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The Plight of Female Entrepreneurs in India

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Abstract: Women from around the world are making substantive contributions to new ventures. Research on this phenomenon is starting to increase, but to this point, most of the research on female entrepreneurship has only examined it from the perspective of developed countries. As such, there is a gap in understanding this phenomenon from the perspective of developing countries. Due to the lack of theoretical underpinnings, and exploratory research approach to unearthing new ideas was called for. Using 10 female entrepreneurs as case studies and depth interviews as the main source of data, this study explores female entrepreneurship in India. The study's findings suggest that deep-rooted gender bias and family pressures are major challenges that female entrepreneurs in India face. This study's findings also suggest that supportive husbands, stress management, and maintaining a good work–life balance are important to helping female high-tech entrepreneurs in India overcome the challenges that they face. The results from this study inform the literature on the plight of female entrepreneurs in India, and more broadly, the study contributes to the understanding of the challenges that female entrepreneurs all around the world face.

Keywords: female entrepreneurship; women entrepreneurship; women entrepreneurs; female high-tech entrepreneurs; high-tech entrepreneurship



Citation: Aggrawal, Artee, Jon Carrick, Jeffrey Kennedy, and Giovanni Fernandez. 2022. The Plight of Female Entrepreneurs in India. *Economies* 10: 264. https:// doi.org/10.3390/economies10110264

Academic Editor: Angela Roman

Received: 25 July 2022 Accepted: 13 October 2022 Published: 26 October 2022

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1. Introduction

Research on female entrepreneurship has recently been growing (Chreim et al. 2018), but there is still much left to be understood on the topic. One of the knowledge gaps on the topic is on the role that women play in entrepreneurship in developing countries. Female entrepreneurship is increasing in many developing countries, especially in India (Shankar and Nithyananda 2017). There is a burgeoning literature identifying the key components of entrepreneurial ecosystems developing countries; for example, the presence of major technology companies (Fosfuri and Rønde 2004); educations systems (Kapur and McHale 2005); venture capital (Zacharakis et al. 2003), and support organizations (Roundy et al. 2017). A few of these studies have tangentially touched on the topic of female entrepreneurs in developing countries, and there is evidence that suggests that women have made substantive contributions to new tech ventures in developing countries (Tan 2008), but little depth has been provided on this topic. As such, the extant literature provides little insight on the extent and role of women in high growth ventures in developing countries.

This paper explores the role of female entrepreneurs in the developing country of India. To explore this topic, the rest of the paper is organized as follows: Section 2 discusses the relevant theory and the background of the study; Section 3 overviews the research methods and the results of the study; Section 4 discusses the findings of the study; and Section 5 concludes the paper.

2. Theoretical Foundations

Numerous studies have looked at the additional challenges that women face when engaging in entrepreneurship; one particularly popular topic is the notion of the glass

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ceiling (Ribes-Giner et al. 2018)—that is, the societal constraints that keep women from engaging in entrepreneurship. For example, Guzman and Kacperczyk (2019) show that women have more trouble than men raising funds for a new venture. This is similar in nature to (Gompers et al. 2022), which found that woman have a harder time raising venture capital. In a similar vein, Asha (2016) shows that it is harder for women to secure sales contracts for their new ventures. Nziku and Struthers (2017) similarly found that female entrepreneurs in Africa have a harder time securing sales contracts.

The body of literature on female entrepreneurship is limited, but studies in developed countries have surfaced insights on the topic. A lot of the research has focused on work–life balance or work–family conflict. For example, Welsh et al. (2016) suggest that a strong support system is needed to help women entrepreneurs balance family and life. Ruderman et al. (2002) discuss the importance of psychological resources and social support in strengthening coping ability. Kossek et al. (1999) concentrates on boundary management and role embracement concepts, showing external resources play a mediating role.

The central characteristic of the high growth entrepreneurship is innovation. Another notable hallmark of successful new ventures is the importance of human capital. A small number of people drive the growth of new ventures. Human capital is one of the main enablers of growth in new technology-based firms (NTBFs). Furthermore, high growth firms cluster near top universities so that they can access top talent (Zucker et al. 1998). The number of women engaged in high growth new ventures is disproportionally small (Field et al. 2010). Less than five percent of leadership roles in technology ventures are filled by women, but the number of female leaders of new ventures is on the rise around world (González-González et al. 2018). There is known on why there are so few women in leadership positions in new ventures, especially in developing countries (Duflo and Topalova 2004).

