Article

Determinants of the Business Performance of Women Entrepreneurs in the Developing World Context

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Abstract: Resource-based theory posits the deployment of resources by entrepreneurs to achieve performance without questioning the possibility of deploying these resources. The question, however, remains how resources are deployed in developing countries that constrain the choice in the deployment of resources. To answer this, we analyse the factors determining the business performance of women entrepreneurs in a developing country context. Data were collected through a survey sent to 211 Bangladeshi women entrepreneurs engaged in handicraft businesses. Results from hierarchical multiple regression analyses show that (1) the social environment in terms of socio-cultural norms and customs hinders the performance; (2) the entrepreneurial orientation (EO) dimensions, namely, combined Innovative–proactive EO and Risk-taking EO, and the business trainings positively affect the performance; and (3) the social ties negatively influence the performance, which may be due to the excessive presence of strong ties in a personal social network. Based on results, we suggest that environment (context) is a contingent factor for the way personal traits such as EO, human, and social capital can be used by women entrepreneurs to achieve performance in a developing world context.

Keywords: entrepreneurial orientation; business and social environment; human capital; social ties; business performance; women entrepreneurs

1. Introduction

Entrepreneurship, defined in the literature as ‘a process by which individuals—either on their own or inside organisations—pursue opportunities without regard to the resources they currently control’ [1], is characterised by severe resource constraints [2]. Entrepreneurs seemingly explore and start new activities despite the scarcity of resources. How to understand and explain the manner in which entrepreneurs construct and deploy resources from, in the extreme, nothing or at the least in a constrained resource environment? The Resource-Based View (RBV) argues that resources, including resources that are supplied to a company, contribute to the explanation of the company’s competitive advantage [3]. This leading perspective in organisational theory partly explains the creation of resource pools. The RBV starts from the perspective of competition between companies and examines to what extent resources are valuable and rare [3–6]. In this sense, the RBV is a useful perspective for strategic management research [5]. However, this perspective does not explain fully how entrepreneurs deal with combining a company’s resource pool within a constrained resource environment. Entrepreneurs within a constrained resource environment have to relate to the constraints in order to be able to wrest from that environment the valuable combination of resources to develop their businesses [2]. Combining a resource pool in a resource-constrained environment has several implications. First, the activities of companies combining a resource pool should be seen in relation to the resource
Companies develop their own manners of how to deal with scarcity in the environment. Second, companies can deploy seemingly similar resources in different manners and combination. They can therefore grow their own idiosyncratic business activities. Third, resources can be valueless in one situation and valuable in other situation [2]. Research initiated from the RBV downplays the role of entrepreneurial discretion and choice [4], which is key to explaining business performance beyond bringing the venture into business [7] in constrained resource environments [2,8]. The approach of ‘making do with what is at hand by an entrepreneur’ is known as entrepreneurial bricolage. This can be a fruitful perspective from which to gain insight into the way entrepreneurs deploy a combination of resources in a constrained environment. Specifically, this perspective may provide insight into how entrepreneurs create something from nothing in a resource-poor environment [2].

Entrepreneurs who create something from nothing are women entrepreneurs—the women who are the initiators, owners, and managers of businesses—in developing countries (generally identified as the low- and middle-income economies [9]). The social environment might constrain their business activities because societal norms control most of their activities [10–12]. Women’s societal position is confined by their social environment [13,14]. Moreover, the business environment in developing countries is challenging for women because of environmental threats, unstable infrastructures, institutional limitations, and non-supportive government policies [8,12,15–17]. Therefore, the social environment, alongside the abovementioned challenging business environment, might be a vital determinant of the business performance of women entrepreneurs. In literature, next to social and business environments, entrepreneurial orientation, human, and social capital of women entrepreneurs are generally regarded as resources that help to improve their business performance [11,13,18,19].

Bangladesh is a developing country in which women are engaged, though not at a large scale, in entrepreneurial activities. Women entrepreneurs in Bangladesh represent 10% of the total number of its entrepreneurs [20,21]. They work mainly in manufacturing (62%), trading (13%), and service (13%) sectors. The majority of Bangladeshi women entrepreneurs are engaged in handicraft businesses (70%). Home textiles (16%) comes next, followed by parlour (5%), food processing (4%), agricultural products processing (3%), and printing (2%) businesses [22]. Among them, 97.6% operate micro businesses (fewer than 10 employees), while only 2%, 0.24% and 0.16%, respectively, operate small (10 to 49 employees), medium (50 to 99 employees) and large businesses (100 and more employees) [23].

Bangladesh women’s activities largely depend on the societal setting they live in [24–26]. Bangladesh is mostly confined to a traditional societal setting where women are underprivileged; having a highly marginalized social position might create significant obstacles to developing their own businesses [20,26]. The prevailing socio-cultural norms and traditions in this country might constrain women’s mobility and, thereby, their participation in business activities [11,27]. In fact, Bangladeshi women’s business operations largely depend on patriarchy and religion [20,26]. The majority of the population (90%) are Muslims and the Islamic view prescribes that women must maintain purdah (the practice in Muslim societies of screening women from men or strangers, especially by means of a veil) (seclusion), which might hinder their business activities and performance, as well [28,29]. Women observing purdah often find it hard to visit financial institutions (e.g., banks), purchase their raw materials, and sell their products in public settings where they would need to deal with men [20,30,31]. The patriarchy in society relegates them to cooking, family care, and all kinds of household activities and keeps them financially dependent on men [26]: their economic capability and financial resources are capped at levels substantially lower than those needed to develop a business [13]. Equally, the business environment in Bangladesh is challenging for the entrepreneurial activities of women (and men) because of different barriers [32]. Literature finds that barriers are related to the physical and institutional [33,34]. Although women and men might face the same barriers in the business environment, Jahed, Kulsum and Akthar [35] find that women entrepreneurs in Bangladesh are in a less favourable position compared to their male counterparts when it comes to overcoming these barriers. The barriers in the business and social environments, as well as the resource scarcity in Bangladesh,
are reasons to assume that this is a constrained environment for the entrepreneurial activities and business performance of women entrepreneurs.

