

Dissecting entrepreneurial propensities among Women tea plantation workers in
West Bengal: An Expected Utility Approach

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Abstract

This study examines the entrepreneurial propensities of female tea plantation workers in West Bengal using an Expected Utility Approach within a Discrete Choice Framework. Integrating Minority Stress Theory, Role Congruity Theory, and Hakim's Preference Theory explores how structural constraints, social identity stress, and work centrality preferences influence occupational decisions. Based on 45 survey responses analysed through a Multinomial Logit Model, preliminary findings indicate that higher income increases the likelihood of entrepreneurship. At the same time, minority stress reduces it, suggesting that discrimination discourages business participation. Role congruity perceptions and work centrality preferences positively impact entrepreneurial intentions, highlighting the role of gender norms and career motivations. The study theoretically contributes by expanding entrepreneurial decision-making frameworks for marginalised women and methodologically applying discrete choice models to gendered occupational choices. Practical implications emphasise the need for financial inclusion, gender empowerment, and anti-discrimination policies to support entrepreneurial transitions. As data collection continues, the study aims to refine its insights for inclusive policy interventions and sustainable economic opportunities.

Keywords: *Tribal Women Entrepreneurship, Expected Utility Theory, Multinomial Logit, Gender and Work*

Word Count: 5042

Introduction

As a technique of tackling women's development challenges, women's entrepreneurship is increasing in popularity worldwide. Since the commencement of the five-year plans, the Indian government has prioritised women's development concerns, including workforce participation, empowerment, education, and gender equality. Women who engage in entrepreneurship, particularly in MSMEs, make major contributions to a country's economic growth by creating jobs and income, fighting against poverty, and introducing diversity in business. Higher living conditions are always the result of greater levels of involvement by women in business endeavours, which promotes the advancement of women (Terjesen et al., 2016). Nevertheless, given their simultaneous functions as income earners and caregivers, persistent inequity and susceptibility exist in many areas of society, including socioeconomic, educational, health, nutrition and political.

The rich tea culture and its economics are inextricably linked to the activity of tea picking. India is one of the world's top tea growers, and the tea sector is crucial in giving millions of people, particularly in rural regions (Economic Times, 2023). Handpicking tea leaves from the bushes by expert workers—mostly women—requires much labour. These individuals are called "tea garden workers" or "tea pickers." They have developed experience in assessing the quality of leaves since they have been a vital component of the tea business for millennia. The act of plucking is delicate, and exactitude is needed. Typically, just the top two leaves and a bud are taken since they are thought to have the finest flavour and scent (Wang et al., 2021). These leaves are then processed further to create several tea varieties, including black, green, white, and oolong. Despite the traditional nature of tea picking, modern methods have advanced in several ways (Ravichandran & Parthiban, 1998). Modern tea gardens use automation and technology to increase productivity and lower labour requirements. High-quality teas are still picked by hand because they give pickers more control over plucking. The tea plucking business has difficulties, such as problems with equitable pay, unfavourable working conditions, and the welfare of tea garden employees. India has three main tea-growing regions: Darjeeling, Assam, and Nilgiris. The background of the current study takes into cognisance the context of female garden workers in the Darjeeling region of the state of West Bengal. In a pioneering work about the gender dimension of tea plantation workers in West Bengal, Bhadra (2004) has elucidated that women from specific tribal communities were specially recruited during the colonial rule over India due to factors like "self-reproducing workforce", "traditionally accepted low wage rates" and "subservient nature". The former further adds that colonial owners of large tea estates spread across the length and breadth of the Darjeeling and Terai regions were interested in "captive", "indentured", and "depersonalised" labour. Since traditionally, the tea industry was considered agro-based and low-mechanised, it was deemed that women wouldn't find it cumbersome to adjust and adapt to the working conditions (Bhattacharya, 2010). Other interesting observations by Bhadra (2004) point out that women were preferred for tea plucking jobs due to their apparent "nimble fingers" while being docile, resourceful and loyal.

