PalArch's Journal of Archaeology of Egypt / Egyptology

EXPLORING THE IMPACT OF TOTAL QUALITY MANAGEMENT MEDIATION BETWEEN GREEN SUPPLY CHAIN METHOD AND PERFORMANCE

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Ahmed Uzaim Shahid, Muniba Ghaffar, Saif Ur Rahman, Mubashar Ali, Mirza Aslam Baig, Sadia Idrees. Exploring The Impact Of Total Quality Management Mediation Between Green Supply Chain Method And Performance -- Palarch's Journal Of Archaeology Of Egypt/Egyptology 19(4), 1252-1270. ISSN 1567-214x

Keywords: Green Supply Chain Practices, Total Quality Management, Just In Time, Business Performance

ABSTRACT:

Purpose:

The main purpose of this study is to gain the competitive advantage and improve performance that has resulted in adoption of numerous practices by the firms. Green Supply Chain Practices, Just in Time, Total Quality Management adopted by firms to improve organizational performance and Business Performance.

Design/Methodology/Approach:
This study utilizes the quantitative approach of research for using questionnaire to conduct a survey and gather the data from manufacturing firms. The research uses partial least square structural equation model (PLS-SEM) to analyze the data collected.

Findings:

The analysis results show that Green Supply Chain Practices, Total Quality Management and Just in Time positively influenced on organizational performance and Business Performance. The findings disclose Green Supply Chain Practices combine with Just in Time and Total Quality Management to improve the significancy of organizational performance Business Performance.

Originality/Value:

This study anticipated a research model that examine both the individual and combined influence of Green Supply Chain Practices, Total Quality Management and Just in on both the organizational performance and Business Performance from the viewpoint of developing countries. The study models Green Supply Chain Practices as an antecedent of Just in Time and Total Quality Management, which has not been explored.

Practical Implications:

Regarding paper implications, the findings provide a constructive basis to adopt Just in Time and Total Quality Management to catalyze green strategy to achieve high Operational as well as Business Performance. Moreover, the study advises to adopt Total Quality Management program such as customer focus in the production of goods and services that enhance the satisfaction of customer through the improvement in quality and low cost of goods and services that leads to enhance the market shares and sales.

INTRODUCTION

Global Competition, Tentative Business Environment And Environmental Concern Focusing Firm To Go Ahead Of The Internal Hub Competencies And Capabilities To Adapt To The Green Supply Chain That Helps To Enhance Competitive Gain And Consumer Satisfaction To Improve The Performance And To Meet The Needs Of Other Stakeholders (Agyabeng-Mensah, Ahenkorah, & Agnikpe, 2019; Agyabeng-Mensah, Ahenkorah, & Korsah, 2019). Numerous Firms Have Relied On Internal And External Logistics, Chain Practices, Which Ensure That Resources Are Used Properly To Reduce Waste And Environmental Protection That Will Reduce Costs And Improve Efficiency. The Green Supply Chain Practicess Is An Environmental Managing Approach Adapted By Many Firms To Make Aggressive Advantage And Improve Efficiency. However, The Adoption Of This Use Follow-On In Conflicting Firm Performance (Feng Et Al., 2018). The Discovery Of Some Existing Literature Pieces That Look For Beginning A Link Between Financial Performances And Green Methods Has Led To Claims Against The Adoption Of Green Methods. Because, In The Short Run There Is A Negative Correlation Between Green Supply Chain Practices And Financial Performance (Feng Et Al., 2018; Longoni, Luzzini, & Guerci, 2018; Yu, Chavez, Feng, & Wiengarten, 2014; Zhu & Sarkis, 2004) Some Scholars Even Make This Claim. Green

Supply Chain Practices Has A Positive Effect On Stable Performance (Agyabeng-Mensah, Ahenkorah, & Agnikpe, 2019; Agyabeng-Mensah, Ahenkorah, & Korsah, 2019; Agyabeng-Mensah, Ahenkorah, & Osei, 2019; Baah, Jin, & Tang, 2020; Green, Inman, Sower, & Zelbst, 2019). Contradictions Were In Green Supply Chain Practicess-Performance Relationship. This May Due To The Lack Of Corresponding Firms Methods That Can Be Adopted To Improve The Effectiveness Of Green Supply Chain Practicess To Achieve High Performance In The Short And Long-Run Period. According To (Agyabeng-Mensah Et Al., 2020), Only Just In Time (Just In Time) And Total Quality Management (Total Quality Management) Are Reciprocally Accommodating, And Their Coordination Can Improve Performance. In Adding Up, (Green Et Al., 2019) Suggests That The "Three Zero Manufacturing Paradigm", Which Demand Manufacturing Managers Concurrently Achieve Zero Defect, Zero Environmental Waste And Emission And Zero Inventory, Indicating That This Can Be Met By Just In Time, Total Quality Management And Green Supply Chain Practices.