Most of the studies on female entrepreneurship have focused on developed, western countries (Corrêa et al. 2021; Field et al. 2010; Kumar 2013; Sestic and Ibrahimagic 2015). Little work has looked at the challenges that female entrepreneurs face in developing counties, and research is needed on this topic because women from developing countries face different challenges than women from developed countries do (Shah and Saurabh 2015). One country that provides a particularly interesting context to study this is India, which has a growing number of startups (Pandey 2018)—but it is also one of the lowest rated countries in the Glass Ceiling Index, a measure of the inclusion of women in the economy (Guzman and Kacperczyk 2019).

Women in India face unique challenges, as sociological factors such as caste and religion have made it difficult for them to engage in entrepreneurship (Bertaux and Crable 2007). Despite these large challenges, there are women in India that have defied the odds and broke through in entrepreneurship (Kumar 2013). There is scant knowledge on how these women have been able to do this.

Although women in India still face daunting obstacles when it comes to starting a business, studies have found that some women in India–especially in the high-tech cities of Mumbai and Calcutta–are becoming more accepted in the workplace; this is a largely because of the development of a robust IT industry in the major technology hubs in India (Kumar 2013). This has helped open opportunities for women to engage in entrepreneurship (Shekhar 2016). Recent studies show that women in India are participating in entrepreneurship at increasing levels (Gupta 2018; Qureshi et al. 2016). There is also some research suggesting that confidence, knowledge, access to entrepreneurship training, household support, and participation in networks is increasing amongst female entrepreneurs in the tech hubs of Calcutta and Mumbai (Gupta 2018; Rani 2013). However, overall, there is little known on female entrepreneurship in India.

There is little known on the challenges that female entrepreneurs face in developing countries. Thus, the main objective of this study is to help fill this gap. Based on the discussion above, the research objectives for this study are as follows: (1) to identify themes relating to the challenges that female entrepreneurs face; (2) to identify themes relating to

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the cause of the challenges that female entrepreneurs face; and (3) to identify mechanisms that female entrepreneurs use to overcome the challenges that they face.

3. Methods and Results

3.1. Methods

The little extant knowledge on female high-tech entrepreneurship made an exploratory, theory building methodology appropriate for this study. The purpose of this exploratory approach was to develop new ideas that could be further developed into constructs that could be used in hypothesis testing studies. Thus, the present study used a case study approach. Case studies are ideal for building theory (Miles et al. 1994; Strauss and Corbin 1994). Case methodology also allows for the integration of positivist and interpretivist methodologies, while also incorporating time as a key dimension (Coviello and Jones 2004), and a grounded theory case approach is particularly useful for unearthing new ideas on new or underdeveloped research topics (Strauss and Corbin 1994).

Resource constraints limited this study to a sample of 10 cases. However, this is in line with similar studies in entrepreneurship that used a case approach to unearth new theoretical underpinnings. Table 1 presents an overview of the 10 female entrepreneurs that were used as case studies for this study. All the women were tech entrepreneurs that had started a tech firm in or near the city of Mumbai. This is a major city and tech hub in India, and it is one of the leading places in India for producing high-tech start-ups (Pandey 2018). Female entrepreneurs were chosen at various points within the small to medium size enterprise spectrum (i.e., 2–225) to examine the effects of the various sizes of firms on the research question. Furthermore, for comparative purposes, female entrepreneurs were chosen that had started different types of firms: information technology, ecommerce, web technology, and health. Furthermore, the case firms were at different stages of development. Three of the firms were in the early stage of development; three were in the mid-stage of development; and four were in the later stage of development. The different stages in development allowed the study to isolate the unique challenges that female entrepreneurs face in each stage of development.

Entrepreneur	Company	#Employees	Revenue	Age of Children	~Length of Interview
KI-1	HR technology	6	50M INR	12 years old	110 min
KI-2	Data storage tech	50–75	1B INR	NA	115 min
KI-3	Ecommerce	25	1B INR	5 years old	110 min
KI-4	Biotechnology	20	4B INR	NA	130 min
KI-5	Biotechnology	10	50M INR	NA	120 min
KI-6	eCommerce	50–75	1B INR	NA	40 min
KI-7	eCommerce	30	100M INR	10 years old	120 min
KI-8	Social media job board	5	100M INR	4 & 6 years old	110 min
KI-9	Wellness technology	50–75	100M INR	8 years old	125 min
KI-10	IT consulting firm	2	20M INR	11 & 14 years old	115 min

Table 1. Interview information.

