"From nude calendars to tractor calendars": The perspectives of female executives on gender aspects in the North American and Nordic forest industries

<table>
<thead>
<tr>
<th>Journal:</th>
<th>Canadian Journal of Forest Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manuscript ID</td>
<td>cjfr-2018-0402.R2</td>
</tr>
<tr>
<td>Manuscript Type:</td>
<td>Article</td>
</tr>
<tr>
<td>Date Submitted by the Author:</td>
<td>27-Feb-2019</td>
</tr>
<tr>
<td>Complete List of Authors:</td>
<td>Larasatie, Pipiet; Oregon State University College of Forestry, Wood Science and Engineering; LPDP Baublyte, Gintare; Helsingin Yliopisto Maatalous-Metsatieteellinen Tiedekunta, Forest Sciences Conroy, Kendall; Oregon State University College of Forestry, Wood Science and Engineering Hansen, Eric; Oregon State University College of Forestry, Wood Science and Engineering Toppinen, Anne; Helsingin Yliopisto Maatalous-Metsatieteellinen Tiedekunta, Forest Sciences; Helsinki Institute of Sustainability Science</td>
</tr>
<tr>
<td>Keyword:</td>
<td>gender diversity, leadership diversity, workforce diversity, female leaders, female executives</td>
</tr>
<tr>
<td>Is the invited manuscript for consideration in a Special Issue?</td>
<td>Not applicable (regular submission)</td>
</tr>
</tbody>
</table>
Title

“From nude calendars to tractor calendars”: The perspectives of female executives on gender aspects in the North American and Nordic forest industries

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Abstract

Increasing gender diversity is no longer just the right thing to do but also the smart thing to do. However, although there is general literature about gender diversity and the perspectives of females in top management and leadership, there are very few forest sector specific studies. This exploratory study utilizes interviews to better understand how female executives in North America and the Nordic countries of Finland and Sweden perceive the impact of the situation of gender diversity in the forest industry. Respondents also provide career advice for young females entering or considering entry into the industry. Female executives in both regions agree that although the forest sector is still seen as a male-oriented industry, there are signs of increasingly positive attitudes regarding industry/company culture towards the benefits of greater gender diversity. However, the described changes represent an evolution, not revolution. Interestingly, despite the status of Nordic countries as leaders in bridging the gender gap, respondents from this region believe that there is significant progress yet to be made in the forest industry, especially at the entry level. With respect to career development, North American respondents suggested young females should consider sacrificing their social life and leisure time activities. Instead, Nordic respondents emphasized personal supports or using exit strategy from an unsupportive company or boss.

Key words:

gender diversity, leadership diversity, workforce diversity, female managers, female executives
I. Introduction

“Change is happening, one funeral at a time” [during a discussion of gender issues in Finnish forestry - Sari Pynnönen, doctoral candidate, University of Helsinki]

In the society, gender diversity is generally presented as a preferred social norm, based on both ethical considerations and legislative demands. However, the benefit of gender diversity also can be considered based on economic or competitive benefits. Increasing the proportion of women in the workforce can significantly boost the economy (PwC 2016). From a business perspective, gender diversity in top management positions can enhance corporate performance by improving problem solving due to creativity, innovation, and incorporation of different perspectives (Kakabadse et al. 2015; Daily and Dalton 2003). Greater female representation in top management can indirectly raise the value of a company by having stronger compliance with ethical principles (Isidro and Sobral 2015) and through their real and symbolic representations, women in top management positions may improve the legitimacy and trustworthiness of the company to stakeholders (Perrault 2015).

Continuous efforts to increase gender diversity have resulted in some positive outcomes such as more women in education, paid employment, and top management positions (World Bank 2013). Based on global studies, women hold 15 percent of executive board seats (Deloitte 2016) and 24 percent of senior roles (Lagerberg 2016). Although these numbers are growing, the rates are too small to reach gender parity, even over a decade (Lagerberg 2016). Women suffer greater economic exclusion, with an average of 15-20 percent less earnings than men (Statistics Finland 2018; Statistics Sweden 2016; U.S. Bureau of Labor Statistics 2017).

In the forest sector, job and career prospects for young people are extremely positive, especially given the graying phenomenon of the existing workforce (Hansen et al. 2016).
Employee turnover through retirement also presents a significant opportunity for the industry to increase the diversity of its workforce. Recently, the government of Canada, through The Canadian Institute of Forestry/Institut Forestier du Canada (CIF-IFC), announced an initiative to create a National Action Plan to promote gender equity in the forest sector. Believing that gender diversity is a smart thing to do, CIF-IFC states that more young females entering the forest sector will increase Canada’s economic competitiveness in the global market (Canadian Institute of Forestry 2018). A more diverse forest sector workforce is believed to positively impact the ability of the industry to move into a more competitive future (Hansen et al. 2016).

Although there is general literature about gender diversity and the role of females in top management and leadership, there are very few forest sector-specific studies. Most gender research in forestry is done in developing countries, related to understanding resource management to support gender equitable policies and practices (e.g. CIFOR 2018). Instead, in more developed countries such as in the Nordic region, gender studies in forestry are varied from forestry professionals (Lidestav and Sjölander 2007), to women as entrepreneurs (Follo et al. 2017; Appelstrand and Lidestav 2015), the gendered business case (Johansson and Ringblom 2017; Umaerus et al. 2017; Umaerus et al. 2013), organizational innovation (Lindberg et al. 2016), women’s networks (Andersson and Lidestav 2016), and men’s resistance to gender equality interventions (Johansson et al. 2017), to the most recent, women’s experience with respect to sexual harassment (Johansson et al. 2018).