Findings Have Also Shown That There Is An Existing Synergy Between Lean Management (Just In Time & Total Quality Management) And Environmental Management Practices While Numerous Studies Establish A Positive Relationship Between Total Quality Management, Just In Time And Environmental Performance By Reducing Wastes And Emission (Agyabeng-Mensah Et Al., 2020). Despite A Thorough Study Of The Effects Of Green Supply Chain On Performance, The Combined Effect Of Just In Time And Total Quality Management, Op And Business Performance, To Organize Can't Achieve Enough Attention From The Scholars (Bastas & Liyanage, 2018; Narasimhan, Swink, & Kim, 2006) Suggests That There Is An Unexpected Link Among The Quality Management And Green Supply Chain To Improve Performance Which Calls For Further Study. (Green Et Al., 2019) Who Studied Just In Time And Total Quality Management As Elders Of Green Supply Chain Practices, Who Studied Green Supply Chain Practices And Just In Time And Gsc On Business Performance And Organizational Performance Focused Only On The Environmental Aspect Of Performance Without Considering Every Synergistic Effect Of Organizational Performance And Total Quality Management.

Current Study Is Done To Strike A Balance Between Present Sciences (Feng Et Al., 2018). Furthermore, Despite Reviewing The Assumptions In The Current Literature, We Didn't Find Any Current Study That Is Considering The Mediating Role Of Total Quality Management In Which Structural Sample Contexts Include Green Supply Chain Practices And Each Organizational Performance And Business Performance. In Present Study, Natural Resource Theory Has Been Used To Quickly Explore Direct And Indirect Relationship Between Green Supply Chain Practices, Total Quality Management, Just In Time, Organizational Performance And Business Performance. (Agyabeng-Mensah Et Al., 2020). Furthermore, This Study Examines How Green Supply Chain Practices, Total Quality Management, Just In Time And Business Performance Have Implemented To Have Positive Impact.

The Study Examines The Link Between Green Supply Chain Practices And Just In Time And Green Supply Chain Practices And Total Quality Management's Individual Synergy Between Each Operational Performance And Business Performance Through The Mediation Effect Of Just In Time And Total Quality Management. It Will Be Helpful In The Work Of Literature And Practitioners (Bastas & Liyanage, 2018). In Addition, A Review Of The Coordination Between Gsps On Bs And Both Just In Time Is The Major Contribution Of This Study (Agyabeng-Mensah, Ahenkorah, & Agnikpe, 2019). First Part Of Study Contains An Introduction. The Second Part Reviews The Literature, While Third Part Consists Of Methodology (Feng Et Al., 2018). Fourth And Fifth Section Of The Study Details The Analysis, Findings, And Discussions Respectively. Finally We Conclude The Study With Future Directions, Limitations And Implications Of The Study.

LITERATURE REVIEW:

Theoretical Background:

For Providing A Rationale And The Foundational Explanation Behind The Theoretical Model, This Study Employs The Natural Resource Theory. It Is The Most Governing Theory That Begins The Affiliation Between Performance And Sustainable Series And Is To Be Used By Green And Sustainable Scm. This Theory Was Developed From Resource Based Perspective, Which Become Central To Systematic Strategic Management (Barney, Wright, & Ketchen Jr, 2001). This Theory Suggests That Firms Use Environmental Strategies Such As Reduction Of Pollution, And Gain Competitive Advantage Through Sustainable Development.

HYPOTHESIS DEVELOPMENT:

Green Supply Chain Practices And Business Performance

Innovation In Firm’s Performance Relies Upon Implementation Level On Green Supply Chain Practices (De Sousa Jabbour, De Oliveira Frascareli, & Jabbour, 2015). Several Studies Have Establish Positive Relationship And Effect Of Green Supply Chain Practicess On Business Performance (Liang, Yang, Cook, & Zhu, 2006). Adopt Green Supply Chain Through Predetermining Impact Of Products That Leads Successfully And Make Sure Efficient Usage Of Water, Energy, Materials, Which Results In Enhancement Of Performance (Cucciella Et Al., 2012). Long Term Profit Gaining Can Develop Organization Image, Enhance Business Performance And Increase Profit (Cucciella Et Al., 2012). Simultaneously, By The Reduction Of Above Mentioned Usages, We Can Lead To Improve Environmental Performance. From the Above Arguments:

H1: Green Supply Chain Practices Positively Influences To Business Performance.

