



DISSERTATION PROPOSAL

**STRATEGIC WORKFORCE PLANNING AND PRODUCTIVITY OPTIMIZATION IN
APPAREL FACTORIES: EVIDENCE FROM DHAKA AND GAZIPUR, BANGLADESH**

SUBMITTED BY

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1. INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Readymade garment industry (RMG) is the biggest source of export income and the key engine to the economic progress of Bangladesh (Zohra et al., 2025). The sector contributes 7.87% of the country's GDP, accounting over 80% of total exports and employment of over 4.6 million workers (LightCastle, 2024; Bangladesh Bank, 2024). Bangladesh currently holds an 8.65% of global apparel market, exporting about USD 47.39 billion worldwide (Kim, 2025). These figures show the industry's vital role in employment generation, poverty reduction, and women's empowerment.

Despite this strong performance, The sector face significant productivity and performance issues. It is reported that in some of these factories, up to 45 percent of the total working hours are lost as “non-productive time” as a result of bad planning, inefficient utilization of resources, and shortages in skills (Hosen, 2020; Habib, 2023). High rates of turnover, absenteeism and low levels of motivation similarly undermine efficiency and product quality (Ullah et al., 2024). The Bangladesh Bank (2024) observed that while export earnings have been rising, growth in productivity has lagged behind, restraining the competitiveness to countries such as Vietnam and China.

Optimal strategic workforce planning (SWP), supported by precise demand forecasting, training and optimal scheduling has received attention in prior research as a vital tool for achieving desired operational efficiency improvement (Rahman et al., 2024; Ahmed, 2024). But still most factories depend on reactive labour management, rather than systematic planning. Thus an understanding of how SWP practices impact productivity is vital in order to enhance competitiveness and achieve sustainable industrial development in Bangladesh's apparel industry (Sheehan & Garavan, 2022; BetterWork, 2025).

1.2 PROBLEM STATEMENT

Bangladesh's apparel industry has achieved remarkable export growth in exports, but it has problems with managing its workers and uneven productivity levels between the Dhaka and Gazipur factories (Two major industrial areas of Bangladesh). Bangladesh's apparel industry has achieved remarkable growth in exports, but it has problems with managing its workers and uneven productivity levels between the factories. Persistent challenges such as excessive absenteeism, frequent turnover, and poor worker training continue to have an effect on

production goals (Habib, 2023; Ullah et al., 2024). Several factories rely on overtime and temporary workers to make-up for a short delivery date, which often results in fatigue and quality loss (Ahmed, 2024). Moreover, week balancing and manpower planning causes time wastage and production bottlenecks (Rahman et al., 2024).

While some factories have implemented lean manufacturing or industrial engineering, those often disregards the importances of proper HRM planning (Sheehan & Garavan, 2022). As a result, existing labour resources are significantly underused and productivity improvement in the long run is comparatively low. This gap underscores the importance in assessing how SWP could support apparel factories in Bangladesh to enhance productivity, operational stability and global competitiveness.

1.3 RESEARCH AIM

To evaluate how SWP practices influence productivity performance in apparel factories of Bangladesh.

1.4 RESEARCH OBJECTIVES

- To examine the current SWP practices in apparel factories (e.g., forecasting, recruitment, skill development, and scheduling).
- To assess the relationship between SWP practices and key productivity indicators
- To identify the main operational and organisational challenges that affect the implementation of effective workforce planning.
- To develop a practical framework with recommendations to improve workforce planning and productivity in the Bangladeshi apparel sector.

1.5 RESEARCH QUESTIONS

- What SWP practices are currently being used in apparel factories in Dhaka and Gazipur?
- What is the relationship between SWP practices and productivity performance indicators?
- What organisational and operational challenges do factories face when trying to implement effective workforce planning?
- How can a practical workforce planning framework be designed to help apparel factories improve productivity and operational stability?

1.6 SIGNIFICANCE OF THE STUDY

This research connects SWP (forecasting, recruitment, training and scheduling) with measurable productivity performance in Bangladeshi apparel factories, a field which has very little empirical evidence. The research will demonstrate the impact of specific HR planning decisions on efficiency, quality, absenteeism, and output by integrating survey data from employees with managerial interviews. It is anticipated that this study will offer management recommendations for use by factory managers and industry groups in Dhaka and Gazipur, as well add to the literature on strategic HRM in a developing-country labour-intensive manufacturing context.

