there, it's total confirmation that it's not supposed to be like that anyway. So back to the start. And that is, of course, the problem. The few women who enter the forestry sector, even in management positions, are condemned to success for those who follow them. [...] that is a domino effect that is triggered. If one falls, all those who come after fall and have a much harder time getting up again” (INT 8, p. 12).

Lack of solidarity among women

Interviewee 3 said that there was a lack of solidarity among women in the sector: “And it has to be said that it is not always only men who bully. Women do that too. We are no better. [...] People think they become bigger by making others smaller” (INT 3, p. 7).

¹⁰ “Vorzeiger” bzw. “Vorzeigefrauen” (INT 4, p. 9)

Being subjected to scrutiny

Interviewee 8 said that men's appearance was not judged to the same extent and that being subjected to scrutiny was a barrier for women, especially in the application process:

"[...] for a woman, it's a complete scan from [head] to toe. And you have to have that in mind if you want to get in somewhere, if you apply, if you go there. It starts with the photo on the application. What is she wearing, how is her hair and so on? You always have to be pretty. You always have to come across as nice. What you have in your head is secondary. If this visual impression doesn't work, it doesn't matter what you say. Then it's even harder. And that's not the case with men. A lot of things are overlooked there. And that's even worse with older men than with young men. And in this respect, that is also a barrier" (INT 8, p. 11-12).

4.1.2.2 Internal general barriers

Internal general barriers include a lack of self-confidence (INT 1, INT 2, INT 3, INT 4, INT 8) and not negotiating one's salary (INT 8).

Lack of self-confidence

Already mentioned as a personally experienced barrier, lack of self-confidence was also named as a general barrier by five interviewees (INT 1, INT 2, INT 3, INT 4, INT 8).

Interviewee 1 said that lack of self-confidence led to women building their own barriers:

"So the problem is often the women themselves, who [...] build barriers for themselves. And they have far too little confidence in themselves. I have noticed that again and again" (INT 1, p. 10).

She also said that the problem lied with the women and that others often had more confidence in them than themselves: "The problem is not the others, the problem is yourself. Yes, others often have much more confidence in you than you have in yourself" (INT 1, p. 9).

Interviewee 2 also argued that women had less self-confidence than men but that she wasn't sure whether this was due to nature or nurture:

"Women have less confidence in themselves than men. [...] So it's a completely different self-perception. It's probably in our nature or our socialisation or whatever. I don't know. We simply weigh things up more overall" (INT 2, p. 8).

Interviewee 3 stated that women not having enough self-confidence showed through them not applying for leadership positions, but jobs at a lower level, even though they would be qualified:

“They do not apply for leadership positions [...] And I feel that with other women too. For example, I have applications on my desk where I think to myself, is she applying to be my project assistant? She could do management. She has a top education. What's wrong with her?” (INT 3, p. 4).

Similarly, interviewee 8 argued that often, women set themselves smaller goals:

“And it's often the case that they tend to set smaller goals as a precaution. ‘I'm studying at [university] now, but I want to become a forest ranger¹¹.’ Yes, that's the result, which is actually completely wrong. The moment I obtain a university degree, it means I'm going into management. Or into science. There are really only these two options from my point of view” (INT 8, p. 7).

Interviewee 4 also identified lack of self-confidence as a general barrier and reported that many of her female colleagues did not trust themselves enough to take on jobs at a higher level:

“And what I now see with my female colleagues, I also see that they put themselves down a lot. And I'm sorry about that, because I say, hey, look at how the others work. You work with at least the same commitment, the same competence, there is no question, and then they say, yes, true. And I say, so what? Do you think you can do it? Do you trust yourself to do the work in the senior position¹² the same way he does it? Then she says, yes, I can do that too. Then I say, yes, then please do. ‘No, [...] I haven't been around that long.’ [...]” (INT 4, p. 10).

She further argued that a significant problem connected to lack of self-confidence was that as a woman, “[...] you blame yourself [...]” (INT 4, p. 13) for the challenges you encounter in the forestry workplace.

Interviewee 3, however, expressed her hope that this would change over time and with future generations being more self-confident:

“I believe that the next generation will be different. [...] That there will be some with a high level of self-confidence [...] Well, we raised you with a lot of praise, with a lot of confirmation. [...] But my generation, which is still the role model, of course, is not equipped with so much self-confidence” (INT 3, p. 4).

¹¹ Lower-level management position

¹² “Chefposten” (INT 4, p. 10)

Not negotiating one's salary

Interviewee 8 argued that in the application process, women, different from men, do not talk about or negotiate their salary, but they talk about whether they want to do the job, their tasks and ideas:

“Women discuss the matter, the job, [...] do you want to do the job and talk about all kinds of things, but don't like to talk about their own salary. And men, when they are offered a job or are supposed to do it, the first thing they say is, what's in it for me? [...] the first question is about money. [...] women talk about how it can be realised, what do I need for it and can I see myself doing it, do I perhaps have ideas about the content. But they don't talk about the money” (INT 8, p. 4).

4.2 Strategies

The interviewees were asked about the main strategies they had applied to overcome the barriers they had personally encountered (i.e. personal strategies), whether they had had mentors and what personality traits had helped them with overcoming barriers. Towards the end of the interview, they were asked about strategies that they generally deemed important to overcome gender-specific barriers in the forestry sector (i.e. general strategies).

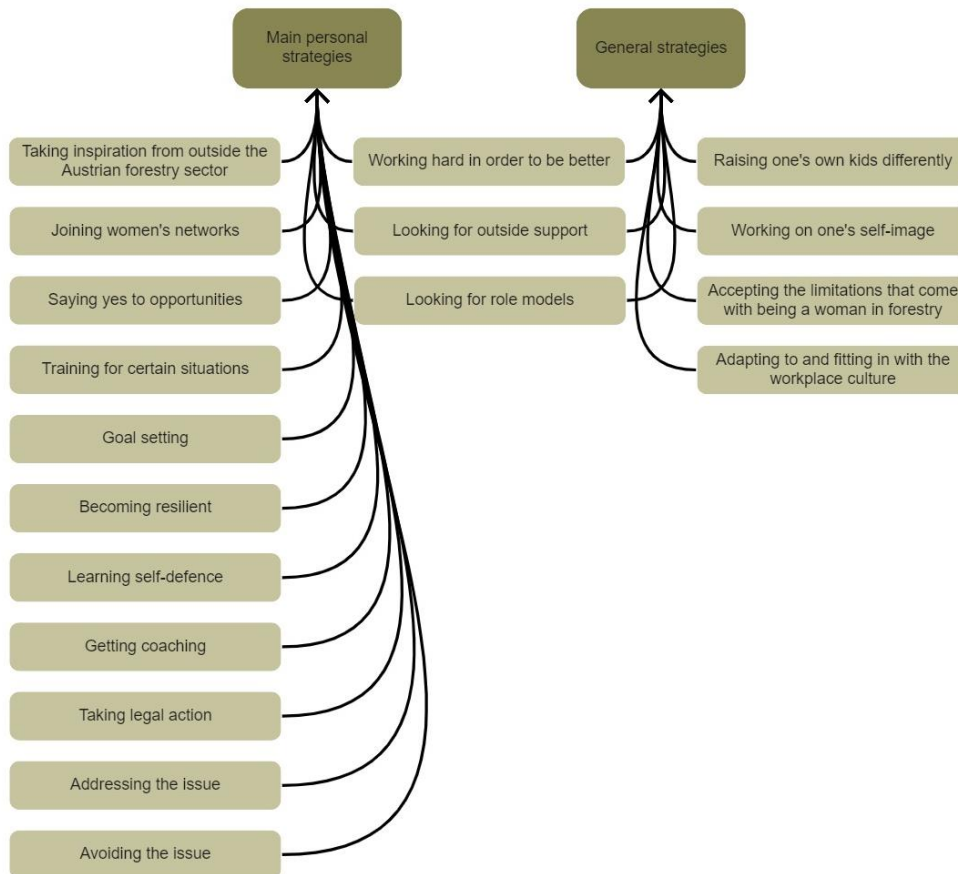


Figure 7. Comparison of the main personal and general strategies.

