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**New Perspectives in
Gender Research**

**Working Paper Series
2026, Volume 6**

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Away From All Creatures
Great and Small.

Challenged Professional
Identities of Female
Veterinarians in Germany
During Maternal
Employment Bans



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Working Paper Series

(ISSN 2509-8179)

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Suggested Citation

Ulmer-Stein, Lisa, Knubben-Schweizer, Gabriela and Jeanrenaud, Yves (2026). Away From All Creatures Great and Small. Challenged Professional Identities of Female Veterinarians in Germany During Maternal Employment Bans. In: *Gender(ed) Thoughts, Working Paper Series*, Vol. 6, p. 1–22. <https://doi.org/10.47952/gro-publ-421>.

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Away From All Creatures Great and Small. Challenged Professional Identities of Female Veterinarians in Germany During Maternal Employment Bans

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Zusammenfassung

Der Beruf des Tierarztes bzw. der Tierärztin hat sich in Deutschland von einer Männerdomäne zu einem überwiegend weiblichen Beruf gewandelt, was den globalen Trends entspricht. Dennoch sind Frauen nach wie vor mit Lohnunterschieden und eingeschränkten Aufstiegsmöglichkeiten konfrontiert. Das deutsche Mutterschutzgesetz (MuSchG) von 2018, das die Weiterbeschäftigung während der Schwangerschaft unterstützen soll, führt häufig zu Verbotsverfügungen, da Arbeitgebende Risiken vermeiden wollen, was Personalmangel und Stress verschärft. Basierend auf qualitativen Interviews mit Tierärztinnen, deren Schwangerschaften mindestens vier Jahre zurückliegen, ergab diese Studie, dass die meisten weiterarbeiten wollten, und befürchteten, durch ein Beschäftigungsverbot ihre berufliche Identität zu verlieren. Da sie sich über die gesetzlichen Anforderungen unsicher waren, verhängten Arbeitgebende häufig Verbote, insbesondere in Berufen mit häufigem Tierkontakt. Dieser Verlust der Selbstbestimmung veranlasste die Frauen zu Bewältigungsstrategien wie einem Berufswechsel oder der Verschleierung ihrer Schwangerschaft. Trotz der Schutzabsichten verstärken strenge Gesetze und Unsicherheiten somit die externe Kontrolle und untergraben die berufliche Identität und Zugehörigkeitsgefühl der Frauen, die sich um den direkten Kontakt mit Tieren herum aufgebaut hat.

Schlagworte

Tierärztin, Tiermedizin, Arbeit, berufliche Identität, Mutterschaftsurlaub, qualitative Methoden, Beschäftigungsverbot, Deutschland

Abstract

The veterinary profession in Germany has shifted from male-dominated to largely female, reflecting global trends. Yet women still face pay gaps and limited career advancement. The 2018 amended German Maternity Protection Act (MuSchG), intended to support continued work during pregnancy, often leads to prohibition notices as employers avoid risks, which is worsening staff shortages and stress. Based on qualitative interviews with female veterinarians whose pregnancies occurred at least four years ago, this study found whilst most wished to keep working, they feared losing their professional identity. Uncertain about legal requirements, employers frequently imposed bans, especially in roles with frequent animal contact. This loss of self-determination prompted coping strategies for the women such as career changes or concealing pregnancy. Thus, despite protective aims, rigid legislation and uncertainty reinforces external control and undermines women's professional identity and sense of belonging built around direct animal contact.

Keywords

veterinarian, veterinary medicine, work, professional identity, maternal leave, qualitative methods, employment ban, Germany

1. Introduction

The veterinary profession in Germany has undergone significant demographic shifts over recent decades, particularly concerning gender distribution. As a historically male-dominated field, the veterinarian profession in Germany has seen a substantial increase in female participation. As of 2024, approximately 71 percent of veterinarians in Germany were female (Bundestierärztekammer e. V. 2024; Statistisches Bundesamt 2024). This trend mirrors global patterns, with countries such as the United Kingdom and the United States reporting similar feminisation within the profession (Federation of Veterinarians of Europe 2023). Hence, veterinary medicine has been an academic field dominated by females for decades (Baumgärtel 2016) with annual female enrolment numbers circling around 87 percent in German universities for the last 25 years (Statistisches Bundesamt 2024).

The increasing presence of women in veterinary academia over decades has led to notable changes in educational environments. Female students now represent the majority in veterinary programmes, influencing both curriculum development and pedagogical approaches. However, despite higher enrolment numbers, challenges persist. Studies indicate that female veterinarians often experience disparities in income and career advancement opportunities compared to their male counterparts. For instance, in Germany, female practice owners earned 25 percent less per hour than male practice owners (Kersebohm et al. 2017). Furthermore, women are underrepresented in leadership positions within academic and professional settings, suggesting the presence of a ‘glass ceiling’ effect (Ohlendieck 2003) in veterinary medicine, hindering them from major career steps and continuing working in the field at all.

Data also suggests that the female share of veterinarians decreases with increasing age

according to the age distribution statistics by the German Veterinarian Chamber. The greatest drop-out happens between the switch of the age groups 30–39 years and 40–49 years with a decrease of up to ten percent (Platt and Freytag 2024). This brings up a significant question – where do all those skilled female veterinarians go?

Veterinary medicine is, however, a field with various areas of work ranging from animal health care professionals working the curative practice, to being part of sectors such as public health, regulatory medicine and food safety, biomedical research, veterinary education or the pharmaceutical industry.

Additionally, veterinarians working curative practice inhabit very different workspaces as their patients range from fish and reptiles to small mammals, cats and dogs to horses, farm and zoo animals. Most of the general veterinarians will narrow their interests further to either farm animals, equine or companion animals (Bundestierärztekammer e. V. n.d.).

Depending on the animal species and the institution (practice or clinic), the working conditions are diverse: whereas a small animal veterinarian will usually receive patients in-house, a large animal veterinarian will drive to the patient with a mobile practice, unless they are employed in a hospital. The main hazards for a general veterinarian are animal bites and kicks, contact to zoonotic pathogens and sharp objects, danger of slipping, standing and sitting in unphysiological postures (Jeyaretnam and Jones 2000; Epp and Waldner 2012; Kozak et al. 2012). Working with large animals in particular involves considerable physical strain and night and weekend shifts represent an additional burden (Jensen et al. 2022).

Veterinarians working in the meat inspection industry will usually be posted in abattoirs, examining the animal before and the carcass after slaughtering. Usual tasks involve the detection of evidence of disease or other abnormal conditions. Furthermore, they play a role in the surveillance of food hygiene. Their main

occupational hazards include the contact to possibly infectious material (e.g. blood), sharp objects and danger of slipping (Nienhaus et al. 2005; Kozak et al. 2012).

Another major occupational group is the official veterinarians who are employed by the administrative district office or the city. They are responsible for animal protection, animal epidemic control and food control. Their list of tasks usually combines office and field work, e.g. inspecting farms, kennels or breeding facilities (Bundestierärztekammer e. V. n.d.).

Based on the maternity protection act, a preliminary risk assessment is required for each workplace that can be resorted to upon notice of pregnancy. Based on this analysis, a decision can be made as to whether it is still possible to responsibly continue an employment relationship during pregnancy or breastfeeding. In 2018, the German Maternity Protection Act was slightly amended with the intention to facilitate and promote continued employment of pregnant and breastfeeding employees, including an anti-discrimination clause. The intended goal was to keep the pregnant or breastfeeding employee in the business by rearranging their workplace if needed or assigning them to another suitable workplace.

The decision whether a rearrangement or relocation is necessary, is based on the risk assessment. As a result, an employment can be partly or fully restrained if a reorganisation of the workplace is impossible by the implementation of a (partial) employment ban. In this case, employers get reimbursed for the wages through health insurance. As stated above, veterinary medicine offers diverse work areas resulting in a broad spectrum of occupational hazards that can be potentially harmful to the mother or her unborn child. Consequently, risk assessments in veterinary medicine can range in all levels of complexity. That could be one of the reasons for the deficiency in particularised risk assessments in veterinary businesses making a transformation of the workspace upon disclosure of pregnancy virtually impossible (Bundesverband angestellter Tierärzte e. V. n.d.).