Looking at the seemingly dominant societal trait, researching women’s entrepreneurship in such a developing country from a bricolage approach may enhance our insight into how these women achieve business performance using their specific creation of combined resources to deal with the resource-constrained environment. Research on identifying the resources and, more in general, the factors determining the business performance of women entrepreneurs operating in constrained environments, is rare [36–40]. We therefore aim at identifying and exploring the determinants of women entrepreneurs’ business performance in the context of a developing country, Bangladesh. This research may contribute theoretically and societally. Central to our contributions is understanding how women entrepreneurs in a resource-constrained environment deploy the specific combinations of resources to reach their business performance. Theoretically, we can enhance insight (1) into how resources under constrained contexts influence Bangladeshi women entrepreneurs’ performance, and (2) as to what extent resources in combination impact their performance. By comparing the results from this research to similar research in other countries, we strive to become more specific about resources that are of particular importance for developing countries. This insight contributes as well to our social aim. Societally, we acknowledge the fact that women’s entrepreneurship can be a vital driver for the economic development of developing countries where women come forward and take part in the economic activities of the society through their income and employment creation [11,12,15,41,42].

2. Theory and Hypotheses

The theoretical perspective of entrepreneurial bricolage considers the deployment of resources in constrained environments [2]. By means of this theoretical approach, this study intends to gain insight into how women entrepreneurs cope with the poor environment and deploy resources in order to develop their businesses. In achieving this insight, which is based on five concepts—specifically, social and business environment, entrepreneurial orientation (EO), human and social capital—this research aims to identify and explore the determinants of the business performance of women entrepreneurs operating in the context of a developing country, Bangladesh.

2.1. Business Performance: Deployment of Resources

Business performance is defined as the business success assessed by using financial and/or non-financial performance [7]: financial performance is the economic success, while non-financial performance means the operational goal of the business [43]. Business performance is taken as the indicator of women entrepreneurs’ ability in the deployment of types of resources for developing their businesses in a constrained environment. The level of constraint of the environment for business performance is explained in relation to social and business environments. Next, the types of resources (entrepreneurial orientation, human and social capital) and their influence on business performance are explored. The determinants of the business performance of women entrepreneurs originate from five hypothetical concepts, namely, social environment, business environment, EO, human capital, and social capital [11,13,18,19]. Hypotheses for each concept are formulated to explain the business performance of women entrepreneurs in a constrained context.

2.2. Level of Constraints of the Environment on Deploying Resources and Business Performance

Social environment: The social environment is the environment that influences the performance of individuals, creating a sense of social control via a common culture that includes shared norms, values, customs, traditions, beliefs, and practices [44]. The environment in which women entrepreneurs operate their businesses cannot be ignored because it may create or increase or decrease hindrances, and create or increase or decrease (new) opportunities for their businesses [45]. However, the social environment in developing countries in terms of local customs, religion, societal obligations, societal legitimacy, and gender disparity influences the behaviour of women entrepreneurs, and it may thereby
hinder their business performance [11,12,36,37,46]. For instance, women are more likely to have less productive businesses in sub-Saharan Africa as the informal traditional cultural practices have restricted women’s access to resources [12,47]. Evidence in the context of Bangladesh states that the socio-cultural hindrance proves to be the main obstacle for women to start business activities, although nowadays they are conscious of their potentials and capabilities [11,27,38].

**Hypothesis 1.** *The social environment shows a negative relationship with the business performance of Bangladeshi women entrepreneurs.*

Business environment: The business environment, defined as the environment where business transactions take place and create opportunities or barriers for businesses [48], may also for women entrepreneurs in developing countries determine their business performance [12,48]. Still, the business environment in developing countries seems poor, uncertain, and changing in condition [49]. Infrastructural instability (e.g., poor electricity and communication technologies), environmental threats (e.g., floods, cyclones, and heavy rains) and government limitations (e.g., corruption and briberies) may create constraints for men and women entrepreneurs in the business environment [10,15]. Physical barriers (such as flush floods and poor roads) and institutional barriers (such as non-supportive government gender policies) are two main sources of constraints in the business environment [15]. Empirical research results show that a hostile business environment hinders the business performance of Zimbabwean women entrepreneurs [50].

**Hypothesis 2.** *The business environment shows a negative relationship with the business performance of Bangladeshi women entrepreneurs.*

2.3. Deployment of Types of Resources and Business Performance

Entrepreneurial orientation: Entrepreneurial orientation (EO) is viewed as a determinant of business performance [51–54]. EO refers to strategic capabilities with actual practices of entrepreneurs that lead to new ‘entry’, such as access to new markets by offering new or existing products or services [55–57]. EO shapes the way in which entrepreneurs exploit opportunities by infusing innovativeness, risk-taking, and proactiveness—the so-called three EO dimensions—into operations of the business [18,58]. The Innovative dimension of EO (Innovative EO) is defined as the capabilities of entrepreneurs practicing and participating in new business activities (e.g., actual practices of new ideas, techniques, products, services, and markets) [57,59,60]. The risk-taking dimension of EO (Risk-taking EO) refers to the capabilities of entrepreneurs taking strategic risks on uncertain events and processes (e.g., taking financial risks on unknown products, services, and markets in uncertain business environments) [52,61]. The proactive dimension of EO (Proactive EO) refers to the capabilities of entrepreneurs looking forward to business opportunities such as forward thinking for finance, products, customer services, and markets [51,57]. Individual dimensions of EO influence the business performance [57,62].

Innovative EO: Innovative EO is one of the bases for the sustainable competitive advantage of businesses [63,64]. Some research results suggest that women entrepreneurs have a lower level of innovativeness in businesses because of their small business sizes, involvement in traditional businesses, and limited access to financial resources, compared to men entrepreneurs [65–68]. Other research results suggest that women entrepreneurs have a higher level of innovativeness in their businesses [69] with a higher level of promise for product and service innovation, compared to their counterparts [70], whereas others suggest that there is no significant difference in innovativeness between men and women entrepreneurs [71–73]. The general (men and women) research results find a significant positive relationship between innovativeness and the business performance of global industrial firms [74], service and manufacturing industries [75], high tech incubating firms [76], automotive industries [63], and small and medium enterprises (SMEs) [77]. The meta-analysis of Rosenbusch, Brinckmann and
Bausch [78] also concludes there is a positive relationship between innovativeness and the business performance of SMEs. We use the general (or predominantly male) research results on the relationship between innovativeness and business performance, and adapt them to women because of the absence of research results on women’s entrepreneurship.

Hypothesis 3a. Innovative EO shows a positive relationship with the business performance of Bangladeshi women entrepreneurs.