Figure 7 compares the main personal strategies of the female leaders and the general strategies they identified. Working hard in order to be better, looking for outside support and looking for role models appear in both categories. The following chapters will give a detailed overview of the personal and general strategies and other factors connected to overcoming barriers.

4.2.1 Personal Strategies

Asking the interviewees about their personal strategies, the topics main personal strategies, mentorship and helpful personality traits were discussed. The results answer one of the research questions: *What are the personal strategies of female leaders in the Austrian forestry sector to overcome gender-specific barriers?* Figure 8 illustrates the main personal strategies of the interviewees, their take on mentorship and the personality they considered important for them to overcome the barriers.

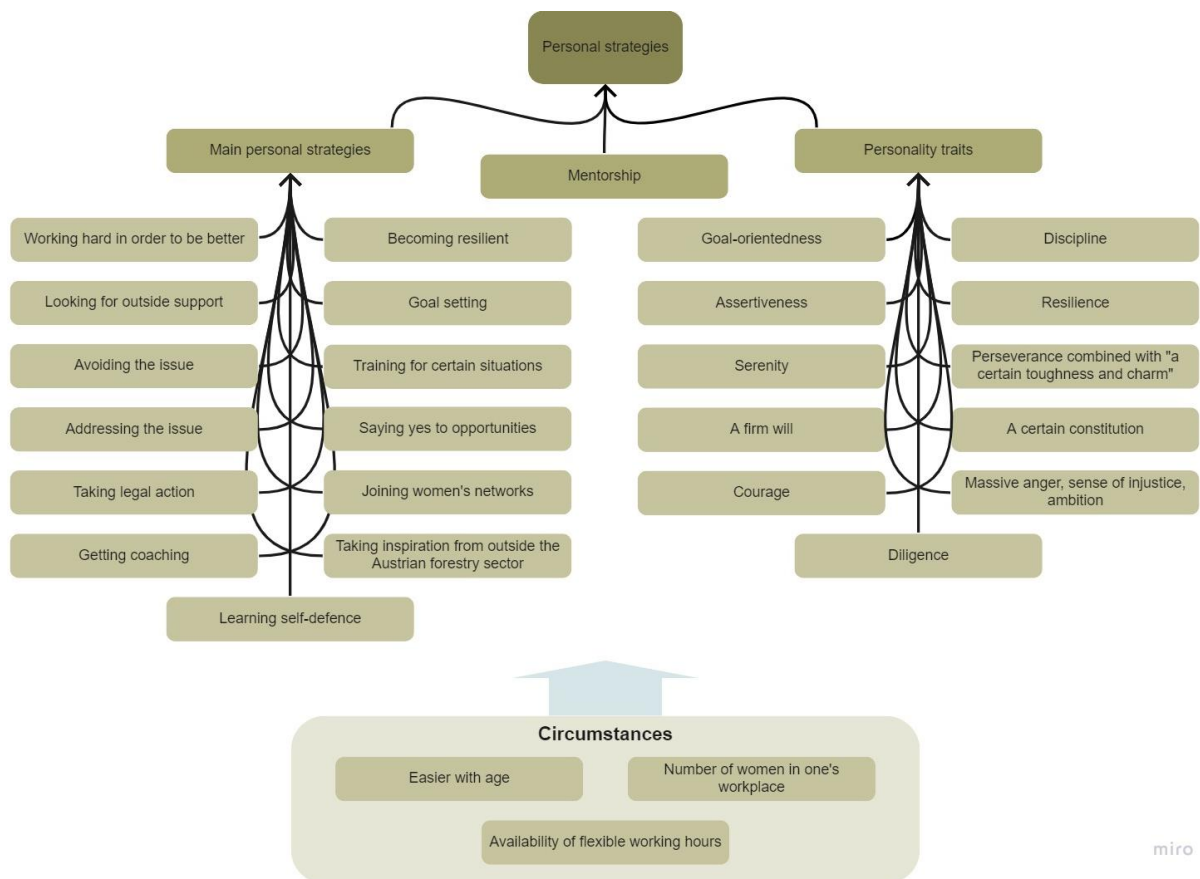


Figure 8. Personal strategies (including takes on main personal strategies, mentorship and personality traits) and identified circumstances.

4.2.1.1 Main Personal Strategies

As their main personal strategies, the interviewees named working hard in order to be better (INT 2, INT 3, INT 5, INT 6, INT 8), looking for outside support (INT 1, INT 2, INT 5, INT 6, INT 7, INT 8), avoiding the issue (INT 4), addressing the issue (INT 4, INT 8), taking legal action (INT 4), getting coaching (INT 4), learning self-defence (INT 2), becoming resilient (INT 3, INT 5), goal setting (INT 3), training for certain situations (INT 2), saying yes to

opportunities (INT 2), joining women's networks (INT 2, INT 3) and taking inspiration from outside of the Austrian forestry sector (INT 2).

Working hard in order to be better

Working hard in order to be better was the strategy interviewees named the most (INT 2, INT 3, INT 5, INT 6, INT 8). Interviewee 8, for example, said:

"You have to shine with performance. That's just the way it is. And you have to assert yourself, and you have to [...] deal with the hurdles, all the extra work, everything that comes along. Otherwise, you don't stand a chance" (INT 8, p. 7).

Interviewee 6 said that part of this was to be well-prepared for meetings to know what to expect:

"And I always try [...] [to be] well prepared. I study the documents well. I also have a co-worker who prepares them for me. [...] And you always have to take your time. So you always know what to expect at a meeting. There will be enough unforeseen things anyway" (INT 6, p. 6).

Looking for outside support

Another strategy that was several times was looking for or relying on outside support. This ranges from the support of family and friends (INT 2, INT 5, INT 8) to the support of peers (INT 1) or (male) allies (INT 2, INT 6, INT 7).

Support by family and friends

Both interviewees 5 and 8 listed the support by family and friends (INT 5, INT 8). Interviewee 8 stated that she needed the support of family and friends in order to balance her career and family care responsibilities:

"[...] combining work and family is not a matter of strong will alone. You simply need fellow human beings, friends and family to help you. Without that, you can't solve the problem" (INT 8, p. 10).

Interviewee 5 said that the support of her friends was necessary when coping with the barriers she encountered working in the forestry sector (INT 5, p. 6). Interviewee 2 mentioned that the support of her husband was of utmost importance, especially in the face of harassing behaviour (INT 2, p. 4).

Support by peers and allies

Interviewee 1 shared her personal strategy from another area that she had worked in and of which she said that it resembled the forestry sector in many aspects, not the least because of it being similarly male-dominated. As her and other women's statements or opinions in meetings tended not to be considered as per usual, they started to back each other up. When one of them said something, and before the chair could move on with the meeting agenda, another woman or sometimes even more of them would get up and state that they found their idea or opinion good and worth discussing. They had been doing this for years, and interviewee 1 said it had proved to be a very successful strategy:

"[I] argue that, first of all, it did us good to each other that we weren't always just wiped away like that and we achieved something with it. But that only works if you do it with solidarity and not by putting each other down" (INT 1, p. 6).