The bulk of the data for this study came from in-person, semi-structured interviews that were conducted at the business location of the interviewees; the interviews were conducted from June-August of 2017. The interviewees were asked a series of open-ended questions. The open-ended questions were then supplemented by probing questions to encourage the interviewee to offer more insights. The interviewer made efforts to not persuade the interview, but instead to elicit unbiased thoughts.

The interview protocol was developed to allow new ideas on the challenges the women faced as female entrepreneurs and how the women were able to successfully engage in

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high-tech entrepreneurship. The Questionnaire consisted of 11 open ended questions, and the questions focused mainly on the journey of these entrepreneurs, their experiences, their motivation to get into entrepreneurship, and the resources that were important to their journey.

In analyzing the data, a thematic content analysis was conducted; the observations from the transcripts were coded and pattern matched. The data from the interviews was recorded and transcribed. The data was then manually coded by the researchers, and a custom python script was used to systematically collect the data on the coded data. Table 2 presents sample quotes that were coded in the data. The patterns were categorized using a variation of Miles et al. (1994) three level abstraction process. Table 3 depicts the abstraction process that was used in this study. At the first level, the researchers analyzed the text and identified major themes; themes were identified based on the number of times they appeared and the significance of the quote; that is, the researchers counted the number of times a theme appeared and then assigned a 1–5 weight scale on the theoretical significance of the quote. If the theme was coded five or more times or if a quote was highly significant (rated a 5 by both researchers), the theme was included in the list of first-level themes. This resulted in 22 major themes groups, which are listed in column I of Table 3; the data from the categories was then reviewed and abstracted into eight categories, which are listed in column II of Table 3; then, at the third level, the categories from the second level were evaluated and condensed into five categories, which are identified in column III of Table 3.

Table 2. Representative quotes.

1. Gender bias

"I was surprised to see that the government official, I was talking to was not looking at me at all. I was asking him a question and he was replying it to my male colleague. It was shocking for me He was avoiding making eye contact with me may be because I am woman." (KI-3)

"I applied for the bank loan under stand-up India scheme for scaling up my pharma business. Although it's peculiar for women entrepreneurs but still my application is pending from last five months. Typically, men who apply for a similar loan get the results back in a couple of weeks." (KI-5)

"It is very difficult for my male employees to take orders from me. They have been serving the company from the time of my father. Now I am heading it but I find it very difficult to get the work done from them." (KI-2)

2. Challenges of family and business

"I sometimes go back home really tired and show my frustration on my daughter for no fault of her. She wants to talk to me but I have no patience to sit with her" (KI-2)

"He (son) was preparing a speech for the Annual function and wanted me to be present there but I had an urgent meeting. He was so upset. He did not speak to me for three days. I felt so bad as mother." (KI-4)

3. Supportive husbands

"I am so lucky to have him as my husband. He makes tea for me in the evening and helps me in cooking also." (KI-6)

"I would not have completed my studies if he had not encouraged and supported me for the same. Both of us started this journey together. He would take care of our son if I have to go for meetings and was there to make the family function." (KI-7)

4. Stress and dealing with stress

"There is lot of tension in day to day dealing with vendors and customers. You know how I gained this much weight because I tend to over eat when I am stressed. But I can't help it. My business keeps me on my toes" (KI-5)

"You know if a woman comes from a business, investors take her seriously but for person like me with no experience of business and getting into a tech startup, the challenges are far more. Many times they call me for meetings in the evening where I feel stressed whether they are serious or they want to take advantage of me." (KI-8)

5. Work-Life Balance

"Sometimes I feel like lying idle and watching movie. A break of that sort relaxes me to once again gain energy and work more efficiently" (KI-3)

"Sometimes I feel distant from my family and relatives due to work pressure. I love being with them and the time I get with them refreshes me. My daughter is the reason I am into business and I need more time for her." (KI-9)

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Table 3. Data abstraction.