Risk-taking EO: Risk-taking EO may be positively related with business performance [38, 57]. Some researchers suggest that women are more likely to seek business protection and take on low-risk businesses [65, 79]. To avoid risk, women entrepreneurs are less likely to invest a higher level of capital in businesses, are more likely to start their businesses with a lower amount of capital [80], and are less likely to take external capital, compared to men entrepreneurs [81]. Likewise, they have a lower expectation of financing their debt in businesses [82]. Lim and Envick [72] also suggest that women are more risk-averse, compared to men. Other researchers find that there is no significant difference in risk-taking between men and women entrepreneurs [83, 84]. Tan [73] finds that women entrepreneurs take higher risks to gain higher profit and competitive advantage, and thereby outperform in their businesses, compared to their male counterparts. The general research results find that risk-taking has a significant positive relationship with the business performance of SMEs [85], small business owners [86], and manufacturing, wholesale, retail, and service companies [87]. Moreover, based on 30 examples of Nigerian women entrepreneurs, Garba [88] finds that risk-taking has a positive relationship with business expansion.

Hypothesis 3b. Risk-taking EO shows a positive relationship with the business performance of Bangladeshi women entrepreneurs.

Proactive EO: Proactive EO has a mostly positive relation with business performance [89, 90]. The gender stereotypes (men are more capable, compared to women) negatively affect the entrepreneurial intentions of women with proactive attitudes [91]. Lim and Envick [72] find that women entrepreneurs are less proactive in exploiting entrepreneurial opportunities, compared to men entrepreneurs. Tan [73] finds that there is no significant difference between men and women entrepreneurs’ proactiveness. The general research results find that proactiveness has a positive relationship with the business performance of small business owners [86], high tech incubating firms [76], service and manufacturing sector SMEs [62], and manufacturing, service, and retail sector SMEs [92]. Also, Lerner and Almor [69] find that proactiveness of Israeli women entrepreneurs has a positive relationship with their business performance.

Hypothesis 3c. Proactive EO shows a positive relationship with the business performance of Bangladeshi women entrepreneurs.

Human capital: Human capital is defined as the knowledge and skills of individuals that increase their intellectual capabilities and lead to efficient and productive activities [93]. Entrepreneurs with a high level of human capital may expect better business performance, compared to entrepreneurs with a low level [94]. Education and training are known as the best investments in building and improving human capital [95]. Education leads to the explicit knowledge of individuals [95]. The knowledge derived from education may be useful for entrepreneurs to improve their business performance [96]. Several studies show that education is a key determinant for profitability [97], productivity growth [47], annual turnover (or annual sales) and employment growth of women entrepreneurs [98]. Next to education, training may increase working capability [95], and thus, this has a potential to improve the business performance of entrepreneurs [99]. Empirical research results show that business training has a positive effect on the net income [100] and annual sales of women entrepreneurs [98].
Hypothesis 4. *Education level shows a positive relationship with the business performance of Bangladeshi women entrepreneurs.*

Hypothesis 5. *Business trainings show a positive relationship with the business performance of Bangladeshi women entrepreneurs.*

Social capital: Social capital, defined in the literature as the resource, whether actual or virtual, that can be achieved through a network of social ties or relationships [101,102], is considered as a determinant of business performance [25,38,96,102,103]. This can be a potential resource for entrepreneurs who can derive it from their network, which is defined as a set of interactive ties/relationships that individuals have and can benefit from in pursuing their interests [38,104]. The personal network of an entrepreneur includes all the people with whom she has direct social relationships, encompassing friends, family, business partners, bankers, and so on [105–108]. The benefits that entrepreneurs can get through social relationships or ties are evident in the identification and exploitation of business opportunities: Social ties provide access to valuable resources, such as financial and physical capital (e.g., money and materials), symbolic support (e.g., certification, approval and legitimacy), and new information (e.g., practical knowledge, advice, and direction) [105,109,110]. Social ties shaped in bonding (family and friends), bridging (other colleagues), and linking ties (GOs and NGOs) [108] of women entrepreneurs may be helpful in providing not only motivation, but also instant cash support and experience-oriented and calculative advice [13,108]. We therefore assume a positive effect of social ties on business performance.

Hypothesis 6. *Social ties show a positive relationship with the business performance of Bangladeshi women entrepreneurs.*

3. Data and Methods

3.1. Research Setting, Samples and Data Collection

The research took place in the Jamalpur and Mymensingh districts of Bangladesh. These districts were selected because: (i) a large number (though not quantifiable) of women have been developing for long time in these districts (more than in others in Bangladesh) their own handicraft businesses, which represent a profitable business in the area; (ii) the business environment in these districts is challenging because of poor roads, bridges, electricity, and communication technologies, as well as consequential threat of flooding; and (iii) the social environment is dominated by patriarchy and the Muslim religion, which affects the societal position of women. Women entrepreneurs have shops where they sell different types of handicraft products, for example, fabric, bamboo, cane, jute, leather, and wooden products.

To find examples of women entrepreneurs, we asked for lists of names from organizations (the organizations we contacted were: the government organizations BSCIC (Bangladesh Small and Cottage Industries Corporation), DWA (Directorate of Women Affairs), JMS (Jatiya Mahila Sangstha); non-government organizations WV (World Vision) and BRAC (Bangladesh Rural Advancement Committee); commercial and specialised banks NB (National Bank) and GB (Grameen Bank); and other organizations BWCCI (Bangladesh Women Chamber of Commerce and Industry), Trinamool Nari Unnayan Samity, Srijan Mohila Sangstha, Jamalpur Zilla Hasta Silpa Babsahi Samity, Jamalpur District Handicrafts Associations) that support women and their handicraft businesses in these districts. These organizations provided us a total of 789 women entrepreneurs’ names. After crosschecking and skipping overlapping names, we had 440 names of women entrepreneurs. Finally, based on the definition of women entrepreneur in our research, we selected a sample of 300 women entrepreneurs as respondents for the survey.

Data were collected through a survey (i.e., executed as site visits) using a structured questionnaire. To create a valid and relevant questionnaire in this context, we discussed the structure and contents
of the questionnaire with 12 local experts from BSCIC, DWA, JMS, WV, BRAC, NB, GB and BWCCI. After receiving suggestions from the local experts, we added, corrected, and modified the questions in the draft questionnaire without endangering the theoretical relations between concepts and questions. To check the validity of the questionnaire in practice, a pilot survey of 20 respondents in both districts (10 from each district) was done. Based on feedbacks from respondents in the pilot survey, the survey questionnaire was finalized. The researcher and three graduate students of Bangladesh Agricultural University conducted the survey. A two-day long training period provided the fellow interviewers with the theoretical background of the research and interview techniques. The interviewer helped respondents to understand each rating question in the questionnaire. Data were collected from February 2015 through June 2015 through face-to-face one-and-a-half-hour interviews.