Additionally, several interviewees underlined the importance of predecessors and bosses who supported them as (male) allies (INT 2, INT 6, INT 7).

Avoiding the issue

Interviewee 4 mentioned that she had avoided the issue (INT 4). To prevent exposing or reporting a supervisor who had sexually harassed interviewee 4, she asked her colleagues who knew about it to help her avoid fieldwork with the said supervisor. In this case, the issue was therefore not addressed but avoided:

"[...] I always said to the other colleague, no, please, do a lot of fieldwork with him, so that I don't have to go with him, and that was agreed upon and everyone knew that. And then we solved it somehow so that we didn't really step on anyone's toes or anything like that" (INT 4, p. 5).

Addressing the issue

Two interviewees (INT 4, INT 8) mentioned addressing the issue as one of their strategies. Interviewee 4 addressed various situations and set boundaries both with her superiors and her colleagues. She asked her superior, after previously having avoided the issue (see above), to stop his harassing behaviour when he put pictures that he had taken of her on the screensaver of his work computer (INT 4, p. 4). She further addressed her exclusion from

working groups both in performance reviews and with her department head (INT 4, p. 6). With her colleagues, she drew a line regarding their comments and jokes during working hours:

“[...] I said that we could [...] make jokes when we're having a beer in the evening or as a soft version during the coffee break, but I don't need this when I'm working, when I'm sitting at the computer. I don't have time to justify myself. I'm somewhere in the middle of a topic when something comes up and annoys me” (INT 4, p. 11).

Interview 8 directly addressed the issue in her welcome speech at an event she hosted. Some of the guests had hoped to get rid of her when she first got the position and treated her accordingly. According to her, openly addressing an issue can often be a helpful strategy: “[...] so I just addressed it head-on, which is often helpful just to get things across” (INT 8, p. 8).

Taking legal action

Missing out on a better position she had applied to due to a less qualified colleague getting it, interviewee 4 got informed on the legal framework such as the advancement of women¹³, Equal Treatment Act¹⁴ and anti-discrimination law¹⁵ (INT 6, p. 6). When looking for dialogue did not lead to any action from her employer's side despite the promise to look into this, she sought a review. The result showed that she had been discriminated against:

“The review showed that I was discriminated against, that the Equal Treatment Act was violated [...]. The law on the advancement of women was violated and I was also disadvantaged in the course of the process since I did not get the promotion” (INT 4, p. 6-7).

She said that just the act of seeking a review had helped her, as she had taken action instead of passively enduring the situation: “[...] now it's recorded, now it's clear and not like always sticking your head in the sand again [...]. I have the feeling that you [usually just] get patted on the head” (INT 4, p. 8-9)

¹³ “Frauenförderungsgebot” (INT 6, p. 6)

¹⁴ “Gleichbehandlungsgesetz” (INT 6, p. 6)

¹⁵ “Antidiskriminierungsgesetz” (INT 6, p. 6)

Getting coaching

Interviewee 4 got coaching and understood that what was wrong was not her. The coach also practised difficult conversations with her. She said that she would not have been able to cope without this:

“I always thought I was wrong [...], I have to say. [...] I really needed someone from the outside [...] to accompany me, look at it, discuss it, and practise conversations. I practised conversations, conflict conversations [...]. And I think without that [...] I wouldn't have been able to cope” (INT 4, p. 11-12).

However, reflecting on this, she added that she thought trying to solve something by looking for the fault within themselves instead of demanding the world around them to change was typical behaviour for women (INT 4, p. 12).

Learning self-defence

Interviewee 2 started to take close combat training so she would be able to defend herself against co-workers who harassed her (INT 2, p. 4) (see *sexual harassment*).

Becoming resilient

Two interviewees mentioned becoming resilient as an essential strategy (INT 3, INT 5). Interviewee 3, for example, said: “High resilience, I think, too. [...] I can regenerate very quickly. On the other hand, I also know that I often really go to the limit” (INT 3, p. 7).

Goal setting

Interviewee 3 said that she was intrinsically motivated and named goal setting as one of the main strategies that kept her going:

“[...] sticking to the goal. This intrinsic motivation. I am someone who stumbles but then gets up again relatively quickly and keeps going, keeps going and keeps going. So I am always very strongly triggered by goals. And I think [...] that I never put it down to being a woman, but rather that I had to do better. It's more like the goals are driving me forward” (INT 3, p. 7).

Training for certain situations

Interviewee 2 shared her strategy of looking at challenging situations as a sport that she could train and then analyse. Instead of a chore that she simply had to go through, she treated them like training:

“What helped me personally a lot is that I saw it all as a sport. As a top-class sport. [...] And I trained myself like that in difficult situations. I always say that I put on my neoprene suit so that all the toxicity doesn't get to me. All of that is gone. While a man might put on protective armour, I put on a neoprene suit. And then I practised. And sports and training in the sense that I looked at myself from above in such situations [...]. I slipped out of the situation and watched how I acted in it. And I practised it like a sport. I practised it like a top-class sport. Every situation. Now it is like training. And not like 'now I have to do this', but 'let's see, let's practise this'. And [then] analyse it again, it didn't always go well” (INT 2, p. 10).

Saying yes to opportunities

Interviewee 2 shared that she had stopped saying no to opportunities when they presented themselves to her right away and started saying yes to more of them. However, reflecting on this strategy, she also said that this had led to her saying yes to too many things: “I say yes far too quickly for many areas. That's not clever either” (INT 2, p. 8).

Joining women's networks

Two interviewees (INT 2, INT 3) named joining women's networks as an important strategy. Interviewee 2, however, said that when she started her career, those networks had unfortunately not existed yet and that this was why she thought they were important (INT 2, p. 6).

Interviewee 3 said that after joining an international women's network that had invited her, she understood that she was not alone in her experiences: “And they told me how they were doing. And all of a sudden I understood, I'm experiencing the same. And I always thought, I'm not okay, that I'm feeling like that” (INT 3, p. 2).

Taking inspiration from outside of the Austrian forestry sector

Interviewee 2 said that a strategy that has kept her motivated was to look outside of the Austrian forestry sector and take inspiration from there:

“And if you look outwards a bit and at other models, then you think to yourself, it doesn't have to be like it is here. And that has always made me confident. It doesn't have to be like this. It is not God-given. If you take that with you and keep it in your head, then you can do your part” (INT 2, p. 10).

4.2.1.2 Mentorship

When asking the interviewees about their strategies, the interviewer also asked whether they had had mentors during their careers. Five out of eight interviewees confirmed having had mentors supporting their professional development (INT 1, INT 2, INT 6, INT 7, INT 8). Interviewee 7, for example, said:

“Yes, I've always had supporters, and I have to say, male supporters. [...] they have always taken me very seriously. After, well, really, after they got to know me, they really came to appreciate me. And they have always been very supportive” (INT 7, p. 6).

Interviewee 8 mentioned that she had even taken part in a mentoring programme and that she experienced their mentoring relationship as friendship:

“I once took part in a mentoring initiative [...] Although at the beginning I thought, mentoring initiative, that's more of that women's libber nonsense. You don't need all that. So I sent a very cheeky application to this initiative because I thought, you actually are mad. But in retrospect, it was a beautiful friendship that came out of it” (INT 8, p. 10-11).

Two interviewees, however, said that they had not had mentors (INT 3, INT 5), and one interviewee said that while she had had them at university, she did not have mentors afterwards (INT 4).

Out of the five interviewees who had had mentors, two explicitly underlined that they only ever had had male mentors (INT 1, INT 7). Interviewee 1, for example, said that she had had mentors, “but no women, because naturally there were no women” (INT 1, p. 14).

