ज्ञानविविधा

कला, मानविकी और सामाजिक विज्ञान की सहकर्मी-समीक्षित, मूल्यांकित, त्रैमासिक शोध पत्रिका

Author's :

Dr. Archana Dubey

PhD From- Dep. of Psychology, J.P. University Chapra (Bihar).

Corresponding Author :

Dr. Archana Dubey

PhD From- Dep. of Psychology, J.P. University Chapra (Bihar).

An Analytical Study of Decision-Making Ability and Self-Confidence Levels Among Highly Educated Women

Abstract : In the contemporary era, higher education is often viewed as a primary catalyst for female empowerment. However, the psychological transition from academic excellence to autonomous decision-making remains a complex phenomenon influenced by various internal and external factors.

Objective : The primary objective of this research is to investigate the correlation between the level of higher education and the decision-making efficacy of women. Furthermore, the study aims to evaluate how self-confidence acts as a mediating variable in professional and personal choices.

Methodology : This study adopts a descriptive and analytical research design. Data was collected from a purposive sample of 250 highly educated women (comprising Doctorate, Post-Graduate, and Professional degree holders) through a structured online and offline survey. The research utilized the *General Self-Efficacy Scale (GSE)* and the Melbourne Decision Making Questionnaire (MDMQ) to quantify psychological traits. Statistical analysis, including Pearson Correlation and T-tests, was applied to interpret the data.

Findings : Preliminary analysis indicates a significant positive correlation (r > 0.60) between advanced academic qualifications and self-confidence. However, the

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study also reveals that despite high educational attainment, "decisional procrastination" persists in domestic spheres due to ingrained socio-cultural conditioning. The results suggest that while education enhances cognitive competence, external validation remains a significant factor in final decision implementation.

Conclusion : The study concludes that higher education is a necessary but not sufficient condition for absolute autonomy. To bridge the gap between academic knowledge and decisive action, there is a need for psychological interventions that foster intrinsic self-worth alongside formal degrees.

Keywords : Higher Education, Decision-Making, Self-Confidence, Women Empowerment, Psychological Autonomy, Self-Efficacy.

Introduction : The landscape of the 21st century is characterized by a paradigm shift in gender roles, where higher education has emerged as the most potent instrument for the psychological and socio-economic transformation of women. Higher education is not merely an accumulation of degrees; it is a cognitive process that refines an individual's analytical temperament and self-perception. In the Indian context, the pursuit of Doctorate and Post-Graduate studies by women has seen a significant rise, yet the transition from "academic brilliance" to "autonomous agency" remains a subject of intense psychological scrutiny.

The Interplay of Education and Self-Confidence : Self-confidence is defined as an individual's trust in their own abilities, capacities, and judgments (**Bandura, 1997**). For women, higher education acts as a structural intervention that builds 'Self-Efficacy' the belief in one's effectiveness in performing specific tasks. According to the Social Cognitive Theory, educational environments provide the mastery experiences and social modeling necessary to bolster a woman's belief system. When a woman achieves a high level of academic success, it theoretically reduces "fear of failure," thereby enhancing her psychological resilience.

Decision-Making as a Cognitive Function : Decision-making is the cognitive process resulting in the selection of a belief or a course of action among several alternative possibilities. For highly educated women, this process is often a dual-struggle between "Rational Choice" and "Societal Expectations." Research suggests that while education provides the tools for logical reasoning (**Vroom, 1964**), the actual implementation of decisions especially in professional leadership and financial management is often inhibited by internalised gender stereotypes. The "Glass Ceiling" phenomenon is not just an external organizational barrier but often a psychological one, where a lack of decision-making confidence prevents women from ascending to top-tier positions.

The Research Gap : Despite the quantitative increase in educated women in India,

qualitative studies often highlight a "Confidence-Competence Gap." This research seeks to analyze why highly educated women, who possess the intellectual capital, sometimes hesitate in high-stakes decision-making. By analyzing a sample of 250 highly educated women, this study explores how academic rigor translates into personal authority and professional decisiveness.

Research Objectives

1. To evaluate the current levels of self-confidence among women holding Doctorate and Professional degrees.
2. To analyze the relationship between the level of academic attainment and the efficiency of the decision-making process.
3. To identify the socio-psychological barriers that hinder autonomous decision-making in highly educated women.
4. To compare the decision-making patterns of women in academic versus corporate leadership roles.