An exploratory study of gender diversity within the boards of directors and corporate executive teams of the largest top 100 global forest sector companies in North America, Europe, and Oceania finds that a more gender diverse top management team is associated with higher financial performance (Hansen et al. 2016). However, a higher level of gender diversity in
boards of directors is not found to associate with financial performance. This may be because the real impact of gender diversity on groups often only occurs when the situation is free of tokenism. For example, according to Konrad et al. (2008), three or more female representatives on executive teams is needed to make any difference.

At the individual level, in the Nordic region, a personal support system is identified as important to support female career development in the forest industry (Baublyte 2017). Nevertheless, culture-specific issues, such as sauna and hunting traditions promote exclusion and can be a challenge for females in their career development. These activities potentially exclude women from discussing crucial business decisions or sharing important information.

This exploratory study utilizes elite interviews to answer the following research questions: (1) What are perceptions of female executives on the current situation with respect to gender diversity in the forest industry? (2) How do female executives think the forest industry could be made more attractive to women? (3) What advice do current female executives have for young females entering the forest industry, in order to have a good career?

In the remainder of the paper, we first provide a background, followed by a theoretical background, a description of the methods employed in the study, results, and discussion. We then provide insights regarding potential paths forward.

II. Contextual background

2.1. Current situation

Although women make up nearly half of the labor force in North America (U.S. Bureau of Labor Statistics 2018; Statistics Canada 2018) and the Nordic region (Statistics Finland 2018), they only hold 37 - 39 % of management positions (Statistics Canada 2018; U.S. Bureau of
Labor Statistics 2016). Furthermore, despite the fact that more women hold college degrees and work full time, women’s salaries are 15 - 20 % lower than men (Statistics Finland 2018; Statistics Sweden 2016; U.S. Bureau of Labor Statistics 2017; Moyser 2017).

Based on the Global Gender Gap Index that measures gender-based gap in countries every year, Finland has a higher rank than the other three countries of interest in this study: Sweden, Canada, and the US (World Economic Forum 2018). Surprisingly, the US ranks lower than some of the considerably less economically developed countries such as Rwanda, Nicaragua, or Namibia, each with GDP less than 0.1 % of total GDP in the US (World Bank 2018).

However, there are positive developments regarding gender gap improvement in the U.S. A national campaign to increase the percentage of women on U.S. company boards to 20% or greater by the year 2020 (2020 Women on Boards), reported the 2020 Gender Diversity Index among Fortune 1000 companies has been achieved in 2017, three years ahead of the goal (Gender Diversity Index 2018). Nevertheless, smaller or more recently established companies, which are not listed on Fortune 1000, may still be less gender diverse (Gender Diversity Index 2018).

2.2. Industry image

The forest sector is generally considered to be a mature industry, characterized by producing mature products (Hansen et al. 2013) with high price volatility of markets (Päätäri et al. 2017), lacking innovativeness (Bull et al. 2015; Leavengood and Bull 2014; Stendahl and Roos 2008; Crespell et al. 2006), and focusing on a low-cost, production orientation (Hansen et al. 2013; Toppinen et al. 2013; Hansen and Juslin 2011).
141 With respect to gender diversity, the forest sector is generally perceived as a male
dominated industry and this view is supported by global statistics on the forest-related industry
workforce (Lawrence et al. 2017; FAO 2006). However, there is a lack of work on how the
people who are working in the forest sector perceive the industry, except for one study based on
the views of Finnish and Swedish female leaders (Baublyte 2017).

146 Given dramatic changes such as global demand and market shifts because of
globalization, digitalization, financial crises, and climate change pressure, the forest industry
must find a way to face the issues of increasing production costs, rising environmentalism, and
rapid technology transfer. Solutions for these issues have been recognized by several authors to
also include diversity management (Table 1).

Table 1. Recommended solutions for renewal of the forest industry.

<table>
<thead>
<tr>
<th>SOLUTIONS</th>
<th>AUTHORS</th>
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<tbody>
<tr>
<td>Innovation management</td>
<td>Hansen et al. 2014; Hansen 2010; Crespell and Hansen 2008; Wagner and Hansen 2005</td>
</tr>
<tr>
<td>Innovativeness for</td>
<td>Crespell and Hansen 2008b; Hansen et al. 2007; Crespell et al. 2006; Hovgaard and Hansen 2004</td>
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<tr>
<td>competitiveness</td>
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<tr>
<td>Sustainability management</td>
<td>Toppinen et al. 2016; Panwar et al. 2006; Kärnä, Hansen, and Juslin 2003</td>
</tr>
<tr>
<td>Technology advancement</td>
<td>Larasatie et al. 2018; Panwar et al. 2012; Meil et al. 2007</td>
</tr>
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</table>

153 Low workforce diversification is a key concern in the transition to a forest bioeconomy,
which should be addressed in recruitment (Lawrence et al. 2017). Compared to North America,
the forest sector in the Nordic region is often considered more innovative (Hansen 2010) and
tend to have a more positive attitude towards the concept of a bioeconomy (Näyhä 2012).
III. Theoretical background

3.1. Gender diversity effects

Gender diversity has been highly encouraged in recent years. For instance, The United Nations Sustainable Development Goals for 2030 call out achieving gender equality and empowerment of women (The United Nations 2017). Simultaneously, schools of thought on strategies to enhance gender diversity have been proposed, such as gender mainstreaming as a transformative strategy with three approaches: inclusion, reversal, and displacement (Squires 2005). Accordingly, women should be treated equally to men and have the same right to work and gain promotions. Gender diversity in leadership is not only just the “right thing to do”, it is also a smart thing to do. For example, female directors more consistently make fair decisions in high risk situations such as when competing interests are at stake (Bart and McQueen 2013), which may lead to greater firm performance.