4.2.1.3 Personality traits

As the last question regarding their strategies, the interviewees were asked what personality traits they thought were vital for them to succeed as women in forestry. The traits that were named were goal-orientedness (INT 3, INT 5, INT 6, INT 8), assertiveness (INT 1, INT 7), serenity (INT 1), a firm will (INT 8, p. 8), courage (INT 8, p. 10), diligence (INT 3, p. 7), discipline (INT 2, p. 9), resilience (INT 3, p. 7), perseverance combined with “a certain toughness and charm” (INT 5, p. 6), a “certain constitution” (INT 4, p. 7) to feel comfortable in the male-dominated environment and “massive anger, sense of injustice, ambition” (INT 2, p. 9).

Four interviewees (INT 3, INT 5, INT 6, INT 8) named goal-orientedness, which makes it the trait that they mentioned the most. Interview 5, for example, said that she would do everything possible to reach a goal she set herself:

“When something doesn’t immediately work out, I become all the more ambitious. [...] When I have set a goal, I don't care. No matter how much they criticise me, I will achieve it” (INT 5, p. 3).

Another trait that was named by two interviewees (INT 1, INT 7) was assertiveness. Interviewee 7, for example, said:

“I mean, you need assertiveness, and yes, you just have to say, okay, that's it now. Whether that's true or not, I don't care now. But now we do it like this. Just be firm as well” (INT 7, p. 7).

Interviewee 1 added that being assertive was especially important in order not to show any weakness:

“It's okay to bang on the table and say, I [...] believe that we do it this way. [...] But if you show weaknesses, they recognise that immediately and pick at it, and you never get out of it again” (INT 1, p. 13-14).

When naming serenity, interviewee 1 added that it was essential to disguise nervousness, i.e. a weakness, in front of others, as well: “I think what is very important is serenity. [...] They must never feel that you are getting nervous, that you are hectic” (INT 1, p. 13).

Other traits that the interviewees named were firm will (INT 8, p. 8), courage (INT 8, p. 10), diligence (INT 3, p. 7), discipline (INT 2, p. 9), resilience (INT 3, p. 7), perseverance combined with “a certain toughness and charm” (INT 5, p. 6), a “certain constitution” (INT 4, p. 7) to feel comfortable in the male-dominated environment and a “massive anger, sense of injustice, ambition” (INT 2, p. 9).

4.2.1.4 Other factors related to overcoming gender-specific barriers

Circumstances

In addition to their main strategies, experiences with mentoring, and the personal traits that they thought were important to overcome gender-specific barriers, some interviewees mentioned circumstances that helped them overcome those barriers, such as one’s age (INT

1), the number of women in one's workplace (INT 4) and the availability of flexible working hours (INT 7).

Interviewee 1 said that the situation became easier with age: "[...] the older you are, the easier it is" (INT 1, p. 7). Interviewee 4 said that a higher number of women in her workplace contributed to normalising female forestry professionals there: "There are now several women, and everything has become much more relaxed and the initial, let's say, fear of interaction¹⁶, I would have said, has fallen away" (INT 4, p. 11).

Interviewee 7 said that the flexible working hours she had thanks to the support of her boss had been beneficial:

"[...] I also have to say quite honestly that I always had, or still have, the support of my boss. I have flexible working hours. I can work whenever I want. It doesn't matter if it's at the weekend, at night or whenever. The main thing is that I get it done, my work" (INT 7, p. 4).

Insurmountable barriers

However, according to the interviewees' experiences, not all barriers can be overcome by applying one's strategies. Interviewees 6 and 8, for example, stated that the barrier of uniting familiar care responsibilities with one's career could simply not be overcome (INT 6, INT 8). Interviewee 6 stated that their career came at the cost of their family life:

"Well, it's been a bit detrimental to my presence at home. [...] Maybe I'm a bit sorry in some areas. [...] But that is somehow almost insurmountable. [...] No, it's not possible somehow" (INT 6, p. 5-6).

4.2.2 General strategies

At the end of the interview, they were asked about strategies they generally deemed necessary to overcome gender-specific barriers in the forestry sector.

One of the research questions asks what female leaders in the Austrian forestry sector consider vital for overcoming gender-specific barriers. Figure 9 illustrates the general strategies and circumstances that are necessary to do so:

¹⁶ "Berührungangst" (INT 4, p. 11)

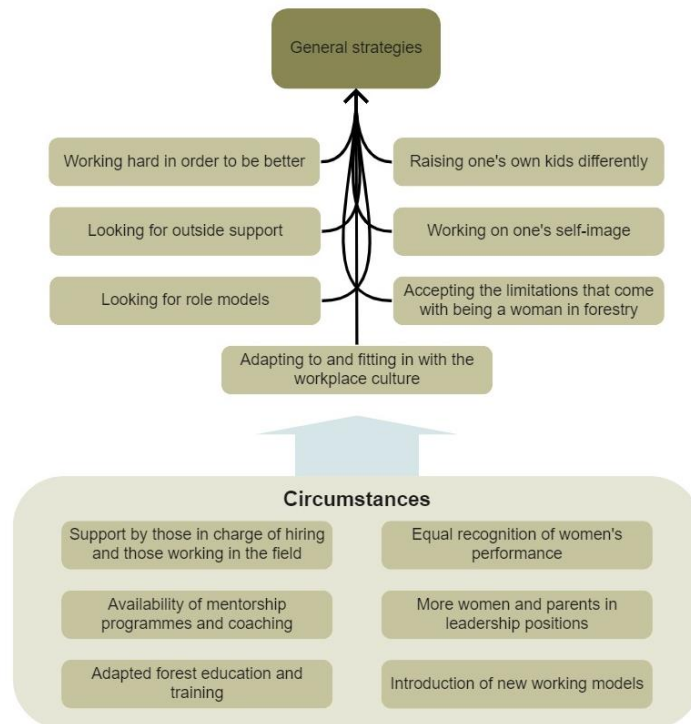


Figure 9. General strategies and identified circumstances connected to overcoming general gender-specific barriers in the forestry sector.

As general strategies, the interviewees named working hard (INT 6), looking for outside support (INT 5), looking for role models, adapting to and fitting in with the workplace culture (INT 6), accepting the limitations that come with being a woman in the forestry sector (INT 7), working on one's self-image (INT 4), and raising one's own kids differently (INT 3).

Working hard in order to be better

Interviewee 6 named hard work and determination to perform well in the tasks one has as important strategies (INT 6, p. 6).

Looking for outside support

Interviewee 5 mentioned looking for outside support as a general strategy that can range from the support by friends to the support of other professionals as mentors, thereby building a bridge to mentorship (see *section 4.2.2.1 necessary circumstances for overcoming gender-specific barriers*):

“I think when there are problems, it is also imperative that you have someone you can go to who gives you courage and strength. And maybe you have connections¹⁷ [...]. If you have to do it on your own, then it's good to have good friends or someone who is perhaps in a similar position and who can strengthen you. That is, as a mentor or something [...]" (INT 5, p. 8).

Looking for role models

Interviewee 1 suggested looking for role models and being inspired by their achievements: “[...] looking for role models and saying, well, she's done it too” (INT 1, p. 14).

Adapting to and fitting in with the workplace culture

Interviewee 6 said that in her opinion, a strategy could be to try to adapt to and fit in with the workplace culture and its customs, manners and rituals:

“Yes, and also somehow, I think you should also still adapt a bit. That is my personal opinion. Some people say, 'I'm setting a counterpoint'. You can also see it that way. I also find that sympathetic. But I think adapting a little to the environment is often a polite gesture. [...] simply to the customs. [...] There are simply committees where there are certain manners and certain, yes, rituals in part. You just have to listen to them at first” (INT 6, p. 6).