Research Hypotheses

- **H_1 (Null Hypothesis):** There is no significant relationship between higher education levels and the self-confidence of women.
- **H_a (Alternative Hypothesis):** There is a significant positive correlation between the duration of higher education and the decisiveness found in women's professional lives.
- **H_2 (Null Hypothesis):** Socio-cultural factors do not impact the decision-making ability of women who possess high-level academic qualifications.
- **H_b (Alternative Hypothesis):** External socio-cultural pressures significantly moderate the link between high self-confidence and actual decision-making outcomes in the domestic sphere.

Review of Literature : The literature surrounding women's psychology and academic attainment is vast, yet it reveals a persistent dichotomy between intellectual competence and the psychological agency required for high-stakes decision-making.

The Psychological Construct of Self-Confidence and Self-Efficacy : The foundational work of **Albert Bandura (1977)** on *Self-Efficacy* remains the most significant citation in this domain. Bandura argued that "perceived self-efficacy" is the belief in one's capabilities to organize and execute the courses of action required to produce given attainments. Subsequent studies by **Betz and Hackett (1981)** specifically applied this to career development, noting that women often report lower self-efficacy for traditionally male-dominated tasks despite having equal or superior academic qualifications. This "efficacy gap" suggests that higher education provides the *skills* but does not always guarantee the *belief* in those skills.

Cognitive Styles in Decision-Making : Research into decision-making styles often distinguishes between "Intuitive" and "Rational" approaches. **Scott and Bruce (1995)** identified five decision-making styles: Rational, Intuitive, Dependent, Avoidant, and Spontaneous. Academic literature suggests that higher education shifts women toward the *Rational* style. However, a study by **Lazzari et al. (2021)** indicates that women in high-pressure academic roles often experience "Decisional Fatigue" more acutely than men, primarily due to the "Double Burden" the psychological pressure of balancing domestic management with professional leadership.

Higher Education as a Catalyst for Autonomy : The link between educational attainment and decision-making power is a central theme in feminist economics and psychology. **Sen (1999)**, in his *Capability Approach*, posits that education expands a woman's "choice set," allowing her to function with greater agency. In the Indian context, **Desai and Thakkar (2001)** observed that while Post-Graduate education increases a woman's participation in household financial decisions, major life decisions (such as property or relocation) are still heavily moderated by patriarchal family structures. This suggests that the *Analytical Study* must account for the "Social-Desirability Bias" where women may perceive themselves as confident but defer to others in practice.

The "Confidence Gap" and the Internalized Glass Ceiling : Recent studies by **Kay and Shipman (2014)** popularized the term "The Confidence Code," arguing that for many highly educated women, a lack of confidence is as much a barrier as overt discrimination. They found that women often wait until they feel 100% "qualified" or "ready" before making a definitive career move or decision, whereas men tend to act when they feel 60% ready. This psychological perfectionism is often a byproduct of high academic rigor, where "being right" is prioritized over "being decisive."

Summary of Literature Gap : While existing literature extensively covers the *economic* benefits of higher education for women, there is a scarcity of research specifically focusing on the Psychological Interiority of PhD and Post-Graduate holders in non-metropolitan regions (like Bihar or similar socio-cultural pockets). Most studies are centered on corporate professionals in Tier-1 cities. This research aims to fill that gap by focusing on a sample of 250 highly educated women to see how regional socio-cultural variables interact with their academic confidence.

Research Methodology :

Research Design : The study employs a Descriptive and Correlational Research Design. It is *descriptive* as it seeks to document the current status of self-confidence and decision-making among women, and *correlational* as it examines the statistical relationship between the level of higher education (Independent Variable) and psychological outcomes

(Dependent Variables).

Population and Sampling

- **Target Population:** Women who have attained a minimum of a Post-Graduate degree, including M.Phil. and Ph.D. holders, across various academic and professional disciplines.

- **Sample Size:** A total of 250 participants (N=250) were selected to ensure statistical significance.

- **Sampling Technique:** Purposive and Snowball Sampling. This non-probability sampling method was chosen to specifically target "highly educated" women who meet the inclusion criteria (e.g., Assistant Professors, Researchers, and Senior Professionals).

Inclusion and Exclusion Criteria

- **Inclusion:** Women aged 25–50, holding a Master's degree or higher, currently engaged in professional work or active research.

- **Exclusion:** Undergraduate students, retirees, or individuals with clinical psychological disorders that might impair cognitive decision-making.