Green Supply Chain Practices and Operational Performance

Green Supply Chain Practices Are Expected To Boost Product Quality, Decreasing Level Of Inventory And Improve Delivery On Time Of Organizational Performance. (Zhu, Geng, Fujita, & Hashimoto, 2010). (Feng Et Al., 2018; Yu Et Al., 2014) Find The Positive Effect Of Green Supply Chain Practices On Organizational Performance Of Elasticity, Quality And Cost. It Provides The Possibility Of Production Improvement, And Attracts New Customers And Suppliers. Moreover, For Improving The Organizational Performance, They Need To Minimize Production Costs By Promoting Operational Performance Such As Minimum Time Of Production, And Energy Consumption And Improve Green Supply Chain Management Values (Yu Et Al., 2014). According To (Vachon & Klassen, 2008), Green Supply Chain Practicess Can Improve Operational Performance Of An Organization. Thus, We Can Say That:

H2: Green Supply Chain Practices Is Positively Related To Operational Performance.

Operational Performance and Business Performance

Enhanced Organizational Performance Is Predictable To Proceed Business Routine Through Price Savings And Increased Revenues (Laosirihongthong, Adebanjo, & Tan, 2013). The Highly Developed Operational Competence That Reflect Organizational Performance Has Been Recognized As A Resource Of Aggressive Benefit And High Business Routine (Terjesen, Patel, & Covin, 2011). Also, Well-Organized Utilization Of Operation That Enable Firms To Attain Production-Related Goals Involving Invention Quality That Conform To Terms, Cost Manage, Volume And Product Elasticity And Accuracy Of Delivery Will Expand Business Performance (Yu & Ramanathan, 2016). (Akgul, Gozlu, & Tatoglu, 2015) Emphasize That Firms That Wish To Keep Their Spirited Position In The Market And Achieve Advanced Performance Should Improve Their Organizational Performance Concerning Cost, Excellence And Delivery. Improved Organizational Performance Consequences In Less Substandard Products, Enhanced Quality, Reduced Cost, Increased Output, On-Time Product Delivery And Increased Marketplace Performance (Kafetzopoulos, Psomas, & Gotzamani, 2015). Thus, We Supposed That:

H3: Operational Performance Is Positively Related To Business Performance.

Green Supply Chain Practices and Total Quality Management

Overall Quality Administration Is Another Thought That Increase The Both Ecological And Business Performance To Make Improvement In The Application Of Green Supply Chain Management. It’s A Wide Approach Whose First Precedence Is Uninterrupted Development. (Kannan & Tan, 2005) Found That It Is Highly Linked With The High Quality Of Product Which Moves Towards Customer Satisfaction And Helps To Improve The Efficiency

Of Work. (Tasie, 2016) Recommends That The Distinctiveness Features Of Total Quality Management In Decision Making And Problem Solving And Involvement In Process And Teamwork Through Unity Of Purpose. According To (Dean Jr & Bowen, 1994), Total Quality Management Implementation On Green Supply Chain Practices Is A Fundamental Tor Firms Success.

H4: Green Supply Chain Practices Positively Influences To Total Quality Management.

Green Supply Chain Practices and Just In Time

Jit Is A Production System Or Technique Is The Coordinated Components Manufacturing Or Products So They Arrived At Specified Place Just In Time According To The Demand Of Customer. (Carvalho, Duarte, & Machado, 2011) Lists The Main Green Supply Chain As: "Reduction Of Redundant And Unnecessary Materials, Introduction Of Reusable And Remanufactured Parts In The Material Inventory, Reduction Of Replenishment Frequency, Integration Of The Reverse Material And Information Flow In The Supply Chain, Environmental Risk-Sharing, Waste Minimization, Reduction Of Transportation Lead Time And The Efficiency Of Resource Consumption." In This Study, Just In Time Is Accessed To Green Supply Chain Management And Practices, Recommend That:

H5: Green Supply Chain Practices Is Positively Relates With Just In Time.

Total Quality Management and Operational Performance

Total Quality Management Has Been Found An Influence On Operational Performance (Fuentes, Montes, & Fernández, 2006), Financial Performance (Herzallah, Gutiérrez-Gutiérrez, & Munoz Rosas, 2014), And Aggregate Operational Performance (Kaynak, 2003). However, (Mohrman, Tenkasi, Lawler, & Ledford, 1995) And (Sadikoglu & Olcay, 2014) Resulted The Negative Impact. According To (Feng Et Al., 2018) Total Quality Management Has Positive Impact On Business Operational Performance. Thus We Can Say That:

H6: Total Quality Management Is Positively Related To Operational Performance.

Total Quality Management and Business Performance

A Suggestion By (Ittner & Larcker, 1996) Is That Total Quality Management Can Increases Profitability Of Business Through Building Loyalty Among The Customers Of A Firm And Through Customer Satisfaction. The Results In Making Improvement In It Are To Make A Business More Profitable Of An Organization (Armitage & Atkinson, 1990; Jyoti, Kour, & Sharma, 2017). Their Findings Reveal A Significant Relationship Between Business Performance And Total Quality Management. Similarly, Studies Support The Significance Of Enhancement For Successful Implementation Of Strategies As It Also

Develops Sustainable Presentation Through The Quality In The Business. Thus, It Is To Be Said That:

H7: Total Quality Management Is Positively Related To Business Performance.