3.2. Variables Measured

3.2.1. Dependent Variable

Business performance: Business performance can be measured via perceived financial and non-financial and archival (objective) financial performance measures [51]. Perceived measures use a rating scale compared to competitors, whereas archival measures use actual financial data (e.g., yearly sales) [111–113]. As in Dess and Robinson [112], perceived performance measure was used because of the unavailability of archival financial data in this context. The business performance of women entrepreneurs was measured on a seven-point Likert scale (1 = completely disagree, 7 = completely agree) adapted from Stam and Elfring [114]. The summated score [76] of the items on the scale represented the business performance of women entrepreneurs (see Table 1).

3.2.2. Independent Variables

Social environment: The social environment was measured on a seven-point Likert scale (1 = completely disagree, 7 = completely agree) with items of hindrance due to family, norms, customs, traditions, and religion over business experiences.

Business environment: The business environment was measured with the following four items: hindrance due to inadequate infrastructure (electricity and information technology); hindrance due to environmental threats (flood and heavy rains); hindrance due to political instability (strike, illegal tolls, and briberies); hindrance due to government rules and regulations (license, tax, and VAT (value added tax)) over business experiences. Items were adapted from Rodriguez-Gutiérrez, Moreno [77] and measured on a seven-point Likert scale (1 = completely disagree, 7 = completely agree). The summated score [76] of the four items of the scale represented the business environment.

Entrepreneurial orientation (EO): To measure EO dimensions of women entrepreneurs, we adapted the EO scale of Verhees, Lans [115]. The EO scale included a total of 22 items of innovativeness, risk-taking, and proactiveness. Items were measured on a seven-point Likert scale (1 = completely disagree, 7 = completely agree) and are shown in Table A1. EO dimensions of women entrepreneurs resulted from exploratory factor analysis (see Table 2).

Education level: Education level was measured as the highest level of education of women entrepreneurs.

Business training: This was measured as the average number of hours per year of business training received by women entrepreneurs.

Social ties: The social ties data of Bangladeshi women entrepreneurs were gathered using the name generator technique that allowed for acquiring data on the structural characteristics of the ties (e.g., the number of ties) [116]. The number of social ties is the most usual measure of social ties [105–107]. Women entrepreneurs were asked to name people with whom they exchange information while chatting about matters of finance, market, raw materials, and technology [117]. These abovementioned relationships were labelled as social ties, which were measured as the number of their relationships/ties (see Table 1).
Table 1. Operationalization of variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Operationalization</th>
<th>Scale</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business performance</strong></td>
<td>Sum of: The total volume of my firm’s production has increased; I was satisfied with the price that I got from my customers; Customers were satisfied with my products and services; My shop had better products on offer compared to other handicrafts shops; My shop had a higher profit compared to other handicrafts shops</td>
<td>Likert 1–7 (summated scale 5–35)</td>
<td>0.75</td>
</tr>
<tr>
<td><strong>Social environment</strong></td>
<td>Hindrance due to family, norms, customs, traditions and religion</td>
<td>Likert 1–7</td>
<td>-</td>
</tr>
<tr>
<td><strong>Business environment</strong></td>
<td>Sum of: Hindrance due to inadequate infrastructure (electricity and information technology); Hindrance due to political instability (strike, illegal tolls and briberies); Hindrance due to environmental threats (flood and heavy rains); Hindrance due to government rules and regulations (license, tax and vat)</td>
<td>Likert 1–7 (summated scale 4–28)</td>
<td>0.70</td>
</tr>
<tr>
<td><strong>Innovative–proactive entrepreneurial orientation (EO)</strong></td>
<td>Reported later (Table 2)</td>
<td>Likert 1–7</td>
<td>0.95</td>
</tr>
<tr>
<td><strong>Risk-taking EO</strong></td>
<td>Reported later (Table 2)</td>
<td>Likert 1–7</td>
<td>0.91</td>
</tr>
<tr>
<td><strong>Social ties</strong></td>
<td>The total number of social ties of women entrepreneurs</td>
<td>Continuous variable</td>
<td></td>
</tr>
<tr>
<td><strong>Education level</strong></td>
<td>The highest level of education: (0 = no formal education; 1 = primary school; 2 = secondary school; 3 = higher secondary school; 4 = vocational and university education)</td>
<td>Categorical variable</td>
<td></td>
</tr>
<tr>
<td><strong>Business training</strong></td>
<td>The total number of hours of business-related training/business age</td>
<td>Continuous variable</td>
<td></td>
</tr>
<tr>
<td><strong>Financial capital</strong></td>
<td>Current inventory + (the value of facilities/business age) (Value of facilities = shop + sewing machine + embroidery machine + furniture + computer + other fixed assets)</td>
<td>Continuous variable</td>
<td></td>
</tr>
<tr>
<td><strong>Business age</strong></td>
<td>The number of years since women entrepreneurs started the businesses</td>
<td>Continuous variable</td>
<td></td>
</tr>
</tbody>
</table>

Note: Cronbach’s α cannot be measured for single item variables and they are indicated as (-).

Table 2. Exploratory factor analysis for items of EO dimensions.

<table>
<thead>
<tr>
<th>Items</th>
<th>Innovative–Proactive EO (λ)</th>
<th>Risk-Taking EO (λ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I produce a variety of unique products                                                    0.81                         -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use new techniques in production and marketing                                         0.77                         -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always look for new markets                                                            0.74                         -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I start production and marketing of new products faster than competitors                  0.73                         -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always try out new products                                                             0.73                         -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I introduce new and uncommon products into the market                                     0.73                         -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always look for new ideas and techniques                                                 0.71                         -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to predict future demands and the necessary changes of products                 0.68                         -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually initiate activities before other handicraft firms do                            0.65                         0.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always start new activities if I see an opportunity                                     0.63                         -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I take financial risks for higher profit                                                  -                            0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I invest extra time in products and services that yield a higher profit                   -                            0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always take risks if I see an opportunity                                               -                            0.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I take financial risks by producing new products and to go to new markets                 0.41                         0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I invest extra money in products and services that yield a higher profit                   0.52                         0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am always eager to find potential strategies for higher profit                           0.46                         0.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use my own techniques to create new products                                           -                            0.61</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data fit statistics:
Bartlett’s test: chi-square (df = 136) = 3825.58, (p) < 0.01; KMO = 0.95
Total variance explained: 65.28%
Factor loading (λ) smaller than 0.40 is suppressed.
3.3. Control Variables

Financial capital such as money or credit is the most common resource that can easily be changed into business resources [118]. Financial capital was therefore used as a control variable for business performance. This was measured as the current investment in inventory and facilities used by women entrepreneurs. Women entrepreneurs face challenges in exploring and exploiting business opportunities at different ages of their business [114,119]. Consequently, business age was used as a control variable, measured as the number of years since women entrepreneurs started their businesses (see Table 1).

