

Gendering, Biology, and Stereotypes in Entrepreneurship Training

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Abstract: This conceptual paper interrogates the gendered assumptions underpinning perceptions of women's capacity for economic agency. It challenges biologically determinist and historically entrenched narratives that continue to shape entrepreneurship discourse. It unravels the persistent stereotypes, rooted in outdated constructions of women's domestic seclusion, workforce needs, and gendered labour divisions, that have relegated women to the margins of entrepreneurship and innovation. It critiques how postfeminist and neoliberal feminist narratives obscure the socio-historical processes through which these assumptions have been normalised. Through its critical reconceptualisation of gender, biology, and economic agency, it highlights how normative legacies continue to shape attitudes to gender and entrepreneurship and innovation. It argues for the integration of structural and historical analysis into entrepreneurship education to unsettle essentialist logics and equip students with the conceptual tools to examine how entrepreneurial subjectivities are institutionally and discursively constituted. It proposes a shift toward reflexive pedagogical approaches that encourage students to critically reflect on how assumptions, stereotypes, and practices are embedded in understandings of economic agency and gender. Its theoretical contribution is its advance of the imperative of analytical engagement with the socio-historical formation of institutional frameworks and their normative legacies to unpack gendered assumptions that continue to undermine women's entrepreneurial and innovation capacities.

Keywords: Entrepreneurship Education, Gender and Entrepreneurship, Mate Guarding Theory, Neoliberal Feminism, Postfeminism, Women's Economic Agency.

1. Introduction

This conceptual paper explores the historical, cultural, and socio-economic foundations that have shaped perceptions of women's capacity for economic agency, arguing that understanding these roots is essential for addressing persistent gender disparities in entrepreneurial ecosystems. By critically investigating the origins of the stereotypes and narratives that continue to influence how women's economic roles are evaluated, this study offers a theoretical basis for advancing gender equity. Embedding gender awareness into entrepreneurship education will serve as a strategic intervention to challenge entrenched biases and promote more inclusive entrepreneurial practices. In doing so, education becomes not only a vehicle for skills development but a means of transforming perceptions and opening equitable opportunities.

Despite the proliferation of university programmes designed to foster entrepreneurial competencies, a critical gap remains in addressing the persistent influence of gendered perceptions within the entrepreneurial ecosystem. Deeply rooted stereotypes continue to position men as the default entrepreneurs and women as peripheral or less capable, subtly shaping how entrepreneurship is both practised and understood. Associated narratives reinforce structural inequities and undermine inclusivity in entrepreneurship. As Ahl (2006) demonstrates, dominant discourses are sustained through cultural and institutional norms that perpetuate assumptions about gender and entrepreneurial competence. These perceptions typically remain unchallenged in educational spaces, necessitating the introduction of gender awareness components that foster critical engagement with the socio-cultural dimensions of entrepreneurship and innovation.

2. The Historical Exclusion of Women From Economic Life

Biases against women's entrepreneurial and innovation capabilities stem from historical practices, principally the seclusion of women to ensure paternity certainty, the demands of frequent pregnancies prior to the availability of effective birth control, and the emphasis on upper body strength in labour-intensive sectors such as agriculture, mining, construction, transport, and the military. These historical issues created rigid gender roles that have given rise to an essentialist view of gender meaning a belief that gender is determined by biological traits that are innate and universal, and that men and women have distinct qualities that are rooted in their biological sex.

However, the advent of mechanization, automation, and digitalization has significantly altered the demands placed on the labour force, while advances in birth control have reduced the number of children women typically bear. Despite these transformative changes, the gender roles shaped by historical labour requirements and family dynamics persist and are still typically upheld as "natural." These enduring perceptions have contributed to prejudices that question women's capabilities as economic agents most especially in innovation and

entrepreneurship. By examining how intersections of gender and work emerge in specific historical, cultural, and geopolitical contexts, students can gain a deeper understanding of how societal and cultural norms are generated and perpetuated. Analysing how these norms evolve in response to changing economic, political, and social realities can equip students with the tools to critically assess and disrupt the gender biases that persist within entrepreneurship.

