THE EFFECT OF ACADEMIC TEXTILES STUDIES ON THE GHANA TEXTILE INDUSTRY

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ABSTRACT

Purpose: The study sought to examine the impact of institutional textiles research on the textile industry in Ghana to make feasible projections towards the effective implementation of research findings for the revitalization and sustainability of the Ghana textile industry.

Design/Methodology/Approach: Adopting the quantitative evaluation research methods with questionnaires and interviews as the main instrumentation for data collection. Purposive sampling and stratified random sampling techniques were used to select 142 respondents. Though, only 54 respondents participated in the research.. The data was analysed descriptively using frequency.

Findings: The study revealed that despite the upsurge of research works with concrete and feasible recommendations in curbing the challenges of the textile factories, the lack of industry/academia collaboration is what impedes the effective implementation of these research findings to address the issues.

Research Limitation: The study focused on two major large-scale textile factories in Ghana; Tex Styles Ghana Limited (TGL) and Akosombo Textiles Limited (ATL) alongside research publications of Ghanaian institutions of high repute like KNUST, Takoradi Technical University, University of Education, University of Cape Coast and the University of Ghana were targeted for the study.

Practical Implication: There should be a strong partnership between industry and academia through collaborative research, a policy on the implementation of research findings, allocation of funds for textile researchers and a monitoring system by the government to ensure full implementation of research findings.

Social Implication: The study, therefore, calls on the government to monitor these policies to ensure that they are in full effective operation and implemented to the highest peak.

Originality/ value: the findings of this study provide numerous recommendations by academic institutions of higher learning aimed at revamping the declining industry which when fully implemented will help boost the rise of the industries.

Keywords: Academic. impact factor. research. revitalization. textile.

INTRODUCTION

The vision of this research is geared towards assessing the impact of institutional textile research works on the Ghanaian textile industry. This is to find out the extent of implementation of research works of the textile institutions and suggest feasible recommendations towards a revival and sustainability of the sector to boost the economy of the country to benefit all Ghanaians.

Clothing is a major necessity for man and can never be overlooked in these modern times when everybody is conscious of what to wear. To buttress this assertion, Adu-Akwaboa (2010) also posits that clothing which is made of textiles is one of the three necessities of man alongside food and shelter. It thus goes to say that it is very imperative to ensure that clothing is made available at all times to satisfy man's needs. When one talks about clothing, textiles come to mind. Also, in these modern times, the 21st century where fashion industries have become a very booming sector in the economy of most countries, the textile industry cannot be left out since it acts as a major backbone to the supply of raw materials for the fashion industry. Again, the textile industry cannot be left out when it comes to industrialization. According to Howard (2013), the textile industry has been the main pillar around which industrialization in Europe and other countries has evolved. It thus goes to say that, this sector plays a tremendous role in the development of every nation and the life of the people thereof.

According to Asare (2012), the textile sector has over the years, especially in the mid-seventies been an important sector to the Ghanaian economy on account of its contribution to income generation, employment and exports. Asare (2012) is of the view that the sector dominated the manufacturing sector and contributed significantly to livelihood. Abdallah (2010) asserts that 25000 people who gained employment in the textile industry accounted for 27 percent of Ghana's total manufacturing employment in 1977. Indeed the above assertions are factual since the Institute of Statistical, Social and Economic Research (ISSER, Legon, Ghana) corroborates that the textile industry created employment for about 25000 people in 1977. The industry comprises; companies such as Ghana Textile Print (GTP), Akosombo Textile Limited (ATL), Juapong Textile Limited now Volta Star Textiles Company, Ghana Textile Manufacturing Company (GTMC), Tema Textile Limited (TTL), Freedom Textile, Ghana Cotton Company Limited (GCCL) among others. Infact, there used to be over 40 textile firms in the country (Howard, 2013). One would quiz where all these early established large-scale factories are. However, many of these companies have folded up with a few like GTP, ATL and Volta Star Textile Company operating on a low production line amidst various challenges. To buttress this contention, Howard (2013) establishes that the country now has only four textile factories employing less than 4000 workers.

In recent times, the textile industry has been termed as collapsing. Howard (2013) shares the same view and corroborates that indeed in recent times, the industry has gone through some difficult times resulting in the shutting down of production lines of most of the factories. Employment has declined steadily with the following figures; 25000 people in 1977, 7000 people in 1995, 5000

people in 2000 and fewer than 3000 people in 2005 (Institute of Statistical, Social and Economic Research, Legon, Ghana). Currently, the figures are even lower owing to the myriad of challenges bedevilling this sector. There is a massive decline in the production rate of the sector. Many people have been laid off from work since challenges bedevilling the sector keep on worsening day in and day out. There is stiff competition in the market and these companies are unable to compete and not to mention the effect of trade liberalization in the sector. As such, the companies are compelled to lay off some workers. This state of affairs has become even more difficult for tertiary graduates to gain employment in the sector.