2. LITERATURE REVIEW

2.1 CONCEPT OF WORKFORCE PLANNING

Workforce planning is a structured process of matching an organization's human resources to its business needs. This includes predicting labour needs, pointing skill deficiencies and planning ways to have the right people in the right jobs at the right time (Sheehan & Garavan, 2022). Efficient workforce planning can build organizational capacity by enhancing staff recruitment, training and engagement to increase productivity and competitiveness (Kareska, 2023).

Workforce planning reflects on how labour resources are used effectively in any manufacturing sector and particularly in labour intensive industries such as apparel (Habib, 2023). According to Ullah et al. (2024) productivity results in the RMG sector are hinged over HR practices, which stimulate job satisfaction, skill development and commitment of employee. Similarly, Zohra et al. (2025) note that the work ability, comprising physical capacity, mental well-being and job factors, is directly linked to productivity status of Bangladeshi garment workers. The findings also advocate an integrated work force planning system, i.e., incorporating manpower forecasting, recruitment, training and scheduling with the production performance.

A study of high-performance work practices (HPWPs) in SMEs by Sheehan and Garavan (2022) revealed that investment in employee-oriented systems, including training and participative management can lead to a causal relationship with labour productivity over time. Their evidence is consistent with the Resource-Based View, which asserts that capable and well-orchestrated human capital represents a resource that can sustain competitive advantage (Sheehan and Garavan, 2022). Therefore, workforce planning should not be considered simply

as a function of HR in the Bangladeshi garment factories; instead, it should be viewed as critical process that is related to strategic practices for maximizing productivity.

2.2 WORKFORCE PLANNING IN THE APPAREL SECTOR

The apparel industry in Bangladesh has grown swiftly, but productivity is still low since human resources aren't being used efficiently. Habib (2023) found that apparel companies lose about 45% of the time due to improper workforce planning and time allocations. Similarly, Rahman et al. (2024) found that lack of resource planning and line balancing solutions result in production delays and downtime due to more frequent skill shortages, high turnover, and limited management's capacity to forecast properly.

Ahmed (2024) demonstrates that enhancing work allocation, forecasting, and scheduling can increase output per operator and overall efficiency. Ullah et al. (2024) stress that fair pay, training, and commitment make people happier and more productive. Zohra et al. (2025) stress that ergonomics and well-being, which are affected by scheduling, have a direct effect on how well workers do their jobs.

Overall, SWP ensures the correct personnel with the relevant abilities are used effectively, which cuts down on overtime, absenteeism, and quality problems. So, it is a strategic need for apparel sector to keep productivity growth and competitiveness going.

2.3 STRATEGIC WORKFORCE PLANNING (SWP) DIMENSIONS

SWP consists of several essential dimensions that enable the efficient application of human resources to meet productivity requirements among them literature recognized manpower forecasting, recruitment and selection, training and skill development, and work scheduling and allocation as primary dimensions.

Forecasting of manpower helps organizations to foresee labour needs and distribute workers effectively, which in turn reduce overtime work and idle work (Habib, 2023; Rahman et al., 2024). Recruitment and selection establish the right placement of competent and motivated staff that will contribute to improved job satisfaction; and reduce absenteeism (Ullah et al. 2024; BetterWork, 2015). Training and skill development enhance employees' competency, quality of work, which is consistent with Human Capital Theory's assertion that skill investment increase the level of productivity (Sheehan & Garvan, 2022; Zohra et al., 2025). Finally, work scheduling and assignment maintains workloads and processing flow that are balanced in order to avoid bottlenecks and fatigue (Ahmed, 2024; Rahman et al., 2024).

All four of these dimensions serve to constitute a holistic SWP model that facilitates productivity optimization through more strategic planning, development, and utilization of workforce resources in the context of organizational objectives.

2.4 THEORETICAL FRAMEWORK

This study is based on two integrated theories. The Human Capital Theory, which asserts that employee training and development represents a source of higher productivity for the organization in terms of improved skills and knowledge (Becker, 1964; Ullah et al., 2024). Also, the Resource-Based View (RBV), which contends that organization derive sustained competitive advantage from the efficient management and utilization of human resources as valuable, rare and inimitable assets (Sheehan & Garavan, 2022). These theories combined can explain why SWP can contribute to productivity, effectiveness and overall operational performance in apparel factories.