Interviewee 7 made the statement that if one wants to pursue a career in the forestry sector, one should adapt in terms of refraining from calling oneself a feminist and not insisting on gender-aware language: “[...] if you want to get ahead in the industry as a woman, you can't present yourself as feminist, but you just have to feel addressed with the masculine form” (INT 7, p. 6).

Accepting the limitations that come with being a woman in the forestry sector

Interviewee 7 stated that probably the best thing to do was to accept the limitations that came with being a woman in the forestry sector to avoid hopeless battles: “So I think it's easier if you just accept it. I think everything else just becomes a fight with yourself actually” (INT 7, p. 8). She, later on, added:

“[...] I have the feeling that it's better, I think, to simply accept it and see life as a whole and [...] in such a way that there can probably be more of a purpose in life on a family level than there is professionally” (INT 7, p. 8).

¹⁷ “Vitamin B” (INT 5, p. 8)

Working on one's self-image

Interviewee 4 said that women needed to work on their self-image: “[...] women have to get a different self-image, that you don't look for the fault in yourself first [...]” (INT 4, p. 12).

Raising one's own kids differently

Interviewee 3 stated that one strategy should be to raise one's own kids differently to make them aware of gender inequalities and to encourage one's daughters: “And I think that's what we can do. That we raise our children a bit like that. And above all, encourage our daughters to dare to do anything” (INT 3, p. 6).

4.2.2.1 Necessary circumstances for overcoming gender-specific barriers

When asked about strategies to overcome the general barriers, many interviewees also mentioned circumstances that were necessary in their opinion but did not lie in the power of the person trying to overcome the barriers. These are support by those in charge of hiring and those already working in the field (INT 1, INT 2, INT 3), the availability of mentorship programmes and coaching (INT 4), adapted forest education and training (INT 7), the introduction of new working models (INT 3), more women and parents in leadership positions (INT 3), and the equal recognition of women's performance (INT 8).

Support by those in charge of hiring and those already working in the field

One theme that was addressed in multiple interviews was supporting women in the field, both by other women (INT 1, INT 3) and those with power who are in charge of hiring processes (INT 2).

Interviewee 3 argued that women who promote women (INT 3, p. 3) and solidarity among women (INT 3, p. 8) were needed. Interviewee 1 said that an action one could take was to “create a mood” (INT 1, p. 15) to facilitate and support the entry of women into the field.

Interviewee 2 took this one step further and said that it in addition to supporting, it was also one's responsibility as a person in charge of hiring to be more persistent and try harder to hire women:

“[...] if you really want women, you have to look harder. And you have to approach women three times and not give up the first time. And say, but I need you because you

can do this and this and this. And then the third time, she says yes. That means you have to approach them differently” (INT 2, p. 8).

Availability of mentorship programmes and coaching

Interviewee 4 stated that in her opinion, the availability of mentoring programmes and coaching that accompany women for a more extended period of time and already during forest education, was necessary:

“So I think that accompanying women or coaching or mentoring or something like that, [...] not just [...] to get a taste of the profession, but for longer. And I think [...] even at the beginning of their forest education” (INT 4, p. 13).

Adapted forest education and training

Interviewee 7 said that there was a gap in what was taught at university and what was necessary to be sufficiently equipped for the challenges in the workplace:

“But that's crucial, the human aspect. And you don't learn that at [university]. That's really something we lack. [...] How do you deal with men? With men who don't accept you fully? How do you simply deal with stress, with [...] negative experiences. Just this leadership know-how. [...] I have done many such leadership seminars. [...] That still helps me today [...] But I think that a bit of that belongs at university” (INT 7, p. 7-8).

Introduction of new working models

Interviewee 3 stated that new working models were needed: “[...] I think it is time that we get other working models [...]” (INT 3, p. 4).

More women and parents in leadership positions

Interviewee 3 further stated that more women and parents were needed in leadership positions to function as role models, set a precedent, and make it possible for others to follow: “And if we finally succeed in having women in leadership positions, if we have parents in leadership roles, then it will also be possible for more women to step up” (INT 3, p. 8).

Equal recognition of women's performance

Interviewee 8 stated that while she did not believe in some of the measures furthering gender equality in the workplace, e.g., equal opportunities commissioners, women's performance needed to be recognised equally to remove inequalities:

"[...] I have been asked several times, what do you think about equality? Yes, and do we need an equal opportunities commissioner? My answer is always that I don't need one. And from my point of view, it doesn't need one. The important thing is that women's performance is recognised just as much as men's. And then we don't need all this nonsense. And that's it. That's all it is" (INT 8, p. 6-7).

4.3 Access to the field

The narrations in access to the field centre around the access to the traditionally male-dominated field of forestry for the women in concern. They shared their reasons for choosing forestry and whether they had a family forestry background.

4.3.1 Reasons for choosing forestry

For four interviewees (INT 5, INT 6, INT 7, INT 8), their family forestry background was the main reason to choose education and a career in the field. Interviewee 6, for example, said: "I grew up on a farm. We have a forest there, and I have always liked to go into the forest" (INT 6, p. 1). Interviewee, while having 5 initially encountered resistance from her parents, was later allowed to take professional forestry training as the family did not have a son to take on the role as a forester:

"[...] my father has always said, yes, well, since it has to be like this and we have not had a boy, [...] yes, what should I do? But then we have to make at least sure that she is well prepared for it [...]" (INT 5, p. 1).

Two interviewees decided at what university they wanted to study before choosing forestry as the specific subject (INT 2, INT 4). Interviewee 2, for example, said:

"I had always wanted to do technical studies because I was not too interested in languages and so on [...] And then I chose forestry because of this technical orientation, completely by chance" (INT 2, p. 1).

Interviewee 2 additionally had a family forestry background (INT 2, p. 1), Interviewee 4 did not (INT 4, p. 1).

Two interviewees had initially not taken forestry education or training but entered a career in the sector later. Interviewee 3 entered the sector when she co-founded a company (INT 3, p. 1). Interviewee 1 who had wanted to study forestry at university, but was prohibited from doing so by her father, entered the sector at a later time as her interest for forestry was not diminishing:

“And then it was clear to me that I wanted to study forestry because it had always interested me. And then I confronted my family with this wish. [...] That was a very long time ago now. [...] That was a different time. [...] I come from a rather conservative family, and my father said, so forestry, what kind of a stupid idea is that? It's a man's job. Women have no business there at all. You can study whatever you want, but please do not obtain a man's profession. Maybe you want to earn your own money one day, have a job. A woman in forestry has no chance at all” (INT 2, p. 2).

4.3.2 Family forestry background

When asked whether they had a family forestry background, three interviewees said they did not (INT 1, INT 3, INT 4). Thus, five interviewees answered that they had a family forestry background (INT 2, INT 5, INT 6, INT 7, INT 8).

As a follow-up question, the interviewees were asked whether they felt their background or the absence of their background had impacted them, either positively or negatively.

Interviewee 6, for example, said that her family forestry background had had positive effects on her as she had gained an understanding of the sector:

“[...] positive effects, because you understand the business from an early age, I would say. [...] So that's just naturally the case. If someone, I say, grows up in a musical family, where they play music, you don't need to teach them rhythm or notes” (INT 6, p. 1).