Just In Time with Operational Performance and Business Performance

(Zhu & Sarkis, 2004) Observed That Just In Time Manufacturing Aspect Could Contribute The Performance On Environment, But, More Adoption Of Just In Time Practice Makes Weaker In Firm With Green Supply Chain Practices And Environmental Performance. However, (Klassen, 2000) Noted That Just In Time Is Significantly And Positively Associated With The Environmental Performance. The Reduction In Delivery Lead-Time Can Only Be Done Through Just In Time, While It Helps To Increase Firms' Competitive Advantage Through Responsiveness Leading. This Improves The Cost System Of Both Operational And Business Performance. Thus, We Stated That:

H8: Just In Time Positively Influences To Operational Performance.

H9: Business Performance Is Positively Relates To Just In Time

Mediating Effect of Total Quality Management, Just In Time and Operatio nal Performance:

Yet Mostly The Firms Are Persuade To Put Into Practices Green Supply Chain Practices Due To Capital Nature, Furthermore, Different Researchers Compete That For Implementation Of Green Supply Chain Practicess, Its Necessary To Improve The Organizational Performance Of The Business (Feng Et Al., 2018). However, Its Implementation On Financial Performance Has Adverse Effect (Feng Et Al., 2018). Just In Time Programs Noted That You Need To Improve Performance To Implement Green Supply Chain Practices. (Agyabeng-Mensah Et Al., 2020) Conduct That Firms Found Corresponding Relationship Between Green Supply Chain Practicess, Just In Time And Total Quality Management. Besides That, Total Quality Management And Just In Time Is To Be Consider And Use As A Background Of Green Supply Chain, While, Just In Time And Total Quality Management In This Study Are Mediating Variables. (Feng Et Al., 2018) Concluded That In Manufacturing Firms, Operational And Performance On Environment Plays Fractional Mediating Role Between Green Supply Chain Practices And Financial Performance.

According To (Green Et Al., 2019; Green, Zelbst, Meacham, & Bhadauria, 2012), Green Supply Chain Implemented Has Positively Affected Just In Time, Total Quality Management And Organizational Performance Are Mutually Supported Through Each Other And It Improves Financial Performance And Operational Markets (Green Et Al., 2019). Some Other Scholars Thought That Just In Time And Other Variables Leads To The Creation (Bergmiller & Mccright, 2009; Narasimhan & Schoenherr, 2012). Thus, This Shows That They Need To Implement Op Concurrently. (Salvador, Piekarski, & Francisco, 2017) Suggested That Their Need Further Exploration Of The Synergy In

Between Green Supply Chain Practices, Just In Time And Total Quality Management On Performance. Thus, We Show That:

H1b: Total Quality Management Significantly Mediates the Relationship between Green Supply Chain Practices and Business Performance

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H1c: Just In Time Significantly Mediates The Relationship Between Business Performance And Green Supply Chain Practices.

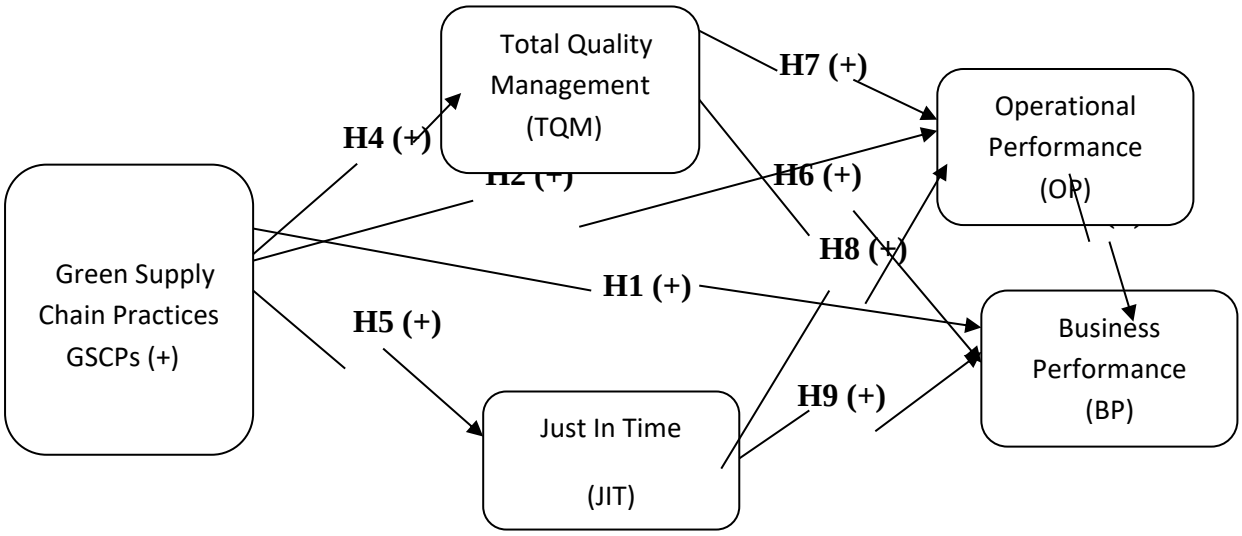
H1d: Operational Performance Significantly Mediates the Relationship Green Supply Chain Practices and Business Performance.