2.5 RESEARCH GAP AND JUSTIFICATION OF THE STUDY

Although there are many research works on productivity in Bangladesh's apparel, they are mostly on operation tools such as lean manufacturing or industrial engineering tools rather than SWP processes. Hence, there remains a significant research gap concerning the direct empirical link on the impact of SWP dimensions, specifically manpower forecasting, recruitment, training, and scheduling on productivity outcomes in the apparel factories. Previous research (Habib, 2023; Rahman et al., 2024) suggests inefficiencies and skill gaps but rarely incorporates them into one integrated model for analysis. In addition, little research integrates employee data with manager's perceptions drawing on both quantitative and contextual aspects of workforce planning. Accordingly, the study fills a noticeable void and contributes towards investigating of how the four SWP dimensions are associated with achieving higher productivity as how HRM strategic decisions materialize in to operational efficiencies in Bangladeshi RMG factories.

2.6 CONCEPTUAL FRAMEWORK

Drawing on the reviewed literature, this study proposes the following model:

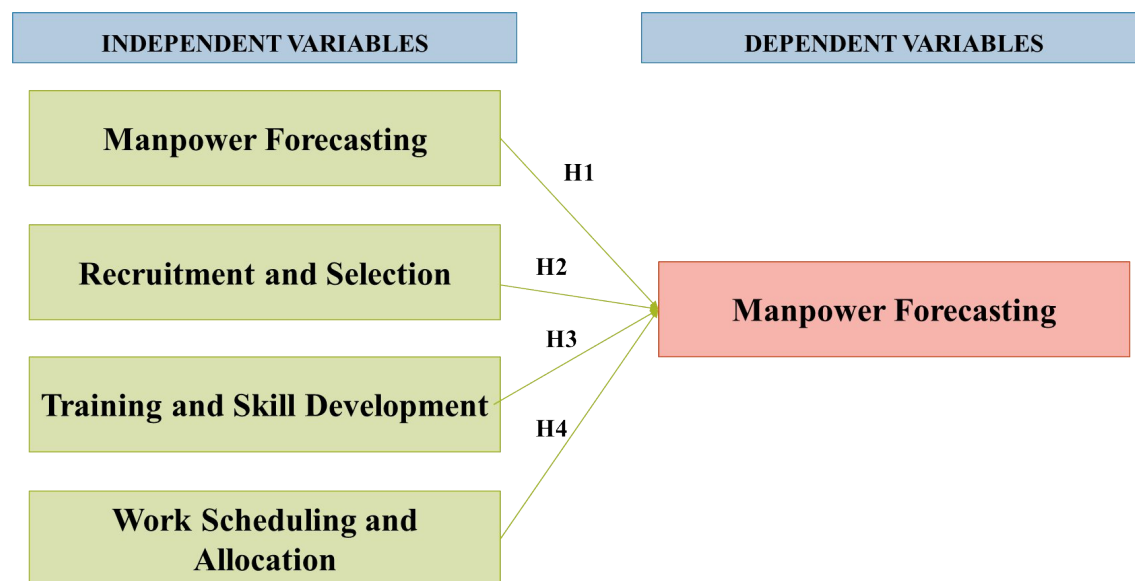


FIGURE 2.1: CONCEPTUAL FRAMEWORK

Based on the conceptual framework, following hypotheses are proposed for the study;

- **H1:** Manpower forecasting has a positive and significant impact on productivity optimization.
- **H2:** Recruitment and selection practices positively influence productivity optimization.
- **H3:** Training and skill development significantly enhance productivity optimization.
- **H4:** Work scheduling and allocation have a positive relationship with productivity optimization.

3. METHODOLOGY

3.1 RESEARCH PHILOSOPHY

This study adopts a pragmatic approach focusing on making practical recommendations that can be used by practitioners and academics, using both qualitative and quantitative methods. Pragmatism is appropriate here as allows the study to address both measurable operational aspects and experiential managerial insights.

3.2 RESEARCH APPROACH

The study employs mixed method, aimed at blended quantitative and qualitative research methodologies to achieve a more holistic understanding of research issues (Creswell & Creswell, 2018). The quantitative part of this method is represented by the survey that will help understand if there is a correlation between the dimensions of SWP and their impact on productivity. The qualitative part is presented through interviews that will reflect the perception and application of managers on the above-mentioned practices in a real factory. The combination of the mentioned two types of findings will help to provide stats evidence and managerial facts.