In an attempt to revamp the Ghanaian textile industry, so many institutional research works have been conducted by both students and the working staff and lecturers on this subject matter. Data has been collected and analyzed in which certain recommendations have been made as a means of revamping the industry. One would quiz if indeed these recommendations are being implemented. One would wonder if these works are just left on the shelves. Are these research works having an impact on the textile industry in Ghana and the society and finally the nation as a whole? To see a revamp of the industry, these research works must have an impact on the industry for society to benefit. In the phase of many institutional textile research works, Egu (2009) indicates that most new textile graduates from the country's universities and polytechnics remain unemployed. It is due to the decline of this sector that so many institutional research works have been conducted to find solutions to curb the rapid decline of the industry. This notwithstanding, the problems of the industry keep on escalating. There is, therefore, the need to see a significant improvement in the sector to help reduce the rate of unemployment and also boost the productivity of the industry for the sustainability of the sector. This study, therefore, assesses the impact of institutional research works on the Ghanaian textile industry and makes feasible recommendations that will ensure that research findings are implemented to revive the Textile sub-sector.

METHODOLOGY
The study employs quantitative evaluation methods and mainly relied on questionnaire and interviews for data collection, presentation and discussion of results. Industrial and academic institutional surveys were conducted to critically examine institutional textiles research done to help revamp the Ghana textile factories and further assess the impact factor of the recommendations therein on the factories, thus the extent of implementation of the research findings. Through the quantitative evaluation aspect of the study, closed-ended and open-ended questions were utilized. In terms of qualitative evaluation, interviews were conducted to collect relevant data from a section of the administrative and technical staff of GTP and ATL as well as some lecturers from KNUST and Takoradi Technical University.

Population, Sampling Technique and Sample Size
The target population for the study is 284 and were grouped into seven categories as follows: Workers of selected textile factories in Ghana; GTP and ATL, Textiles lecturers– KNUST and

Takoradi Technical University, Final year textiles students- Ho Technical University and Takoradi Technical University, University textile graduates, Postgraduate textile students, Institutional Research Works and Scholarly/Other Research Works. Purposive sampling and stratified random sampling techniques were used to select 142 respondents. However, only 54 respondents participated in the research. The data was analysed descriptively using frequency.

RESULTS AND DISCUSSION
Accessibility of the Research Works to the Textile Industry
A survey was conducted on the industry (TGL and ATL) to ascertain whether or not the factories have access to the research outputs conducted by the institutions and other authors concerning the challenges of the textile industry and ways of revamping the industry.

Table 1: Accessibility of the Research Works to the Textile Industry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	1	1.9	1.9%	1.9
	NO	53	98.1	98.1%	100.0
	Total	54	100.0	100.0	

(Field survey, 2016)

Inferring from Table 1, out of the 54 respondents (TGL and ATL staff), only 1 respondent took the stand that the company has access to the research outputs. This accounts for just 1.9%. However, the majority of the staff, 53 members accounting for 98.1% attest to the fact that the companies do not have access to the research outputs conducted to help revamp the declining nature of the textile industry in Ghana. This implies that there is low accessibility of research works of the institutions to the industry.

Collaboration between the Academic Institutions and the Textile Industry
Even though the study revealed some form of collaboration between the textile companies (TGL and ATL) and institutions by way of industrial attachment only, the collaboration is however weak due to the following reasons;
   i)   Low Capacity of Factories; the study established that there is an ineffective industrial attachment for students due to the inability of the textile factories to take on board all students for internship.
   ii)   Effects of Change in H.O.Ds and Management; the study established that change in H.O.Ds of the Textile Sections of the institutions and management of the factories relegates collaboration to the background. This implies ineffective documentation of collaboration as observed by Adikorley (2013) for which she recommended proper documentation of the collaboration between institutions and industry.
From the above submissions, the study reveals that in the area of collaboration between industry and academia, recommendations made by the researchers have not been fully implemented.

Good Government Policies to Protect the Ghana Textile Industry

A survey was conducted on the industry (TGL and ATL) to ascertain if they see the significant implementation of any favourable policies helping in their operations. The following figures were thus obtained;

Table 2: Implementation of Favourable Policies for the Textile Industry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	24	44.4	44.4%	44.4
	NO	30	55.6	55.6%	100.0
	Total	54	100.0	100.0	

(Field survey, 2016)

Inferring from Table 2, out of 54 sets of questionnaire distributed to 54 staff (TGL and ATL), 24 staff members accounting for 44.4% assert that government policies are helping the industry. However, 30 respondents constituting a percentage of 55.6 % assert that government policies are not helping the textile industry. These statistics imply that the rate of implementation of favourable policies as recommended by the researchers is rated at 44.4% judging from the questionnaire responses. And at that, the majority of responses accounting for 44.4% of implementation attributed to a special task force set by the government to check and seize Chinese and imported fabrics on the market. This recommendation was seen in the work of Quartey (2006), Howard (2013) Abdallah (2010) and Osei-Ntiri (2013).