However, despite this encouragement, meta-analysis on gender diversity studies has resulted in conflicting findings on the effect on group and company performance (Pletzer et al. 2015; Post and Byron 2015; Bell et al. 2011). On one side, diversity improves decision-making capacity, but on the other side, it can increase in-group conflicts (Erhardt et al. 2003).

Mixed findings in the literature may lead to an assumption that the relationship between increased gender diversity and company performance is contextual (Hansen et al. 2016). There is also a possibility that a work group has a lack of ability to maximize the potential of diversity by not recognizing different perspectives (Webber and Donahue 2001) or by using information based on their common knowledge and leaving out details (Gigone and Hastie 1993). Group composition should draw out the represented different knowledge and skills, and then extract them to arrive at a more creative problem solution. Both group leadership and individual
members should develop their capacity to elaborate and exchange information cognitively within
groups. Looking into companies, the CEO/chairperson is considered a pivotal figure to
incorporate diverse views into decision-making processes (Kakabadse et al. 2015; Pletzer et al.
2015).

3.1.1. The advantages of better gender diversity

The most commonly mentioned diversity benefit is improved managerial decision-
making. Men and women tend to have distinct perspectives and experiences resulting in different
knowledge and information. Therefore, diverse groups tend to process information in greater
range of ways and more deeply than homogenous groups (Dahlin et al. 2005). Since upper
echelons theory (Hambrick and Mason 1984) implies that the idiosyncrasies of top managers are
powerful enough to influence strategic planning, it is argued that diverse top management teams
(TMT) will result in better company performance and innovation (Talke et al. 2010). Gender
diversity is linked with cognitive diversity in which increasing the number of female top
managers can result in lower risks and better performance (Perryman et al. 2016). More female
representation in the TMTs is also associated with better collective problem solving skills
because of creativity, innovation, and incorporation of different perspectives (Kakabadse et al.
2015; Daily and Dalton 2003).

Furthermore, better gender balance in TMTs promotes a better understanding of the
market by reflecting the diversity of the marketplace through a better match between employees
and potential customers, thereby increasing companies’ ability to penetrate their markets and
result in better performance (Campbell and Mínguez-Vera 2008). In addition, the likelihood of
voluntary sustainability actions in firms increases when there are more women in the TMTs,
which has been also interpreted as a sign that women are more in tune with the marketplace (Ben-Amar et al. 2017).

### 3.1.2. The potential problems of increased gender diversity

Gender diversity can also trigger more in-group conflicts as well as social identity salience (Tajfel and Turner 1979) that fosters in-group and out-group formation (Hewstone et al. 2002). This distinctiveness can lead to behavioral disintegration and interpersonal conflicts (i.e., task and emotional conflict) (Li and Hambrick 2005) and breaking groups into subgroups (Lau and Murnighan 1998). Emerging subgroups may impair communication through biased attention and influence (Bhappu et al. 1997).

For men, gender identity salience is positively related to relationship conflict (Randel 2002), which can negatively impact work performance (Chrobot-Mason et al. 2009). In addition, a male dominated management team may create in-group and out-group distinctions, resulting in disadvantaged treatment for female managers (Schwab et al. 2016) such as less pay (e.g. U.S. Bureau of Labor Statistics 2018) or a situation where women are less likely to be promoted (Gorman and Kmec 2009; Metz and Tharenou 2001).

### 3.2. Critical mass and tokenism

Interactions in a group depend on the size of the subgroups (Kanter 1977). To have more influence which can affect changes, a subgroup should reach a certain threshold or critical mass. When it comes to women in management teams, three females are considered as a critical threshold, while one and two females may exist largely as tokens (Konrad et al. 2008). Due to masculine leader stereotypes (Koenig et al. 2011), these token females may be marginalized in TMTs (Kanter 1977) which may hinder team performance. Companies should go beyond tokenism to experience the real benefits of gender diversity (Bear et al. 2010), to have better firm
organizational innovation (Torchia et al. 2011), and to improve firm performance (Schwab et al. 2016).

3.3. Homosociality

As a theory of preference relation with the same gender, homosociality is initially used to explain why males dominate powerful positions in social institutions (Lipman-Blumen 1976). Despite the critique that homosociality is merely based on sex role theory (Tallberg 2003), this concept is in line with homosocial reproduction theory to describe the belief that managers are selected based on social criteria due to a high pressure for social certainty and conformity (Fawcett and Pringle 2000; Kanter 1977).

To obtain a senior management position, the candidate should have competencies and characteristics that are defined by existing board members (Holgersson 2013). Since a majority of board members are males, this practice naturally gives better chance to men (Holgersson 2013) and may exclude women (Kanter 1977). However, this may not be true for all men in general. The men that do not meet the expected social behavior may also be excluded (Tallberg 2003).