Level 1: Summarize and Package Data		Level 2: Repackage and Aggregate Data		Level 3: Framework and Structure	
1. 2. 3. 4.	Anxiety from the uncertainty of the business (AXB) Bias towards men (BIM) Dealing with problems with the children (PWC) Dealing with setbacks (SET)	1	Disamination and		
5. 6. 7. 8. 9. 10.	Discrimination against women (DIS) Engaging with hobbies (HOB) Financial pressures (FIN) Finding time to relax (RLX) Getting enough sleep (SLP) Husbands being there to listen (HLS) Husbands helping with chores (HHC)	 2. 3. 4. 	Discrimination and disrespect towards women (DIS) Not enough family time (AFF) Problems with the family (PWF) Husbands stepping up to	1. 2. 3.	Gender bias (BIA) The challenges of family and business constraints (FBC) The importance of
12. 13. 14.	Husbands understanding the work and family challenges (HUC) Not work with women (RFW) Pressures from running a business (BPR)	5.	help with the family (HSH) Husbands being supportive (SHB)	4. 5.	supportive husbands (SHB) The importance of a good work–life balance (WLB) The stress that caused by
15. 16. 17. 18.	Refusal to communicate with women (NCW) Showing disrespect towards women (DTW) Spending enough time with children (TWC) Spending time with friends (TWF)	6. 7. 8.	Anxiety about business Pressure from business (PRE) Finding time to rest and		work (STR)
19. 20. 21. 22.	The importance of emotionally supportive husbands (ESH) The problems that employees bring (PWE) Too much time away from family (TAF) Hostile towards women (HTW)		relax (REL)		

3.2. Results

The first–and most prevalent–theme to emerge from the data is that the women in the study faced many biases because of their gender. All the women reported that they faced visible bias from the way employees, customers, government officials, banks and other business acquaintances treated them. For example, six of the women discussed how difficult it was to secure contracts because their male counterparts did not want to enter into a contract with a woman. Similarly, five the women discussed how they were not able to get a loan simply because they were a woman. Another common gender bias related to the troubles they had in dealing with their male employees; eight of the women discussed how the male employees did not want to take direction from a woman. Despite all the women discussing how they experienced gender bias, they did not all internalize the bias the same way. Six of the women were clearly upset about experiencing bias, and it was something that they consistently thought about; whereas, four of the women discussed how they simply ignored the bias and moved on and did not think about it again.

The second major theme to emerge was that it is challenging for women to find enough time for their businesses and their families. Seven of the women spoke at length about how they would feel remorseful almost daily because they felt like they were giving more time to their business than they were their families. To help alleviate the pain of not being able to help with their families as much as they would have liked to have, most of the women attempted to maximize their time with their children and families; for example, five of the women set aside concentrated time for their children in the evening so that they could hear their kids' stories and interact with them. Four of the women discussed not being able to help with their children's homework and having to miss important school related events. The four women that did not have children also reported on the challenges of finding time for both their businesses and their families. They discussed how they were major contributors to taking care of their parents and extended families and how they often could not devote as much time to their families as they would have liked to have because of the demands from their businesses.

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A third theme to emerge from the data is the importance of supportive husbands. All the interviewees discussed how their households did not follow a lot of traditional cultural norms when it came to the expectations of men and women in the household. Most notably, the husbands of six of the entrepreneurs in this study were substantially more active with the family than is typical of a husband in India. For example, the husbands helped get the kids ready for school, helped with kids' homework, and did chores that in India are usually reserved for women. Another recurrent theme in the data related to the mutual respect that the women and their husbands had for each other. Six of the women spoke about how the men understood the huge effort the women were making to run a scaling business and a growing family. All the women also discussed how the emotional support the husbands provided was instrumental in enabling them to fight through the challenges that they faced as female entrepreneurs. Moreover, seven of the women also discussed how their husbands relished having successful wives.

A fourth theme to emerge relates to the stress that was caused by work and the importance of finding ways to deal with stress. All the women reported mental stress as one of their main challenges, and all the women discussed how that one of the main stressors came from their business; seven of the women specifically discussed the immense stress that the ups and downs of their business caused. Another business-related stressor was the high attrition rate of the employees; seven of them specifically noted that it was often difficult to retain employees because a lot of their employees did not want to work for a woman. Closely related, over half the women reported the stress that negotiating with men caused; that is, they felt stressed by the fact that on a regular basis men did not want to meet with them and negotiate important business related matters simply because the men did not want to negotiate with a woman. The women also talked about how family stresses compounded the stress they had at work; for example, four of the women discussed how the struggles of their children brought them a great deal of stress and that they were constantly thinking about their children's struggles at work. All the women discussed how it was essential for them to develop methods to cope with this stress. Seven of them discussed the importance of mentally and emotionally leaving the business at the end of the day so that they could spend time with their families or engaging in leisurely activities. Interestingly, three of the women discussed coping mechanisms that are usually considered unhealthy. Two of the women discussed how eating was an important mechanism for dealing with stress. They knew this was unhealthy, but it proved to be an effective mechanism for relieving the immense business and family related stress that she had to deal with. Three of the women discussed how important it was for them to lie around and do almost nothing. Even though they knew doing nothing is generally considered unhealthy behavior, it proved to be an important stress relieving mechanism for these women.