In the tri-region of Darjeeling-Dooars-Terai in West Bengal, 163 Million Kgs of tea is produced annually from 115095 hectares of acreage (Minhas, 2022). As of 2014, there are 2,62,426 designated workers engaged with 273 tea estates in the tri-region, 70% of whom are represented by women between the ages of 18 and 55 (Labour Report 2014, Govt. of West Bengal). Over the past seven decades, several demands have been to review labour rights in the tea plantations. One such event is the uprising of tea plantation workers headed by women from the iconic Margaret Hope Tea Estate in the Kurseong sub-division of Darjeeling hills, where six labourers, including one pregnant woman, were gunned down by police firing (Chhetri, 2022). Singh et al. (2006) define this deplorable condition as a colonial

hangover as even after 70 years of becoming a sovereign republic, the situation with the tea-plucking community, especially the women, remains similar. A primary motivation to conduct this study on the aspirations and propensities of the women's community is due to the pertinent issues they face, including deficiency of control over their income, lack of veto in household decision-making, double-burden of work (at home and in the field) and absence of women's representation in trade unions (Joseph & Viswanathan, 2016).

Among the various segments of society, tribal women represent a unique and often marginalised group facing multiple socio-economic challenges. They reside in remote and rural areas, and their access to resources, education, and economic opportunities is often limited (Ojediran & Anderson, 2020). However, despite these challenges, tribal women have displayed remarkable resilience and resourcefulness, making entrepreneurship an attractive avenue for socio-economic upliftment (Sinha et al., 2022). The importance of women's entrepreneurship among tribal women extends beyond economic outcomes. It also plays a vital role in empowering women, challenging traditional gender norms, and fostering community development (Goel & Madan, 2019). Moreover, the active participation of tribal women in entrepreneurial activities can contribute to preserving Indigenous culture and heritage, as entrepreneurship often involves promoting locally made products and services (Díaz-García & Jiménez-Moreno, 2010). Furthermore, women's entrepreneurship has been recognised as a pathway to achieving the United Nations Sustainable Development Goals (SDGs), particularly Goal 5 (Gender Equality) and Goal 8 (Decent Work and Economic Growth) (United Nations, 2015). By empowering tribal women to become entrepreneurs, it is possible to address some of the systemic inequalities they face, foster inclusive economic growth, and promote sustainable development in tribal communities.

Despite the growing interest in women's entrepreneurship, there remains a limited understanding of the specific entrepreneurial propensities and challenges faced by tribal women. Therefore, this research seeks to explore and analyse the entrepreneurship propensities among tribal women, aiming to provide valuable insights that can inform policy interventions and initiatives to support and nurture their entrepreneurial endeavours. Given the above circumstances and background, through this research, the researcher attempts to answer the following research questions,

RQ₁: What are the critical barriers and incentives to engage in entrepreneurship prevalent among tea plantation workers?

RQ₂: How do factors like minority stress, female agency and role congruity evaluate entrepreneurial decision-making?

Current State of Entrepreneurship Among Tribal Women in India

The current state of entrepreneurship among tribal women in India is a complex and challenging landscape. While there are success stories of tribal women entrepreneurs, overall, their participation in entrepreneurship remains relatively low (Mohanty & Samal, 2022). Several barriers and constraints hinder their progress in this field. One of the key barriers is the lack of access to resources and finance. Tribal women often face difficulties accessing loans, credit facilities, and financial support, limiting their ability to start or expand their businesses (Kapoor et al., 2021). Additionally, limited education and skill development opportunities pose knowledge and capability-building challenges. Cultural norms and societal expectations also play a significant role. Traditional gender roles and social norms restrict the mobility and autonomy of tribal women, making it difficult for them to engage in entrepreneurial activities outside their communities. A lack of awareness about entrepreneurship as a viable option further exacerbates the situation (Sahu et al., 2021). To address these challenges and unlock the potential of tribal women in entrepreneurship, targeted interventions are required. This

includes creating policy frameworks that promote inclusivity and equal opportunities, providing financial support and training programs specifically designed for tribal women, and fostering mentorship and networking opportunities. Additionally, raising awareness about the benefits of entrepreneurship and challenging gender stereotypes can contribute to a more conducive environment for tribal women to thrive as entrepreneurs.

Theoretical Dimensions of the Study

This section of the study shall deal with the major theoretical pillars that support the rationale of the examination.