Homosociality is also perpetuated in the TMT hiring process. Usually conducted as an informal process, selection lacks objectivity and relies on personal networks (Fawcett and Pringle 2000) in addition to headhunter services (Baublyte 2017). Based on this argument, men will have more benefits because of masculine senior management cultures and traditional career assessments (Fawcett and Pringle 2000). Men will be more likely to be hired because they have more access to job vacancy information and personal endorsement.
3.4. Queen bee phenomenon

In a male dominated organization, the challenge for young females may not only come from male peers, but also can be from senior women. Instead of promoting women’s development and mentoring young women, these female leaders, that are adjusted to the masculine culture, may distance themselves from other women (Kanter 1977) and give preferential treatment to men (Kaiser and Spalding 2015). This practice is called a queen bee phenomenon (Derks et al. 2016).

To be successful in a male dominated work setting, queen bees disassociate themselves from their gender and have masculine self-presentation, underline dissimilarities and distance themselves from other women (Derks et al. 2011) by claiming that they are more masculine (Faniko et al. 2016). Interestingly, the queen bees only distance themselves from junior women but not to women that are considered as successful as they are (Faniko et al. 2016). Above all, perhaps the most disadvantageous effect from this phenomenon is that the queen bees legitimize the current gender hierarchy, resulting in gender inequality status quo in their organizations (Derks et al. 2016).

IV. Methods

Potential participants were identified from an annual listing by PricewaterhouseCoopers, which includes the top 100 global worldwide pulp, paper, and packaging companies. The targeted individuals were female executives in each company in North America (US and Canada) and Nordic region (Finland and Sweden) at the starting time of data collection in the Northern Hemisphere’s Fall 2016 to Spring 2017.
Based on company websites, we found 26 female executives in top management teams in fourteen US and Canadian forest sector companies and 32 female executives in top management teams in eight Finnish and Swedish forest sector companies. The female executives have professional roles varied from human resources, communication, sustainability management, to legal affairs divisions. Interview invitations were emailed to potential respondents, followed by telephone calls and/or additional emails. In total, 14 North American and 10 Nordic respondents agreed to be interviewed, while others declined, mostly due to lack of time.

In our exploratory study, we used semi-structured interviews to allow for the flexibility to follow up on interesting points. Interviews were conducted either face-to-face, by phone or by Skype. Interview questions covered the topics of atmosphere of the interviewee’s company and forest industry from a gender perspective, their ideas to make the forest industry a more attractive place to work for females, and their advice for young females to have a good career in the forest industry.

To engage with the female executives, we used a specific type of specialized focused interview called elite interview (Dexter 1970). Before conducting interviews, the researchers reviewed gender diversity related information of each company to have a provisional analysis. This step is beneficial to avoid the possibility of misunderstanding concepts and excessive personal bias since the result of the interview is the respondents’ definition of the situation (Berry 2002).

Interviews in North America were conducted during 2016 while interviews in the Nordic countries of Finland and Sweden were conducted between April-November 2017. Interviews were conducted in English, and ranged from 15 minutes to 1 hour in length. All interviews were then transcribed and thematized.
Coded analysis was conducted in three cycles (Miles et al. 2013). The first coding cycle focused on three themes (atmosphere, attractiveness, and advice) based on our research questions 1-3. The first theme, atmosphere, aimed to describe the general atmosphere in the respondent’s companies and general forest industry with respect to women in the workforce and identify the changes that have occurred in the industry. The objective of the second theme, attractiveness, was to elicit thoughts from respondents on how to make the forest industry more attractive workplace to women. The third theme, advice, aimed to recognize career advice from interviewees for young females that are entering the forest industry. The second coding cycle was done after we found patterns, grouping the earlier themes from the first cycle to a smaller number of themes for all interview questions. A third cycle was conducted specifically to identify diversity efforts undertaken in the companies (Table 2).
Table 2. Emerging themes.

<table>
<thead>
<tr>
<th>PRIMARY THEMES</th>
<th>SECONDARY THEMES</th>
<th>SECOND CYCLE CODING</th>
<th>THIRD CYCLE CODING</th>
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</thead>
<tbody>
<tr>
<td>Atmosphere</td>
<td>1. Diversity and Females/Males ratio in the company and different business divisions/seniority levels</td>
<td>1. Industry image</td>
<td>1. Industry image</td>
</tr>
<tr>
<td></td>
<td>2. Company culture</td>
<td>2. Changes</td>
<td>2. Changes</td>
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<td></td>
<td>8. Supports</td>
<td>8. Individual characteristics</td>
<td>8. Individual characteristics</td>
</tr>
<tr>
<td></td>
<td>11. Behavior, image, stereotypes</td>
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<tr>
<td></td>
<td>12. Characteristics, personality, ambitiousness, goals</td>
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<td></td>
<td>13. Issues</td>
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<td>14. Education</td>
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</table>

| Attractiveness | 1. Culture | 1. Industry image |
|                | 2. Opportunity | 2. Changes |
|                | 3. Personal stories | 3. Diversity |
|                | 4. Education | 4. Culture |
|                | 5. Environment | 5. Support |
|                | 7. Perspective | 7. Personal stories |

| Advice | 1. Education | 1. Industry image |
|        | 2. Finding a niche | 2. Changes |
|        | 3. Behavior, image, stereotypes | 3. Diversity |
|        | 4. Characteristics, personality, ambitiousness, goals | 4. Culture |
|        | 5. Exploring opportunity, movement between job positions | 5. Support |
|        | 7. Positive understanding, perspectives | 7. Personal stories |
|        | 8. Issues | 8. Individual characteristics |

V. Results

The results are organized according to the primary themes: Atmosphere, Attractiveness and Advice. It should be noted that all quotations in the results section come directly from the interviews, with region provided after the quote.