Similarly, interviewee 7 said that while it had both positive and negative aspects in her opinion, there was an implicit rule in the rural area where she worked, that you would only get a job if your parents had had it before:

“Difficult. So it has a huge advantage, which you need as a woman, that you can cut down a tree. [...] as a woman, you can't get a job in a company without this working background. They make fun of you. [...] I mean, does it have an advantage that you have parents who are in the same job? It's always a yes and a no. So I don't necessarily want it. [...] On the other hand, especially [...] in the country [...] you actually only get a job if you have parents who have already had this job and you then inherit it” (INT 7, p. 1-2).

Interviewee 8, who had a father who was a forester, said that she found being compared to him and constantly having to prove herself more of a hindrance:

“If you have someone in forestry and then you work in the same field, in the same company, in the same forestry administration, or you start there, then you are rather always the child of that, yes. And you are not yourself. It was rather a hindrance in this respect, [...] because they all knew him [...] ‘oh, this is his daughter’. So I found it rather unpleasant because you had to prove more who you are” (INT 8, p. 1).

Interviewee 1, however, said that not having had a forestry background or undergone forest education led to her having the role of an “outsider”. This meant that she was generally not seen as a competitor for the same positions that women who were foresters would have typically gone for and that she was unsure if she would have been equally privileged had she also been a forester:

“I am not perceived as a threat or as competition by anyone [...] I don't know if I would have been as well-off had I been a forester. I think you have to make a difference. Because if you are competing for a position that someone else would also like to have, then you have a completely different starting position [...]” (INT 1, p. 8-9).

4.4 Other

The section “other” compiles other information that does not fall into one of the previous categories (i.e. barriers, strategies, and access to the field) but is still of interest for the research question. The interviewees shared their observations of decreasing numbers of women along the career path in the forestry sector over time (INT 7), them taking the “mother” role for their colleagues (INT 1) and changes regarding gender inequalities over time (INT 1, INT 5).

4.4.1 Decreasing numbers along the career path over time

Interviewee 7 observed that the higher number of women she studied with did not translate into an increase in the share of women working in the forestry sector. Apart from herself, she only knew no one in a leadership position and one other woman who, while working in the field, did so only part-time:

“When I think about it, at university, there were many women. I now only know one who works part-time in the sector. [...] All the others work somewhere else. [...] And I don't know any who are in management” (INT 7, p. 6).

4.4.2 The mother role

Interviewee 1 gave further insights into how she was placed in the position of “the mother” by her male colleagues who would turn to her:

“I'm a little bit like ‘the mother’. [...] I really mean that in a very positive way. You can discuss everything with your mother. Mom doesn't laugh at you - quite the opposite. Mom takes your hand and says, it's going to be okay, and now we'll make a warm tea. Yes. And that's my role, too” (INT, p. 10-11).

She continued to say that they felt like they could share their worries with her:

“And they come and share their worries with me. On all levels. Whether they're doing badly economically or personally. I even know, in some cases, when they've been fighting with their wives. This picking up of worries and negative emotions frees them and makes them strong to perform in their daily business. Yes. And that also gives me, so maybe respect is the wrong word now, but a certain amount of strength” (INT 1, p. 11).

4.4.3 Changes regarding gender inequalities over time

Interviewee 1 reflected on gender inequalities within the forestry sector and the changes she had experienced within her lifetime, both in the forestry sector and in society at large:

“It's not at all like in the 1980s, which I really suffered through as a young woman. Not just in the forestry industry but in terms of sociopolitics as a whole for women. [...] The fact that we still have a long way to go before we have equal rights, and that, as I said, there is still a lot to be done, I think you just have to accept that. However, that nothing ever happens and that everything is terrible, I can't say that at all” (INT 1, p. 16).

Interviewee 5 shared a similar observation. While she did not say it was easy for women, she said it was becoming increasingly more accessible:

“[...] now that women are starting to be heard, and that the notion that women can do this just as well is spreading [...] it is becoming increasingly easier. I wouldn't even say ‘easy’” (INT 5, p. 7).

5 Discussion

5.1 Limitations of methods

The research in this thesis is subject to several limitations. First, it could have benefitted from including perspectives from people who do not identify as cisgender¹⁸ women to get a complete picture of gender-specific barriers in the Austrian forestry sector. However, the objective of the thesis is not to account for all potential gender-specific barriers but rather to understand how female leaders in the Austrian forestry sector perceive gender-specific barriers.

Second, it could have benefitted from including perspectives from women who are not in leadership positions or changed careers to be able to depict gender-specific barriers in the Austrian forestry sector accurately. The reason for this lies in the objective of the thesis that focuses on women in leadership positions to enquire about the specific ways of overcoming these barriers.

Third, the data collection (e.g. creation of interview guidelines, choice of follow-up questions) and analysis of the results have been influenced by the gender, culture, history, and socioeconomic origin of the author (Creswell, 2013).

That said, the applied qualitative methods provide utmost in-depth information on the specific life circumstances of high-level female leaders in the Austrian forestry sector.

5.2 Discussion of the results

All eight interview partners were, without exception, capable, charismatic and assertive. This suggests that women who do not have these personality traits do not achieve a leadership position in the Austrian forestry sector. The characteristics that the interviewer observed correspond to the personality traits that the interviewees identified as essential to overcome gender-specific barriers, such as assertiveness, a firm will, courage, and resilience.

5.2.1 Barriers

Analysing how the women describe the barriers they have personally experienced, it is most striking that none of them said they did not encounter any barriers at all. In addition, seven

¹⁸ Cisgender describes someone whose “gender identity [...] fully corresponds to the sex assigned to them at birth” (Collins Dictionary, online).

out of eight interviewees named general barriers for women working in the forestry sector, and even the remaining interviewee who did not identify any general barriers had encountered one barrier herself (family care responsibilities). This confirms the existence of gender-specific barriers in the Austrian forestry sector.

In relation to the existing literature about barriers in the forestry sector (Böhling et al., 2021; Larasatie, Barnett and Hansen, 2020), the results of this thesis show both commonalities and differences.

Regarding the commonalities with the categories of barriers identified by Larasatie, Barnett and Hansen (2020), “glass ceiling, glass cliff and leadership labyrinth” finds its equivalent in the results of this thesis in the *glass ceiling*. “Perceived role incongruity and double bind” is located in the *understanding of competence*, more precisely in the need for women to work much harder in order to be seen as equally qualified. Aspects of “implicit bias/unconscious gender bias and second-generation bias” are found in the *lack of awareness of the scope of the issue*. One interviewee touches on one aspect of “male gatekeepers and homophily” (practices in recruitment that favour candidates that are similar to the people in charge of shortlisting, interviewing and hiring candidates) in *discrimination based on gender* when she says that even though the Equal Treatment Act has been introduced in public service and job offers usually state that, if equally qualified, the female candidate will be chosen, in her experience, they do not prove effective and are not always followed to give preference to the male candidate. The “queen bee phenomenon” finds its equivalent in *lack of solidarity among women*, where one interviewee says that some women show a lack of solidarity and think they have an advantage in making others feel small. “Tokenism and critical mass” finds its equivalent in *tokenism*.

Similarities in the challenges that were observed by Baublyte et al. (2019) can be found between the “existence of masculine networks and homosocial reproduction” and *lack of women’s networks* as well as *discrimination based on gender* regarding homosocial reproduction, a phenomenon related to homophily. “Inconsistency between characteristics attributed to leaders and those attributed to women in general” finds its equivalent in *understanding of competence*, “a lack of technical forestry education background” in *lack of knowledge*, and “social norms regarding childcare arrangement” in *family care responsibilities*. Baublyte et al. (2019) further explicitly highlight that tokenism, a barrier identified by female leaders in the Austrian forestry sector, was not among the findings from their interviews (Baublyte et al., 2019).