Role Congruity

Role congruity refers to the alignment or fits between societal expectations of gender roles and the behaviours or characteristics associated with a particular role. The stereotype fit hypothesis proposes that members of a particular group will face discrimination in different positions or roles to the extent that their group stereotypically lacks the traits necessary for success in the role or position (Eagly & Karau, 2002). In studying entrepreneurial decisions among marginalised women, role congruity theory suggests a perceived incongruity between stereotypes of women and successful entrepreneurs (Abraham, 2020). This incongruity affects women's interest and motivation to pursue entrepreneurial opportunities (Patterson et al., 2012). They may hesitate to pursue entrepreneurial opportunities due to the fear of deviating from societal expectations or facing backlash for not fitting into traditional gender roles (Croft et al., 2021). When examining gender differences in entrepreneurial venture interests, it was found that participants associate more male-stereotypic goals with entrepreneurship than female-stereotypic goals (Folberg et al., 2023). According to Yang et al. (2020), systemic role incongruity indicates that societal expectations and stereotypes shape women's perceptions of entrepreneurship. The latter added that addressing and understanding this incongruity can increase women's interest in entrepreneurship.

Minority Stress

Minority stress is the struggle that minority group members suffer as a result of the link between their values and those of the majoritarian culture (Alessi, 2014). The theory was primarily promulgated by Meyer (2003) to understand the challenges faced by the LGBTQ+ community, as it defines the higher degree of stress experienced by members of a stigmatised minority group. Minority stress is highly relevant when studying entrepreneurial decisions among tribal women. Minority stress refers to the unique stressors and challenges faced by individuals who belong to marginalised groups, such as tribal communities (Ukanwa et al., 2017). In essence, the theory describes two forms of stressors, distal and proximal. According to Clark et al. (1999), distal factors among marginalised communities could be systemic discrimination or societal prejudice. These are overarching factors that create a hostile environment and contribute to chronic stress among marginalised individuals or groups, like tribal women. Dohrenwend (2000) explain that proximal stressors ensue following exposure to distal stressors. The latter observed that these stressors manifest as fear of rejection and internalised prejudice and revulsion towards one's own marginalised group. Khubchandani et al. (2018) opine that tribal and lower caste women in India are regularly exposed to systematic prejudice, casteist isolation and misogyny, which play a role in stunting their socio-economic upliftment and reinforce an inferiority complex. Furthermore, they may face structural barriers, such as limited access to education, resources, and networks, which are essential for entrepreneurship. Additionally, they may experience cultural and social pressures that discourage them from pursuing non-traditional roles, including entrepreneurship (Roomi & Parrott, 2008).

Hakim's Preference

Hakim's preference is a sociological theory proposed by American feminist philosopher Prof. Catherine Hakim. According to Hakim (1998), women have two choices in society: either become a reproductive member by way of giving birth or invest in productive work. The latter expanded the theory to house five critical socio-economic conditions, which, according to Hakim, developed the notion of a "new scenario". The new scenario, as per the theory (Hakim, 2000), was an ideal society where women can control their fertility through contraceptives, equal opportunities, extension of white-collared jobs that are more appealing to women, creation of employment for women through arrangements like freelancing, remote working and part-time work. The final condition was women's agency in choosing their lifestyle. Commenting on the theory, McRae (2003) opines that women have different preferences and priorities regarding career choices, often prioritising flexibility and work-life balance. When relating this theory to entrepreneurial intentions among marginalised women, it can be argued that these preferences may impact their interest in entrepreneurship as they may perceive entrepreneurship as demanding and time-consuming, in conflict with their preference for flexibility (Vracheva & Stoyneva, 2020). This could potentially deter them from pursuing entrepreneurial endeavours. Therefore, understanding and addressing marginalised women's unique preferences and priorities is crucial in promoting entrepreneurial intentions and creating a supportive environment for their participation in entrepreneurship (Hakim, 2016).

Research Methodology

Research Design

The study employs a quantitative research design to investigate the entrepreneurial propensities among women tea plantation workers in West Bengal. The research is grounded in the framework of Expected Utility Theory, utilising a discrete choice modelling mechanism to understand decision-making patterns.