The fifth theme that emerged from the data was on the importance of a good work-life balance. All the women discussed the importance of having a good work-balance and how structuring this into their life was essential to alleviating stress and rejuvenating them. Closely related, they also discussed the challenges of not having enough "me time." They all stated that almost all their time was dedicated to their startup and their families but finding time for themselves was essential. Seven of the women discussed wanting to spend more time pursuing hobbies like singing, dancing, gardening, or fitness, but only being able to wedge in a little bit of time for these hobbies. These seven women also discussed how wedging in even a little bit of "me time" provided energy and focus that was important to running their business and taking care of their families.

4. Discussion

Women around the world face large obstacles when it comes to engaging in entrepreneurship. India is no exception, as there are distinct challenges that women face there. This study unearthed new theoretical underpinnings for five themes relating to the challenges that female entrepreneurs in India face when engaging in a high-tech entrepreneurship. Economies 2022, 10, 264 7 of 10

This study's finding suggests that deep-rooted gender bias is a major obstacle for women to overcome. This study is one of few studies to look at gender bias in an overt context. The women in this study faced open and stern discrimination and were able to overcome it. Previous research has shown that gender bias is an extra challenge that female entrepreneurs often have to contend with (Brush et al. 2018; Duflo and Topalova 2004; Kumar et al. 2015), but it has not given a lot of insight into how gender bias can be overcome. The results from the present study add to literature by showing that female entrepreneurs can overcome bias by being persistent, having supportive husbands, employing mechanisms for dealing with stress, and having processes for ensuring they spend enough time with their families. Another unique finding from this study relates to the way in which women deal with bias; some of the women from this study dwelled on the bias, while some of the women seemed brush it off. Research has looked at how women receive and internalize bias in the workplace (Field et al. 2010; Kumar 2013), but little work has looked at it from the perspective of female entrepreneurship.

The study's findings extend the Higgins et al. (2000) work on the influence that family has on women in business by showing that family pressures are a big challenge that female entrepreneurs have to contend with. This study's findings suggest that the dual pressures of family and business can be minimized if systems are put in place to ensure that female entrepreneurs set aside concentrated time for their families and for their businesses. This has important implications, as burnout amongst female entrepreneurs is a serious problem (Zhang and Zhou 2019). The results from this study also show that female entrepreneurs need to develop mechanisms to mentally and emotionally check out from work at the end of the day and for them to set aside time for themselves. Another unique theme to emerge from this study is that it is just not women with children that have challenges in balancing family and work. There is evidence from this study to suggest that women without children also have challenges in balancing family and business, and they must also make efforts to spend high quality time with their families.

Another notable finding to emerge from the study is that that supportive husbands can be important enablers to helping their wives become successful entrepreneurs. These findings extend previous work on female entrepreneurship that has shown that extensive support networks (Ahl 2006) and work–life balance are important to helping women engage in entrepreneurship (Shah 2015). What is unique from the findings of the present study is that the husbands' help with the family and the husbands' emotional support were germane to the success of their wives' ventures. This is an important finding, as little research has looked at how husbands can be enablers to entrepreneurship.

The last three theoretical contributions from this study relate to work-life balance and coping with stress. Studies have found that stress tolerance and dealing with stress are essential entrepreneurial success (Buttner 1992; Wincent and Ortqvist 2009). The present study adds to those findings in several ways. First, there is evidence from this study to suggest that it is important for female entrepreneurs to get time for themselves; that is, time away from their businesses and families where they can engage in leisurely activities that they find rejuvenating. This finding enriches the existing literature by providing specific ideas of what female entrepreneurs can do to improve work-life balance. Second, there is evidence from this study to suggest that developing stress coping mechanisms is an important skill that female entrepreneurs need to develop. Previous studies have noted the importance of stress tolerance (Harris et al. 1999; Wincent and Ortqvist 2009), but these studies have given little specific insight into the exact mechanisms that female entrepreneurs can use to cope with stress. The present study suggests that mechanisms such as engaging in hobbies and spending time with family can help alleviate stress. Another unique finding this study found that relates to stress is that even unhealthy habits, such as eating, can help alleviate business and family related stress.

Although this study was exploratory in nature, it offers a host of policy and practice implications. These are insights that can be immediately taken from this study and applied to policy and practice.