According to the Quality Inspector and Data Entry Clerk for TGL (Personal Communication, January 11, 2016), there is a special task force set by the government to check the influx of cheap imported goods and Chinese products on the Ghanaian market. However, concerning the position of the Data Inspector and Quality Entry Clerk, one of the Assistant Managers at TGL (Personal Communication, January 12, 2016) is of the view that not much has been done with the operations of this special task force set by the government due to the fact there are still instances of cheap imports, smuggling and influx of Chinese goods on the Ghanaian market. The study, therefore, revealed that though implementation of favourable policies is pegged at 44.4%, there is much to be done to ensure a higher implementation rate of other policies to favour the industry.

Recapitalization and Modernization of the Textile Industry

A survey was conducted on 54 staff members of TGL and ATL to ascertain the type of machine used in production be it, old, modern or both. The following figures were thus obtained;

Table 3: Types of Machines Used in the Textile Industry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Modern	24	44.4	44.4%	44.4
	Old	12	22.2	22.2%	66.7
	Both	18	33.3	33.3%	100.0
	Total	54	100.0	100.0%	

(Field survey, 2016)

Inferring from Table 3, out of 54 respondents, 24 respondents (TGL and ATL staff) accounting for 44.4% are of the view that the textile industry is equipped with modern machines. Twelve (12) respondents accounting for 22.2% assert that the industry uses old machines. On the other hand, 18 members posit that the industry is equipped with both old and modern machinery. This accounts for a percentage of 33.3%.

The study, therefore, reveals that the implementation of replacing old and obsolete machines is pegged at 44.4% with 33.3% still replacing obsolete machines. The reason according to the Assistant Production Manager for TGL (Personal Communication, January 14, 2016), is that full implementation of replacing obsolete machinery is not easy due to financial issues and lack of support from the government.

The Need for Innovative Marketing Platforms and Marketing Strategies
The study observed the aforementioned in the work of Egu (2009), Asare (2012) and Osei-Ntiri et al (2013) which has to do with effective marketing strategies and the creation of a larger market for the Ghana textile industry.

The study revealed a significant implementation in this area due to the investment in marketing departments of the industry. The study revealed from the affirmations of the Quality Inspector and Data Entry Clerk for TGL (Personal Communication. January 11, 2016) that the marketing department of the company is equipped with the right incentives and investment to enable the company to sell out its products to the customers. The study, therefore, establishes a high implementation of new strategies in marketing by the industry.

Effective Teaching Strategies
A survey was conducted on 37 final-year textile students of Ho Technical University and Takoradi Polytechnic to ascertain how effective teaching and learning of the textile and fashion programme is. Out of 37 students, 34 students accounting for 91.9% asserted that there is effective teaching at the institutions. However, 3 students constituting 8.1% assert that teaching is not effective as shown in Figure 1. The study revealed from a section of the final year students (Personal Communication, January 28, 2016) that they are allowed to engage in research work, team projects as well as field trips to the industry.
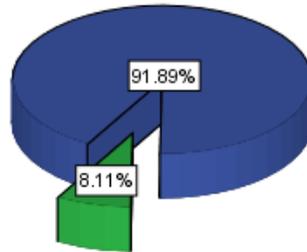
GBPA
Ghana Book Publishers Association

Figure 1: Effective Teaching Strategies

The study, therefore, establishes that there are effective teaching strategies at the institution but the KNUST textile section does not have internship programmes inculcated in the curricula.

An Integration of Aesthetics and Symbolism in African Print Designs

Inferring from the recommendations made in this area by Adikorley (2013) and Howard (2013), the study surveyed to ascertain the implementation of the aforementioned recommendation.

Table 4: Inculcation of Historical Concepts in Design

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	17	31.5	31.5%	31.5
	NO	37	68.5	68.5%	100.0
	Total	54	100.0	100.0	

(Field survey, 2016)

Inferring from the table above, out of 54 respondents (TGL and ATL staff), 17 members accounting for 31.5% assert that historical concepts are adapted for their design concepts. However, 37 members are of the view that historical concepts are not adapted for their design concepts and subsequent prints. This accounts for 68.5%. This implies that the inculcation of historical concepts by the industry in their design process has not been fully implemented owing to the percentage obtained which is 31.5%.