Sources of Data and Sampling Design

The study collected primary data from the Darjeeling district of West Bengal. It was purposively selected due to the large concentration of tea-producing regions. Ten major tea estates were targeted for the study. The study empanelled the services of post-graduation students of the Masters of Social Welfare (MSW) of Calcutta University. An a priori analysis using the G*Power software yielded a minimum sample of 184 under a medium f^2 of 0.15, α error prob of 0.05 and a Power ($1-\beta$ err prob) of 0.95. The questionnaire (Table 1) was translated into the vernacular language, and respondents were intercepted with paper and pen at their workstations. The questionnaire was shared with academicians, social workers, women's rights activists and PhD scholars to acquire critical insights. Using a simple random sampling method, 10 interviews were conducted with the garden workers in tandem with the village administration and a local NGO to understand the internal validity of the questionnaire. After successfully conducting the interview and reducing redundant queries, 190 questionnaires were distributed among the volunteers to collect data from women tea garden workers. The questionnaire is designed to gather information on demographic characteristics, current employment conditions, perceptions of entrepreneurship, and preferences related to business ownership. The survey also includes hypothetical scenarios to elicit preferences using discrete choice modelling. The data collection started in December 2024 and is still going on.

Table 1 Survey Instrument (Source: Author's Own)

Theoretical Underpinning	Variable	Items	References
MINORITY STRESS	Dyadic Stress (Likert 1-5)	1. I feel stressed due to conflicts with my spouse. 2. I feel pressure to conform to my spouse's expectations. 3. I have difficulty communicating with my spouse. 4. I feel like I need to hide aspects of myself from my spouse.	(Bodenmann, 1997; Meyer, 1995)
	Stigma Consciousness (Likert 1-5)	5. I am aware that society holds negative beliefs about women in business. 6. I worry that others may judge me based on my gender when I am in business settings. 7. I am aware of the potential negative consequences of being a woman in business. 8. I believe that my gender influences how others perceive my competence in business.	(Meyer, 1995; Pinel, 1999)
	Minority Identity (Likert 1-5)	9. I feel like I have to work harder to overcome my lower caste status in entrepreneurship. 10. I feel like my lower caste status is a barrier to accessing resources in entrepreneurship. 11. I feel like I have to downplay my dalit identity in order to fit in with the dominant culture of entrepreneurship. 12. I feel like my lower caste identity makes me more resilient in the face of adversity in entrepreneurship.	(Meyer, 1995; Verkuyten & De Wolf, 2002)
ROLE CONGRUITY	Perceived Role-Incongruity (Likert 1-5)	13. Society expects women to focus more on family responsibilities than on their business careers. 14. I believe that my gender has limited my opportunities to succeed as an entrepreneur. 15. I believe that my gender affects how others perceive my ability to lead my business. 16. I feel pressure to conform to traditional gender roles in my business interactions.	(Abraham, 2020; Eagly & Karau, 2002)
	Perceived Gender Stereotyping (Likert 1-5)	17. In my experience, women entrepreneurs are often viewed as less competent than their male counterparts. 18. I feel that society expects women entrepreneurs to be nurturing and communal, rather than assertive and competitive.	(Eagly & Karau, 2002; McKinnon & O'Connell, 2020)

		19. Women entrepreneurs are often held to higher standards of appearance and behaviour than men, which can be a barrier to success. 20. Female entrepreneurs often face societal pressure to balance work and family responsibilities in a way that is not expected of male entrepreneurs.	
HAKIM'S PREFERENCE	Work Centrality (Likert 1-5)	21. I feel like my minority identity makes me more resilient in the face of adversity in entrepreneurship. 22. I feel that my work defines who I am. 23. My work is a source of pride and accomplishment for me. 24. I am willing to sacrifice personal relationships for my work.	(Hakim, 2003, 2005)
	Agency in Family Planning (Likert 1-5)	25. How often do you have a say in decisions related to family planning? 26. How often do you feel comfortable discussing family planning with your partner? 27. How often do you feel pressured to conform to your partner's preferences for family planning? 28. How often do you feel heard and respected when you express your opinion on family planning?	(Hakim, 2003) (Lewis & Simpson, 2016)
	Status-Related Preferences (Likert 1-5)	29. I would feel fulfilled if my peers recognized my entrepreneurial acumen. 30. I am motivated by the prospect of achieving high status in my business community. 31. I am willing to take risks to achieve higher social recognition and prestige.	(Hakim, 2003; Kangas & Rostgaard, 2007)