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The first policy implication relates to the importance of creating a business environment that is supportive of female entrepreneurs. Female entrepreneurs have had a major impact on the global economy (Ahl 2006), but have not been able to fully realize their entrepreneurial potential (Neumeyer et al. 2018). This study put forth specific examples of gender bias that female entrepreneurs in India have to contend with on a daily basis. From these findings, it is clear that the Indian government needs to craft and enforce policies that minimize gender bias. This study also suggests that policy's need to encourage work–life balance; that is, policies need to be crafted that encourage and incentivize female entrepreneurs to rest and relax and find concentrated time to spend with their families. For example, one way they could do this is by offering female entrepreneurs training and resources for relaxing and partaking in healthy habits that help them get away from their businesses. Another policy implication that can be taken from this study is that governments need to help foster an environment that is conducive to helping husbands/partners support female entrepreneurs. For example, governments could provide spouse/partner training seminars on how to support female entrepreneurs.

There are also several practical implications that entrepreneurs can take from this study and put into action. First, female entrepreneurs need to be prepared to deal with extreme gender bias. Second, female entrepreneurs can benefit from putting systems and processes in place to ensure that time is set aside for both family and business. Third, female entrepreneurs must develop coping systems and processes for dealing with stress.

The contributions of this study discussed above are meaningful, but the study did have some shortcomings. Most notably, validity and reliability are one are of concern in this study, as validity and reliability are of concern in all qualitative studies (Eisenhardt 1989). The study drew information from a small set of entrepreneurs, which will raise questions about its validity. However, this was a theory building study, so its main objective was to uncover ideas. With the limited sample size, the findings need to be further refined and tested before they can be generalized. Qualitative research is always scrutinized for validity, and many quantitative purists will fault qualitative work without cause (Yin 1981). Consequently, it is important to reiterate that the approach taken in the present study was appropriate. First, the constructs of the relevant theories were not well-developed; therefore, these theories needed qualitative work to extend them. Second, the study was properly designed and executed to minimize the impact of researcher bias and to establish trustworthiness in the findings. The ten entrepreneurs used in this study is an ideal number for case research (Eisenhardt 1989). Furthermore, a substantial amount of data was collected. Third, the intend of this study was to uncover new concepts and ideas that theory can be built from-not test of confirm theory.

Another shortcoming of this study comes from the richness of the data that was lost. This study generated a substantial amount of rich, qualitative data, and much of this was lost when it was packaged and summarized. Relatedly, there were challenges that emanated from the study's holistic approach. The challenges female entrepreneurs in developing countries face is an inherently complex topic, and it is difficult to isolate these challenges and the root causes of the challenges. However, scholars contend that it is possible in theory building studies to capture key ideas and then further test the ideas in subsequent studies (Yin 1981).

Although the study had some shortcomings, it still contributed several meaningful ideas to the literature on the challenges that female entrepreneurs face in developing countries. Moreover, the study was designed so that the ideas that emanated from it can be further examined and tested in future studies. Thus, it provides a foundation for a myriad of future studies.

5. Conclusions

This was an exploratory study intended to conceptualize the plight of female hightech entrepreneurs in India. It has laid a foundation for many future studies. There are opportunities for future research to both qualitatively and quantitatively extend this Economies 2022, 10, 264 9 of 10

study's findings. For example, the authors of the present study are working on developing constructs and measures on gender bias and how this impacts the performance of female run ventures. Future studies could also build on the present study's findings by further exploring the best practices for finding time for business and family. Another Important finding from this study that could be further developed is the role that husbands/significant others play in supporting female entrepreneurs; for example, this study's findings could be used as the basis for constructs and measures relating to the support mechanisms that husbands/partners can provide and how this impacts the development and performance of female lead ventures.

This study makes several contributions to theory, policy, and practice. It offers insights on the plight of female entrepreneurs in a country that is particularly challenging for women to engage in entrepreneurship. The results provide theoretical underpinnings for understanding the plight of female high-tech entrepreneurs from India, and more broadly, for understanding how women can overcome the additional challenges they face when engaging in entrepreneurship.

Author Contributions: Conceptualization, A.A., J.C., J.K. and G.F.; methodology, A.A and J.C.; validation, J.K. and G.F.; formal analysis, A.A.; investigation, A.A.; resources, J.C and J.K.; data curation, A.A.; writing—original draft preparation, A.A. and J.C.; writing—review and editing, J.C., J.K., G.F.; visualization, G.F.; supervision, J.C.; project administration, J.C.; funding acquisition, J.K. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable. **Data Availability Statement:** Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

References

Ahl, Helene. 2006. Why research on women entrepreneurs needs new directions. *Entrepreneurship Theory and Practice* 30: 595–621. [CrossRef] Asha, N. P. 2016. The role of rural women entrepreneurship in India. *Splint International Journal of Professionals* 3: 59–64.