However progressive the idea behind the amendment of 2018 may have been, studies in human medicine have shown that it encourages a zero-risk-approach among employers leading to the infliction of a (partial) employment ban (Deutscher Ärztinnenbund e. V. 2021; Puhahn-Schmeiser et al. 2023). Additionally, pregnant medical staff is being reassigned for tasks that are irrelevant to their career (ibid.). The removal of skilled medical workers from the labour market has been proven to add to the shortage in skilled workforce in the medical sector (Fedder et al. 2022). Additionally, the so-induced loss of self-determination has a considerable impact on mental well-fare (Hube et al. 2022). While multiple studies around the employment ban have been conducted in human medicine (Weis-Müller et al. 2016; Seidler et al. 2017; Ochmann et al. 2021; Darius et al. 2023), unfortunately, little is known about the current situation in veterinary medicine.

Therefore, this study aimed to establish a basis for this subject matter. Is it possible that the inflictions of employment bans occur to flippantly? Does the management of pregnant and breastfeeding employees differ according to the professional field's domains? How do affected female veterinarians experience the infliction of an employment ban? What are the psychosocial and professional consequences for female veterinarians?

And finally: Could the inflictions have an impact on the shortage of skilled workers in the field of veterinary?

2. Theoretical framework – Gender, choice of profession, and professional identity

To research the complex and multifaced field of veterinarians, we employ a constructivist theoretical framework (Berger and Luckmann 2012) on the trias of gender, professional choice, and the formation of professional identity.

The intricate relationship between gender, professional choice, and the formation of professional identity has been extensively

examined within sociological discourse, particularly through the lens of symbolic interactionism (Blumer 1969). This theoretical framework posits that individuals construct their identities through social interactions, continuously interpreting and reinterpreting the meanings of these interactions within specific cultural and institutional contexts. In this regard, gender is understood not as a fixed biological attribute but as a dynamic social construct that profoundly influences, and is influenced by, one's professional environment (Lewis 2004).

Empirical studies have illuminated the significant role gender plays in shaping career trajectories and professional identities: For instance, research focusing on social workers practising as counsellors and psychotherapists revealed distinct gendered patterns in career development (Vieira et al. 2017). Women in this field often gravitate towards roles with a strong clinical emphasis, integrating responsibilities such as management, supervision, and training. They frequently express the necessity of balancing professional duties with familial obligations, reflecting traditional societal expectations placed upon women. Conversely, men in the same profession are more inclined towards management positions and feel a pronounced duty to provide for their families, especially after the birth of a child. These divergent pathways underscore the pervasive influence of gendered expectations on professional identity formation (ibid.).

The social construction of gender roles significantly informs the development of professional identities. Societal norms and expectations often delineate 'appropriate' professions for different genders, leading to occupational segregation. This segregation not only perpetuates gender stereotypes but also reinforces the association of certain professions with specific gender identities. For example, caregiving roles are traditionally linked to femininity, while leadership positions are associated with masculinity. Such associations can influence individuals' perceptions of suitable career choices and impact their professional self-concept (Sánchez-Moreno et al. 2023).

The concept of 'doing gender' (West and Zimmerman 1987) further elucidates how individuals actively perform and reinforce gender roles within professional settings. This performance is context-dependent and involves managing conduct in line with normative conceptions of attitudes and activities appropriate for one's sex category. In male-dominated professions, women may navigate complex dynamics to align their professional identity with prevailing masculine norms, often balancing authenticity with conformity to institutional expectations (Li 2021).

Institutional structures and cultural narratives also contribute to the construction of professional identities. Hegemonical masculinity (Connell 1995), for instance, establishes a standard of acceptable behaviour for men and simultaneously serves as a product of men's behaviour. This dynamic can marginalise alternative expressions of professional identity and perpetuate gender disparities within various fields. Consequently, individuals may internalise these norms, shaping their professional aspirations and self-perceptions (Connell and Messerschmidt 2005).

In the context of health professions, gender differences in professional identity perceptions have been observed among undergraduate students. A study comparing students in predominantly female (health) and male (engineering) courses found that gendered perceptions of professional identity are evident even at the educational stage (Vieira et al. 2017). These perceptions can influence career choices and the development of professional identities, further reinforcing occupational segregation (ibid.).

As Baumgärtel (2016) outlined, the choice to study veterinary medicine is mainly based on the possibility for animal contact. In order to become a veterinary professional and reach the goal of animal contact, an overall mentally and physically demanding educational path must be followed (Hafen et al. 2008). After successfully completing academic training, ideally, a primary occupational self-identity has been formed (Tomlinson and Jackson 2019). Occupational

self-identity is commonly defined as identifying oneself with the acquired profession and the occupational group (Crossley and Vivekananda-Schmidt 2009). Among others, professional self-identity is formed by demographic, social and personality factors (Chamberlain et al. 2005). In higher education, it is shaped by both the curriculum and the actual work in the designated profession (Kaartinen-Koutaniemi and Lindblom-Ylänne 2008). According to Armitage-Chan and May (2019), veterinary students that enter the professional world are prone to experiencing an identity crisis due to the difference between their very own conception of the veterinary identity and the possible identities presented to them in the veterinary world. In multiple studies concerning the education of different types of medical professionals, patient contact was defined as a major determinant (Chamberlain et al. 2005; Crossley and Vivekananda-Schmidt 2009; Noble et al. 2014). Concerning veterinary medicine, animal contact plays a pivotal role (Baumgärtel 2016).

Symbolical interactionism (Blumer 1962) provides a valuable framework for understanding these dynamics, emphasising the fluid and negotiated nature of identity within social interactions. Through this lens, professional identity is not a static attribute but an ongoing process of interpretation and redefinition, shaped by the interplay of individual agency and structural constraints. This perspective highlights the importance of considering the broader social and cultural contexts in which professional identities are formed and enacted.

Therefore, we regard the formation of a professional identity as a complex process influenced by gendered social constructions, institutional norms, and individual agency. Understanding this process requires a nuanced analysis that accounts for the dynamical interplay between these factors, recognising the role of social interactions in shaping professional identities within specific cultural and institutional contexts.

3. Methodology

This article analyses the experiences of 14 female veterinarians on the aspects of pregnancy and breastfeeding in their professional lives as a part of starting a family in Germany.

Our main research goal was to determine the implementation (or a lack thereof) of a prohibition notice required by law and the resulting consequences for the female veterinarians. More detailed, we were interested in the effect on the career as well as emotional aspects. Therefore, we chose a qualitative approach that allows for an in-depth exploration of personal experiences, perceptions, and the nuanced realities that structured methods might overlook. Even though other professions are prone to similar effects stemming from the maternal employment ban (e.g. female physicians, see Puhahn-Schmeiser et al. 2023), we focus our empirical work solely on the veterinary profession due to its rather unique settings: female veterinaries are (1) in an academic professional field with (2) an ongoing demand for highly educated professionals (Fedder et al. 2022) and (3) among students in Germany, female make up the majority (Bundestierärztekammer e. V. 2024; Statistisches Bundesamt 2024). These three factors are, to our best knowledge, particularly and to their specific extent only observable for the veterinary profession and therefore provide us with an empirical magnifying glass for effects of gender, gendered law and organisation in gainful employment. By doing so, we longed to shed light on the gender regime in the veterinary profession and advance knowledge on gender in the professional context.

Semi-structured interviews offer a balance between guided questioning and open-ended responses, enabling participants to share their stories in their own words while allowing researchers to probe deeper into specific areas of interest (Gall et al. 2003). This flexibility is particularly valuable when examining complex issues such as employment bans, where individual experiences may vary widely (Adeoye-Olatunde and Olenik 2021). By facilitating a

conversational environment, interviewees can express their feelings, thoughts, and reactions more freely, leading to richer and more comprehensive data. The focus lies on the individuals' stories about their lives and experiences (Cohen and Crabtree 2008). This approach is instrumental in understanding how female veterinarians perceive and make sense of employment bans, how these bans have impacted their career trajectories, and the emotional responses elicited. Through their narratives, participants can convey the chronological sequence of events, contextual factors, and personal interpretations that have shaped their professional and emotional journeys.