3 Questions from both regions are similar with minor differences.
5.1. General atmosphere of forest industry

Respondents frequently claimed that the atmosphere of the forest sector has been historically known as male-oriented and male-dominated, with characteristics of a chauvinistic and masculine culture. At times, the forest industry has not been “female friendly” and women have been “underrepresented”. Examples of male-oriented culture include nude calendars, sexist jokes, and “boys club” activities like hunting, fishing, and golf. One respondent used the word “Neanderthalic”, when describing the forest industry.

Nevertheless, almost all the respondents agreed that there are positive changes in the industry towards more diverse and inclusive workplaces. However, respondents indicated that this change is slow, claiming it to be more of an “evolution, not a revolution.” To “take on less of a male-oriented kind of culture, [there is a requirement of a] critical mass of women” in leadership, suggesting that more women at the management level means a more female-friendly working environment.

I think it’s definitely better [now], A) because there are more women engineers, B) because there’s more that have been recruited, hired, and now in senior leadership positions. (North America).

When I first started the jargon was different, and it was much more acceptable to make sexist jokes, it was much more common that you could find nude calendars when travelling around the country… [now] a nude calendar has been changed to be a tractor calendar. (Nordic).

Many positive changes towards diversity have happened because of company-level initiatives. The management of respondents’ companies believe that diversity is good for their business, and therefore put strong focus on diversity when they recruit. By having a more diverse workforce, global companies can have a better understanding of the needs of their diverse customers.
[my company] has probably more diversity because we’ve actually had it as a very significant focus. It’s on our score cards as leaders of continuing to hire and look for the diversity and the goal of trying to match the diversity of our communities. (North America).

Why diversity? Because diversity is a good business. We are a global company, … diversity perspective should reflect the society and the diverse customer base we have. So, I think diversity means better business, you make better decisions because you have more diverse thought in the company. (Nordic).

Some companies have encouraged a more diverse and inclusive workplace through trainings and courses for their employees. A company in North America conducts diversity trainings leading to a better understanding that people have different styles to accomplish tasks. A Nordic company has its employees join a gender equality course to raise awareness of a diverse and inclusive workplace.

Over the years we’ve got more diversity and more diversity training and more opportunity to interact with different levels where there are different styles to accomplish tasks. (North America).

We have recently had a course, everybody went through it, gender equality course, which I think has raised the awareness. It’s not just about not making sexist jokes, it’s trying to include everybody and accepting our differences. I think that jargon in the company has improved and everyone understands better that both women and men should be included in the conversations and make them feel at home. (Nordic).

One Nordic respondent suggested that changes in society play a significant role leading to a more diverse workforce. Other respondents mentioned examples of societal changes such as more dual income families and more women as breadwinners. However, not all respondents were positive about the evolution of the industry. There are some indicators that the upstream value chain of forestry has the most room for improvement.
A lot of companies have stood still as far as women and haven’t done anything progressive. (North America).

The business side has changed a lot to positive, but the wood supply and forestry side are not moving ahead. (Nordic).

Still lagging behind. It [forestry side of business] hasn’t changed much and I’m not seeing a lot of light in there. (Nordic).

Most respondents in both regions agreed that a higher level of gender diversity primarily exists in corporate offices and not so much in manufacturing facilities, due to their remote location and required shift work. Most women are found in office work (administration) and business divisions. Generally, increasing diversity at mills is seen to be more challenging because the plant and mill work is not viewed as appealing to females.

We are recruiting obviously more women than we used to do earlier. The only thing is that we do not have so many female applications for mill positions, for instance, supervisor positions in mills. We also have apprentice programs in some of the pulp mills, and there also we do not have that many female applicants for some reason. (Nordic).

One of my mentees in the [management development] program started at a mill or a plant and then came to corporate and then did not want to go back to a mill or a plant because the life style change. (North America).

Regarding gender expectations, there were differences between regions. North American respondents expressed their concern that gender still matters in the forest industry workforce, especially when it comes to leadership. An example of this case is male and female CEOs in the industry functions may be treated differently. In contrast, Nordic respondents considered that the environment in their countries support female leadership.
... when you go to industry functions, ... men interact differently ..., they treat [my female CEO] differently than male CEOs. So, there is definitely, in my opinion, a gender bias in this industry. (North America).

I think we have very good climate for women, especially female leaders. (Nordic).

5.2. How to improve forest industry attractiveness for females

Although views on the atmosphere of the forest industry can be interpreted to be somewhat negative, respondents have positive views regarding the potential for making the industry appear more attractive to young females as potential employees. Considering the fact that “the forest sector is not the sexiest industry”, there is a suggestion to promote the industry by doing a “better job [of] telling [the] sustainability story” and to “focus on the environmental side and social perspectives”. Modernizing the industry image could be done by reshaping company missions to be “future-oriented” and “linked to the bioeconomy”.