3. Mate Guarding: The Roots of Economic Exclusion

The first question to address, and the one that I will focus on given the limitations of a single paper, is the origins of women's exclusion from the economic sphere. Why have women been secluded within the domestic domain and systemically barred from productive labour? The source of their domestic seclusion lies in the practice of mate guarding. This necessitates some consideration of the biological basis for gendered roles, the primacy of the reproductive instinct, and the very different roles of men and women in reproduction. The enormous asymmetry in reproductive biology between men and women has had profound implications for evolutionary strategies and social structures (Buss, 2002). The salient issue is that of paternity uncertainty by which is meant that, men, unlike women, cannot be biologically certain of their genetic relationship to children. A primary response to paternity uncertainty, in contrast to maternity certainty, was to control a female partner's access to other males and attempts to ensure female sexual fidelity. This response to the uncertainty around male reproduction and men's fear of investing in another man's child spawned the practice of keeping their mates secluded, known as mate guarding, to preserve reproductive exclusivity. The construct of female honour, generated as a societal norm to support mate guarding, serves to increase woman's sexual fidelity to ensure their own social approbation and encourages women to maintain their seclusion (Kupfer and Gul, 2023). Similarly, the socio-legal category of illegitimacy functions as a mechanism to reinforce patriarchal lineage through the imperative of paternity certainty, to regulate female sexuality by enforcing norms of chastity and marital fidelity, and to uphold heteronormative family structures by positioning the nuclear family as both morally superior and economically legitimate (Smart and Smart, 1978). Social expectations that frame women as biologically predisposed to find existential fulfilment in reproductive work have evolved around emerged from these socio-legal structures (Friedan, 2013).

In the contemporary world, the practice of mate guarding is vividly exemplified in the context of Afghanistan, where, under Taliban rule, women have been forced into almost total domestic seclusion through legislative restrictions. They are not permitted to attend secondary school or university, are largely banned from the workforce, barred from public spaces such as parks, and must wear full body covering in public. However, it is important to recognize that comparable restrictions were prevalent historically in European societies where marked constraints on women were common even in the 20th century and beyond. In the UK, for example, the law of coverture meant that a woman's legal identity was subsumed under her husband's on her marriage, and she could not own property independently. Her husband had full control of her assets and income, had legal authority over her body, and could not be charged with raping her until 1991. The legal structures of coverture were not dismantled until the 20th century. It was only in 1975 that women in the UK were allowed to open a bank account in their own name and, even then, needed the signature of their father if they were not married. Women were not permitted to work in the London Stock Exchange until 1973. It was not until 1975 that the UK Sex Discrimination Act prohibited discrimination based on sex in employment and education. Only as late as 2010 was legal protection for women in the workplace and public arena reinforced with the Equality Act which consolidated various anti-discrimination measures. The underlying rationale for such legal frameworks was grounded in a patriarchal logic aimed at preserving women's structural economic subordination and guaranteeing paternity certainty, thereby ensuring that male investment was devoted exclusively to their biological offspring.

These attempts to manipulate the implications of the biological imbalance between maternity certainty versus paternity uncertainty have underpinned social narratives that naturalize gender divisions of labour, justify different social expectations, and shape institutional arrangements around economic activity.

4. Patriarchal Taboos and Ideological Silencing

Despite the magnitude of mate guarding practices and their multifaceted consequences, the topic has been only moderately addressed in the academic literature. The most well-known scholar in the area of mate guarding is the American evolutionary psychologist David Buss (e.g., Buss, 2002) whose work has inspired research in various issues related to mate guarding (e.g., Haselton and Gangestad, 2006; Starratt and Shackelford, 2023).

Interestingly, for animals there is a broad literature on how males of different species act to safeguard their investment in offspring (e.g., Elias et al., 2008; Kokko and Morrell, 2005). This limited attention to the evolutionary practice of human mate guarding begs the question as to why its historical and biological origins have been ignored. A plausible interpretation is that this silence functions in service of patriarchal ideology by maintaining the taboo surrounding the marginalization or invisibility of the male role in biological reproduction.

Recent developments relating to feminist thought have served to perpetuate this silence. Postfeminism maintains a cultural and ideological position that insists **that feminist goals** have already been achieved. This stance reconfigures feminist constructs and ignores structural inequalities, framing gender issues as personal choices rather than political struggles, thus circumventing attention to genderist practices. Neoliberal feminism aligns itself with market-based empowerment and highlights women's success through economic engagement rather than structural change or awareness of the historical trajectories that led to women's disempowerment. As Fraser (2013) and Rottenberg (2018) have demonstrated, neoliberal feminism has depoliticized feminist goals by recasting empowerment as a matter of adapting to existing economic systems rather than challenging the systemic inequalities and power hierarchies that continue to sustain and validate gendered stereotypes, practices, and experiences. Postfeminist and neoliberal feminist perspectives celebrate individual progress, and ruinously neglect the enduring influence of historical structures, such as mate guarding and women's exclusion from productive work, that have shaped societal understandings of women's roles and curtailed their exercise of economic agency. This omission contributes to perpetuating an incomplete and overly optimistic narrative that fails to address the systemic and cultural barriers still facing women, particularly in the realms of entrepreneurship and innovation and productive work in general.