Bertaux, Nancy, and Elaine Crable. 2007. Learning About Women. Economic Development, Entrepreneurship and The Environment In India: A Case Study. *Journal of Developmental Entrepreneurship* 12: 467–78. [CrossRef]

Brush, Candida, Linda F. Edelman, Tatiana Manolova, and Friederike Welter. 2018. A gendered look at entrepreneurship ecosystems. Small Business Economics 53: 393–408. [CrossRef]

Buttner, E. Holly. 1992. Entrepreneurial stress: Is it hazardous to your health? Journal of Managerial Issues 4: 223-40.

Chreim, Samia, Martine Spence, David Crick, and Xiaolu Liao. 2018. Review of female immigrant entrepreneurship research: Past findings, gaps and ways forward. *European Management Journal* 36: 210–22. [CrossRef]

Corrêa, Victor Silva, Fernanda Regina da Silva Brito, Rosileine Mendonça de Lima, and Maciel M. Queiroz. 2021. Female entrepreneurship in emerging and developing countries: A systematic literature review. *International Journal of Gender and Entrepreneurship* 4: 300–22. [CrossRef]

Coviello, Nicole E., and Marian V. Jones. 2004. Methodological issues in international entrepreneurship research. *Journal of Business Venturing* 19: 485–508. [CrossRef]

Duflo, Esther, and Petia Topalova. 2004. *Unappreciated Service: Performance, Perceptions, and Women Leaders in India*. Cambridge: Department of Economics, Massachusetts Institute of Technology.

Eisenhardt, Kathleen M. 1989. Building theories from case study research. Academy of Management Review 14: 532-50. [CrossRef]

Field, Erica, Seema Jayachandran, and Rohini Pande. 2010. Do traditional institutions constrain female entrepreneurship? A field experiment on business training in India. *American Economic Review* 100: 125–29. [CrossRef]

Fosfuri, Andrea, and Thomas Rønde. 2004. High-tech clusters, technology spillovers, and trade secret laws. *International Journal of Industrial Organization* 22: 45–65. [CrossRef]

Gompers, Paul A., Vladimir Mukharlyamov, Emily Weisburst, and Yuhai Xuan. 2022. Gender gaps in venture capital performance. *Journal of Financial and Quantitative Analysis* 57: 485–513. [CrossRef]

González-González, Carina S., Alicia García-Holgado, Maria de los Angeles Martínez-Estévez, Maica Gil, Alicia Martín-Fernandez, Ainhoa Marcos, Cristina Aranda, and Talia S. Gershon. 2018. Gender and engineering: Developing actions to encourage women in tech. Paper presented at the 2018 IEEE Global Engineering Education Conference (EDUCON), Santa Cruz de Tenerife, Spain, April 17–20; pp. 2082–87.