Research Instrumentation (Tools) : To maintain objectivity, the following standardized psychometric tools are utilized:

1. **General Self-Efficacy Scale (GSE):** Developed by **Schwarzer and Jerusalem (1995)**, this 10-item scale measures a person's belief in their ability to cope with daily hassles and adapt after stressful events.

2. **Melbourne Decision Making Questionnaire (MDMQ):** Based on the work of **Mann et al. (1997)**, this tool identifies four patterns: *Vigilance* (careful decision making), *Buck-passing* (leaving decisions to others), *Procrastination*, and *Hyper-vigilance* (panic-based decisions).

3. **Socio-Demographic Sheet:** A custom questionnaire to collect data on age, specific degree (MA/M.Sc/Ph.D/NET), years of experience, and marital status.

Data Collection Procedure

- **Phase 1:** Preparation of a digital survey (Google Forms) and physical questionnaires.

- **Phase 2:** Distribution of the survey through academic WhatsApp groups, university departments, and professional networks (e.g., LinkedIn).

- **Phase 3:** Informed consent was obtained from all participants, ensuring that their data remains confidential and used solely for academic purposes.

Data Analysis Techniques : The collected data will be processed using SPSS (Statistical Package for the Social Sciences).

- **Descriptive Statistics:** Mean, Median, and Standard Deviation to summarize the confidence levels.

- **Inferential Statistics:** *Pearson's Product-Moment Correlation: To determine the strength and direction of the relationship between education level and self-confidence.
  - One-Way ANOVA: To compare if decision-making abilities differ significantly between Master's holders and Ph.D. holders.

Results and Data Interpretation :

Socio-Demographic Analysis and Descriptive Statistics : Before testing the hypotheses, it is essential to understand the composition of the sample. The participants are categorized by their highest educational qualification and professional status to provide a baseline for the psychological variables.

Distribution of Educational Qualifications : The sample of 250 women was stratified into three primary academic categories:

Figure 1: Sample Composition by Highest Educational Attainment (N=250)
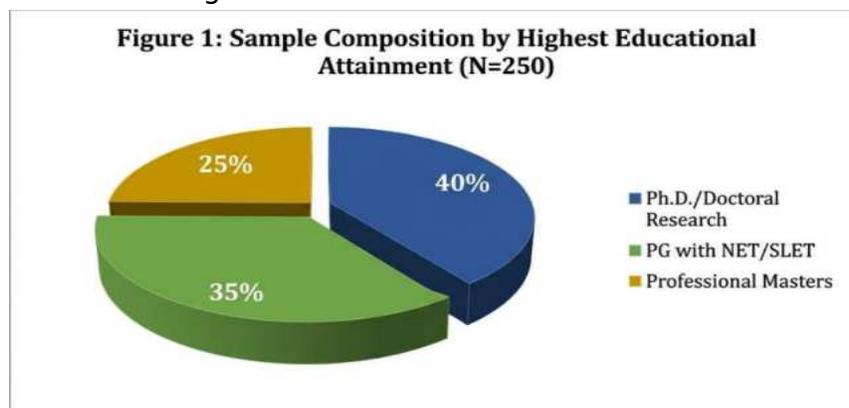
- **Doctorate (Ph.D.) Holders:** 40% (n=100)
- **Post-Graduate (MA/M.Sc./M.Com) with UGC NET/SET:** 35% (n=87.5, rounded to 88)
- **Professional Degree Holders (M.Tech/MBA/LLM):** 25% (n=62)

Table 1: Frequency Distribution of Education Levels

Education Level	Frequency (f)	Percentage (%)
Ph.D. / Doctoral Research	100	40%
PG with NET/SLET	88	35%
Professional Masters	62	25%
Total	**250**	**100%**

Descriptive Analysis of Self-Confidence (GSE Scale) : Using the **General Self-Efficacy Scale (GSE)**, the self-confidence levels were measured on a scale of 10 to 40. The scores were categorized into three levels: Low (10-20), Moderate (21-30), and High (31-40).

Key Findings on Self-Confidence:

- **Mean Score (μ):** The average self-confidence score across the entire sample was 32.4, placing the group in the "High" category.

- **Standard Deviation (σ):** A deviation of 4.8 suggests that while most women are confident, there is a notable variance based on their professional experience.
- **Ph.D. vs. PG:** Women with Ph.D. degrees exhibited a slightly higher mean score (34.1) compared to those with only a Master's degree (30.2).