H2b: Total Quality Management Significantly Mediates The Relationship Between Green Supply Chain Practices And Operational Performance.

H2c: Just In Time Significantly Mediates The Relationship Between Green Supply Chain Practices And Operational Performance.

H2d: Operational Performance and Just In Time Significantly Mediates the Link In Between Green Supply Chain Practices and Business Performance.

RESEARCH MODEL:



RESEARCH METHODOLOGY:

Sample Size and Data Collection:

Present Study Use Firms As The Unit Of Analysis. The Reason Is Because For Improving The Performance, Firms Need To Adapt Green Supply Chain Practices. Data Was Collected Using Survey Questionnaire. Survey Was Administrative By 5 Researchers. For Data Collection, Author Shares Online Link Of The Questionnaires Using Convenient Sampling. A Total Of 150 Questionnaires Were Allotted Out Of Which 125 Returned And 110 Questionnaires Were Useable After Screening Which Is In Line With The Average Responses Rate For Green Supply Chain Management Research (Agyabeng-Mensah Et Al., 2020).

Questionnaire and Pre-Test:

All Scales Adopt From Prior Literature In This Study. The Questionnaires Comprises On Close-Ended Questions And Measures with A 5-Point Likert Scale Ranges In Between (1) Strongly Disagree To (5) Strongly Agree. To Measure Green Supply Chain Practices, A Scale With 7-Questions Were Used And It Should Be Taken From (Longoni Et Al., 2018; Zaid, Jaaron, & Bon, 2018; Zhu & Sarkis, 2004). To Measure Total Quality Management, A Scale With 3-Questions Were Taken From (Agyabeng-Mensah Et Al., 2020; Green Et Al., 2019). Other Than That, Just In Time Was Adopted By (Flynn, Huo, & Zhao, 2010; Green Et Al., 2019) With A Scale Of 6-Items. To Measure Operational Performance, A Scale With 4-Items Was Adopted From (Agyabeng-Mensah, Ahenkorah, & Korsah, 2019; Flynn Et Al., 2010; Lai & Wong, 2012). For Measuring Business Performance, A Scale With 6-Items Were Adopted From (Agyabeng-Mensah, Ahenkorah, & Agnikpe, 2019; Feng Et Al., 2018). The Context Validity Of Scales Was Established By Expert Academic Scholars.

FINDINGS:

This Present Study Exploits Pls-Sem To Test The Anticipated Hypothesis By The Use Of Smart Pls 3 As It's Widely Used Software As Up To Date Techniques In Business Sectors Predominantly In Manufacturing Firms Nowadays (Henseler, 2017). It's A Useful Tool And The Main Reason For Choosing This Software Is That By This Software, It Allows To Avoid The Issue Of Normality In Data. The Pls Algorithm, Follow By Bootstrapping, Were Use To Conclude Coefficients, Factor Loadings, And Considerable Levels (Peng & Lai, 2012). Firstly, Measurement Model Was Calculated And After This, We Use Structural Model Assessment Through Estimates.

Measurement Assessment Model:

This Measurement Model Was Predictable And Convergent Validity Was Appraise Through Factor Loadings, Cronbach's Alpha, Composite Reliability And Average Variance Extract. As Shown In Level 1, Factor Loadings Surpass The Recommend Value 0.50. Other Than This, The Values Of Component Reliability Exceed The Recommended Value 0.70. Moreover, Average Variance Extract Value Is Also More Than The Recommended Value Of 0.50. No Item Was Deleted As All The Values Are According To Recommendation.