The feasibility of this method is further supported by its successful application in similar research contexts. For instance, a qualitative study exploring the perceived effects of veterinarians' work on their mental health employed semi-structured interviews to gather in-depth insights into participants' lived experiences. The interviews, lasting between up to two hours, provided a platform for veterinarians to discuss the multifaceted impacts of their work on their mental well-being (Campbell et al. 2023). The problem-centred aspect of these interviews focuses on specific issues—in this case, the employment ban—and examines them from the participants' perspectives. This approach facilitates a comprehensive understanding of how the ban is implemented in various settings and its direct and indirect consequences on female veterinarians. By centring the discussion on the problem, researchers can delve into the intricacies of policy enforcement, workplace dynamics, and individual coping mechanisms (Witzel 2000).

This method's feasibility is further supported by its successful application in similar research contexts. For instance, a qualitative study exploring why veterinarians leave clinical practice utilised semi-structured interviews to gain insights into personal and work-related factors influencing their decisions. The study revealed that a combination of personal circumstances

and workplace experiences contributed to their departure, highlighting the value of this interview method in uncovering complex, multifaceted issues (Arbe Montoya et al. 2021).

In examining the effects of employment bans, semi-structured, problem-centred interviews can uncover how such policies influence female veterinarians' career decisions, opportunities, and progression. Participants can discuss challenges they faced, such as barriers to career advancement, changes in job roles, or shifts in professional identity resulting from the ban. Moreover, these interviews may reveal systemic issues within the profession, such as gender biases or structural barriers, that may be exacerbated by employment restrictions and the work environment of veterinarians.

Furthermore, the problem-centred nature of these interviews enabled us to capture the temporal dimension of participants' experiences, illustrating how the effects of employment bans evolve over time. This longitudinal perspective can provide insights into the long-term consequences of such policies on careers and emotional health, informing the development of support mechanisms and policy interventions.

This approach facilitates a comprehensive understanding of both, the career-related and emotional consequences of such policies, providing valuable insights that can inform future research, policy development, and support initiatives within the veterinary profession. To do so, we published a call for participation in the specialist journal *Deutsches Tierärzteblatt*. To receive a more protracted view on the matter, we chose to advertise for participants whose (first) pregnancy dated back at least four years. Since veterinarians can work in many different occupational areas, we determined four main professional fields of interest, which contained approximately 94 percent of the occupational active veterinarians in Germany in 2022 (Bundestierärztekammer e. V. 2023). The advertisement was aimed at employees working as veterinarians in the curative practice, the industry, the veterinary office or in research during pregnancy and/or breastfeeding. Furthermore, we were looking for the

experiences of self-employed veterinarians in the curative practice as they are not subject to the same laws as employees concerning the German Occupational Safety and Health Act and the Maternity Protection Act. For this article, the personal experiences of pregnancy and breastfeeding as a self-employed veterinarian are excluded due to their specifically constrained perspectives. However, their views on employees' pregnancies and nursing periods will be included in this article as they offer an important perspective to the whole topic.

As we planned on conducting qualitative problem-centred interviews, we were looking for about 2-3 participants per field of interest. At this point, we missed the fact that one participant could offer information about more than one field, as there was the probability of undergoing more pregnancies while employed in different fields of interest. Therefore, some participants were able to share their experiences in more than one occupational field.

Sixty-seven female veterinarians responded to the research advertisement. Due to the high number in responses, we desisted from placing any more advertisements. We selected the appropriate candidates based on the predetermined requirements stated above. Women who consented on participating also were asked to submit a signed data privacy statement. The *semi-structured* interviews (n=16) with a duration of up to two hours were conducted by the first author via video calling software (Zoom Workplace) in March and April 2023. Participants were asked about their experiences during their veterinary studies, their labour conditions, the reaction to and the consequences of their pregnancy announcement at work, as well as their professional situation as mothers. The interviews were recorded locally on the researcher's computer. The recording and verbatim transcription of the interviews was conducted with the explicit consent of the participants.

To analyse the interview transcripts, we chose a thematic analysis. The thematic analysis is a strategy used as an approach to qualitative data interpretation by identifying, analysing, and

disclosing patterns or so-called themes within (Castleberry and Nolen 2018). It delivers methodical approaches for generating codes and themes and is only guided by the research question which can progress throughout the process (Berger-Grabner 2022). After transcription, the data was deconstructed by identifying key features through a coding process. This approach revealed several aspects that were not initially considered in the research question. The codes were then reorganised into themes, forming main thematic groups for further analysis. To enhance data visualization, a summary grid was used to summarise the themes, which were subsequently compiled into summary spreadsheets for a final round of abstraction. Data interpretation occurred both during and after this process.

Demographical information was collected in the beginning of and during the ongoing interview. At the time of the interviews, the participants lived in 7 different federal states and were mothers of one or two children born between 2010 and 2022. Two of the participants were currently pregnant with their second respectively third child. Seven of the participants held a doctorate in veterinary medicine and 2 were qualified veterinary specialists. More than half of the participants worked part-time, while 2 were self-employed and one currently unemployed. The German legal differentiation between part-time and full-time labour is made by the mean working hours of all full-time employees. Every labour that includes fewer working hours than the work time of comparable employees in full-time labour is considered as part-time (Statistisches Bundesamt n.d.).

This study has been conducted as a collaboration between two distinct fields of expertise: veterinary science and social science. While author 1 mainly works as a general veterinarian, author 3 is a habilitated sociologist in academia. Author 2 works as a veterinary professor in a leading academical position. During each phase of the project, we met to discuss the different aspects to the research involving both professions. While author 3 provided meaningful insight into and advised on

sociological practices relevant for this research, authors 1 and 2 shared their veterinary expertise of job-related issues on a regular basis. As quantitative methods are commonly used in the natural sciences, this interdisciplinary collaboration provided an opportunity to adopt a distinctive approach to data collection and analysis, yielding broader insights than those typically achieved through purely quantitative research. The value of interdisciplinary collaboration is not a novel concept and has already garnered significant attention (Coccia and Wang 2016). Interdisciplinary collaboration is highly valued by researchers for its adaptability and broad applicability (Leahey 2016). “The integration (or synthesis) of ideas, methods, and data from distinct disciplines has been a transformative force in science”, as Hackett and Rhoten (2009) state.

4. Empirical Results and Discussion – The Importance of Curative Practice for Vets

Based on the analysis, three key themes emerged from the interviews: (1) the desire for continued veterinary employment during pregnancy; (2) a loss of self-determination resulting from enforced employment restrictions; and (3) how female veterinarians managed their self-determination via exit strategies.

4.1 Continuation of labour

For many female veterinarians interviewed, it was important to continue to work during pregnancy or while breastfeeding. The following chapters shall shed some light on some of our corresponding empirical findings. For this porpoise quotes from the interviews were translated from German verbatim by the first author. Interviewed veterinarians were assigned pseudonyms based on their current or most recent field of work, number of pregnancies, employment status (employed or self-employed), and any additional designation.

4.1.1 Employees' standpoints

When asked about their desire to continue working during pregnancy, responses varied significantly based on the occupational field. Notably, all but one participant expressed a strong willingness to remain employed and openly communicated their intentions to their employers. As the German Maternity Protection Act and the Occupational Safety and Health Act impose significant constraints on the veterinary tasks during pregnancy and breastfeeding, concerned employees working the curative practice offered to shift their expertise to more administrative assignments. The primary concern was the fear of losing connection to their job and colleagues, leading to an externally imposed disconnection from their professional identity. However, all employers refused this concern. Some of the given arguments recited by the employed women were:

- In case of a veterinary emergency the risk of intervention by and therefore endangerment of the pregnant employee is far too high
- Veterinarians are overqualified and therefore too costly to be assigned solely to administrative tasks.

“And then he basically needed me out, so to speak.”, I.21AZ described her experience after expressing the wish to continue working during pregnancy to her employer.