4. Data Analyses

We adopted two steps of empirical strategy. The first step included preparatory work aimed at (1) identifying the EO dimensions in the Bangladeshi context through an exploratory factor analysis; (2) checking for the consistency of items used in latent variables by means of a reliability analysis; (3) testing the common method bias through a marker variable analysis; (4) reporting on the descriptive statistics (mean and standard deviation) and the bivariate correlation of variables used in the model (Table 3). The second step was a hierarchical multiple regression analysis.

4.1. Exploratory Factor Analysis

We conducted an exploratory factor analysis to test the multidimensionality of the EO concept and also identified the EO dimensions in the Bangladeshi women entrepreneurs’ context [62]. We followed principal component analysis with Varimax rotation and Kaiser’s criterion (eigenvalues > 1) [120]. The analysis included 22 items of innovativeness, risk-taking, and proactiveness. After the analysis, we took three items out of proactiveness and one item out of risk-taking because they were cross-loaded in two components with a single loading higher than 0.40, and the difference between loadings was lower than 0.10 [121]. After taking out the four items, we reid the analysis with 18 items. After the analysis, we took one item out of proactiveness for the same reason as the first removal. After deleting the one item, we reid the analysis with 17 items and finally got a two-component solution for EO, which met Kaiser’s criterion and explained 65.28% of total variation. Items loading higher than 0.60 constructed each component in this analysis. We labelled the first component as Innovative–proactive EO because items of innovativeness and proactiveness dominated this component. Similarly, the second component was labelled Risk-taking EO, as items of risk-taking dominated this component, although two items of proactiveness loaded on it (Table 2). Thus, two EO dimensions, namely, Innovative–proactive EO and Risk-taking EO, were retained in further analyses (descriptive statistics and regression).

Table 3. Descriptive statistics and Correlations (N = 211).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Business performance</td>
<td>29.14</td>
<td>3.00</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Financial capital</td>
<td>4408.69</td>
<td>12,028.57</td>
<td>0.31***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Business age</td>
<td>8.73</td>
<td>5.97</td>
<td>0.11</td>
<td>0.10</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Social environment</td>
<td>5.01</td>
<td>1.50</td>
<td>−0.13*</td>
<td>0.01</td>
<td>−0.03</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Business environment</td>
<td>20.86</td>
<td>4.07</td>
<td>−0.02</td>
<td>0.06</td>
<td>−0.07</td>
<td>0.29***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Innovative–proactive EO</td>
<td>5.88</td>
<td>1.02</td>
<td>0.43***</td>
<td>0.16**</td>
<td>−0.03</td>
<td>0.02</td>
<td>−0.17**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Risk-taking EO</td>
<td>5.94</td>
<td>0.99</td>
<td>0.30***</td>
<td>0.18***</td>
<td>0.06</td>
<td>0.01</td>
<td>0.03</td>
<td>0.03</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Education level</td>
<td>2.02</td>
<td>1.08</td>
<td>0.25***</td>
<td>0.15**</td>
<td>−0.05</td>
<td>−0.03</td>
<td>−0.07</td>
<td>0.33***</td>
<td>0.09</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Business training</td>
<td>29.86</td>
<td>56.99</td>
<td>0.13*</td>
<td>0.10</td>
<td>−0.16**</td>
<td>0.14**</td>
<td>0.01</td>
<td>0.09</td>
<td>0.05</td>
<td>0.26***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>10. Social ties</td>
<td>3.96</td>
<td>1.23</td>
<td>−0.02</td>
<td>−0.01</td>
<td>0.09</td>
<td>−0.08</td>
<td>0.04</td>
<td>0.10</td>
<td>0.18**</td>
<td>0.23***</td>
<td>0.16**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*, ** and *** Significant at 10% (p < 0.10), 5% (p < 0.05) and 1% (p < 0.01) levels.

4.2. Reliability Analysis

The reliability analysis is indicated by Cronbach’s alpha (α), and it should be greater than 0.70 [120]. The value of Cronbach’s α for all the latent variables was higher than the threshold value: business
performance (0.75), business environment (0.70), Innovative–proactive EO (0.95), and Risk-taking EO (0.91).

4.3. Marker Variable Analysis

We used the marker variable analysis to assess the common method variance (CMV). We separated out the CMV from the uncorrected correlations (denoted \( r_u \)) to arrive at the CMV-corrected correlation coefficients (denoted \( r_a \)). Testing for the significance of the CMV-corrected correlations \( r_a \) provided an estimate of the magnitude and significance of common method variance in the data. Correlations that remain significant after having controlled for CMV are unlikely to be severely affected by method variance [122]. The CMV corrected \( r_a \) correlations are computed as follows:

\[
\begin{align*}
  r_a &= r_u - r_m, \\
  r_u &= \frac{r_a}{1 - r_m},
\end{align*}
\]

where \( r_a \) is the CMV-corrected correlation and \( r_u \) is the original uncorrected correlation. For \( r_u \) we selected a correlation that was fundamental to our hypotheses (here: the correlation between business performance and \( I \) start production and marketing of new products faster than competitors; \( r_u = 0.42 \)). For \( r_m \), we selected the smallest correlation between any pair of variables that was theoretically unrelated. We used the bivariate correlation of both marker variables as an indicator of CMV (here: the correlation between business performance and \( I \) take financial risks for higher profit; \( r_m = 0.28 \)). We arrived at \( r_a = (0.42 - 0.28)/(1 - 0.28) = 0.19 \).

The t-statistic to assess the statistical significance of \( r_a \) is computed as follows:

\[
  t(\xi, n - 3) = r_a / \sqrt{(1 - r_a^2)/(n - 3)} = 3.35.
\]

The test statistic (3.35) was higher than 1.96, indicating that common method variance was not a serious problem in our research.

4.4. Hierarchical Multiple Regression Analysis (HMRA)

We ran hierarchical multiple regression analysis to test the hypotheses on the determinants of the business performance of Bangladeshi women entrepreneurs. This method was chosen because of our aim to examine the additive influence exerted by independent variables on dependent variable to the control variables. Due to 83 incomplete pieces of information on social ties, two missing values on financial capital, and four outliers, the final sample comprised 211 respondents. We also tested for linearity (adding square variables), heteroskedasticity (Breusch–Pagan test), multicollinearity (condition index and VIF (Variance Inflation Factor)), and normality (Kolmogorov–Smirnov test).