Table 1: Convergent Validity

Constructs	Items	Loadings	Alpha	CR	VAE
Business Performance	BP1	0.809	0.86	0.905	0.704
	BP2	0.862			
	BP3	0.858			
	BP4	0.826			

Green Supply Chain Practices	GREEN SUPPLY CHAIN PRACTICES1	0.828	0.858	0.898	0.639
	GREEN SUPPLY CHAIN PRACTICES2	0.828			
	GREEN SUPPLY CHAIN PRACTICES3	0.81			
	GREEN SUPPLY CHAIN PRACTICES4	0.787			
	GREEN SUPPLY CHAIN PRACTICES5	0.74			
Just in Time	JIT1	0.9	0.852	0.91	0.772
	JIT2	0.852			
	JIT3	0.884			
Operational Performance	OP1	0.914	0.736	0.882	0.789
	OP2	0.862			
Total Quality Management	TOTAL QUALITY MANAGEMENT1	1	1	1	1

Noted that, here CR= Composite Reliability and AVE= Average Variance Extract

The results from Hetrotrait-Monotrait Ratio (HTMT) use to measure the discriminant validity in the model as shown in Table 2; (Henseler, 2017). It must be need to observe that there should be the value not more than 0.90. Overall, on the evaluation basis, there find that there is no threat of value from discriminant validity.

Table 2: Hetrotrait-Monotrait Ratio (HTMT)

Items	**Business Performance**	**Green Supply Chain Practices**	**Just in Time**	**Operational Performance**	**Total Quality Management**
Business Performance					
Green Supply Chain Practices	0.88				
Just In Time	0.829	0.894			
Operational Performance	0.749	0.772	0.864		

Total Quality Management	0.799	0.775	0.655	0.574	

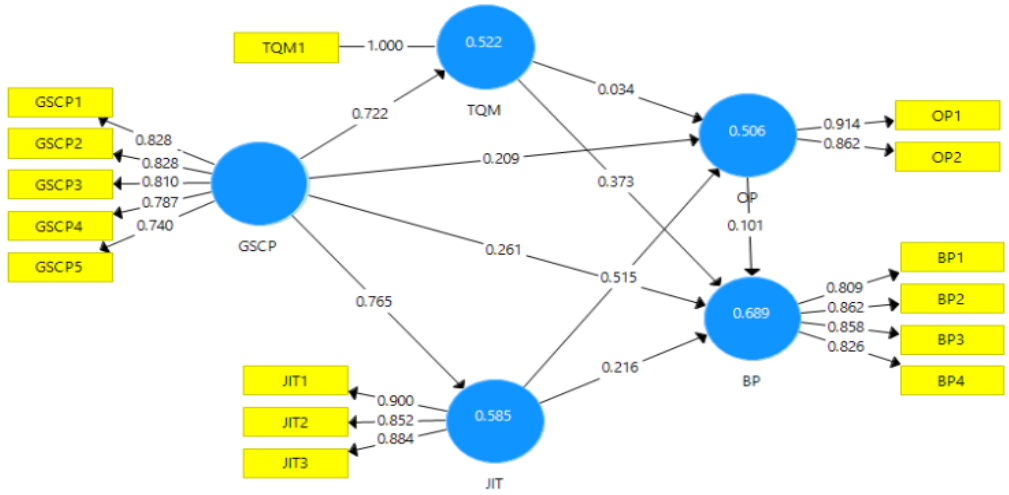


Figure2: Measurement Model Assessments

Structural Model Assessment

It was carried out for hypothesis estimation after the confirmation of variable reliability and its validity through the model measurement assessment. T-values, standard errors, and path coefficients were calculated to find the significant relationship and model among the variable with the data collection. Path coefficients values determine whether the hypothesis will supported or unsupported. Bootstrapping procedure of calculation determines that there should be an estimation of moderating effects, and all this should be done in Smart-PLS 3. With refer to table 3 and figure 3, Green supply chain practices is significantly and positives associates with Business performance (β=0.261, t= 2.05, L.L= -0.012, U.L= 0.522), so, H1 is supported. Results have also shown that there is a significant and positive relationship in between Green supply chain practices and Just in time (β=0.765, t= 13.446, L.L= 0.646, U.L= 0.862), so H2 is also supported. The result shows that there is not significant relationship in between Green supply chain practices and Operational performance (β=0.209, t= 1.444, L.L= -0.072, U.L= 0.476), so H3 is not supported.

Moreover, the tested result is significantly positive relationship between Green supply chain practices and Total quality management (β=0.722, t= 12.632, L.L= 0.595, U.L= 0.823), Hence, H4 is supported. There shown a significant and positive relationship in between Just in time and Business performance i.e. (β=0.216, t= 1.946, L.L= -0.013, U.L= 0.407). So, the hypothesis H5 is supported. Just in time has also a positive relationship with Operational performance (β=0.515, t= 4.796, L.L= 0.29, U.L= 0.736), so H6 is also supported. Operational performance has not a significant and positive

relationship with Business performance (β=0.101, t= 0.815, L.L= 0.315, U.L= 0.36). So this hypothesis H7 is not supported.

As there is a significant and positive relationship between Total quality management and Business performance, and after testing (β=0.373, t= 3.073, L.L= 0.131, U.L= 0.599), it seems that H8 is supported. While H9 Total quality management with Operational performance is not supported after testing (β=0.034, t= 0.289, L.L= -0.229, U.L= 0.236).