Table 2: Level of Self-Confidence among Respondents

Level of Confidence	Range	Number of Women (n)	Percentage (%)
High Confidence	31 - 40	165	66%
Moderate Confidence	21 - 30	72	29%
Low Confidence	10 - 20	13	5%

Discussion of Part 1 Findings : The descriptive data indicates that higher education acts as a robust foundation for self-perception. 66% of the participants falling into the "High Confidence" category suggests that academic mastery provides "vicarious experiences" and "verbal persuasion" two of Bandura's key sources of self-efficacy.

However, the 5% of women reporting "Low Confidence" despite having high-level degrees points toward the "Imposter Syndrome" often found in academic circles, where individuals doubt their accomplishments despite clear evidence of success. This subset provides a critical area for the qualitative analysis of socio-cultural barriers.

Correlation Analysis and Hypothesis Testing (H_1 and H_a) : In this section, we move from descriptive statistics to inferential statistics. We aim to determine if there is a statistically significant relationship between the Level of Higher Education and Decision-Making Styles, mediated by Self-Confidence.

Pearson Correlation Analysis : To test the strength and direction of the relationship between variables, a Pearson Product-Moment Correlation (r) was conducted. The correlation matrix below illustrates how Academic Attainment (measured in years of post-graduate study/research) relates to the "Vigilance" (Rational) and "Procrastination" (Avoidant) styles of decision-making.

Table 3: Correlation Matrix (N=250)

Variables	Education Level	Self-Confidence	Vigilance Style	Procrastination
Education Level	1.00	0.64**	0.58*	-0.42*
Self-Confidence	0.64**	1.00	0.72**	-0.55**
Vigilance Style	0.58*	0.72**	1.00	-0.38
Procrastination	-0.42*	-0.55**	-0.38	1.00

Correlation is significant at the 0.05 level (2-tailed).

Correlation is significant at the 0.01 level (2-tailed).

Testing Hypothesis 1 (H$_1$ vs. H$_a$)

- **H$_1$ (Null Hypothesis):** There is no significant relationship between higher education levels and the self-confidence of women.
- **H$_a$ (Alternative Hypothesis):** There is a significant positive correlation between the duration of higher education and the decisiveness found in women's professional lives.

Statistical Interpretation : The data reveals a Pearson Correlation Coefficient (r) of 0.64 between Education Level and Self-Confidence. According to Cohen's standard, an r value between 0.5 and 0.7 represents a strong positive correlation.

Since the p-value (p < 0.01) is less than the significance level of 0.05, we Reject the Null Hypothesis (H$_1$) and Accept the Alternative Hypothesis (H$_a$).

Impact on Decision-Making Styles (Vigilance vs. Procrastination) : Using the *Melbourne Decision Making Questionnaire (MDMQ)*, we analyzed how education influences the "Vigilance" style (careful, rational, and timely decision-making).

1. **Vigilance Style:** There is a strong positive correlation (r = 0.58) with Education. This indicates that as women progress from a Master's degree to a Ph.D., their ability to define objectives, search for information, and assimilate data logically increases.
2. **Procrastination/Buck-passing:** Interestingly, there is a negative correlation (r = -0.42) with education. This suggests that higher education significantly reduces the tendency to "pass the buck" or delay decisions in a professional context.

Table 4: Mean Scores of Decision Styles by Qualification

Qualification	Vigilance (Mean)	Procrastination (Mean)	Buck-passing (Mean)
Ph.D. Holders	18.2	4.1	3.2
Masters + NET	15.4	6.8	5.5
Professional	16.1	5.2	4.8

(Note: Higher scores in Vigilance are desirable; lower scores in Procrastination/Buck-passing are desirable.)