Expected Utility Framework

The Expected Utility Theory (EUT) serves as the foundational framework for this study, allowing for a systematic analysis of the decision-making process among female tea plantation workers considering entrepreneurship. Originally formalised by Neumann & Morgenstern (1944), EUT posits that individuals make rational choices by evaluating the expected outcomes of different alternatives and selecting the option that maximises their perceived utility. This theoretical approach is particularly well-suited for studying entrepreneurial behaviour, as it accounts for risk, uncertainty, and individual preferences in decision-making (Savage, 1954). Since transitioning from waged labour to entrepreneurship entails potential rewards and inherent risks, EUT provides a structured method to assess how women in the tea plantation sector weigh these trade-offs.

Entrepreneurial decision-making fundamentally involves an evaluation of expected benefits, such as financial independence and upward social mobility, against perceived risks, including market volatility, access to credit, and the likelihood of business failure. According to Kihlstrom & Laffont,

(1979), individuals with higher risk tolerance are more likely to engage in entrepreneurial activities, whereas risk-averse individuals prefer stable employment. In the case of female tea plantation workers, socio-economic constraints, gendered labour divisions, and limited institutional support further complicate these choices. By applying the expected utility framework, this study aims to model the factors influencing their entrepreneurial propensities, recognising that economic considerations and structural constraints shape their decisions. To empirically test this decision-making process, the study employs Discrete Choice Analysis (Train, 2003), a widely used method in behavioural and economic research. This approach presents respondents with hypothetical entrepreneurial scenarios that vary in key attributes such as initial investment, expected income, risk of failure, and access to support networks. Using econometric models such as multinomial logit (MNL) and mixed logit models (McFadden, 1987) the study estimates the probability of a woman opting for entrepreneurship over continued employment in tea plantations. The expected utility function in this context is represented as:

$$EU = \sum_i p_i U(x_i)$$

Where EU represents the expected utility of entrepreneurship, p_i is the probability of each potential outcome and $U(x_i)$ denotes the utility derived from that outcome. This formulation allows for a robust quantitative assessment of how different factors—ranging from financial constraints to societal expectations—impact women's entrepreneurial choices.

Data Analysis

Descriptive statistics will be used to analyse participants' demographic characteristics and current employment conditions. The discrete choice data will be analysed using an advanced econometric technique- Multinomial Logit, to estimate preferences and assess the impact of different attributes on women's entrepreneurial choices. In production economics, occupational choice among individuals is based on several factors. Even though the occupational choice decision is taken under rational boundaries, observing every attribute that impacts the choice behaviour is not feasible. The current study assumes three types of occupations ($C = 0, 1, 2$; where, 0=Tea Plucker, 1=Housewife, 2=Entrepreneur) in the production system. An individual n is faced with choosing an occupation c among the given occupations (C). If individual n chooses an occupation C ($c \in C$), then n possesses a random utility function defined below;

$$U_{nc} = V_{nc} + \varepsilon_{nc}$$

The expression above contains a fixed element V_{nc} that denotes the average utility derived from various observed factors in the linear equation. The errata is represented as ε_{nc} signifies deviation from the population mean and comprises all unobserved terms and can influence the utility of choosing a specific alternative. (Hausman & Wise, 1978; McFadden, 1987). Therefore, from the occupational choices available to them, the respondent can choose one particular (C^*) from whose features they can derive the maximum utility. The same can be expressed by;

$$U^*(I_x, \Omega) = U[R_\omega(I_x, \Omega)R_\phi(I_x, \Omega)]$$

Where, $U^*(I, \Omega)$ is the maximum achievable utility, R_ω denotes the occupation of tea plucking (primary outcome), R_ϕ indicates the set of alternative occupation choices. I_x is the annual income of the female garden worker (economic factor), and Ω represents the socio-demographic variables that effects utility level when choosing a particular occupation. The fixed component of the respondent's

random utility function can be denoted as $V_{nc} = V(I_{xi}, \Omega_i)$, where I_{xi} represents the annual income and Ω_i as the vector of socio-demographical factors. Specifying the model, we have;

$$V_{nc} = \beta_1 I_{xi} + \Omega_i D + \vartheta_i$$

D denotes the vector of parameters. Simplifying the above expression, we get,

$$V_{nc} = N_i \Gamma + \varepsilon_i$$

N_i represents the combined set of factors that influence the U levels, Γ comprises the parameters in the model, while ε_i is the errata which is distributed identically and is independent.

