

**To Investigate the Impact of Laundering on Drapability of Cotton Grieg Fabric**



**In partial fulfillment of the requirement of the  
Degree of Master of Science In Textiles**

**By,**

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Pakistan.**

# **DEDICATION**

**This effort is dedicated to my**

**Lovely Mom,**

**My Beloved Husband,**

**&**

**My Dearest Daughter “Haram Fatima”**

# Acknowledgement

I always pray to **Almighty Allah** for His blessings and guidance, and my deepest gratitude to Him for opening new horizons in our pursuit for knowledge. Undertaking project appeared to be very difficult in the start but with Allah's benevolence this apparently tough task became easy step by step and finally I have been able to formulate this study project.

Special praises and respects are for our **Holy Prophet (PBUH)**, the beacon of knowledge who enlightened the soul of mankind with the spirit of Islam and directed to acquire knowledge wherever it.

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Thank you,

Tabinda Riaz  
University Of Management and Technology  
February 2014.

## Declaration

I hereby declare that all the information in this thesis is the result of my sincere efforts and work. This research document, to the best of my knowledge and belief, reproduces no material previously published or written, or that has been accepted for the award of any other degree or diploma, except where due acknowledgement has been made in the text.

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## **Abstract**

A comprehensive study on drape percent and drape coefficient has been made on 100 percent Grieg cotton fabric with plain weave. The method employed to measure the drape of fabric was Cusick's drape-meter with light source. Six samples were taken which had the same weave, equal number of end and picks per inch with the same finished width. The variable taken was the difference in weft and warp yarn counts in which every sample had a different yarn count for the weft while the warp yarn count was same for the six samples. This constructional difference in yarn counts changed their

individual drape behaviors. After taking drape measurements for all the six samples they were laundered by using home laundering cycle conditions as described in AATCC 124-2000 methods. Then again the same tests were taken and the measurements after washing were calculated. This experiment gave knowledge about their individual drape behavior as well as a comparison can be seen in results after samples were washed once. A general rise in drape percent has been noticed as the weft yarn counts became finer because the fabric was less stiff thus resulting in more drape-able. Measurements after one washing cycle showed a handsome increase in drape percent for each sample respectively but again the trend was same according to the weft yarn count fineness. This shows that finer counts in fabrics results in more beautifully draped fabric than the coarser ones. And also when the Grieg fabric is washed it enhances the drape-ability of it. This drape behavior is required in draperies, bed-linens, table linens and other upholstery applications.

# Table of Contents

<b>ABSTRACT .....</b>	<b>5</b>
<b>LIST OF TABLES .....</b>	<b>10</b>
<b>LIST OF FIGURES.....</b>	<b>11</b>
<b>CHAPTER 1 .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>BACKGROUND KNOWLEDGE.....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>1.1 COTTON .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
1.1.1 COTTON ATTRIBUTES.....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
1.1.2 COTTON FABRIC PROPERTIES& USES .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>1.2 ESSENTIALS OF WOVEN FABRICS.....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
1.2.1 PROPERTIES OF WOVEN FABRICS .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>1.3 DETERMINING THE WEAVE OF A FABRIC.....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
1.3.1 PLAIN WEAVE .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
1.3.2 STRUCTURE AND PROPERTIES OF PLAIN WEAVE .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
1.3.3 FABRIC COVER FACTOR AND DENSITY .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>1.4 YARN COUNT .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
1.4.1 THE DENIER SYSTEM.....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
1.4.2 THE YARN COUNT SYSTEM.....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
1.4.3 THE TEX SYSTEM.....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
1.4.4 WARP AND WEFT YARN COUNT .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>1.5 DEFINING DRAPE.....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>1.6 MEANING.....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>1.7 IMPORTANCE OF DRAPE .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>1.8 EFFECT OF HOME LAUNDERING ON DRAPE COEFFICIENT .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>CHAPTER 2 .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>OBJECTIVES AND SIGNIFICANCE OF THE RESEARCH.....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>2.1 OBJECTIVES .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>