5. Results

Table 3 provides the descriptive statistics and the correlations of all variables used in regression analyses. The correlation table shows substantial correlations between the variables. Descriptive statistics show that the average business performance score of women entrepreneurs is quite high (about 29 out of 35). They are experienced in their businesses, as is clear from their average business age (about 9 years). Nevertheless, the current investment indicated by financial capital in their businesses is reasonably low (on average USD 4409). On average, they have about four social ties. The average scores of these entrepreneurs for barriers in the business environment (about 21 out of 28) and for barriers in social environment (5 out of 7) are moderately high. Moreover, on average, the scores of their Innovative–proactive EO (5.88 out of 7) and Risk-taking EO (5.94 out of 7) are high. Their average education level is low (secondary school) and they receive on average about 30 h of business training per year (Table 3).

Table 4 contains the hierarchical multiple regression models. Model 1 is the base model, including control variables. Model 2 is the final model, incorporating all independent variables with control
variables. We reported regression coefficients, $t$ values, significance level, adjusted $R^2$, $F$ test (overall model significance), maximum VIF, condition index, $X^2$ value, and ZRE (standardized residuals) statistic for both models. In the final model, the maximum VIF (1.24) indicates no serious multicollinearity because it is within the threshold VIF value (10) [123]. The condition index (19.72) is within limit (30), which confirms no apparent multicollinearity [124]. The ZRE statistic (.04) indicates that the residuals are normally distributed. Furthermore, the $X^2$ value (2.18) indicates the constant variance of residuals, as we cannot reject the hypothesis of constant variance at 5% level of significance. We can therefore consider our final model robust.

Table 4. Results of hierarchical multiple regression models $^a$.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1 (Base)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient ($\beta$)</td>
<td>$t$ Value</td>
<td>$\beta$</td>
<td>$t$ Value</td>
</tr>
<tr>
<td>Financial capital</td>
<td>0.30 $^{***}$</td>
<td>4.59</td>
<td>0.16 $^{***}$</td>
<td>2.69</td>
</tr>
<tr>
<td>Business age</td>
<td>0.08</td>
<td>1.22</td>
<td>0.13 $^{**}$</td>
<td>2.17</td>
</tr>
<tr>
<td>Social environment</td>
<td>$-$0.18 $^{***}$</td>
<td>$-$3.03</td>
<td>$-$0.13 $^{**}$</td>
<td>$-$2.09</td>
</tr>
<tr>
<td>Challenging business environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovative–proactive EO</td>
<td>$-$0.26 $^{***}$</td>
<td>4.55</td>
<td>0.11 $^{*}$</td>
<td>1.87</td>
</tr>
<tr>
<td>Education level</td>
<td>0.07</td>
<td>1.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business training</td>
<td>0.11 $^{*}$</td>
<td>1.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social ties</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.09 $^{***}$</td>
<td></td>
<td>0.34 $^{***}$</td>
<td></td>
</tr>
<tr>
<td>$\Delta$ in adjusted $R^2$</td>
<td></td>
<td></td>
<td>$0.25^{***}$</td>
<td></td>
</tr>
<tr>
<td>$F$ test</td>
<td>11.93 $^{***}$</td>
<td></td>
<td>12.93 $^{***}$</td>
<td></td>
</tr>
<tr>
<td>Maximum Variance Inflation Factor (VIF) for multicollinearity</td>
<td>1.01</td>
<td></td>
<td>1.24</td>
<td></td>
</tr>
<tr>
<td>Condition index for multicollinearity</td>
<td>3.43</td>
<td></td>
<td>19.72</td>
<td></td>
</tr>
<tr>
<td>$X^2$ for Breusch–Pagan test for heteroskedasticity</td>
<td>0.00</td>
<td></td>
<td>2.18</td>
<td></td>
</tr>
<tr>
<td>ZRE (standardized residuals) statistic for Kolmogorov–Smirnov test for normality</td>
<td>0.04</td>
<td></td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>Number of respondents</td>
<td>211</td>
<td></td>
<td>211</td>
<td></td>
</tr>
</tbody>
</table>

$^a$ Standardized regression coefficients are reported. $^{*}$, $^{**}$ and $^{***}$ Significant at 10% ($p < 0.10$), 5% ($p < 0.05$) and 1% ($p < 0.01$) levels.

Model 1 explains the relationships between control variables and the business performance of women entrepreneurs. Financial capital has a positive significant relationship with business performance ($\beta = 0.30$, $t$ value = 4.59). This result is in line with Lee, Lee and Pennings [119]. Here, business age does not show a statistically significant relationship with business performance. Model 1 explains 9% variation of the total variation of women entrepreneurs’ business performance ($\text{Adjusted } R^2 = 0.09$). Thus we added the related independent variables in the successive model.

Model 2 is the final model explaining the relationships between control and independent variables with business performance. Social environment shows a negative significant relationship with business performance ($\beta = -0.18$, $t$ value = $-3.03$), which supports our Hypothesis 1. The relationship between business environment and performance is not statistically significant and therefore we do not have support for Hypothesis 2. Innovative–proactive EO shows a positive and statistically significant relationship with business performance ($\beta = 0.40$, $t$ value = 6.46). We cannot relate this result directly to Hypotheses 3a and 3c, since this dimension incorporates the two dimensions (innovativeness and proactiveness) usually discussed in the literature. It obviously indicates that the combination of innovativeness and proactiveness influences Bangladeshi women’s business performance in a positive way. Likewise, Risk-taking EO has a positive and significant relationship with business performance ($\beta = 0.26$, $t$ value = 4.55), supporting our Hypothesis 3b. However, education level does not show a statistically significant relationship with business performance, and consequently we do not have support for our Hypothesis 4. Business training ($\beta = 0.11$, $t$ value = 1.87) has a positive significant
relationship with business performance, which supports our Hypothesis 5. Conversely, social ties show a negative significant relationship with business performance ($\beta = -0.13$, $t$ value = $-2.09$), which is the opposite of our Hypothesis 6. Of the control variables, financial capital and business age both show a positive significant relationship with business performance. Inclusion of independent variables with control variables significantly increases the explained variance ($\Delta$ in adjusted $R^2 = 0.25$), and therefore Model 2 explains about 34% variation of the total variation of women’s business performance (Adjusted $R^2 = 0.34$).