3.3 RESEARCH DESIGN

A descriptive explanatory research design will be used. The descriptive aspect will profile the current workforce planning approaches, while the explanatory aspect will examine relationships between independent and dependent variables outlined in the theoretical framework. For this study, 4 to 5 apparel factories in Dhaka and Gazipur will be studied since the locations are considered major industrial hubs and provide easy access to relevant respondents (Ullah et al., 2024; Habib, 2023).

3.4 DATA COLLECTION METHODS

SURVEY (QUANTITATIVE)

A structured questionnaire will be distributed among 100–150 employees from different positions (e.g., operator, supervisor and industrial engineer). The questionnaire will consist of demographic items, and five-point Likert scale questions measuring dimensions of SWP and productivity of the selected factories. Data will be collected via Google Forms. The study's hypotheses will be statistically tested using the data from survey responses.

INTERVIEWS (QUALITATIVE)

There will be semi-structured interviews with 12–15 managers, including HR Managers, Industrial Engineering Managers, Production Heads and Factory Managers. Interviews will be between 20–30 minutes in duration. The goal is not hypothesis testing but to contextualize and justify quantitative results by exploring difficulties, practical issues and managerial tactics in workforce planning.

3.5 SAMPLING METHOD

A purposive sampling method will be employed to choose the factories and participants who are relevant in terms of experience and accessibility. This method is suitable for research with a focus on individuals who are in charge of workforce management (Saunders et al., 2019).

3.6 DATA ANALYSIS

Quantitative data will be processed with use of SPSS software, through descriptive statistics (mean, standard deviation) and correlation analysis to evaluate inter-variable associations. Interview data will be analysed qualitatively using thematic analysis to identify structures and common patterns, crossings or shared themes with respect to workforce planning and productive time (Creswell & Creswell, 2018). The integration of the two analyses will provide the basis for a useful workforce optimization model for apparel factory setting.

3.7 ETHICAL CONSIDERATIONS

The work will be guided by the established research ethics and university guidelines. Participation will be optional, and respondents will be made aware of the study's objective prior to data collection. All participants will sign a consent form, and their anonymity and privacy will be securely protected. Data will be used solely for academic purposes and stored securely to maintain participant confidentiality.

4. EXPECTED FINDINGS

The research is projected to confirm that there is a strong positive correlation between SWP dimensions and productivity in the case of apparel factories. In particular, the accurate forecasting of manpower will contribute to the reduction in delays in production, systematic recruitment will enhance stability of employment, on-the job training promotes efficiency and quality of work, and proper scheduling reduces idle time and absenteeism. Additionally, the insights obtained from interviewing are anticipated to identify some practical problems such as shortage of skillsets, high turnover, and planning mismanagement. In summation, all these findings are going to suggest that there is a room for better SWP practices that apparel factories could have adopted to improve their operational efficiency and competitiveness via sustainable employee performance.

5. LIMITATIONS

While this study attempts to draw useful insights, there are certain limitations that must be recognized. First, the sample of this study will be restricted to 4–5 factories in Dhaka and Gazipur, which may affect the generalization of findings on Bangladeshi apparel sector. Second, interview depth for managerial staff in the data collection may also be limited by time and access restrictions. Third, the use of self-reported survey data in this study may be influenced by individual feelings or misinterpretation of questions. Furthermore, the study is cross-sectional and the relationships are only measured at one point in time, so it is not possible to make inferences about any potential causal relationship between workforce planning and productivity.

6. TIMEFRAME

	October					November					December					January					February				
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Proposal																									
Finalise topic & scope																									
Initial literature review																									
aim & objectives																									
Methodology																									
Write & submit proposal																									
Dissertation																									
Literature review																									
Methodology																									
Ethics / access approval																									
Data collection (survey)																									
Data collection (interviews)																									
Quantitative analysis																									
Qualitative analysis																									
Draft chapters																									
Edit, format, references																									
Final review & submission																									

7. CONCLUSION

This research aims to investigate how the four key SWP dimensions can enable productivity in apparel production in Bangladesh. The study will be conducted among the selected factories in Dhaka and Gazipur using online survey and interview. The application of this method approach will help to better understand the impact of SWP on productivity optimization. Therefore, it is expected that the study will have significant contribution in academia and

industry. The study will help to develop a SWP model that contributes to improvements in productivity, operational efficiency and the advancement of an environmentally sustainable workforce within Bangladesh's garment factories as per national targets for economic growth and sustainable workflows.