Table 3: *Path Analysis*

Relationship	**B**	**S.D**	**Test Value**	**P. Value**	**Lower Level**	**Upper Level**	**Decision**
GREEN SUPPLY CHAIN PRACTICES -> BP	0.261	0.128	2.05	0.041	-0.012	0.522	Supported
SGREEN SUPPLY CHAIN PRACTICES -> JIT	0.765	0.057	13.446	0	0.646	0.862	Supported
GREEN SUPPLY CHAIN PRACTICES -> OP	0.209	0.145	1.444	0.149	-0.072	0.476	Unsupported
GREEN SUPPLY CHAIN PRACTICES -> TOTAL QUALITY MANAGEMENT	0.722	0.057	12.632	0	0.595	0.823	Supported
JIT -> BP	0.216	0.111	1.946	0.05	-0.013	0.407	Supported
JIT -> OP	0.515	0.107	4.796	0	0.29	0.736	Supported
OP -> BP	0.101	0.124	0.815	0.416	-0.135	0.36	Unsupported
TQM -> BP	0.373	0.121	3.073	0.002	0.131	0.599	Supported
TQM -> OP	0.034	0.119	0.289	0.773	-0.229	0.236	Unsupported

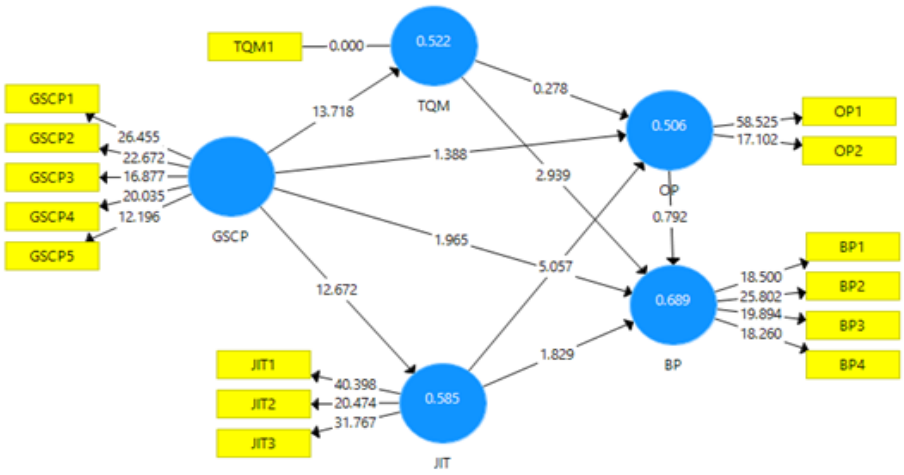


Figure3: Structural Model Assessments

DISCUSSION:

The findings of the study provided the notable impacts of the factors playing an investigating the intervening affects of Total Quality Management and Just in Time On Green Supply Chain Practices And Performance Under The Theoretical Background Of Natural Resource Based Theory. Previous Literatures Recognize That Green Supply Chain Practices Can't Play A Vital Role In Business Performance (Herrmann, Thiede, Stehr, & Bergmann, 2008).

The Exploration And Comparison Of Synergy Between Green Supply Chain Practicess With Total Quality Management, Green Supply Chain Practicess With Just In Time On Operational Performance And Business Performance From A Developing Country Is That Which Prior Literature Have Not Considered (Green Et Al., 2012). The Implementation Of Green Supply Chain Practicess Shows The Importance Of Such Practices In The Global Era Where There Is To Put The Efforts Deliberately To Achieve Green Supply Chain Practices And Performance Through Business Performance (Bienhaus & Haddud, 2018).

In The Previous Studies, There Is A Gap Showing How Management Literacy Plays A Significant Role In Improving The Degrees Of Green Supply Chain Performance And Practices And Business Performance. This Study Reflects The Fact That Management Literacy, Which Comprises Of Developing Strategies Of Making The Best Use Of Persisting Long In Facing Hurdles And Come Out Of The Situation Successfully, Improves The Green Supply Chain Practices And Performance And Operational Performance With Business Performance (Agyabeng-Mensah Et Al., 2020). On The Basis Of Natural Resource Based Theory, Green Supply Chain Practicess Significantly Affects Just In Time, Organizational Performance And Business Performance. The Study Has Also Proved That The Higher Is Adoption Of green supply chain practices and performance, the higher is your operational as well as business performance. This can also be underpinned by previous researchers

(Agyabeng-Mensah, Ahenkorah, & Osei, 2019; Green et al., 2019; Herrmann et al., 2008; Lai & Wong, 2012).

Thus, the study verifies that to improve your Business Performance same like Operational Performance, so you have to adopt Green Supply Chain Performance, Just in Time and Total Quality Management.