Women working in industrial, governmental (excl. meat inspection) or research facilities were all allowed to continue working after disclosing their pregnancy. Veterinarians working in the industry primarily handled administrative duties and lecturing responsibilities, often involving carrying degrees of travel. As the pregnancy advanced, tasks shifted to increased stationary work therefore reducing time spent on travels. The workload of an official veterinarian usually composes of office work, the examination of animals and facility inspection. All participants were eager to remain working aforesaid tasks, being especially clear about not wanting to be solely appointed desk work. Legally speaking, direct contact with animals was the main hazardous task in their line of work. As official

veterinarians always work in pairs for legal reasons, the close-contact tasks got shifted to the non-pregnant partner thus enabling the pregnant employee to have points of contact with live animals with a reduced risk of injury and/or infection. All participants employed at research facilities were able to continue their tasks. Either they were not at risk as their line of work didn't require laboratory work or they made use of an exit strategy and were therefore able to continue their research unimpaired. In this case, the exit strategy was a non-disclosure of the pregnancy until the professional time was right.

Veterinarians working as meat inspectors in slaughterhouses are subjects to a highly hazardous environment, meaning they are at high risk to get in contact with infectious material (e.g. blood or other bodily fluids), hazardous situations and/or objects (e.g. slippery floors, sharp objects) and dangerous animals (Fehlhaber 2014). The job description therefore checks all the boxes on the "list of hazardous and forbidden tasks during pregnancy by law". Consequently, official veterinary inspectors are usually banned from work by hundred percent. Only one veterinarian expressed the wish not to continue working during pregnancy. She chose to get pregnant to get a break from her everyday work in the curative practice by counting on the implementation of an employment ban by her employer.

Employment bans can and will also be inflicted after birth, when there is a substantial risk for the mother or the breastfed newborn which can be exposed to hazardous agents (e.g. toxins or pathogens) through breast milk. Exclusively breastfeeding in the first six months of life is a worldwide recommendation by the WHO that is being carried through the Western World (Perez-Escamilla et al. 2023). Accordingly, the German Maternity Protection Act states that the post-partial ban from employment is only applicable when breastfeeding is still the only nutritional source for the baby. German jurisdiction sets the cut-off date at the baby's first birthday, unless there are medical reasons that say otherwise. There is still considerable disagreement regarding this article, as it does not

provide clear guidance on how to properly implement the ruling. The common approach seems to be the infliction of an employment ban until the day before the baby's first birthday demanding regular evidence of breastfeeding. This so-called proof is furnished by the delivery of a medical report, usually issued by the gynaecologist, stating that the woman in question is still breastfeeding. According to our participants, the assessment was conducted verbally by simply asking whether they were still breastfeeding.

The wish for continuing working during breastfeeding right after birth was only present in one participant. As she was employed at a research facility, she was able to resume work shortly after giving birth. This was important "to stay in the game", as she stated herself. Two veterinary curative practitioners resumed work after approximately six months of breastfeeding. Reaching the six months tag mattered to them as much as returning to their workplace as fast as possible.

4.1.2 Employers' standpoints

In our case, all participants working as self-employed veterinarians in the curative practice also employed other veterinarians and veterinary assistants. As a result, they were able to share their experiences and approaches to managing pregnant and/or breastfeeding employees. All agreed on the fact that the risks associated with the continued employment of a pregnant employee are often abstract and difficult to fully apprehend. They would in fact appreciate any form of support about the legal situation. Furthermore, all employers emphasised their apprehension about their potential co-responsibility for a possible health impact of the unborn. Additionally, addressing this matter with official institutions, like the German Federal Chamber of Veterinarians led to advice against the employment of pregnant employees due to zero-risk approaches. Employer P.52S stated:

At the time, I was also in contact with the Chamber of Veterinary Surgeons and asked: What does it look

like? She wanted to keep working. But I was explicitly advised against it. Because, and that was when I truly became fully aware of it, the responsibility would still lie with me if anything were to happen. Which is why, of course, I immediately put her on a professional employment ban.

From a business perspective, running a business and employing parents demands a certain amount of flexibility. Parents, especially of young children, are more frequently missing work because of children's sick days. As a workday in any medical field is already very unpredictable and therefore demands a readiness for changes, this adds to the requirement for flexibility in an employer or manager.

Some employees openly asked for the imposition of an employment ban even though they initially spoke against it. In those cases, the employers' hands were tied. Employees threatened to get a medical employment ban issued by their gynaecologists if the employers would not agree. Usually, gynaecologists issue those medical attests as they naturally are not well enough acquainted with the everyday work of every type of veterinary curative practitioner. In one case, the offer of an alternative workspace containing mainly administrative tasks, was denied by the employee.

In contrast, one veterinary employer already had made a continued employment possible with multiple pregnant or breastfeeding employees. For the creation of a safe workspace, she used the help of the Employers' Liability Insurance Association and discussed workable tasks the employee concerned. Given the current labour market conditions, having an employee who performs a reduced workload is still preferable to leaving a position entirely vacant.

When asked about their wishes for the veterinary field as employers, they emphasised the need for greater understanding of their challenges and a level of flexibility comparable to what is expected of them. Additionally, they expressed a desire for more open communication regarding family planning, even though they are legally prohibited from inquiring about it.

4.2 Self-determination

All participants emphasised the importance of self-determination on the job when inquired about the ideal workplace during pregnancy and breastfeeding. Depending on the field of work, ideas of how a self-determined workplace should look like varied.

Veterinarians working in practice found a reduced practical activity desirable, in which close contact to dangerous animals and agents was reduced to a minimum. Most importantly, this very reduction of allegedly hazardous activities is supposed to be determined by oneself, as all veterinarians are well educated in the handling of hazardous agents, animals and situations. Veterinarians employed in inspection offices and the industry expressed a desire for a greater flexibility in choosing their workplace, varying between office work at home and in-house. Additionally, veterinary inspection officers sought the ability to independently reduce fieldwork involving direct animal contact while remaining some level of interaction with animals from a distance.

The importance of self-determination was not contingent on the infliction of an employment ban. Nevertheless, an employment ban was imposed on all participants working in curative practice and slaughterhouses once they disclosed their pregnancy. The wish for self-determination was supported by employers as well as government and research facilities. Veterinary employees were given the opportunity to express their preferred tasks, which employers sought to accommodate.

The findings above clearly demonstrate that veterinarians are highly motivated to continue working during pregnancy. During their professional duties, it is essential that women have the right to determine which tasks they feel confident performing during pregnancy. Among similar statements by all veterinarians, P.22A of them said:

Yes, well, you're being patronised. Really. I mean, you should really be allowed to decide that for yourself.

Women in this study solely expressed a wish for reduction of close animal contact, not its

absolute prohibition. For all veterinarians, no matter the professional path, the contact with animals played a pivotal role. By the infliction of a prohibition of employment, the animal contact is withdrawn. For the women in this study, it was irrelevant if the prohibition was actually implemented or still a long way off. As our research showed, women who were concerned with the management of pregnant veterinarians in their current field of work were aware of the fact that there would be a realistic possibility for the implementation of an employment ban once they would be expecting a child – during pregnancy and most certainly also during the first year of breastfeeding. The mere chance of the imposition urged the women to act upon the loss of self-determination by changing career paths precautionary. Hence, prohibition of employment led to a loss of animal contact either way.

By removing this contact through implementing a prohibition of employment, the reason for passing through a demanding education is taken away. Furthermore, the reason for choosing this specific training route and becoming a veterinarian in the first place is removed. The essence is taken away.

Once the academic education is completed, veterinarians continue their training in the real world leading to a continued shaping of their occupational identity. Through interactions with other professionals, clients and animals, the individual's values and personal identity undergo a constant metamorphosis. After completing the early stages of their career, veterinarians ultimately form a more stable version of the occupational identity composed of a batch of values and priorities that are meaningful to the individual (Armitage-Chan and May 2019). Research showed that the engagement in meaningful occupation has a positive influence on a person's wellbeing (Kielhofner et al. 2002). It substantially contributes to personal identity formation and self-esteem (Andrew et al. 2019). As soon as meaningful occupation is withdrawn, the occupational identity gets disrupted (Armitage-Chan and May 2019).

Due to the withdrawal of the veterinarian from her workspace, a lack of belonging is created. The sense of belonging has proven to be one of the key elements regarding occupational well-being (Saraswati et al. 2019). Silver et al. (2024) states that belonging is “defined by the experience of personal involvement in a system where an individual feels valued, needed, and in alignment with the values or goals of a larger social group or institution”. A loss thereof can ultimately lead to employee-induced personnel reduction, also determined by increased suicidal tendencies (Duarte et al. 2020).