8. REFERENCES

Ahmed, M. and Chowdhury, M. A. (2025) 'Workplace environment and employee performance in the ready-made garments (RMG) sector in Bangladesh.' *Theseus Online Repository*. Available at: <https://urn.fi/URN:NBN:fi:amk-202505028713> (Accessed: 25 October 2025).

Bangladesh Bank (2024) *Quarterly Review of Readymade Garments (RMG): April–June, FY 2024*. Dhaka: Bangladesh Bank. Available at: <https://www.bb.org.bd/pub/quaterly/rmg/rmg%20april-june%20fy24.pdf> (Accessed: 25 October 2025).

Becker, G. S. (1964) *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. New York: Columbia University Press.

BetterWork (2025) *Creating Better Jobs for Women and Boosting Productivity in Bangladesh's Garment Factories: An Assessment of the Gender Equality and Returns Programme*. Geneva: International Labour Organization (ILO) and International Finance Corporation (IFC). doi: 10.54394/SQXN3146.

Creswell, J. W. and Creswell, J. D. (2018) *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Los Angeles: Sage Publications.

Habib, A. (2023) 'Effect of efficient production planning on productivity in garments industry of Bangladesh', paper presented at the 13th International Fibre and Polymer Research Symposium, Bolu, Turkey, 5–7 May 2023. Available at: https://www.researchgate.net/publication/381407019_Effect_of_Efficient_Production_Planning_on_Productivity_in_Garments_Industry_of_Bangladesh (Accessed: 25 October 2025).

Hosen, N. (2020) 'Barriers in productivity and efficiency growth in Bangladesh's apparel industry', *Textile Today Online*. Available at: <https://www.textiletoday.com.bd/barriers-productivity-efficiency-growth-bangladeshs-apparel-industry> (Accessed: 25 October 2025).

Kareska, K. (2023) 'Human resource management strategies for achieving competitive advantage of organizations', *Strategy Models for Firm Performance Enhancement eJournal*, 15(20).

Kim, J. (2025) 'Examining the threads: Bangladesh's ready-made garment industry under global scrutiny', *Brooklyn Sports and Entertainment Law Blog*. Available at:

<https://sports-entertainment.brooklaw.edu/fashion/examining-the-threads-bangladeshs-ready-made-garment-industry-under-global-scrutiny/> (Accessed: 25 October 2025).

LightCastle Partners (2024) *Bolstering Worker Well-Being in the Apparel Industry*. Dhaka: LightCastle Analytics Wing. Available at: <https://lightcastlepartners.com/insights/2024/05/worker-wellbeing-apparel-sector/> (Accessed: 25 October 2025).

Rahman, A., Acharjee, P., Sharif, T., Ishraq-Ul-Haque, M. and Choudhury, N. A. (2024) 'A comparative evaluation of line balancing methods to enhance sewing line performance', in *Proceedings of the 7th Bangladesh Conference on Industrial Engineering and Operations Management*. USA: IEOM Society International, pp. 1–7. doi: 10.46254/BA07.20240062.

Saunders, M. N. K., Lewis, P. and Thornhill, A. (2019) *Research Methods for Business Students*. 8th edn. New York: Pearson Education.

Sheehan, M. and Garavan, T. (2022) 'High-performance work practices and labour productivity: A six-wave longitudinal study of UK manufacturing and service SMEs', *The International Journal of Human Resource Management*, 33(16), pp. 3353–3386. doi: 10.1080/09585192.2021.2005658.

Ullah, M. S., Islam, M. R., Amin, M. R., Amin, M. B., Rahman, M. M. and Erdey, L. (2024) 'The effects of compensation, organisational commitment and job satisfaction on work productivity: Evidence from the readymade garments industry in an emerging economy', *Journal of Infrastructure, Policy and Development*, 8(13), p. 8494.

Zohra, F. T., Khan, M. A. S. and Sattar, S. (2025) 'Work ability and associated factors among female ready-made garment workers in Bangladesh', *PLoS One*, 20(6), e0325309. doi: 10.1371/journal.pone.0325309.