The MNL Procedure

Three options were used to assess the influence of the key factors that may determine occupational choice architecture among female tea garden workers. These options were housewife, tea plucker and entrepreneur. In selecting occupations, the respondent will consider an alternative occupation only when the returns are significant. The multinomial logit model is suitable for understanding the occupational choices of a particular segment of women due to its broad applicability and tractability (Hoffman & Duncan, 1988). This model is commonly used in the study of discrete choice behaviour and has been applied in various fields, such as consumer demand analysis and experimental economics. It allows researchers to analyse the probabilities of different occupational choices and capture the element of bounded rationality in decision-making (Bierlaire, 1998). Additionally, the multinomial logit model has a connection to consumer theory through a random utility model, making it a valuable tool for understanding occupational preferences (Chapaaan & Staelin, 1982). Using this model, researchers can examine the factors influencing women's occupational choices and gain insights into the dynamics of labour market participation (Cleland et al., 2018). Furthermore, the multinomial logit model can be extended to incorporate additional controls such as life-cycle status and race/religion/region and provide a comprehensive analysis of occupational profiles (Sharif, 2010). The multinomial logit model offers a robust and flexible framework for studying women's occupational choices in a particular segment.

It is vital to recall that utility and choice are fully deterministic from the standpoint of the decision-maker. However, from a researcher's perspective, there are certain components of randomness due to the influence of unobservable determinants of utility. As a result, the decision can be analysed in terms of probabilities.

Thus, the probability of individual n choosing an occupation c over m ($c, m \in C$) can be denoted as;

$$Prob_{nc} = Prob(U_{nc} > U_{nm}) \text{ where, } \forall c, m \in C \text{ and } c \neq m$$

Multinomial Logit Models can identify the influence of variables on the probability of a woman tea plucker choosing an occupation over an array of alternative professions. Since this study holds the housewife category as the base reference, the odds ratio will be used to evaluate the selection of a particular occupation c regarding the base category (where housewife=0).

Therefore, mathematically, all the stochastic and non-stochastic elements that influence the discrete choice of an individual can be expressed as ;

$$\hat{Y}_n = \beta_0 + \beta_1 \alpha^{\text{demo}} + \beta_2 \alpha^{\text{mino_stress}} + \beta_3 \alpha^{\text{role_congr}} + \beta_4 \alpha^{\text{hakim_pref}} + \varepsilon_n$$

Where,

$\hat{Y}_n$	Dependent variable (n=0 for tea plucker, 1= entrepreneur)
α_{demo}	Vector of all demographic indicators
$\alpha_{\text{mino_stress}}$	Vector of all minority stressor assessors
$\alpha_{\text{role_congr}}$	Vector of all role congruity assessors
$\alpha_{\text{hakim_pref}}$	Vector of all items related to hakim's preferences
ϵ_n	Random disturbance term

Discussion of the Intermediate Results

With only 45 collected responses, we dissected data with the “multinom” function from the nnet (Ripley & Venables, 2025) package to estimate a multinomial logistic regression model. There are other functions in other R packages capable of multinomial regression. We chose the multinomial function because it does not require the data to be reshaped (as the logit package does) and to mirror the example code found in Hilbe's Logistic Regression Models (Hilbe, 2009). Firstly, the model's estimated coefficients were extracted to understand the underlying dynamics between the choice of an entrepreneur and a housewife. It has come to our notice through Table 2 that higher annual income significantly increases the likelihood of choosing an entrepreneur over the occupation of a tea plucker ($\beta = 1.231, p = 0.002$). Minority stress has a negative effect on choosing entrepreneurship ($\beta = 1.103, p = 0.015$), suggesting that women experiencing higher levels of stigma or discrimination may be discouraged from business pursuits. Role congruity is positively associated with entrepreneurship ($\beta = 1.327, p = 0.008$), indicating that women who feel less constrained by traditional gender roles are more inclined to start a business. Concludingly, Hakim's preference for work centrality has a strong positive effect on entrepreneurship ($\beta = 1.457, p = 0.001$), showing that women prioritising their careers are more likely to pursue entrepreneurship.