6. Discussion

Based on the theoretical perspective of entrepreneurial bricolage, which reflects the deployment of resources in meagre environments, this research tries to gain insight into how women entrepreneurs operating in constrained environments deploy resources to develop their businesses. In doing so by using five concepts, namely, social and business environments, entrepreneurial orientation (EO), human and social capital, we aim at identifying and exploring the key determinants of women entrepreneurs’ business performance in a developing country context, Bangladesh. Here, business performance is considered as an indicator of women entrepreneurs’ capacity of deploying the types of resources to develop their businesses in this context.

6.1. Constraints on Deploying Resources

Our research finds that the social environment in terms of social norms, values, traditional customs, and religion is a barrier to the business performance of women entrepreneurs in a patriarchal society, Bangladesh. This finding is consistent with Roomi [36], who finds that the barriers of immediate family, independent mobility, and meeting with men negatively affect the employment and sales growth of women entrepreneurs in the Pakistani context. Al-Dajani and Marlow [37] and Al-Haddad [125] suggest that masculinity or male power represents features or gender stereotypes preventing women from operating their businesses in Jordan. In addition, some studies find that the perception of conflict between the entrepreneurial role and other roles such as mother, wife, and housewife is not supportive of business performance, as in the case of women entrepreneurs in Turkey presented by Ufuk and Özgen [126]. Other hindrances that the social environment poses for women entrepreneurs are represented by religious norms, as in the case of women operating in Pakistan [127–129], or by the caste system, as in India [130–132]. We therefore suggest that hindrances or barriers of family and socio-cultural norms are often counterproductive for the business performance of women entrepreneurs in a developing world context.

Our study, however, shows that the business environment does not have a statistically significant influence on Bangladeshi women entrepreneurs’ business performance.

6.2. Deployment of Types of Resources

Our findings on the dimensions of EO show the main dimensions: combined Innovative–proactive EO and Risk-taking EO for the Bangladeshi women entrepreneurs’ context. This finding is surprising in the sense that research has so far analysed EO as mostly comprising three separate dimensions (innovativeness, proactiveness, and risk-taking), which also influence performance independently from each other [57]. In this research, the Innovative–proactive EO dimension encompasses in itself elements of both dimensions identified in the literature, and we therefore posit here that it reflects the context within which the analyses are done. The role played by the specific context, the type of questions, and how the respondents handled them may have influenced our findings.

Our empirical research results suggest that the Innovative–proactive EO dimension positively impacts Bangladeshi women entrepreneurs’ business performance. This research result contributes to the existing empirical evidences and literature offered by several general (men and women) studies on the separate positive impact of innovativeness [75,76,133] and proactiveness on business performance in developed countries [62,76]. Although it is not possible in our context to separate the impacts that
innovativeness and proactiveness individually have on the business performance, our results confirm that when Bangladeshi women entrepreneurs are involved with new ideas and creative processes, and are capable of anticipating the future problems or changes in the market, their performance scores higher than the competitors. Our empirical results also suggest that the Risk-taking EO dimension has a positive influence on the business performance of women entrepreneurs in the Bangladesh context. This is in line with the existing general (men and women) evidence on the influence of risk-taking on the performance [85–87]. Therefore, women entrepreneurs’ risk-taking attitude may have a positive impact on their business performance in the developing country context. Furthermore, the Innovative–proactive EO dimension of Bangladeshi women entrepreneurs plays a higher role in their business performance, compared to their Risk-taking EO dimension, since our results find a higher positive relationship between Innovative–proactive EO and business performance ($\beta = 0.40$) than between Risk-taking EO and business performance ($\beta = 0.26$). In addition, several researchers claim that the creation and combination of EO dimensions and also their impacts on business performance are related to the context [90,134,135]. Based on this, we propose that in the specific context we analyse, innovativeness and proactiveness are combined to reflect a specific feature of women entrepreneurship in this context.

Next to EO, our results on human capital such as education and business training find a mixed impact on performance. This research finds a statistically not significant effect of education level on business performance in the Bangladeshi women entrepreneurs’ context. This finding is in line with Lerner, Brush [19]. Bangladeshi women entrepreneurs’ business trainings have a positive impact on their business performance. This empirical evidence is consistent with Kantor [100] in the Indian context, and with Immyxai and Takahashi [98] in the context of Laos. Our research therefore confirms that women’s business training is still essential for their business performance in the developing world context.

Finally, our results on social capital suggest that the social ties of Bangladeshi women entrepreneurs negatively influence their business performance. The negative influence of social ties may be due to the excessive presence (in number) of strong ties of women entrepreneurs in a personal social network: most of the ties Bangladesh women entrepreneurs build with their family, friends and relatives, which are strong ties in nature. The literature provides several reasons why the excessive presence of strong ties in a personal network might harm the business performance [108,136,137]. First, numerous strong ties might provide overlapping, conflicting, and unnecessary information that might limit the capability of entrepreneurs to achieve potential business opportunities [38,137,138]. Second, obligations and expectations built into the strong ties might also constrain the entrepreneurs’ ability to build new external ties and access innovative knowledge and information [138]. Third, the potential cost (time and money) of building and maintaining a large set of strong ties might outweigh the potential benefit (new knowledge and information) [139]. Furthermore, in many developing countries the social environment constrains the position of women in society [10–12,54,140]. Women are confined to their household activities and are discouraged from engaging in social networks outside the family [108,141]. When involved in business activities, they need to balance their time between domestic work and business [142]. This positions women entrepreneurs in a ‘socially constrained’ context that ultimately impedes their possibility of exploiting resources and business opportunities through social ties [108,143]. Therefore, social ties may have a negative impact on the business performance of women entrepreneurs operating under constrained conditions in a developing country [108,141,144,145].

7. Conclusions

Using the theoretical lens of entrepreneurial bricolage, which explains the deployment of resources in poor environments, this study intends to gain insight in how women entrepreneurs working under constrained environments deploy the types of resources to develop their businesses. To achieve such insight, we analyse the determinants of the business performance of women entrepreneurs in a developing world context, Bangladesh, based on five concepts, namely, social environment,
business environment, entrepreneurial orientation (EO), human capital, and social capital. The results from a hierarchical multiple regression model show that: (1) the social environment in terms of societal norms and customs is a hindrance to performance; (2) the business environment does not affect the performance; (3) the dimensions of EO, namely, combined Innovative–proactive EO and Risk-taking EO, positively influence the performance; (4) the business training also positively affects the performance, while the education level is not significant; and (5) the social ties negatively affect the performance, which may be due to the excessive presence (in number) of strong ties in a personal social network. As business performance is reflected here as an indicator of the capability of entrepreneurs of the deployment of resources for their businesses, so we propose that women entrepreneurs in this specific constrained context deploy the types of resources in the abovementioned way to develop their businesses. Based on this, we theoretically suggest that the (developed versus developing world) context should be added to Resource-Based Theory (RBT) to explain the possible ways a woman entrepreneur can deploy resources.