Both the disruption of the occupational identity and the loss of the sense of belonging contribute to the feeling of loss of self-determination as they emanate from the outside and therefore cannot be controlled by the individual. For this exact reason, veterinarians developed coping strategies aiding in exiting or even circumventing the loss of control that was imposed on them.

4.3 Exit strategies

To regain control over their own occupational fate and therefore reclaiming self-determination, veterinarians developed several exit strategies. Most of them led to a change of career within the veterinary sector. Some of them left the veterinary profession altogether.

Veterinarians who concerned themselves with the implications of being pregnant in the veterinary field before conceiving a child were aware of the occupational consequences following the pregnancy announcement in their current positions. Their way of addressing the matter consisted of analysing company policy, observing the management of pregnant co-workers and preparing mental pro and con lists concerning the compatibility of family and career. They established that their present position was inconsistent with raising a family due to long and unpredictable working hours, overtime hours without compensation, overall low pay and high-performance pressures. Regarding her career change, Ö.52AZ admitted:

The advantages of working for the public office are simply too great, actually [...] I don't have night shifts. The emergency weekend duties I do have are much more manageable [...] And those are paid extra.

Additionally, they observed that re-entering the workforce in part-time was rarely valued by colleagues and employers, frequently leading to the feeling of being a second-class employee. Additionally, the observation of company policy provided them with the possibility to assess the risk of a possible employment ban after a pregnancy announcement. The mere chance of the infliction provoked this group of women to act upon the loss of self-determination by changing career paths before starting a family. Consequently, they gained control and better compatibility of family and career. However, this decision made them, to a different extent, lose one of the essential elements of becoming a veterinarian - the animal contact. The gravity of the loss of animal contact was clearly expressed by I.12AZ:

When I studied this, I hadn't imagined that I would spend an entire day sitting at a desk [...] And I really miss that. I genuinely was a veterinarian with heart and soul. I loved doing it very, very much. But the working hours were just brutal.

Another group consisted of veterinarians who already found themselves in the situation of an executed prohibition of employment and were therefore attempting to cope with the loss of self-determination. Overall, their pregnancy announcements were not taken kindly. In an attempt to explain the overall reserved response by their employers, the collective rationalisation was the loss of one full-time employee in a time, when a shortage of skilled workers is a key challenge to business owners. By mentally expressing sympathy to their employers, individuals tried to make sense out of the changes in the relationship dynamics with their employers transitioning from amicable to distant. Some of the veterinarians even described suffering from a persisting depressed mood. I.21AZ stated:

Looking back, I think it contributed a lot to me focusing on certain things during the pregnancy. [...]

I mean, I was slightly depressed, to be honest. [...] But then I was sitting at home all day. And I mean, maybe for people who have a large circle of friends here already, or who are active because they've always lived here, it's naturally easier. But for me — I mean, I knew a few people, but not that many. My husband worked all day, just like I had before. [...] I really would have liked to do at least something. Anything at all. Even just administrative work, business-related tasks, entering things into a spreadsheet — whatever. I would have been happy to do that. And yes, that was difficult, I have to say, also psychologically.

Additionally, their lacking engagement in work led to an increased societal pressure as this strongly collides with high German work ethics. Those perceptions are in accord with multiple studies that have described the effect of sudden unemployment on mental health. The loss of a job has numerous mental and physical consequences for those affected, including a reduction of self-esteem, sense of purpose and sense of control (Brand 2015). It does present a disruption of the individual's daily structure, status and source of professional development as well as the social patterns of interactions (Brand 2015). While prohibition of employment certainly did not include a termination of the labour contracts initially, some of the veterinarians in this group were concerned that this would be the next step following the phasing out of their dismissal protection 8-12 weeks post-partum. Many of them felt guilty towards their employers for unexpectedly stepping away, even though it was not their own choice. They believed that the prospect of not returning to their full-time position anytime soon made the situation more difficult, heightening the fear of being dismissed. I.21AZ shared her thoughts during the employment ban:

What happens now? Will he take me back? Then my mind started racing — reading the legal regulations. What are my rights? What am I allowed to do? What am I not allowed to do? Up to what point do I have to disclose something? How does the whole thing have to be organised [...]?

For some, this initial fear eventually became a reality. After being dismissed Ö.42AZ described the change of her career path:

And then I thought, well, during this first year of breastfeeding I'll just see whether any alternatives come up. Then I did another training course. [...] And then I found a position in quality management [...] in human medicine, and basically worked there for about a year.

To retain control all along and not sacrificing the contact to animals, a third group evolved. Individuals in this group decided to conceal their pregnancy as long as possible and as long as needed. In those cases, the main motivation was the possibility to continue work and define the end of work self-determinedly. In other words, they sought to order their affairs in their own time until the pregnancy-related pausing of employment was inevitable - either due to risks for the unborn child that have risen to an intolerable level of irresponsibility or due to physical impairment. Depending on the line of work, this was possible through a longer or shorter period of pregnancy. While most of them continued working out of an intrinsic motivation of self-determination, some of them chose this path out of fear of being replaced even though they feared infection by animal bites or zoonotic pathogens. For this group, retention of control over their own occupational fate as much as self-determination presented the key factors in their decision making. Ö.32A described her thought process regarding the announcement of her pregnancy as follows:

And actually, I found it difficult to say that in the practice, because I knew that if I said it, I'd be out immediately [...] I found out in the seventh week [...] that I was expecting twins. And in the end, it was around the 17th or 18th week when physically I just couldn't hide it anymore. [...] And that was the end of it. Exactly. At the practice / yes, actually, immediately out. Finished. Over and done with.

However, there was one mutual issue that unified the members of all three groups: the fear to fall behind professionally. Ultimately, this was the common denominator in the measures taken. It is described by the fear of losing practical skills as much as ceasing to being on top of scientific insights. As prohibition of employment leads to a prolongation of the time away from the job, an increase in alienation from the job takes place.

Consequently, female veterinarians tended to develop anxieties concerning the return to work after parental leave resulting in low self-esteem, as I.21AZ portrayed:

So yes, it changes you. This employment ban, and having a child in general. It changes you a lot. And I think that if you don't go straight back into practice and somehow push yourself to do it, it becomes harder rather than easier.

It is a commonly known circumstance, that women are more inclined to refuse to apply for a job or a promotion if their qualifications don't fully match the required list than their male counterparts, who will already be willing to take the chance if they only possess a few of the demanded skills (Carlin et al. 2018). In other words, female veterinarians who experience a gradual decline in practical skills due to extended time away from the profession may also suffer a corresponding decrease in self-esteem over time, as Ö.22AZ described:

I was out for quite a long time [...] So I think there are actually many things I wouldn't trust myself to do anymore [...].

This diminished self-confidence can discourage them from applying for positions unless they feel fully qualified. Furthermore, the veterinary field is characterised by significant performance pressure, aggravated by a shortage of skilled professionals. In turn, the consequences of reduced self-esteem contribute to this workforce shortage, creating a vicious cycle that negatively impacts both employees and employers.

When the veterinarians were asked where they saw themselves professionally in five years, only one of the five currently working in veterinary practice envisioned herself still working in clinical practice. In contrast, veterinarians who had already left clinical practice generally saw themselves remaining in their current field of work over the next five years.

5 Conclusions and Implications for Future Research

In this study, we took a closer look on the impacts of the infliction of prohibitions of employment on female veterinarians in Germany. In detail, we drew attention to the ways in which legislation that was initially passed for the protection of the mother and her (unborn) child is interpreted in a way that promotes heteronomy. A distinct aspect of this study is placing special emphasis on female autonomy and how easily it can be taken away, even in the western world.

We discovered three key elements that had great influence on the female autonomy in the veterinary field: continuation of labour during pregnancy and breastfeeding, the necessity for self-determination and the development of exit strategies in case previous needs are not met. In order to examine varying approaches to the management of pregnant and breastfeeding employees, it was necessary to explore the experiences of female veterinarians across four distinct veterinary fields. The prohibition of employment has many different impacts on women in the veterinary field, ranging from economic impacts to effects on mental health and well-being. We have been able to gain insight on several approaches to the prohibition of employment always resulting in one determinant that turned out to be the essence of becoming a veterinarian, namely the animal contact. It is centred in the very core of the veterinary identity. Although working conditions in curative practice are often unfavourable, veterinarians who changed career paths, are deeply missing contact with animals. By removing the animal from the veterinarian, a deep, often irreversible humiliation of the occupational identity takes place.