<b>2.2 AIMS</b> .....	ERROR! BOOKMARK NOT DEFINED.
<b>2.3 SIGNIFICANCE AND EXPLANATION OF RESEARCH</b> .....	ERROR! BOOKMARK NOT DEFINED.
<b>CHAPTER 3</b> .....	ERROR! BOOKMARK NOT DEFINED.
LITERATURE REVIEW.....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>3.1 DRAPE</b> .....	ERROR! BOOKMARK NOT DEFINED.
3.1.1 RELATIONSHIP AMONG THE FABRIC DRAPE AND MECHANICAL PROPERTIES .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
3.1.2 FACTORS AFFECTING THE DRAPE BEHAVIOR OF FABRIC .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>3.2 MEASURING DRAPE</b> .....	ERROR! BOOKMARK NOT DEFINED.
<b>3.3 INTRODUCTION OF FABRIC DRAPE</b> .....	ERROR! BOOKMARK NOT DEFINED.
3.3.1 HISTORY OF FABRIC DRAPE .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
3.3.2 COGNITIVE PSYCHOLOGY WITHIN THE ASSESSMENT OF FABRIC DRAPE.....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>3.4 FABRIC DRAPE BEHAVIOR</b> .....	ERROR! BOOKMARK NOT DEFINED.
3.4.1 LIMITATIONS OF THE DRAPE COEFFICIENT .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>3.5 INSTRUMENTS IN ORDER TO MEASURE FABRIC DRAPE</b> .....	ERROR! BOOKMARK NOT DEFINED.
3.5.1 MATERIAL RESEARCH LABORATORY (F. L. L) DRAPEMETER .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
3.5.2 IMPROVED FAHRENHEIT F.R.L. DRAPEMETER.....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
3.5.3 CUSICK'S DRAPEMETER .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
3.5.4 MEASURING THE DRAPE PERCENTAGE WITH IMAGE ANALYSIS .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>3.6 DETERMINATION OF FABRIC DRAPE</b> .....	ERROR! BOOKMARK NOT DEFINED.
3.6.1 DRAPE-DISTANCE RATIO .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
3.6.2 FABRIC DRAPE PROFILE .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
3.6.3 FINITE-ELEMENT METHOD .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>3.7 RESEARCH ON DIFFERENT FABRIC DRAPE MODELS</b> .....	ERROR! BOOKMARK NOT DEFINED.
<b>3.8 RELATIONSHIP BETWEEN THE FABRIC DRAPE AND MECHANICAL PROPERTIES</b> .....	ERROR! BOOKMARK NOT DEFINED.
<b>3.9 IMPORTANCE OF MECHANICAL PROPERTIES OF FABRIC</b> .....	ERROR! BOOKMARK NOT DEFINED.
<b>CHAPTER 4</b> .....	ERROR! BOOKMARK NOT DEFINED.
MATERIALS AND METHODS .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>4.1 MATERIALS AND METHODS</b> .....	ERROR! BOOKMARK NOT DEFINED.

<b>4.2 MATERIALS</b> .....	ERROR! BOOKMARK NOT DEFINED.
4.2.1 YARN AND FABRIC SPECIFICATIONS .....	ERROR! BOOKMARK NOT DEFINED.
<b>4.3 METHOD</b> .....	ERROR! BOOKMARK NOT DEFINED.
<b>4.4 FABRICATION OF THE INSTRUMENT</b> .....	ERROR! BOOKMARK NOT DEFINED.
4.4.1 SAMPLE MOUNTING DISC AND ITS ASSEMBLY .....	ERROR! BOOKMARK NOT DEFINED.
4.4.2 REFLECTOR AND BULB HOLDING ARRANGEMENT .....	ERROR! BOOKMARK NOT DEFINED.
<b>4.5 DETERMINING FABRIC DRAPE</b> .....	ERROR! BOOKMARK NOT DEFINED.
4.5.1 PREPARATION OF SAMPLES .....	ERROR! BOOKMARK NOT DEFINED.
4.5.2 TEST PROCEDURES .....	ERROR! BOOKMARK NOT DEFINED.
<b>4.6 LAUNDERING THE SAMPLES</b> .....	ERROR! BOOKMARK NOT DEFINED.
<b>CHAPTER 5</b> .....	ERROR! BOOKMARK NOT DEFINED.
RESULTS AND CONCLUSION .....	ERROR! BOOKMARK NOT DEFINED.
<b>5.1 RESULTS AND DISCUSSION</b> .....	ERROR! BOOKMARK NOT DEFINED.
5.1.1 DRAPE % OF SAMPLE "A" BEFORE AND AFTER WASHING: .....	ERROR! BOOKMARK NOT DEFINED.
5.1.2 DISCUSSION .....	ERROR! BOOKMARK NOT DEFINED.
5.1.3 DRAPE % OF SAMPLE "B" BEFORE AND AFTER WASHING: .....	ERROR! BOOKMARK NOT DEFINED.
5.1.4 DISCUSSION .....	ERROR! BOOKMARK NOT DEFINED.
5.1.5 DRAPE % OF SAMPLE "C" BEFORE AND AFTER WASHING: .....	ERROR! BOOKMARK NOT DEFINED.
5.1.6 DISCUSSION .....	ERROR! BOOKMARK NOT DEFINED.
5.1.7 DRAPE % OF SAMPLE "D" BEFORE AND AFTER WASHING: .....	ERROR! BOOKMARK NOT DEFINED.
5.1.8 DISCUSSION .....	ERROR! BOOKMARK NOT DEFINED.
5.1.9 DRAPE % OF SAMPLE "E" BEFORE AND AFTER WASHING: .....	ERROR! BOOKMARK NOT DEFINED.
5.1.10 DISCUSSION .....	ERROR! BOOKMARK NOT DEFINED.
5.1.11 DRAPE % OF SAMPLE "F" BEFORE AND AFTER WASHING: .....	ERROR! BOOKMARK NOT DEFINED.
5.1.12 DISCUSSION .....	ERROR! BOOKMARK NOT DEFINED.
5.1.13 AVERAGE VALUES OF DRAPE % BEFORE& AFTER WASHING SAMPLES .....	ERROR! BOOKMARK NOT DEFINED.
5.1.14 DISCUSSION .....	ERROR! BOOKMARK NOT DEFINED.
5.1.15 AVERAGE VALUES OF DRAPE COEFFICIENT BEFORE& AFTER WASHING SAMPLES .....	ERROR! BOOKMARK NOT DEFINED.
5.1.16 DISCUSSION .....	ERROR! BOOKMARK NOT DEFINED.
<b>5.2 CONCLUSION</b> .....	ERROR! BOOKMARK NOT DEFINED.
<b>5.3 FUTURE WORK</b> .....	ERROR! BOOKMARK NOT DEFINED.