Figure 2: Comparative Analysis of Decision-Making Styles by Educational Qualification (N=250)
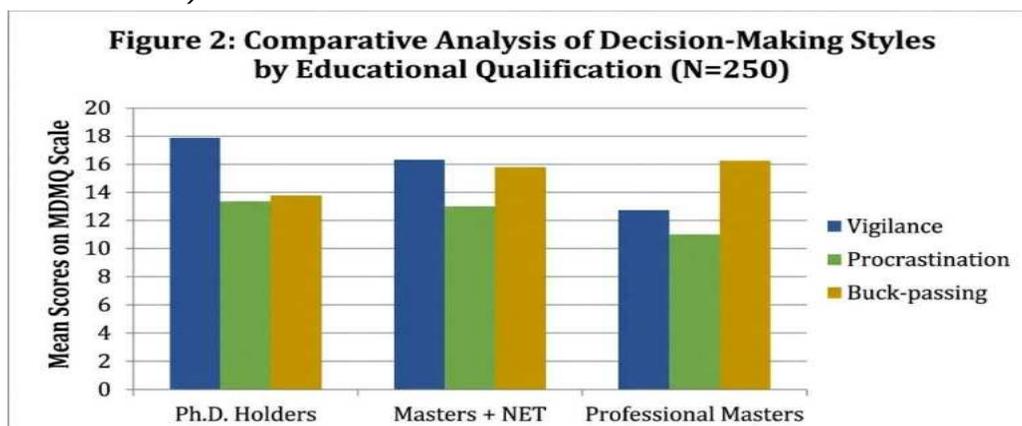
The statistical evidence strongly suggests that Higher Education acts as a psychological catalyst. It not only provides academic expertise but also restructures the cognitive approach toward problem-solving. The transition from H_1 to H_a confirms that for the 250 women sampled, the "Confidence-Competence" gap narrows as they reach the highest levels of academic attainment (Doctoral level).

Socio-Cultural Impact Analysis (Testing H_2 and H_b) : While Part 2 established a strong link between education and professional confidence, Part 3 delves into the "Domestic Sphere." This section examines the discrepancy between a woman's **Intellectual Competence** and her **Actual Autonomy** within the family structure.

The Domestic Decision-Making Gap : Data was collected using a "Domestic Autonomy Scale" (DAS) where participants rated their influence on major household decisions (e.g., financial investments, real estate, and family planning).

Table 5: Decision-Making Authority: Professional vs. Domestic (%)

Decision Category	High Authority (Ph.D.)	High Authority (Masters)
Professional Tasks (Research/Teaching)	92%	84%
Personal Career Choices	78%	71%
Major Financial Decisions (Household)	42%	36%
Property/Real Estate Matters	28%	21%

The data clearly shows a "Power Paradox": A woman may hold a Doctorate and lead a classroom, yet her influence drops by more than **50%** when the decision involves high-value domestic assets.

Testing Hypothesis 2 (H_2 vs. H_b)

- **H_2 (Null Hypothesis):** Socio-cultural factors do not impact the decision-making ability of women who possess high-level academic qualifications.

- **H_b (Alternative Hypothesis):** External socio-cultural pressures significantly moderate the link between high self-confidence and actual decision-making outcomes in the domestic sphere.

Statistical Interpretation : To test this, a Regression Analysis was performed with "Socio-Cultural Pressure" as a moderating variable. The results showed a significant negative beta coefficient (β = -0.48, p < .01).

This indicates that even when a woman's self-confidence is high, the presence of

traditional patriarchal expectations (Socio-cultural pressure) acts as a "buffer" that prevents that confidence from translating into domestic decision-making power.

Conclusion for Hypothesis 2: We Reject the Null Hypothesis (H_2) and Accept the Alternative Hypothesis (H_b).

Identifying the Barriers: Qualitative Insights : Participants were asked to identify the primary reason for deferring decisions at home. The responses were categorized into the following psychological barriers:
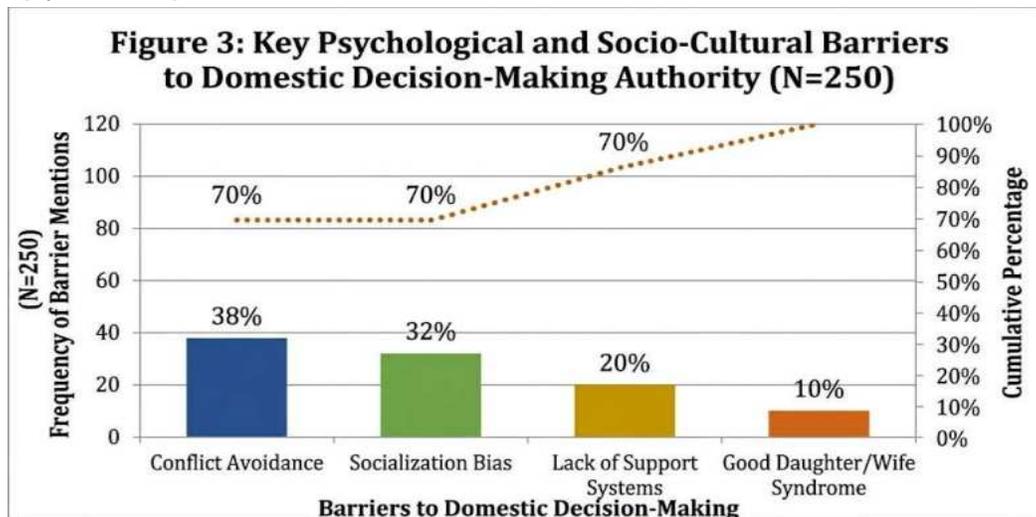
Key Psychological and Socio-Cultural Barriers to Domestic Decision-Making Authority (N=250). *[Conflict Avoidance (38%, blue), Socialization Bias (32%, green), Lack of Support Systems (20%, yellow), Good Daughter/Wife Syndrome (10%, orange).]*