Additionally, highly educated women with the wish to start a family are not being heard and taken seriously in their wish to continue their professional training and keeping up their high work ethics, resulting in an obstruction of female self-determination and loss of control. Both, the high response rate and the interviews themselves

highlight the strong need to communicate these experiences, as well as the profound impact that the loss of autonomy has on female veterinarians.

In 2025, the average age of first-time mothers in Germany was 30.5 years (Statistisches Bundesamt 2026). Once they enter parenthood, women tend to suspend their careers to attend to the arising care-giving work and increased workload at home, therefore reducing their level of participation on the labour market (Caliendo and Künn 2015; Skora et al. 2020). When women seek to return to their positions after parental leave or the mandated employment prohibition during the nursing period, they often prefer part-time work for family-related reasons. The lack of available childcare often necessitates that one parent reduces their working hours. In most cases, the mother assumes this role and returns to work part-time, as fathers typically earn higher wages. According to Skora, Rüger, and Stawarz (2020), the gender pay gap in Germany has remained relatively unchanged since the early 2000s and still stands at 18 percent in 2024, according to Federal Statistics. Furthermore, the statistics show that the gross hourly salary of women nearly flatlines starting at the age of 30, while it steadily increases in men with advancing age. This phenomenon is usually referred to as ‘the motherhood wage penalty’ and ‘the fatherhood wage premium’ (Cukrowska-Torzewska and Lovasz 2020). In accordance, our study displayed that female veterinarians are being penalised for motherhood in the form of lower wages by excluding them from rises in salary or monetary benefits. One main reason seems to be their long downtime due to the prohibition of employment which has been implemented on them heteronomously.

Female veterinarians that have been excluded from the curative practice for a considerable time will significantly downscale their ability to trust themselves to do the job. In fact, this is a prime example for a general phenomenon, that has been observed in multiple studies. The lower occupational self-esteem has proven to be a female attribute that is reflected in a lower willingness in women to apply for a less fitting

position while men will usually approach the lack of knowledge with more confidence (Carlin et al. 2018). Additionally, unfavourable working conditions in curative practice will lead to a dissociation from the job, forcing the individual to develop a fitting exit strategy.

Since veterinary medicine has been a profession dominated by females for the last three decades, it has since become clear that the infliction of the prohibition of employment on female employees does contribute to the skill shortage in veterinary medicine. The legal protection of pregnant and nursing employees is a great privilege that appertains to women in Europe. Nevertheless, the German realisation of the former EU Directive is one of the strictest in the EU supporting the ‘zero-risk-policy’ that is frequently implemented by German employers (Güder et al. 2024). At the same time, it leads to a continuous loss of emergent, skilled workforce. There is a great need for a bolder approach in dealing with pregnant and breastfeeding women at workplaces. Additionally, employers require more legal advice and support in implementing these plans. Furthermore, concepts for returning to work after parental leave need to be modernised.

The German Maternity Protection Act as we know it today was implemented in 1952, setting the framework for safe and strictly regulated working conditions for expecting mothers and their unborn children. Ever since, the work environment and the female gainful occupation have changed drastically, which demanded a grand necessity for amending maternity protection (John and Stutzer 2002). On that account, Germany amended its Maternity Protection Act in 2018 (Arndt and Handbauer 2018). Unfortunately, although the main goal was to retain female workforce under controlled conditions, this has led to a setback in the hard-won female autonomy. A cooperative example of implementing maternity protection laws can be found in Switzerland, where employers conduct the required risk assessment together with their pregnant employees using a traffic light system (Gesellschaft Schweizer Tierärztinnen und Tierärzte 2023). Contrary to this, communication

with the German Federal Chamber of Veterinarians concerning the employment of pregnant veterinary employees usually leads to the induction of insecurity and fear in employers resulting in the infliction of prohibition of employment. It can be concluded that the need for focal points to gain support in that matter is significantly high.

Additionally, our results show that female veterinarians strive to continue working during pregnancy. The entitlement to self-determinedly define occupational tasks during of pregnancy is crucial to them. Furthermore, veterinarians have the skill to correctly detect and assess occupational health risks since veterinary medicine presents a scientific field that is concerned with the prevention, control and treatment of diseases. As veterinarians are in fact humans, their safety needs to be insured. For this purpose, veterinary education delivers a broad range of competence, whereof two aspects are of particular importance. On the one hand, diseases can be caused by zoonotic pathogens, which is why veterinarians are educated about the route of transmission to and symptoms of humans. On the other hand, hazardous substances, e.g. medications, are administered by humans. For this purpose, veterinarians need to be conscious about the potential hazards for handlers. Therefore, the education of veterinarians provides them with a far-reaching competence to perform autonomous self-protection. In the future, this accomplished competence should be trusted more by all instances.

Furthermore, the research should be extended to a comparative approach in order to shed light on different gender regimes in various countries. For example, whilst the Netherlands face a comparable situation in veterinarians study programs considering the rise of the women’s percentage in the last three decades (Koolmees 2000), the employment structure differs from Germany and would promise a fruitful research ground for deeper insights into the entanglements of professional identity and gender for veterinarians. Also, comparative approaches across professional fields could be of interest and promising, e.g. looking at

employment bans for female hairdressers, pilots, etc.

author under the limits of ethics and privacy. The data are not publicly available due to privacy or ethical restrictions.

Acknowledgements and Funding Information

The data collected and analysed for this article was part of the thesis on the situation of pregnant and breast-feeding veterinarians in Germany by Lisa Ulmer-Stein at the Faculty of Veterinary Medicine at the LMU Munich.

Conflict of Interest Statement

All authors declare that they have no conflicts of interest. The third author was specifically excluded from any decisions regarding this article in the board of the working paper series and had no influence on the article's acceptance, review or processing whatsoever.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding

Bibliography

- Adeoye-Olatunde, Omolola A. and Olenik, Nicole L. 2021. "Research and scholarly methods: Semi-structured interviews." In: *Journal of the American College of Clinical Pharmacy* 4: 1358–1367.
- Andrew, Catherine, Phillipson, Lyn and Sheridan, Lynnaire. 2019. "What is the impact of dementia on occupational competence, occupational participation and occupational identity for people who experience onset of symptoms while in paid employment? A scoping review." In: *Australian Occupational Therapy Journal* 66, 2: 130–144.
- Arbe Montoya, Alejandra I., Hazel, Susan J., Hebart, Michelle L. and McArthur, Michelle L. 2021. "Risk factors associated with veterinary attrition from clinical practice: A descriptive study." In: *Australian Veterinary Journal* 99, 11: 495–501.
- Armitage-Chan, Elizabeth and May, Stephen A. 2019. "The Veterinary Identity: A Time and Context Model." In: *Journal of Veterinary Medical Education* 46, 2: 153–162.
- Arndt, Marcel and Handbauer, Christina. 2018. "Stillschutz nach dem Gesetz zur Neuregelung des Mutterschutzrechts." In: *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz* 61, 8: 1001–1007.
- Baumgärtel, Otto A. 2016. "Berufswunsch Tierärztin/Tierarzt." In: *Deutsches Tierärzteblatt* 1, 2016: 12–17.
- Berger, Peter L. and Luckmann, Thomas. 2012. *Die gesellschaftliche Konstruktion der Wirklichkeit: Eine Theorie der Wissenssoziologie*. 24th Edition. Frankfurt am Main: Fischer.
- Berger-Grabner, Doris. 2022. "Angewandte qualitative Sozialforschung." In: Berger-Grabner, Doris (ed.). *Wissenschaftliches Arbeiten in den Wirtschafts- und Sozialwissenschaften*. 137–168. Wiesbaden: Springer.
- Blumer, Herbert. 1962. "Society as Symbolic Interaction." In: Rose, Arnold M. (ed.). *Human Behavior and Social Processes: An Interactionist Approach*. 179–192. Boston: Houghton Mifflin.