5. The Impact of Mate Guarding on Women's Economic Agency

With such legal and societal modalities highly salient in most geopolitical settings in the past, women were effectively removed from the economic sphere except in the most menial of roles, in women-only type activities such as pre-industrial weaving, and largely through economic necessity. Such a socio-historical context shaped women into subjects with limited economic agency and this landscape has only begun to change in recent decades.

Buss (2002) has demonstrated how mate guarding has historically contributed to limiting woman's visibility and participation in public and economic life. Its centrality has further manifested in the vast array of legal constraints and structural norms designed to control women's mobility and access to financial independence (Starratt and Shackelford, 2023) and thereby increase their reliance on men. Smuts (1995) has discussed in detail how women have been framed as reproductive assets within patriarchal systems and this has operated as a mechanism to undermine their roles as economic agents. While legislative developments have altered institutional realities for women as economic agents to some degree, the ideological remnants of this practice persist, contributing to understandings of women as primarily domestic beings. This materially constrains women's economic agency, protecting gender divisions of labour and producing narratives that belittle women's capacity for economic participation (Kaufmann, 2022), most especially in creative areas such as entrepreneurship and innovation. Such narratives and discursive modes reproduce gendered subjectivities and sustain pejorative tropes that undermine women's perceived capacity for entrepreneurship and innovation (Ahl, 2006). Without addressing the origins of how women's economic agency was constrained through their being barred from the economic activity, education, and training that equip an individual for greater innovation and entrepreneurship, these stereotypes will continue to exert influence.

6. Integrating Gender Awareness Into Entrepreneurship Education

I now present some suggestions for a course structure aimed to equip students with a nuanced understanding of the historical roots of gender biases and provide tools to actively challenge and dismantle these barriers in entrepreneurial and innovation ecosystems.

Historical labour divisions and gender roles: This component would focus on the evolution of labour divisions and how these shaped historical gender roles such as the requirement of upper body strength in agriculture and industry. It would overview the transformation of the labour market due to technological advances and how these have changed the demands of the labour force rendering many former gender distinctions obsolete.

Family structures and reproductive control: This module would address gender, biology, and stereotypes through examining biological facts and myths and critically analysing how biological determinism has generated

stereotypes about women and their economic agency. Importantly, it would examine the impact of family structures, articulating how the domestic seclusion of women and emphasis on paternity certainty and mate guarding contributed to perceptions of women's roles and capabilities. It would discuss the ideological biases that account for why these outdated gender roles are still perceived as natural or biologically determined.

Cultural norm formation: Another valuable component of such a course would be an analysis of how cultural and social norms are formed through historical and geopolitical realities. Exploring how societal norms are constructed, perpetuated, and internalized through socialization processes and media even after the social realities that gave rise to them have transformed would generate greater understanding of the legacy of norms and values devoid of contemporary relevance.

Contemporary stereotypes and representation: Next, the course could identify current stereotypes that undermine perceptions of women's capacities in entrepreneurship and innovation. An analysis of the discursive encapsulations of these stereotypes and their presentation in media would reveal the pervasiveness they continue to have (Poutanen et al., 2016). This could also include a scrutiny of how women are underrepresented in entrepreneurship and innovation and also of gender disparities in funding and leadership opportunities.

Transformative frameworks for change: The course could continue with a focus on transformative frameworks for change which would include critical consciousness and bias awareness, thus helping students to recognize their own biases and those that they witness in society. This component would also explore how value systems can alter over time when the conditions that created them have changed and of how, by contrast, certain values can resist such change despite shifting conditions.

Case studies and intersectionality: The course could conclude with exemplifying best practices and case studies of women who navigate systemic barriers and stereotypes to achieve success in their entrepreneurial and innovation endeavours. This component could also address intersectionality to explore how socio-economic class, ethnicity, educational background, and other social factors intersect with gender to shape entrepreneurial experiences.

7. Conclusion

This paper underscores the importance of consciousness-raising efforts that interrogate the historical roots of gendered norms as a vital step in dismantling persistent demeaning stereotypes of women as entrepreneurs and innovators. By tracing the historical roots of these biases, students and educators can gain a deeper understanding of how these norms have evolved and remain deeply embedded in contemporary perceptions of women's capabilities in entrepreneurship and innovation. By bridging historical awareness with actionable insights, this paper advocates for a transformative educational approach that equips future entrepreneurs and innovators to contribute to more inclusive and equitable economic ecosystems. It would also lay the groundwork for broader social equity by directly confronting the historical and structural conditions that have systematically disadvantaged women within the economic domain.

Ethics Declaration

No ethical clearance was required for this conceptual paper.

AI Declaration

AI tools were not used in the development of this paper.

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