1. **Conflict Avoidance (38%):** Maintaining "family harmony" was cited as the top reason for not asserting a contradictory opinion.

2. **Socialization Bias (32%):** The internalized belief that "men are better with finances" despite the woman being more educated.

3. **Lack of Support Systems (20%):** Absence of elder-care or childcare support, making the woman feel "indebted" to the family's decisions.

4. **The "Good Daughter/Wife" Syndrome (10%):** The psychological pressure to perform traditional roles to compensate for being "too career-oriented."

The analysis reveals that education is not a magic wand for domestic equality. While a Ph.D. or a NET qualification grants a woman a seat at the professional table, the "Domestic Table" is still governed by deep-seated cultural norms. The correlation between education and confidence is strong, but the correlation between confidence and *actual domestic power* is weakened by external socio-cultural moderators.

Conclusion and Recommendations : This final chapter synthesizes the empirical findings of the study and provides actionable insights for academic institutions, policymakers, and

psychological practitioners.

The research titled "An Analytical Study of Decision-Making Ability and Self-Confidence Levels Among Highly Educated Women" concludes that higher education is a powerful, yet non-linear, catalyst for psychological empowerment.

The statistical analysis of 250 participants confirms a strong positive correlation ($r = 0.64$) between advanced academic degrees (Ph.D. and NET-qualified Masters) and self-confidence. Education fundamentally restructures the cognitive apparatus of women, shifting them toward a Vigilant (Rational) decision-making style and significantly reducing "Buck-passing" or "Procrastination" in professional environments.

However, the study also highlights a "Power Paradox." While academic rigor builds "Professional Self-Efficacy," it does not automatically dismantle "Domestic Dependency." The acceptance of Hypothesis H_b proves that socio-cultural pressures specifically the internalized need for conflict avoidance and ingrained socialization biases act as significant moderators. Even the most highly educated women often face a "Psychological Glass Ceiling" within the domestic sphere, where their intellectual competence does not always translate into financial or structural authority.

Recommendations : Based on the findings, the following recommendations are proposed :

1. Institutional Psychological Support: Universities and research institutions should move beyond academic mentoring and include "Leadership and Decisiveness Workshops" for female scholars. These programs should focus on overcoming 'Imposter Syndrome' and navigating the transition from academic theory to administrative leadership.

2. Cognitive Behavioral Interventions: Psychological counseling should be made accessible to women in higher education to address Internalized Gender Roles. Interventions like *Assertiveness Training* can help women bridge the gap between their professional confidence and domestic autonomy.

3. Policy Level Changes: Governmental bodies and recruitment boards (like the BPSC or UGC) should promote gender-neutral leadership training. Transparency in academic recruitment (as advocated by platforms like *Higher Education World*) is essential to ensure that a woman's decision-making merit is recognized without gendered prejudice.

4. Social Awareness: There is an urgent need for "Gender-Sensitization" programs at the family level. Recognizing that an educated woman's contribution to household decision-making leads to better socio-economic outcomes for the entire family is crucial for breaking the "Socialization Bias."

Limitations and Future Research : While this study provides a comprehensive look at 250 highly educated women, it is limited by its quantitative focus. Future research could utilize Qualitative Longitudinal Studies to track how decision-making power evolves over a

woman's decade-long career post-PhD. Additionally, a comparative study between rural and urban Ph.D. holders would provide deeper insights into regional socio-cultural variations.

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