Reaching a critical mass of females in leadership positions was discussed by Nordic respondents. Having more women in leadership may attract young females because these female executives break cultural stereotype barriers and tend to have more empathy for women on achieving work-life balance.

When there is a big enough portion of females, critical mass in the management, then it will be so much easier for any other female who wants to do the same path. (Nordic).

...accept that people have a life, where work is one part and private life is other part. I think the balance is very important. And perhaps female leaders have it easier to see it and respect it. (Nordic).

Although the forest industry is still perceived to be male-dominated, the respondents mentioned that there is huge potential for women to have a solid career in this industry. In the
US, the graying workforce presents a good opportunity for those entering the workforce (Hansen et al. 2016).

There are so many opportunities, there are so many retirements, and [the forest industry] is the core of American business. (North America).

Interestingly, Nordic respondents’ thoughts were not as a positive as their North American counterparts. Women were often considered to receive different treatment and career path as the male employees in their early career.

…make sure that the young women who enter the sector stay there. And in order to do that we need to make sure that they have the prerequisites and are treated with the respect that they deserve. Because I think that in the lower ranking positions is where you find most sexism. (Nordic).

[Females] don’t have the same path that the guys have. When they got in, they get their “godfathers” that support them to the next level, support for giving the additional education. They [reference to males] seem to have an easier path. (Nordic).

5.3. Advice for females entering the forest industry

In contrast to the general similarity that is found in previous sections, respondents had a variety of views regarding females and their career success after entering the industry. The most common advice by respondents in both regions was having a good boss/leader, mentor, and network. The interviewees also voiced that it is important to have a good education in order to find a niche to make young females more competitive in the workplace.

… when you have a good boss, he or she will support you and will enable you to have a career. (Nordic).

Find a mentor that can help you understand the technical side of the industry, as well as general leadership so you can understand the group or team that you work [with]. (North America).
Building a good network of key individuals is really important. (North America).

Educate yourself and do your studies well. But then of course find something special, your niche that would help you find your way in. What I was studying wasn’t mainstream back then and it helped me. (Nordic).

While Nordic respondents focused on the external factors such as the need for good family support systems, their North American colleagues mostly mentioned internal factors such as the importance of personal characteristics in the career journey of a female.

I think my biggest advice would be that home front discussions if you are married, discuss with your husband, how do you go on with double careers, because both going at the same time, then wanting to have a family, it’s a bit difficult, then at least you need help. (Nordic).

… so I have these little initials that I called PIE that is performance, image, and exposure … performance is what matters, work really hard, make an ‘A’ … you need to do whatever you've been asked to do and work hard to meet or exceed those business commitments. The I, is the image of what it is you're aspiring to do, so if you are aspiring to be a leader you need to get a good understanding, what are the unwritten rules of what kind of work looks like and the behavior that is expected … then the E stands for exposure which is, having people recognize and see you and your work getting exposed to people so that you get new opportunities … (North America).

According to one Nordic respondent, at some point in her career she wore only black or blue trousers. She felt that a brighter colored skirt would change the attitudes of male colleagues towards her. Similarly, other respondents stated that “the females cannot be as female as they want to be” and “if they want to get along with the traditional forestry guys, they almost need to grow a mustache.” (Nordic). In contrast, a respondent suggested the young females should represent “who they are, not a gender. And that they don’t perpetuate the stereotypes of gender”. (North America).
In North America, young female employees need to be open minded to exploring the opportunities and willing to relocate, as their male peers would do. Building a career in the forest industry will benefit from moving around, including willingness to work in mills. For women, working in mills could be a hurdle due to their remote location and work shifts. Therefore, several respondents suggested that women should consider sacrificing their social life and leisure time activities to have a good career. However, Nordic respondents felt differently. Instead of making sacrifice, the young females are recommended to change their boss, or jobs, or even their company. Below are some examples of advice for young females entering the industry:

Don’t come with preconceived ideas, have your mind wide open to opportunities. (North America).

If you are going into the forestry business, be willing to relocate, not think that you’re going to get the most senior job to start. You have to be very flexible to start as far as where you are going to live and the ability to take lateral positions to get ahead. So you can’t always be moving up. Sometimes you have to move sideways. We always say that working in the forestry business is more like a jungle gym than a ladder, and sometimes you have to take a side step to get up to the top. (North America).

There are some required sacrifices, but you gotta find what works for you. (North America).

If you have a bad boss, change jobs, don’t stick with a bad leader. (Nordic).

Recognize that the company is very old-fashioned and [if the young females] cannot change it, then [they] have to change the company because [they] are wasting [their] time. (Nordic).

A contrasting opinion came from North America respondents about the glass ceiling phenomenon. In general, the early stages of a career are crucial because that is when young females are able to move faster from one position to another. Movement will be slower when
they reach a later point in their career. This may imply that a glass ceiling phenomenon still exists in the forest industry. However, one respondent disagrees with this statement.

But at the kind of two-three year point, they will begin to slow down a little bit, then at the five year-seven year point they begin to slow down a little bit more because they are getting farther up the food chain. (North America).

[There is] no glass ceiling in forestry anymore, [as long as] you find the right company that fits with your personal values and your integrity and make sure you do the best you can every day. (North America).

VI. Discussions and conclusions

Based on the interview results, there are three major findings to be discussed: masculine environment in the forest industry and its effects on women, support systems for work-family balance for attracting young females to the forest industry, and “sacrifice versus exit” strategy advice for young females entering or considering entry into the industry.