THEORETICAL CONTRIBUTIONS:

This study contributes to the existing knowledge in between supply chain and Operational Management By Establishing Synergy Between Green Supply Chain Practicess, Total Quality Management, Just In Time On Organizational Performance And Business Performance. In Addition, The Mediating Effect Of Total Quality Management And Just In Time On Links Green Supply Chain Practicess-Business Performance Which Has Not Been Explored As A Key Contribution In This Study Since Presented Literature Have Not Consider It As Predecessor Of Just In Time And Total Quality Management. For Future Study (Green Et Al., 2019; Inman, Sale, Green Jr, & Whitten, 2011) Suggested That Green Supply Chain Practices-Just In Time-Organizational Performance-Business Performance Is A Major Contribution To Knowledge In Supply Chain And The Production. The Theory Test Of The Synergy Of Green Supply Chain Practices With Total Quality Management And Green Supply Chain Practices With Just In Time On Operational Performance And Business Performance In This Study Is A Major Contribution Of The Literature Since No Previous Research Has Focused On It. Moreover, This Study Responded to natural resource based theory which suggests the implementation of strategies that ensures the pollution prevention to create the competitive advantage to improve the performance of organization (Hart & Dowell, 2011).

Practical Implications:

Regarding paper implications, the findings provide a constructive basis to adopt Just in Time and Total Quality Management to catalyze green strategy (Green et al., 2019) to achieve high Operational as well as Business Performance. The significant and positive linkage in between GREEN SUPPLY CHAIN PRACTICESs and both TOTAL QUALITY MANAGEMENT and JUST IN TIME are establish as they create synergy to reduce cost, sales and profitability (Larson & Greenwood, 2004). They need to develop JUST IN TIME programs such as setup time reduction, minimization of cost related products and ensure better delivery products resulting in improving market performance. Moreover, the study advise to adopt Total Quality Management program such as customer focus in the production of goods and services that enhance the satisfaction of customer through the improvement in quality and low cost of goods and services that leads to enhance the market shares and sales.

Moreover, This Study Encourages To Concurrently Implementing Green Supply Chain Practicess, Just In Time, And Total Quality Management To Enhance The Firm's Ability To Improve Product Quality, Reduce Goods Prices And Ensure Quick Delivery To Improve Operational Performance And Business Performance. Thus, These Suggest That Firm May Need To Apply Green Supply Chain Practicess, Just In Time, And Total Quality Management

Simultaneously With Achieve Improvement In Both Organizational Performance And Business Performance. The Finding Shown The Firms To Persuade Green Supply Chain Practicess-Just In Time And Total Quality Management To Improve The Benefits Of Supply Chain (Green Et Al., 2019; Inman Et Al., 2011).

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS:

There are various limitations refers to this study. The other hypothesis that were not Supported Could Have Better Result If The Sample Size Was Increased (Klassen, 2000). The Results Were Sufficiently Affected As We Put Common Method Bias In It. Business Performance Items Don't Include Environmental And Social Items . Further Studies May Test The Model Of Performance Measurement And Look Other Factor That Mediates The Link In Between Green Supply Chain Practices And Business Performance In Other Countries. Sample Size May Also Be Increased In Future Studies. Though, The Sample Covered Manufacturing Firms, Future Studies May Still Increase The Respondent's Scope To Increase The Generalizability Of The Firms. This Study Employs Pls-Sem To Analyze The Data. Future Studies May Have To Employ Covariance Based Sem For Data Analyzation. Furthermore, Future Study May Be Cross-Sectional. Thus, They Need to Gather the Data from Both Developed As well As Developing Countries and Compare It since This Study Is conducted in a developing country.

CONCLUSION:

This Study Investigated The Effect Of Green Supply Chain Practicess On Op, Business Performance, Just In Time, And Total Quality Management In Manufacturing Firms. The Effect Of Total Quality Management On Business Performance, Organizational Performance Was Also Examined. Furthermore, The Effect Of Green Supply Chain Practicess On Business Performance Through Just In Time, Total Quality Management And Organizational Performance Was Also Explored.

This Study Concludes That Green Supply Chain Practicess Have No Direct Effect On Organizational Performance; However, It Improves Just In Time, Total Quality Management And Business Performance In The Manufacturing Firms. This Is One Of The First Studies That Conducted In Developing Countries To Improve And Demonstrate That The Output Of Green Supply Chain Practices Not Only Enhance Business Performance, But Also Improved Organizational Performance. Also The Findings Revealed That Just In Time, Total Quality Management And Organizational Performance Are The Effective Tools To Improve Business Performance. Additionally, The Findings Exposed That Green Supply Chain Practicess Enhance Business Performance Directly Through Total Quality Management And Organizational Performance. Furthermore, It Suggests The Implementation Of Strategies That Ensures The Pollution Prevention To Create The Competitive Advantage To Improve The Performance Of Organization.

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