The challenges that were named in the FEM4FOREST report that correspond to the barriers identified thesis are: “roles and stereotypes” (see *roles and traditions* and *understanding of competence*), “family care” (see *family care responsibilities*), “lack of self-confidence” (see

lack of self-confidence), “physical and psychological resilience” (see *resilience*), “lack of qualification” (see *lack of knowledge*), “part-time work” (see *inflexible working hours*) (Böhling et al., 2021, p. 31). However, the report results only signify that respondents have met those challenges but leave how and in what ways those challenges were encountered, and whether there were any challenges in addition to the list of predefined answers, unanswered. Most importantly, they do not give any indication on what led to overcoming the barriers.

The results of this thesis answer these questions as the interviewees talked in-depth about the barriers they had personally experienced or identified as general barriers. Additionally, they shared their personal strategies as well as general strategies and circumstances that are necessary to overcome gender-specific barriers.

The fact that the number of external barriers identified in this thesis far outweighs that of internal barriers in both the personally experienced and general barriers further shows that the main part of gender-specific barriers does not lie internally within the women, i.e. in them underestimating their capabilities, but externally, i.e. in the structural settings.

The individual perception and experiences of the interviewees strongly differed. Some of the interviewees were able to confidently identify a large number of barriers, while others named either a medium or a small number. It is, therefore, necessary to discuss how the barriers are distributed within the sample. Two possible perspectives for this are the type of education the interviewees have taken and the sector they work in.

Whether or not the interviewees had experienced barriers during their forest education varied based on the type of forest education they had taken. The interviewees who had studied forestry at university did not name any major barriers they had encountered during their time at university, even though they had been part of the minority based on their gender. However, the interviewee who had taken the professional forestry training had experienced sexual harassment and sexist comments from both teachers and male colleagues during that time. This shows that, depending on what type of forest education a student takes, they might encounter barriers to a different degree. Additionally, the types of barriers might vary. The interviewees who did not study forestry encountered different barriers. One of them, for example, perceived that she had a lack of knowledge.

Depending on the sector one works in (e.g. private sector versus public sector), there also seems to be a difference in the degree to which barriers are encountered, and in the types of barriers. However, the interviewees’ experiences suggest that there can also be differences within the same sector, for example, in the public sector. The differences in the public sector

stood out as it was the sector that most interviewees worked in. Similar observations could potentially be made in other sectors with an increasing number of interviewees.

Among the interviewees working in the public sector, there were interviewees who encountered a small, medium or a large number of barriers. Possible explanations are different experiences depending on the organisation or institution within the public sector they work in, or their individual perceptions. Differing statements regarding the flexibility of working hours serve as an example. The two interviewees in question both work in the public sector. However, they talked about different experiences that shaped their outlook on how flexible the working hours were. While one of them was able to work part-time for some time after becoming a mother, the other one could not work part-time in her previous position after coming back from maternity leave.

Furthermore, the differing amount of barriers that the interviewees working in the same sector experienced might also be connected to varying perceptions of the interviewees, depending on how aware they are about gender inequalities and what they are able to identify as gender-specific barriers.

Several interviewees shared their experiences of sexual harassment and sexually connotative speech in both the workplace and forest education and training. There has been research about sexual harassment and sexualised forms of male control in the Swedish forestry sector in the wake of #MeToo (e.g. M. Johansson, K. Johansson and Andersson, 2018). Inspired by the #MeToo movement, women and non-binary in the Swedish forestry sector started sharing testimonies of sexual harassment within a campaign using the hashtag #slutavverkat (“clearcut”) in December 2017 on Instagram. The #MeToo movement originally goes back to the activist Tarana Burke and went viral in October 2017 when actress Alyssa Milano and other women encouraged all who had been sexually harassed to share their experiences using the hashtag #MeToo to illustrate the magnitude of the problem (M. Johansson, K. Johansson and Andersson, 2018). While the movement got enormous attention in many countries worldwide, including Austria, no similar movements to #MeToo or #slutavverkat took place in the Austrian forestry sector.

M. Johansson, K. Johansson and Andersson (2018) analyse the testimonies shared by women and non-binary in the Swedish forestry sector as part of #slutavverkat and state that “various forms of sexual harassment included in the testimonies can be viewed as controlling gestures that diminish women’s sense of power in the sector” (M. Johansson, K. Johansson and Andersson, 2018, p. 423).

Regarding the practice of warning women about an especially sexist work environment or colleague, they state that normalising sexual harassment in this way “contributes to attributing responsibility to women in the sector to “handle” male sexuality” (M. Johansson,

K. Johansson and Andersson, 2018, p. 423). With regards to this thesis, this becomes relevant in the instance where the colleagues of an interviewee knew about their boss sexually harassing her. They did not address those events not to expose him, but rather helped her avoid situations where it could happen. Sexist jokes are another instance that the interviewees reported.

According to M. Johansson et al. (2018), “events of sexual harassment need to be addressed” (M. Johansson, K. Johansson and Andersson, 2018, p. 422) within the organisational cultures that it occurs in (M. Johansson, K. Johansson and Andersson, 2018).

The personally experienced and the general barriers must be read together and not isolated from each other. This is because of the order in which the interviewer asked the questions, i.e. first the personally experienced and then the general barriers. Some interviewees solely “added” to what they had already said in the interview. Nevertheless, it was possible to determine differences regarding the types of barriers and the frequency they were mentioned with.

Lack of self-confidence, for example, while named as a general barrier by five interviewees, was only listed as a personally experienced barrier by two interviewees. This suggests that the internal barrier lack of self-confidence is seemingly not very strong amongst this group of interviewees.

5.2.2 Strategies

The personal strategies the female leaders use to overcome the gender-specific barriers strongly depend on the context and are closely connected to the barriers the individual women face. Apart from working hard in order to be better and looking for outside support which several interviewees shared as their personal strategies, the strategies were either named by one or a maximum of two interviewees.

When asked about their main personal strategies, the interviewees shared the strategies they had personally applied and a small number of circumstances that needed to change or that had an influence on how they perceived barriers. However, when they were asked about how women could overcome the general barriers in the forestry sector, they shared a comparatively small number of general strategies (approximately half of the number of personal strategies) and twice as many circumstances that needed to change. This indicates that the gender-specific barriers cannot be overcome by applying one’s strategies alone but that changes in the circumstances are necessary.

Even though the number of external barriers far outweighs that of internal barriers, a significant number of both personal and general strategies seem to target overcoming internal barriers. Examples are working hard in order to be better, getting coaching, becoming resilient, goal setting, and working on one's self-image. To overcome external barriers that are founded in structural settings, gender equality interventions and politics are required.

Two interviewees mentioned joining women's networks as one of their strategies. Andersson and Lidestav (2016) study women's forestry networks as examples of agency and resistance. Analysing the largest networks in Sweden, they have found that "the networks are acting to expand the discursive space, establish alternative publics and empower their members by inventing and circulating counterdiscourses" (Andersson and Lidestav, 2016, p. 38). Their different strategies are most likely a reaction to political processes (Andersson and Lidestav, 2016). The organisation of those networks further shows "that one single public sphere cannot comprise the diversity of [the] contemporary forestry sector, stressing the need to contain a multiplicity of publics - both to challenge the modes of deliberation that mask domination and to facilitate transformative processes" (Andersson and Lidestav, 2016, p. 43).