- Blumer, Herbert. 1969. "Symbolic Interactionism: Perspective and Method." Berkeley: University of California Press.
- Brand, Jennie E. 2015. "The Far-Reaching Impact of Job Loss and Unemployment." In: *Annual Review of Sociology* 41: 359–375.
- Bundestierärztekammer e. V. 2024. "Statistik 2023: Tierärzteschaft in der Bundesrepublik Deutschland." In: *Deutsches Tierärzteblatt* 72, 7: 844–854.
- Bundestierärztekammer e. V. n.d. "Tätigkeitsbereiche." Bundestierärztekammer e. V. Last Access on 22nd August 2026.
<https://www.bundestieraerztekammer.de/tieraerzte/berufsbild/tactivities/>.
- Bundestierärztekammer e. V. 2023. "Statistik 2022: Tierärzteschaft in der Bundesrepublik Deutschland." In: *Deutsches Tierärzteblatt* 71, 7: 11.
- Bundesverband angestellter Tierärzte e. V. n.d. "Gefährdungsbeurteilung des Arbeitsplatzes für schwangere Tierärztinnen." Last Access on 22nd August 2026.
<https://bundangestelltertieraerzte.de/infothek/schwangerschaft-elternschaft/gefachrdungsbeurteilung-des-arbeitsplatzes-fuer-schwangere-tieraerztinnen/>.
- Caliendo, Marco and Künn, Steffen. 2015. "Getting back into the labor market: the effects of start-up subsidies for unemployed females." In: *Journal of Population Economics* 28, 4: 1005–1043.
- Campbell, Megan, Hagen, Briana N. M., Gohar, Basem, Wichtel, Jeffrey and Jones-Bitton, Andria. 2023. "A qualitative study exploring the perceived effects of veterinarians' mental health on provision of care." In: *Frontiers in Veterinary Science* 10: 1–9.
- Carlin, Barbara A., Gelb, Betsy D., Belinne, Jamie K. and Ramchand, Latha. 2018. "Bridging the gender gap in confidence." In: *Business Horizons* 61, 5: 765–774.
- Castleberry, Ashley and Nolen, Amanda. 2018. "Thematic analysis of qualitative research data: Is it as easy as it sounds?" In: *Currents in Pharmacy Teaching and Learning* 10, 6: 807–815.
- Chamberlain, T. C., Catano, Victor M. and Cunningham, Donald P. 2005. "Personality as a Predictor of Professional Behavior in Dental School: Comparisons with Dental Practitioners." In: *Journal of Dental Education* 69, 11: 1222–1237.
- Coccia, Mario and Wang, Lili. 2016. "Evolution and convergence of the patterns of international scientific collaboration." In: *Proceedings of the National Academy of Sciences of the United States of America* 113, 8: 2057–2061.
- Cohen, Deborah J. and Crabtree, Benjamin F. 2008. "Evaluative criteria for qualitative research in health care: controversies and recommendations." In: *Annals of family medicine* 6, 4: 331–339.
- Connell, Raewin. 1995. *Masculinities*. Sidney: Allen & Unwin.
- Connell, Raewin W. and Messerschmidt, James W. 2005. "Hegemonic Masculinity: Rethinking the Concept." In: *Gender and Society* 19, 6: 829–859.
- Crossley, Jim and Vivekananda-Schmidt, Pirashanthie. 2009. "The development and evaluation of a Professional Self Identity Questionnaire to measure evolving professional self-identity in health and social care students." In: *Medical teacher* 31, 12: 603–607.
- Cukrowska-Torzewska, Ewa and Lovasz, Anna. 2020. "The role of parenthood in shaping the gender wage gap – A comparative analysis of 26 European countries." In: *Social science research* 85: 102355.

- Darius, Sabine, Heinemann, Franziska, Meyer, Frank and Boeckelmann, Irina. 2023. “Arbeitsplatz OP-Saal – Was muss der Chirurg über die Arbeitsmedizin wissen?” In: *Zentralblatt für Chirurgie* 148, 1: 33–42.
- Deutscher Ärztinnenbund e. V. 2021. “Betroffene bestätigen: Mutterschutzgesetz behindert Ärztinnen-Karriere.” Last Access on 22nd August 2026.
https://www.aerztinnenbund.de/Betroffene_bestaetigen.3357.0.2.html/print.
- Duarte, Dante, El-Hagrassy, Mirret M., Couto, Tiago Castro E., Wagner, Gurgel, Fregnis, Felipe and Correa, Humberto. 2020. “Male and Female Physician Suicidality: A Systematic Review and Meta-analysis.” In: *Journal of the American Medical Association psychiatry* 77, 6: 587–597.
- Epp, Tasha and Waldner, Cheryl. 2012. “Occupational health hazards in veterinary medicine: Zoonoses and other biological hazards.” In: *Canadian Veterinary Journal* 53: 144–150.
- Fedder, Caroline, Wrede, Johanna and Galon, Caroline. 2022. “Positionspapier der DGMKG zur Berufstätigkeit von MKG-Chirurginnen in der Schwangerschaft.” In: *Die MKG-Chirurgie* 15, 4: 322–324.
- Federation of Veterinarians of Europe (FVE). 2023. “FVE VetSurvey 2023: The veterinary profession demography across Europe”. Last Access on 23rd August 2026.
<https://fve.org/vetsurvey-is-now-available>.
- Fehlhaber, Karsten. 2014. “Occupational Hazards.” In: *Meat Inspection and Control in the Slaughterhouse* 21: 495–510.
- Gall, Meredith D., Gall, Joyce P. and Borg, Walter R. 2003. “Collecting Research Data with Questionnaires and Interviews.” In: Gall, Meredith D., Gall, Joyce P. and Borg, Walter R. (eds.). *Educational research: An introduction*. 221–252. Boston: Allyn and Bacon.
- Gesellschaft Schweizer Tierärztinnen und Tierärzte. 2023. “Branchen-Risikobeurteilung: Damit schwangere und stillende Frauen sicher arbeiten können.” Last Access on 22nd August 2026.
<https://www.gstsvs.ch/de/news-archiv/news/branchen-risikobeurteilung-damit-schwangere-und-stillende-frauen-sicher-arbeiten-koennen>.
- Güder, Gülmisal, Boer, Jana, Busch, Sonia, Gaede, Luise, Graf, Tobias, Herberg, Ulrike, Kretschmer, Angela, Krüger, Martina, Lerchenmüller, Carolin, Merbecks, Moritz, Nebe, Katja, Neizel-Wittke, Mirja, Ochmann, Uta, Rudolph, Tanja K., Sack, Stefan and Körber, Maria Isabel. 2024. “Schwangerschaft und Mutterschutz in der Kardiologie und in der Kinder- und Jugendkardiologie.” In: *Die Kardiologie* 18, 2: 200–212.
- Hackett, Edward J. and Rothen, Diana R. 2009. “The Snowbird Charrette: Integrative Interdisciplinary Collaboration in Environmental Research Design.” In: *Minerva* 47, 4: 407–440.
- Hafen, McArthur Jr., Reisbig, Allison M. J., White, Mark B. and Rush, Bonnie R. 2008. “The first-year veterinary student and mental health: the role of common stressors.” In: *Journal of veterinary medical education* 35, 1: 102–109.
- Hube, Larissa, Kleineberg, Nina N., Eisenberg, Hanna J., Berlit, Peter and Klein, Christine. 2022. “Arbeiten als schwangere Ärztin während der Coronapandemie – gegen ein generelles Beschäftigungsverbot.” In: *Zeitschrift der Deutschen Gesellschaft für Neurologie* 5, 4: 261–264.
- Jensen, Katharina C., Schulte-Bahrenberg, Sabine, Blaschka, Carina, Brandebusemeyer, Elisabeth, Ewert, Maren, Menzel, Anne, Munzel, Juliane, Steingraber, Lilith, Niggemann, Johanna R., Damhuis, Lianne, Bonin, Tim, Remien, Dierk and Wunderlich, Christian. 2022. “Befragung