**CHAPTER 6** ..... ERROR! BOOKMARK NOT DEFINED.

**REFERENCES & APPENDIX** ..... ERROR! BOOKMARK NOT DEFINED.

**6.1 REFERENCES** ..... ERROR! BOOKMARK NOT DEFINED.

**6.2 APPENDIX** ..... ERROR! BOOKMARK NOT DEFINED.

## List of Tables

TABLE 1: YARN AND FABRIC SPECIFICATIONS..... **ERROR! BOOKMARK NOT DEFINED.**

TABLE 2: HOME LAUNDERING CYCLE SPECIFICATIONS ..... **ERROR! BOOKMARK NOT DEFINED.**

TABLE 3: RESULTS OF SAMPLE “A” BEFORE AND AFTER WASHING ..... **ERROR! BOOKMARK NOT DEFINED.**

TABLE 4: RESULTS OF SAMPLE “B” BEFORE AND AFTER WASHING ..... **ERROR! BOOKMARK NOT DEFINED.**

TABLE 5: RESULTS OF DRAPE % BEFORE & AFTER WASHING OF SAMPLE “C” ..... **ERROR! BOOKMARK NOT DEFINED.**

TABLE 6: RESULTS OF DRAPE % BEFORE & AFTER WASHING OF SAMPLE “D” ..... **ERROR! BOOKMARK NOT DEFINED.**

TABLE 7: RESULTS OF DRAPE % BEFORE & AFTER WASHING OF SAMPLE “E” ..... **ERROR! BOOKMARK NOT DEFINED.**

TABLE 8: RESULTS OF DRAPE % BEFORE & AFTER WASHING OF SAMPLE “F” ..... **ERROR! BOOKMARK NOT DEFINED.**

TABLE 9: AVERAGE RESULTS OF DRAPE % BEFORE & AFTER WASHING OF ALL SAMPLES..... **ERROR! BOOKMARK NOT DEFINED.**

TABLE 10: AVERAGE RESULTS OF DRAPE COEFFICIENT BEFORE & AFTER WASHING OF ALL SAMPLES **ERROR! BOOKMARK NOT DEFINED.**

# List of Figures

FIGURE 1: A SIMPLE VIEW OF PERCALE/PLAIN WEAVE FABRIC .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 2: COVER FACTOR DIAGRAM FOR PLAIN WEAVE .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 3: IMAGE OF DRAPED PATTERN ON A GROUND GLASS USING LENS SYSTEM.....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 4: IMPROVED F.R.L DARPEMETER .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 5: REFLECTOR BULB AND HOLDING ARRANGEMENT.....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 6: SAMPLE MOUNTING DISC AND MIRROR ASSEMBLY .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 7: IMAGE ANALYSIS INSTRUMENT.....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 8: RESULTS OF DRAPE % BEFORE & AFTER WASHING OF SAMPLE "A" .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 9: RESULTS OF DRAPE % BEFORE & AFTER WASHING OF SAMPLE "B" .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 10: RESULTS OF DRAPE % BEFORE & AFTER WASHING OF SAMPLE "C" .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 11: RESULTS OF DRAPE % BEFORE & AFTER WASHING OF SAMPLE "D" .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 12: RESULTS OF DRAPE % BEFORE & AFTER WASHING OF SAMPLE "E" .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 13: RESULTS OF DRAPE % BEFORE & AFTER WASHING OF SAMPLE "F" .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 14: AVERAGE RESULTS OF DRAPE % BEFORE & AFTER WASHING OF ALL SAMPLES .....	<b>ERROR! BOOKMARK NOT DEFINED.</b>
FIGURE 15: AVERAGE RESULTS OF DRAPE COEFFICIENT BEFORE & AFTER WASHING OF ALL SAMPLES	<b>ERROR! BOOKMARK NOT DEFINED.</b>