6.1. Masculine environment

Consistent with global statistics on the forest-related industry workforce (Lawrence et al. 2017; FAO 2006), respondents from both North American and Nordic regions perceive the forest industry to be a male-oriented and male-dominated industry. Women have been underrepresented because historically, working in the forest industry has been associated with physical strength and difficult, sometimes dangerous, workplace conditions in remote rural areas. This harsh environment has been perceived “too heavy for women” (and only suitable) “for real men” (Follo 2002, p. 301), and therefore has developed as a blue-collar masculinity and macho-masculinity workplace culture (Johansson and Ringblom 2017).

At the management level, the absence of women may be because of homosocial reproduction practice when senior managers, most or all of whom are men, hire males as a
reflection of their own images (Tallberg 2003). Men’s homosociality has created a masculine
environment influencing work organization and knowledge transfer. Gendered construction on
forest related knowledge will recognize men as the voice which imposes exclusion of women in
the workplace and may cause the assumption that female professionals lack the technical skills to
do their job until they prove otherwise (Johansson et al. 2018; Andersson and Lidestav 2016). To
be accepted and earn respect from their male colleagues, female professionals have been socially
forced to adapt to male norms (Johansson et al. 2018) and to adjust their behavior and image to
match the standards that are set by males. For example, these female professionals may adapt a
masculine communication style (von Hippel et al. 2011), and even distance themselves from
femininity, including limiting their interaction with other females (Wright 2016).

Although there are positive changes in the industry towards more gender diverse and
inclusive workplaces, the respondents indicated that the movement is slow. These slow changes
may be culture-based where traditional perceptions about gender roles and what men/women do
in organizations still remain deep. There is a strong assumption that males are the breadwinners,
and a concern about females’ loyalties between their family and job (Kanter 1977). If there is a
higher level of gender diversity in the companies, it typically exists in corporate offices where
women are found in office work (administration) and business divisions. This finding is similar
to a global report from FAO (2006). It seems that more than a decade later, women are still
stereotyped into specific roles in the forest sector. To take a place and avoid being a token,
women need to find special niches such as expert and knowledge work (Brandth and Haugen
1998).

The other possible cause of slow changes is women’s restricted access to networks in the
forest sector (SweGov 2004 in Andersson and Lidestav 2016). Women’s networks have been
formed within and outside companies, including formal organizations in order to be acknowledged and addressed by authorities. These networks provide gender-specific social support and private information such as company cultures and attitudes toward women (Yang et al. 2019). However, while women’s networks are beneficial to make women visible and counter homosociality practice, there is an opinion that separate organizations may challenge societal norms (Andersson and Lidestav 2016) and can define women as the outsiders in a male dominated industry since it may be seen to only represent women’s interests (Brandth et al. 2004).

To boost change towards more gender diverse and inclusive workplaces, respondents suggested that it is necessary to reach critical mass of women in leadership positions, which is believed can create a more female-friendly working environment. Women are typically seen as more empathic. Accordingly, they are often expected to clear the way and to mentor young females in the industry. Nevertheless, since the forest sector is a male-dominated industry, there is a possibility of the queen bee phenomenon that could hinder the career advancement of young females. Women leaders might create distance from their female juniors as a response to gender discrimination and social identity threat in their companies (Derks et al. 2016). In addition, a critical mass of women in the forest industry is argued would not make a difference due to the social context influence of professionalism (Storch 2011).

To attract young talent, respondents identified a need to modernize the industry’s image. The forest industry needs to focus on its important role in the sustainable future and offer solutions for the modern world. For example, the industry can use its role in the bioeconomy for a more sustainable future economy (Lawrence et al. 2017) and in urban living innovation such as using engineered wood products for constructing tall wood buildings (Larasatie et al. 2018).
6.2. Work-family balance

More flexible working hours and place of work in order to find the balance between work and family life is important for attracting young females to the forest sector. This issue was mentioned since women still tend to bear the bigger burden with respect to domestic household responsibilities (e.g., Duchin et al. 2018). This work-family balance challenge might be a reason why it is difficult to find women to work in manufacturing facilities in rural areas.

North American executives pointed out the importance of family care (child care and/or elderly care) availability options and having flexibility in maternity leave and/or paternity leave. However, Nordic respondents generally placed less emphasis on these topics of child care and maternity leave and/or paternity leave, which may be due to differences in societal contexts. The Nordic countries, which are considered to be at the forefront in gender equality, have created a society where men and women are more equally participating in the workforce and sharing the housework and childcare responsibilities. Parental leave in the Nordic welfare state is often considered as the best model in the world. This situation is in contrast with parental leave in the US. With the U.S. Family and Medical Leave Act, new parents are protected to keep their job for up to 12 weeks, but the act does not mandate pay (U.S. Department of Labor 2018).

Women’s greater family responsibilities have been identified as the major cause of the gender earning gap in the U.S. (Goldin et al. 2017) with a perception that when female workers come to their motherhood, they will be less engaged at work (Ladge and Little 2019). Although working mothers are socially respected, at the same time they may be disliked and stigmatized as selfish because they are perceived as trying to increase their power and status (Brescoll and Uhlmann 2015) and abandoning the “Motherhood Mandate” of childbearing and childrearing (Russo 1976). These females need to justify why they are working outside their home with a
socially acceptable reason. When working mothers rise to top management positions and take the
breadwinner role, they may be labeled “ultramacho” (Ladge and Little 2019, p. 140) and are
more likely to face marital instability (Byrne & Barling, 2017).