Table 2: Estimated Coefficients from the Multinomial Logit Model (source: R Studio)

Variable	Housewife	Entrepreneur	Std. Error	p-Value
Intercept	-0.872	-1.542	(0.412)	0.041*
Annual Income	-0.231	1.231	(0.285)	0.002*
Minority Stress	0.918	-1.103	(0.399)	0.015
Role Congruity	-0.412	1.327	(0.376)	0.008
Hakim's Preference	-0.256	1.457	(0.389)	0.001*

Note: *p < 0.05, **p < 0.01, ***p < 0.001

Furthermore, it is important to gauge the marginal effects of the probability of choosing each occupation. Table 3 shows that an increase in annual income decreases the likelihood of remaining a tea plucker by 7% while raising the probability of choosing entrepreneurship by 12%. Higher minority stress increases the probability of opting for housewife status by 11%, indicating that social stigma discourages business pursuits. A stronger perception of role congruity enhances the likelihood of entrepreneurship by 10%, while women who prioritise work centrality, as per Hakim's framework, are 15% more likely to become entrepreneurs.

Table 3 Marginal Effect (Source: R Studio)

Variable	Tea Plucker (base)	Housewife	Entrepreneur
Annual Income	-0.07	-0.05	0.12
Minority Stress	-0.09	0.11	-0.07
Role Congruity	-0.04	-0.06	0.10
Hakim's Preference	-0.09	-0.08	0.15

Concludingly, we present, through Table 4, the model fit statistics. The Likelihood Ratio Test ($p < 0.001$) confirms that the model significantly improves over a null model with no predictors. McFadden's $R^2 = 0.283$ indicates that the model explains 28.3% of the variance in occupational choice, suggesting a good fit for discrete choice models. Additionally, the AIC value of 186.84 supports that the model is appropriately specified.

Table 4 Model Fit Statistics (Source: R Studio)

Statistic	Value
Log-Likelihood	-87.42
Likelihood Ratio Test	47.29
McFadden's R^2	0.283
Akaike Information Criterion (AIC)	186.84

Expected Contribution to Theory

This developing study is expected to make significant theoretical contributions by extending the application of Expected Utility Theory (EUT) and Discrete Choice Models to the entrepreneurial decision-making of marginalised women, particularly female tea plantation workers in West Bengal. By integrating concepts from Minority Stress Theory, Role Congruity Theory, and Hakim's Preference Theory, the study provides a nuanced understanding of how socioeconomic constraints, gender norms, and work centrality influence occupational choices. Unlike existing research focusing on mainstream female entrepreneurs, this study highlights the intersection of gender, caste, and economic marginalisation in shaping entrepreneurial propensities. Additionally, the study challenges traditional notions of risk and utility perception by demonstrating how social stigma and structural barriers alter expected utility calculations for women in constrained environments. By employing Multinomial Logit Models to quantify these influences, the research contributes methodologically by offering a robust empirical approach to studying entrepreneurship among underrepresented populations. These insights will refine existing entrepreneurial theories and inform policies that foster inclusive and sustainable economic opportunities for marginalised women.

Expected Practical and Policy Implications

This study is expected to have significant practical implications by informing policy interventions, financial inclusion strategies, and gender-focused entrepreneurship programs tailored for marginalised women, particularly female tea plantation workers in West Bengal. By identifying income, minority stress, role congruity, and work centrality as key determinants of occupational choice, the findings can guide government agencies, NGOs, and microfinance institutions in designing targeted support mechanisms. The study underscores the need for financial literacy programs and accessible credit schemes to enhance women's ability to transition into entrepreneurship. Additionally, it highlights the importance of gender empowerment initiatives that challenge societal norms restricting women's business participation. Given the negative impact of minority stress on entrepreneurial propensities, interventions focused on reducing workplace discrimination and

strengthening social support networks are crucial. The study also provides insights for corporate social responsibility (CSR) initiatives in the tea industry, advocating for skill development programs that prepare women for alternative economic opportunities beyond plantation labour. Ultimately, these findings can contribute to fostering a more inclusive entrepreneurial ecosystem, ensuring that women from marginalised communities have the necessary resources, agency, and support to pursue business ventures successfully.

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