It is noteworthy that, when asked about mentorship, interviewees explicitly underlined that their mentors mainly had been male. They also mention male allies supporting them. This shows that to reduce gender inequalities, "widespread social support, including significant support from men and boys" (Connell, 2005, p. 1802) is essential. However, there is not just support for gender equality among men, but also resistance (Connell, 2005). K. Johansson et al. (2017) study "men's discursive resistance in relation to gender equality interventions" (K. Johansson et al., 2017, p. 1) in the workplace in the Swedish forestry sector and conclude that "the men were not opposed to gender equality as such and not even to equal representation" (K. Johansson et al., 2017, p. 15). The resistance was, among others, a result of what they describe as "othering of the old men forestry workers and owners" (K. Johansson et al., 2017, p. 14), representing the more traditional forestry, while more modern forestry was being constructed (K. Johansson et al., 2017).

5.2.3 Other

One interviewee observed that none of her female colleagues from the university were in leadership positions. Apart from her, only one other colleague was still working in the sector. The leaking pipeline illustrates this phenomenon (Barinaga, 1992). While usually used in the context of academic careers, the leaking pipeline helps understand why a higher number of women in forest education does not automatically lead to a proportionally increased number of women working in the sector. In the image, the pipeline describes an academic career from being a student to being a professor. The leaking signifies women abandoning their academic careers along the way, similarly to what the interviewee described for women's careers in the forestry sector.

One interviewee said she was “a little bit like ‘the mother’” (INT 1, p. 10), creating a safe environment where her colleagues would come to share their worries with her. This role of ‘the mother’ “becomes an open subject position in which women are placed rather than something they themselves initiate” (K. Johansson et al., 2019). She further stated that, while she did not necessarily get respect for this role, she was able to draw a certain amount of strength from it. ‘The mother’, while getting appreciation and a certain degree of informal authority, can usually not convert these into actual power (K. Johansson, Fältholm and Abrahamsson, 2015; Ollilainen and Calasanti, 2007). Tellingly, “strength” (INT 1, p. 11) is used by the interviewee rather than “respect” or “power” to describe the position she is placed in.

Concluding remarks

Gender imbalance causes low representation of women among actors in the forestry sector. Despite efforts to increase the number of women, the forestry sector remains largely male-dominated. Data from the Austrian forestry sector shows an apparent underrepresentation of women, especially in leadership positions.

The findings from interviews with eight women in leadership positions in the Austrian forestry sector confirm the existence of gender-specific barriers. It is most striking that all of the women encountered considerable gender-specific barriers at some point in their forest education or career. The analysis of the barriers these female leaders personally experienced and the general ones they identify as relevant for women trying to enter the forestry sector further reveals two types of barriers. These are labelled as external barriers and internal barriers in this thesis. The results show that external barriers, such as family care responsibilities, understanding of competence and roles and traditions, are by far more numerous and impactful than internal barriers, such as lack of self-confidence.

The personal strategies the female leaders use to overcome the gender-specific barriers are strongly dependent on the context and closely connected to the barriers the individual women face.

Asked about what they considered vital for overcoming general gender-specific barriers, they put emphasis on changing the circumstances for women in the forestry workplace. Those circumstances include the support by those already working in the field, the availability of mentorship programmes and coaching, adapted forest education and training, the introduction of new working models, more women and parents in leadership positions and the equal recognition of women's performance.

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Appendix

I Interview questions - translated from German

Introduction

I am writing my Master's thesis on gender in forestry. What I am particularly interested in are the professional development and career paths of women in the Austrian forestry sector. The interview will take about an hour. If you agree, I would like to record it to make it easier for me to analyse the conversation. It is important for me to emphasise that what is said will only be used anonymously and I will make sure that it cannot be traced back to the persons I am talking to.

Questions

1. How did you get into forestry?
2. Do you have a family forestry background?
 - a. If no, do you feel this had an impact on your education or career entry?
3. Education
 - a. Proportion: If you think back to your studies, how many women were there?
 - b. Dynamics: Did you notice in your training that you were in the minority as a woman? Was that noticeable to you? What effects did that have? Why do you think that was?
4. Now about your professional career: Today you are [...]. What were the most important milestones along the way?
5. What barriers were there along the way?
 - a. external (structures, values, norms)
 - b. internal (attitude)
6. Are there still barriers or situations in which you are treated differently in a gender-specific way today? Can you give me an example?
 - a. Vertical hierarchy (supervisor or alternatively: what is it like for you to be a leader?)
 - b. Horizontal hierarchy (colleagues)
 - c. External perception as a woman in forestry
7. Strategies
 - a. What has helped you to overcome these hurdles?

- b. Who has been particularly supportive?
 - c. What personal qualities or skills were helpful?
8. Let us now turn to the forestry sector in general:
- a. What are the biggest difficulties today for women who want to enter the forestry sector?
 - b. How do you think they can be overcome?

End

Thank you for the interview. If there are any more questions, may I come back to you? Can you think of anyone else I should definitely interview for my Master's thesis?

II Interview questions - German original

Einleitung

Ich schreibe meine Masterarbeit zu *Gender in Forestry*. Was mich dabei besonders interessiert, sind die Werdegänge und Karriereverläufe von Frauen im österreichischen Forstsektor. Das Gespräch wird etwa eine Stunde dauern. Wenn Sie einverstanden sind, würde ich es gerne aufzeichnen, um mir die Aufarbeitung des Gesprächs zu erleichtern. Es ist mir wichtig zu betonen, dass das Gesagte nur anonymisiert verwendet wird und ich darauf achte, dass es nicht auf die Personen, mit denen ich spreche, rückführbar ist.

Fragen

1. Wie sind Sie zur Forstwirtschaft gekommen?
2. Haben Sie einen familiären forstlichen Hintergrund?
 - a. Falls nein, haben Sie das Gefühl, das hatte Auswirkungen auf Ihre Ausbildung bzw. auf Ihren Berufseinstieg?
3. Ausbildung
 - a. Anteil: Wenn Sie sich an Ihr Studium zurückerinnern, wie viele Frauen waren denn da noch?
 - b. Dynamiken: Haben Sie in der Ausbildung gemerkt, dass Sie als Frau in der Minderheit waren? War das für Sie auffällig? Welche Auswirkungen hatte das? Warum glauben Sie, war das so?

4. Nun zu Ihrem beruflichen Werdegang: Sie sind heute [...]. Was waren die wichtigsten Meilensteine auf dem Weg dahin?
5. Welche Hürden gab es auf diesem Weg?
 - a. extern (Strukturen, Werte, Normen)
 - b. intern (Einstellung)
6. Gibt es heute noch Hürden oder Situationen, in denen Sie gender-spezifisch anders behandelt werden? Können Sie mir ein Beispiel nennen?
 - a. Vertikale Hierarchie (Vorgesetzte*r bzw. Wie ist es für Sie, zu führen?)
 - b. Horizontale Hierarchie (Kolleg*innen)
 - c. Externe Wahrnehmung als Frau in der Forstwirtschaft
7. Strategien
 - a. Was hat Ihnen geholfen, diese Hürden zu überwinden?
 - b. Wer hat sie besonders gefördert?
 - c. Welche persönlichen Eigenschaften oder Fähigkeiten waren dabei hilfreich?
8. Kommen wir jetzt allgemein zum Forstsektor:
 - a. Was sind heute die größten Schwierigkeiten für Frauen, die in die Forstwirtschaft einsteigen wollen?
 - b. Wie glauben Sie, kann man diese überwinden?

Ende

Danke für das Gespräch. Darf ich, wenn sich noch Fragen ergeben, auf Sie zurückkommen?
Fällt Ihnen noch jemand ein, den ich unbedingt für meine Masterarbeit interviewen sollte?

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