This study makes several contributions to the literature. First, EO literature is enriched by providing insights into the constellation of EO dimensions. Second, we increase insights into how the separate EO dimensions trigger women entrepreneurs’ business performance in a developing world context. Third, the impacts of social and business environments on business performance in the specific case of women entrepreneurs are described. Fourth, empirical evidence of the bright side of business training and the dark side of social capital (negative impact) for the business performance of women entrepreneurs is provided. The policy-oriented contribution is also given. As the results show that Innovative–proactive EO and Risk-taking EO positively impact business performance, a business culture should be created where women entrepreneurs’ competences in creating, reacting to the changes in the market, and taking risks are fostered. This would allow for a context within which these competences can effectively unfold and lead to the performance that benefits not only the individual businesses, but also the development of the region in which the businesses are located. The Government and NGOs may play an important role here, for example, by launching business training courses at national and local levels, and by encouraging electronic and print media to portray key examples of entrepreneurial traits that enhance performance, even while respecting societal norms. In this way, the patriarchal society in developing countries may gradually grow a more positive image towards women entrepreneurs and their contribution to the economy.

Limitations and Future Research

This research had a number of methodological limitations. First, the problem of causality was not addressed properly by the method used because of the nature of the available data (cross-section). Due to this type of data, we implicitly assumed that reverse causality was possible between dependent and independent variables. Therefore, further research using longitudinal data should verify our results. Second, perceived measure was used for business performance because of the unavailability of objective data for women entrepreneurs in this context. Third, measurement error or common method variance (CMV) were possible because all data were self-reported and collected using the same questionnaire. However, our results from marker variable analysis showed that CMV was not a problem in this research. Fourth, this research only explored the handicraft sector in Bangladesh, based on the evidence that women develop their businesses more in this sector than in others. Future research may analyse the same dynamics in other sectors (e.g., agriculture and service). Fifth, our results are not applicable to men’s entrepreneurship. Future research on a different sample can be undertaken to compare the determinants between men and women entrepreneurs in this context. This will help to suggest what particular conditions empower women entrepreneurship in constrained contexts.

Author Contributions: Conceptualization, L.M.; methodology, G.v.d.V.; software, L.M.; validation, G.H. and S.W.F.O.; formal analysis, L.M. and G.v.d.V.; investigation, L.M.; resources, L.M.; data curation, L.M.; writing—original draft preparation, L.M.; writing—review and editing, G.H.; visualization, L.M.; supervision,
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Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Measurement of entrepreneurial orientation.

<table>
<thead>
<tr>
<th>Entrepreneurial Orientation (Innovativeness; Risk-Taking; Proactiveness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Could you please respond to the following statements? (completely disagree = 1; disagree = 2; somewhat disagree = 3; neither agree or disagree = 4; somewhat agree = 5; agree = 6; completely agree = 7)</td>
</tr>
<tr>
<td>Block 1</td>
</tr>
<tr>
<td>a. I always start new activities if I see an opportunity</td>
</tr>
<tr>
<td>b. I always look for new ideas and techniques</td>
</tr>
<tr>
<td>c. I always look for new markets</td>
</tr>
<tr>
<td>d. I always try out new products</td>
</tr>
<tr>
<td>e. I produce a variety of unique products</td>
</tr>
<tr>
<td>f. I use new techniques in production and marketing</td>
</tr>
<tr>
<td>g. I introduce new and uncommon products into the market</td>
</tr>
<tr>
<td>h. I use my own techniques to create new products</td>
</tr>
<tr>
<td>Block 2</td>
</tr>
<tr>
<td>a. I always take risks if I see an opportunity</td>
</tr>
<tr>
<td>b. I take financial risks for higher profit</td>
</tr>
<tr>
<td>c. I am good at managing financial risks</td>
</tr>
<tr>
<td>d. I take financial risks by producing new products and to go to new markets</td>
</tr>
<tr>
<td>e. I invest extra time in products and services that yield a higher profit</td>
</tr>
<tr>
<td>f. I invest extra money in products and services that yield a higher profit</td>
</tr>
<tr>
<td>Block 3</td>
</tr>
<tr>
<td>a. I usually initiate activities before other handicraft firms do</td>
</tr>
<tr>
<td>b. I start production and marketing of new products faster than competitors</td>
</tr>
<tr>
<td>c. I am able to predict future demands and the necessary changes of products</td>
</tr>
<tr>
<td>d. I plan ahead what I want to do</td>
</tr>
<tr>
<td>e. I always produce desirable products for clients</td>
</tr>
<tr>
<td>f. I look for new connections to get access to raw materials, finance &amp; new markets</td>
</tr>
<tr>
<td>g. I can easily predict the action of competitors and set my strategies accordingly</td>
</tr>
<tr>
<td>h. I am always eager to find potential strategies for higher profit</td>
</tr>
</tbody>
</table>

References


16. Al-zoubi, A.F.; Al-Alak, B. E... [CrossRef]


22. BWCCI. *Building Women in Business: A Situation Analysis of Women Entrepreneurs in Bangladesh; Bangladesh Women Chamber of Commerce and Industry: Dhaka, Bangladesh, 2008.*


44. Glonti, K.; Mackenbach, J.D.; Ng, J.; Lakerveld, J.; Oppert, J.M.; Bárdos, H.; Mckee, M.; Rutter, H. Psychosocial environment: Definitions, measures and associations with weight status—A systematic review. Obes. Rev. 2016, 17, 81–95. [CrossRef]


Tan, J. Breaking the “bamboo curtain” and the “glass ceiling”: The experience of women entrepreneurs in high-tech industries in an emerging market. J. Bus. Ethics 2008, 80, 547–564. [CrossRef]


Hughes, M.; Morgan, R.E. Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. Ind. Mark. Manag. 2007, 36, 651–661. [CrossRef]


127. Fletschner, D.; Carter, M.R. Constructing and reconstructing gender: Reference group effects and women’s demand for entrepreneurial capital. *J. Socio-Econ.* **2008**, *37*, 672–693. [CrossRef]
129. Roomi, M.A.; Parrott, G. Barriers to development and progression of women entrepreneurs in Pakistan. *J. Entrep.* **2008**, *17*, 59–72. [CrossRef]

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