- angestellter Tierärztinnen in Deutschland – Teil 1: Arbeitsbedingungen.” In: *Berliner und Münchener Tierärztliche Wochenschrift* 135: 1–15.
- Jeyaretnam, Jared and Jones, Helen. 2000. “Physical, chemical and biological hazards in veterinary practice.” In: *Australian veterinary journal* 78, 11: 751–758.
- John, Birgit and Stutzer, Erich. 2002. “Erwerbsverhalten von Erziehungsurlauberinnen.” In: *Zeitschrift für Familienforschung* 14, 3: 215–233.
- Kaartinen-Koutaniemi, Minna and Lindblom-Ylänne, Sari. 2008. “Personal epistemology of psychology, theology and pharmacy students: a comparative study.” In: *Studies in Higher Education* 33, 2: 179–191.
- Kersebohm, Johanna C., Doherr, Marcus G. and Becher, Anne M. 2017. “Lange Arbeitszeiten, geringes Einkommen und Unzufriedenheit: Gegenüberstellung der Situation praktizierender Tiermediziner mit vergleichbaren Berufsgruppen der deutschen Bevölkerung.” In: *Berliner und Münchener Tierärztliche Wochenschrift* 130: 1–12.
- Kielhofner, Gary, Borell, Lena, Freidheim, Ladonna, Goldstein, Karen, Helfrich, Christine, Jonsson, Hans, Josephsson, Staffan, Mallinson, Trudy and Nygard, Louise. 2002. “Crafting Occupational Life.” In: Kielhofner, Gary and Julet, Tim (eds.). *A Model of Human Occupation: Theory and Application*. 124–144. Baltimore: Pippincott Williams & Wilkins.
- Koolmees, Peter A. (2000). “De feminisering van de diergeneeskunde in Nederland, 1925-2000.” In: *Argos* 23: 125–131.
- Kozak, Agnessa, Wendeler, Dana, Schedlbauer, Grita and Nienhaus, Albert. 2012. “Unfälle und Berufskrankheiten bei Beschäftigten in Tierarztpraxen.” In: *Deutsches Tierärzteblatt* 9: 1230–1236.
- Leahey, Erin. 2016. “From Sole Investigator to Team Scientist: Trends in the Practice and Study of Research Collaboration.” In: *Annual Review of Sociology* 42, 1: 81–100.
- Lewis, Ione. 2004. “Gender and professional identity: A qualitative study of social workers practising as counsellors and psychotherapists.” In: *Australian Social Work* 57, 4: 394–407.
- Li, Xiaotian. (2021). “Strategic flexibility in a male-dominated occupation: women software engineers in China.” In: *Journal of Gender Studies* 32, 4: 1–13.
- Nienhaus, Albert, Skudlik, Christoph and Seidler, Andreas. 2005. “Work-related accidents and occupational diseases in veterinarians and their staff.” In: *International archives of occupational and environmental health* 78, 3: 230–238.
- Noble, Christy, O’Brien, Mia, Coombes, Ian, Shaw, Paul N., Nissen, Lisa and Clavarino, Alexandra. 2014. “Becoming a pharmacist: Students’ perceptions of their curricular experience and professional identity formation.” In: *Currents in Pharmacy Teaching and Learning* 6, 3: 327–339.
- Ochmann, Uta, Wicker, Sabine and Michels, Guido. 2021. “Pregnant employees in the healthcare system: Protection through vaccination against SARS-CoV-2 and wearing FFP2 masks.” In: *Medizinische Klinik – Intensivmedizin und Notfallmedizin* 116, 6: 527–529.
- Ohlndieck, Lutz. 2003. “Die Anatomie des Glashauses: Ein Beitrag zum Verständnis des Glass-Ceiling-Phänomens.” In: Pasero, Ursula (ed.). *Gender – from Costs to Benefits*: 183–193. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Perez-Escamilla, Rafael, Tomori, Cecilia, Hernandez-Cordero, Sonia, Baker, Phillip, Barros, Aluisio J. D., Begin, France, Chapman, Donna J., Grummer-Strawn, Laurence M., McCoy, David, Menon,

- Purnima, Ribeiro Neves, Paulo Augusto, Piwoz, Ellen, Rollins, Nigel, Victora, Cesar G. and Richter, Linda. 2023. "Breastfeeding: crucially important, but increasingly challenged in a market-driven world." In: *Lancet* 401: 472–485.
- Platt, Susanne L. and Freytag, Katharina. 2024. "Betrachtung der Statistik der Deutschen Tierärzteschaft - Vergleichende Auswertung der letzten 20 Jahre." In: *Deutsches Tierärzteblatt* 72, 8: 985–994.
- Puhahn-Schmeiser, Barbara, Hennel, Eva K., Gross, Christiane, Raestrup, Heike, Bühren, Astrid, and Mangler, Mandy. 2023. "Female physician and pregnancy- effect of the amended German maternity protection act on female doctors' careers." In: *Innovative surgical sciences* 8, 1: 23–28.
- Sánchez-Moreno, Marita, López-Yáñez, Julián, and Toussaint-Banville, Manon. 2023. "Professional identity formation of female school principals: Gender and emotionality connections." In: *Management in Education*, 37, 1: 13–24.
- Saraswati, Jaya Mai Rose, Milbourn, Benjamin Tyler and Buchanan, Angus James. 2019. "Re-imagining occupational wellbeing: Development of an evidence-based framework." In: *Australian occupational therapy journal* 66, 2: 164–173.
- Seidler, Andreas, Schmeißer, Giso, Selbig, M., Drews, Arne, Hammer, Ivonne, Liebe, Susanne, Nowak, Chris, Riedel-Heller, Steffi, Weiss, Melani, Catrein, Beate, Groneberg, David and Nienhaus, Albert. 2017. "Einsatz von Schwangeren im OP." In: *Zentralblatt für Arbeitsmedizin, Arbeitsschutz und Ergonomie* 68, 1: 27–29.
- Silver, Julie K., Fleming, Talya K., Ellinas, Elizabeth H., Silver, Emil M., Verduzco-Gutierrez, Monica, Bryan, Katherine M., Flores, Laura E. and Sarno, Danielle L. 2024. "Individual, organizational, and policy strategies to enhance the retention and a sense of belonging for health care professionals in rehabilitation medicine." In: *PM and R* 16, 7: 772–778.
- Skora, Thomas, Rüger, Heiko and Stawarz, Nico. 2020. "Commuting and the Motherhood Wage Gap: Evidence from Germany." In: *Sustainability* 12, 14: 1–19.
- Statistisches Bundesamt. 2026. "Daten zum durchschnittlichen Alter der Mutter bei Geburt insgesamt und 1. Kind nach Bundesländern." Last Access on 22nd August 2026.
<https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Geburten/Tabellen/geburten-mutter-alter-bundeslaender.html>.
- Statistisches Bundesamt. 2024. "Mehr als ein Drittel der Studienanfängerinnen und -anfänger im MINT-Bereich sind Frauen." Pressemitteilung Nr. N003 vom 17. Januar 2024. Last Access on 15th August 2026.
https://www.destatis.de/DE/Presse/Pressemitteilungen/2024/01/PD24_N003_213.html.
- Statistisches Bundesamt n.d. "Arbeitsmarkt. Teilzeit." Last Access on 22nd August 2026.
https://www.destatis.de/DE/Presse/Pressemitteilungen/2024/01/PD24_N003_213.html.
- Tomlinson, Michael and Jackson, Denise. 2019. "Professional identity formation in contemporary higher education students." In: *Studies in Higher Education* 46, 4: 885–900.
- Vieira, Adriane, de Padua Carrieri, Alexandre, Monteiro, Plinio Rafael Reis and Roquete, Fatima Ferreira. 2017. "Gender Differences and Professional Identities in Health and Engineering." In: *BAR – Brazilian Administration Review* 14, 1.
- Weis-Müller, Barbara Theresia, Mohr, Rebecca, Seeberg, Lucas and Huber, Rita. 2016. "Schwanger in der Gefäßchirurgie." In: *Gefäßchirurgie* 21, 2: 105–110.

- West, Candace and Zimmerman, Don H. 1987. "Doing gender." In: *Gender and Society* 1, 2: 125–151.
- Witzel, Andreas. 2000. "Das problemzentrierte Interview." In: *Forum Qualitative Forschung (FQS)* 1, 1.