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- Gupta, Andeli. 2018. Women Entrepreneurs in India. International Journal of Research 5: 4367-81.
- Guzman, Jorge, and Aleksandra Olenka Kacperczyk. 2019. Gender gap in entrepreneurship. Research Policy 48: 1666-80. [CrossRef]
- Harris, Julie Aitken, Robert Saltstone, and Maryann Fraboni. 1999. An evaluation of the job stress questionnaire with a sample of entrepreneurs. *Journal of Business and Psychology* 13: 447–55. [CrossRef]
- Higgins, Chris, Linda Duxbury, and Karen Lea Johnson. 2000. Part-time work for women: Does it really help balance work and family? Human Resource Management 39: 17–32. [CrossRef]
- Kapur, Devesh, and John McHale. 2005. Mobile Human Capital and High-Tech Industry Development in India, Ireland, and Israel. From Underdogs to Tigers: The Rise and Growth of the Software Industry in Brazil, China, India, Ireland, and Israel. Oxford: Oxford University Press, p. 236.
- Kossek, Ellen Ernst, Raymond A. Noe, and Beverly J. DeMarr. 1999. Work-family role synthesis: Individual and organizational determinants. *International Journal of Conflict Management* 10: 102. [CrossRef]
- Kumar, Avanish. 2013. Women entrepreneurs in a masculine society: Inclusive strategy for sustainable outcomes. *International Journal of Organizational Analysis* 21: 373–84. [CrossRef]
- Kumar, Alok, Nishant Jain, Sunil Nandraj, and Kheya Melo Furtado. 2015. NSSO 71st Round: Same Data, Multiple Interpretations. *Economic and Political Weekly* 46: 84–87.
- Miles, Matthew B., Michael Huberman, and A. Michael Huberman. 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. London: SAGE Publications.
- Neumeyer, Xaver, Susana C. Santos, António Caetano, and Pamela Kalbfleisch. 2018. Entrepreneurship ecosystems and women entrepreneurs: A social capital and network approach. *Small Business Economics* 53: 475–89. [CrossRef]
- Nziku, Dina Modestus, and John Joseph Struthers. 2017. Female entrepreneurship in Africa: Strength of weak ties in mitigating principal-agent problems. *Journal of Small Business and Enterprise Development* 25: 349–67. [CrossRef]
- Pandey, Neeraj K. 2018. An analysis of startup ecosystem in metropolitan city in India. *International Journal of Engineering and Management Research (IJEMR)* 8: 237–44. [CrossRef]
- Qureshi, Mehar Afroz, Pervez Ahmed Khan, and Sudhir Uprit. 2016. Empowerment of rural women through agriculture and dairy sectors in India. *Economic Affairs* 61: 75–79. [CrossRef]
- Rani, K. Martina. 2013. Innovation in Indian women micro-enterprises. IPE Journal of Management 3: 76–94.
- Ribes-Giner, Gabriela, Ismael Moya-Clemente, R. Cervelló-Royo, and María Rosario Perello-Marin. 2018. Domestic economic and social conditions empowering female entrepreneurship. *Journal of Business Research* 89: 182–89. [CrossRef]
- Roundy, Philip T., Beverly K. Brockman, and Mike Bradshaw. 2017. The resilience of entrepreneurial ecosystems. *Journal of Business Venturing Insights* 8: 99–104. [CrossRef]
- Ruderman, Marian N., Patricia J. Ohlott, Kate Panzer, and Sara N. King. 2002. Benefits of multiple roles for managerial women. *Academy of management Journal* 45: 369–86.
- Sestic, Munira, and Sabina Ibrahimagic. 2015. Business Problems in A Women's Small Entrepreneurship—The Bosnia And Herzegovina Case of Post Conflict And Transition Context. *Economic and Social Development: Book of Proceedings* 1: 491.
- Shah, Hina, and Punit Saurabh. 2015. Women entrepreneurs in developing nations: Growth and replication strategies and their impact on poverty alleviation. *Technology Innovation Management Review* 5: 34–43. [CrossRef]
- Shah, Reena A. 2015. Work-life balance and gender: A study of professionals in India. Review of Management 5: 5–18.
- Shankar, Raj K., and K. V. Nithyananda. 2017. Developing Entrepreneurship Policy in India: Looking for Order in Chaos. New Delhi: Bookwell Delhi.
- Shekhar, Indra. 2016. Rural women entrepreneurship and skill development: A case study of charaka women multipurpose cooperative society. *Splint International Journal of Professionals* 3: 7–20.
- Strauss, Anselm L., and Juliet Corbin. 1994. Grounded theory methodology. *Handbook of Qualitative Research* 17: 273–85.
- Tan, Justin. 2008. Breaking the "bamboo curtain" and the "glass ceiling": The experience of women entrepreneurs in high-tech industries in an emerging market. *Journal of Business Ethics* 80: 547–64. [CrossRef]
- Welsh, Dianne H. B., Eugene Kaciak, and Narongsak Thongpapanl. 2016. Influence of stages of economic development on women entrepreneurs' startups. *Journal of Business Research* 69: 4933–40. [CrossRef]
- Wincent, Joakim, and Daniel Örtqvist. 2009. Role stress and entrepreneurship research. *International Entrepreneurship and Management Journal* 5: 1–22. [CrossRef]
- Yin, Robert K. 1981. The case study crisis: Some answers. Administrative Science Quarterly 26: 58–65. [CrossRef]
- Zacharakis, Andrew L., Dean A. Shepherd, and Joseph E. Coombs. 2003. The development of venture-capital-backed internet companies: An ecosystem perspective. *Journal of Business Venturing* 18: 217–31. [CrossRef]
- Zhang, Jianmin, and Nanjin Zhou. 2019. The Family's Push and Pull on Female Entrepreneurship: Evidence in China. *Emerging Markets Finance and Trade* 57: 1312–32. [CrossRef]
- Zucker, Lynne G., Michael R. Darby, and Jeff Armstrong. 1998. Geographically localized knowledge: Spillovers or markets? *Economic Inquiry* 36: 65–86. [CrossRef]