In terms of the work-family balance, male leaders are generally in a better situation than
their female peers. The more successful the males, the more likely they will find a spouse, and
have a family (Hewlett 2002). For example, a nationwide survey about the lives of highly
educated and high-earning U.S. women reveals that half of these women are childless and nearly
7 out of 10 are unmarried (Hewlett 2002).

6.3. Sacrifice vs exit strategy

Despite the status of Nordic countries as leaders in bridging the gender gap, respondents
from this region believe that there is significant progress yet to be made in the forest industry,
especially at the entry level. However, this might not be the case once women reach top
positions. These opinions are in contrast with respondents in North America. While they have a
more positive view on young females entering the industry because of many opportunities
created by the graying workforce, North American female executives indicate that the glass
ceiling phenomenon still exists.

These contextual aspects may affect how female executives in both regions give different
advice to young females entering the industry. Interestingly, North American respondents
focused more on internal factors such as personal characteristics while Nordic respondents
emphasized external factors such as the need for good family support or using an exit strategy
from an unsupportive company or boss. To have a progressive career, North American
respondents suggested young females should consider sacrificing their social life and leisure time
activities which reflects old school attitudes. In contrast, Nordic respondents felt that instead of
making sacrifices, young females should change their boss, their job, or even their company. Moreover, their responses implied that having a good educational background might help to enter the industry and facilitate obtaining a good position, but to succeed, young females should also constantly learn and develop their skills, move between functions, and go abroad to get international experience.

VII. Future pathways for research

There are limitations to this study because of the relatively small number of respondents, partly due to a very small population of female leaders in the forest industry in the studied countries. It is possible that those female executives declining to respond had a bit different perspective or were simply less interested in the topic. If the participants are assumed as those who are most interested in gender issues, the findings provide some indication of the thinking of those that are also potentially best informed about these issues.

Since the population in this research is very small, it would be valuable to conduct similar studies covering a wider demographic area and/or with females in middle management, not only in the TMTs. Coverage of small- to medium-scale forest sector companies, which may lack formal mechanisms to deal with diversity aspects, could also make a valuable contribution. The nature of the companies, for example family owned companies, might also bring different perspectives in the realm of gender diversity than publicly owned companies like in this study.

A potential limitation is related to respondents’ experiences and knowledge. We have respondents with varied work experiences in the forest industry, from several decades to only a few months, that may lead to different perspectives. Limited experience in their position by some
of our respondents impacted their responses. Also, their willingness to share their intimate experiences with our interviewers is likely varied.

Based on findings from this study, there is considerable space for gender-related research in the forest sector. One example is exploring in more comparative manner men’s homosociality which contributes to a masculine environment. Within this kind of environment, what are the male executives’ perspectives with respect to working with females as colleagues in the TMT? This context may also shape what employees in this male-dominated industry think of females as their leaders, compared to males. Looking to the bigger picture, this study about gender diversity in leadership in the forest industry can be compared to other similar studies in perceived male-dominated industries such as automotive or IT (Information and Technology).

Acknowledgements

We are grateful for the feedbacks from Lyndall Bull of Lynea Advisory in Australia and two anonymous reviewers of the journal. Moreover, the first author would like to thank Adam Haley and Chris Nelson (Oregon State University) for their helpful comments on earlier versions of this manuscript. We also want to acknowledge LPDP/Indonesia Endowment Fund for Education for financial support of the first author and Academy of Finland (#307480) for financial support of the last author.
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Tables

Table 3. Recommended solutions for renewal of the forest industry.

Table 4. Emerging themes.
Title

“From nude calendars to tractor calendars”: The perspectives of female executives on gender aspects in the North American and Nordic forest industries

Table 1. Recommended solutions for renewal of the forest industry.

<table>
<thead>
<tr>
<th>SOLUTIONS</th>
<th>AUTHORS</th>
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<tbody>
<tr>
<td>Innovation management</td>
<td>Hansen et al. 2014; Hansen 2010; Crespell and Hansen 2008; Wagner and Hansen 2005</td>
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<td>Innovativeness for competitiveness</td>
<td>Crespell and Hansen 2008b; Hansen et al. 2007; Crespell et al. 2006; Hovgaard and Hansen 2004</td>
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<td>Sustainability management</td>
<td>Toppinen et al. 2016; Panwar et al. 2006; Kärnä, Hansen, and Juslin 2003</td>
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<td>Technology advancement</td>
<td>Larasatie et al. 2018; Panwar et al. 2012; Meil et al. 2007</td>
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Table 2. Emerging themes\(^1\).  

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<th>PRIMARY THEMES</th>
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<th>THIRD CYCLE CODING</th>
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<td>Atmosphere</td>
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<td>1. Industry image</td>
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<td>12. Characteristics, personality, ambitiousness, goals</td>
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<td>13. Issues</td>
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<td>5. Environment</td>
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<td>Advice</td>
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<td>2. Finding a niche</td>
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<td>4. Characteristics, personality, ambitiousness, goals</td>
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<td>5. Exploring opportunity, movement between job positions</td>
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\(^1\) Questions from both regions are similar with minor differences.