Cutting down the Prices of Ghanaian Locally-made Fabrics

Inferring from Ghartey and Boachie-Mensah (2015) in their recommendation of the above-mentioned, the study conducted a market survey at Tema, Community One, a suburb of the Greater Accra Region as well as Adum Market, a suburb of the Ashanti Region to ascertain the prices of the Ghanaian locally-made fabrics as against the imported and 'counterfeit' fabrics. The study revealed that the prices of Ghanaian locally-made fabrics were relatively higher as compared to the imported and 'counterfeit' fabrics. For example, as a yard of locally-made fabric was going for

50.00 cedis, the imported ones were as low as 20 cedis to 30 cedis a yard. Owing to the submissions and discussions on the extent of implementation of recommendations made in the research works in this section, the study makes the following deduction to conclude the rate/level of implementation.

Inferring from the deductions and pie chart above, the study establishes that, the rate/extent of implementation of research recommendations is rated low at 25% due to the fact, out of 12 feasible recommendations noticed by the study, only 3 had been effectively and fully implemented whereas 9 had either not been implemented or assumed low figures in the statistics of implementation seen in the deductions. The study, therefore, reveals from the questionnaire and interview responses that, the rate of implementation of research findings is low.

CONCLUSION AND RECOMMENDATIONS

Indeed there is evidence of research outputs by institutions of higher learning and other authors, all geared towards reviving the Ghana textile industry. However, the lack of collaboration between industry-academia has rendered the awareness level and accessibility of these research output to industry very low. This undesired state of affairs has affected the rate of implementation of the recommendations of research outputs. As observed by the study, the rate of implementation of research works is pegged at 25% owing to ineffective collaboration between industry-academia relations, lack of funds, ineffective and lack of pragmatic government as well as failure on the part of researchers to do a follow-up on their outputs to ensure implementation of their recommendations.

Recommendations

Based on the findings and the conclusions of the study, the following recommendations have been made for consideration toward an effective and higher rate of implementation of research findings to help revamp and sustain the textile industry in Ghana to benefit the masses.

Effective Memorandum of Understanding(MOU) in industry-academia relations in terms of research development

Evidence from the study revealed the ineffective collaboration that exists between industry-academia relations. This has led to gaps between the two parties in terms of research and development. In other to bridge this gap, the study recommends that the industry and academia form an alliance and effective collaboration (MOU)so that the R&D units of the textile companies could work hand in hand with the institutions during research works geared towards reviving the industry. This would enable the two parties to work together towards bringing up feasible solutions to help revive the industry and subsequently see to it that these solutions are fully implemented.

The need for researchers to do a thorough follow-up on their outputs

The study recommends that individual researchers and institutions should cultivate the habit of following up on their research outputs to ensure that the outputs get to the right sources for the full implementation process to begin. The study observed the numerous instances of research works being left on the shelves and data repositories of institutions without their authors conducting a thorough follow-up to ensure full implementation. The study, therefore, places the onus on the originators of the findings, which are the researchers, to ensure that they follow up on their research works to ensure that the recommendations proposed therein are attended to.

The need for a plan of action/policy on the periodic selection of research works for implementation

This is very imperative to ensure an effective higher rate of implementation of findings. There is a need for the government, institutions and industry to come up with a plan of action or policy that will see to it that, periodically, maybe once every academic year, all research works conducted towards reviving the industry are reviewed in a forum to find out the feasible solutions made therein to enable implementation process to begin. This would be done in collaboration with the government, institutions and industry. Once this plan action is set aside, it will avoid the instances of research works compounding and piling up on the shelves and database repository of institutions unattended to. In effect, institutions would be tasked to submit selected textile research works geared towards reviving the industry to the textile companies and government for review. A review of these recommendations would facilitate a quicker implementation of the research findings.

The need for government to monitor the full implementation of favourable policies towards the textile industry

Indeed, policies have been made in favour of the Ghana textile industry but that alone is not enough if there is no system of checking and monitoring these policies to ensure that they are fully implemented. The study, therefore, calls on the government to monitor these policies to ensure that they are in full effective operation and implemented to the highest peak.

Allocation of funds for textile lecturers to effect implementation of their research findings

Evidence from the study showed that lecturers do not have the necessary funds to propel them to put their recommendations into action. Though feasible recommendations have been made by lecturers in their research findings, they lack the finances to implement their findings. The study, therefore, entreats the government that, as part of the book and research allowances remitted to textile lecturers, additional funds should be set aside for lecturers to also implement their findings. This would therefore call for a system that would enable textile lecturers to submit their proposals for the necessary funds to be remitted to them to enable them to put their recommendations into action. In turn, a system would be put in place that would make the lecturers accountable for monies remitted. These factors would ensure a higher and more effective implementation of research findings.

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