CHAPTER-5

SUMMARY AND CONCLUSIONS

INTRODUCTION

Ever since Adam and Eve became Man and Woman after eating the forbidden fruit, God sent them on earth with just one leaf tied around their waist. From then onwards a race to adorn their bodies started. The evolution continued and a need of clothing led to the discovery of different fibers, the techniques of spinning them, weaving differently and converting them into clothes.

A revolution came when the hand spinning and weaving was taken over by machines. Power loom captured the market from the reigning handloom and became the undisputed winner. Natural fibers were run over by manmade fibers.

Over the last 50 years, natural fibres have started to become displaced by synthetic, man-made materials such as polyester, acrylic and nylon. These materials are much cheaper and easier to manufacture in bulk, and easily create uniform colours, lengths and strengths of materials that can be adjusted according to specific requirements. The production of synthetic materials, however, is a strong contributor to carbon emissions and waste.

Unlike synthetic fibres, natural fibres not only come from the environment, but also benefit it. These fibres are renewable, carbon neutral, biodegradable and also produce waste that is either organic or can be used to generate electricity or make ecological housing material.

The onset of synthetic materials has not only been destructive towards the environment, it has also had a negative economic impact on those whose livelihoods depend on the production and processing of natural fibres

According to the UN, natural fibres provide a multitude of human and environmental health as well as economic benefits. Each fibre has its own purpose in manufacturing, and provides better quality and more sustainable textiles than synthetic materials.
Natural fibres in clothing allow fabric to breathe, reducing the risk of skin rashes and allergic reactions, and also insulate the wearer against hot and cold temperatures.

Synthetic materials, while inexpensive to produce, can cause more harm to the environment and economy than they do good. For the betterment of the global community, the shift back to natural fibres must be made particularly for those products, which directly come into contact with the skin for a prolonged period of time. Clothing covers the skin and has the ability to protect the skin from the extremes of the climate. The new born child who has the most tender and sensitive skin needs most protection, thus there is an urgent need to design special clothing for infants of present generation.

Infancy the beginning or the early period of existence as an individual and is a very important period of the lifespan. Today, infant’s clothing is expected to meet all requirements related to comfort, healthcare, handle and easy care properties, design as well as performance. Infant’s skin is very soft and tender, therefore, chemically safe dyes, soft materials are required for making infant’s clothing. The infant-clothes are essential to keep them looking cute and enable them to remain cool or warm and comfortable.

In the first months the growth rate of an infant is fastest than at any other age of life, and their bodies are more susceptible to infections and irritations. The type of fabric selected for infants bears a direct relation to the health of an infant. Priority has to be given to infant’s comfort along with the style and the look of the garment. The infant-clothes should be made of 100% natural fibers. A fabric that is too thick and heavy makes the infant look tired. Itchy textures of the fabric bother the skin of an infant as it is very tender. Due to less cost, easy availability, easy care and maintenance parents have been opting for polyester fabrics or their blends for children’s clothing, but this is no solution, we cannot enjoy our comfort and convenience at the cost of the child. It is thus essential to develop an eco-friendly range of clothing for Infants in fabric made of natural fibers. Khadi cotton is one of such fabric.

Khadi means “any cloth which has been handspun and hand woven in India from cotton, silk or woolen yarns or from the mixture of any two or more such yarns.” Cool in summers and Warm in winters, Khadi cotton is hand woven and hand spun fabric which
takes time to be made. Khadi has the added value of allowing more air penetration. The hand woven fabric forms air pockets in the fabric due to the thick and thin places created during hand spinning and is therefore, cooler, softer, more absorbent and breathes better than highly uniform and compact machine made fabrics. The added breathability makes the fabric stay cooler in summer and warmer in winter. Hand woven fabric also has a textural beauty and visible character. Khadi cotton is a very strong fabric even when it is wet, so it holds up very well to repeat laundering. Thus it can be most suitable for Infant clothing.

REVIEW OF LITERATURE

The literature for the study was reviewed under three Sections.

SECTION I- Dealt with extensive review on KHADI: Starting with understanding the Meaning and Definition of Khadi, History of Khadi, The Technique involved in the production of Khadi, Hand spinning on the traditional Indian Charkha, Fine varieties of Khadi, Khadi Post Independence, Major Schemes of KVIC, Contribution of Khadi to the economic and the moral regeneration, Suitability of Khadi for Clothing, Quality Assurance Norms For Khadi, Khadi and Its role in Indian Cinema, Khadi and Self Sufficiency, Khadi: The only answer to healthy Environment, Benefits of Khadi, Khadi: As Gandhiji believed. Various research Studies already conducted in the field of Khadi like Gandhian views on Khadi, History of Khadi and Financial Performance of Khadi Corporations, Studies related to Design development in Khadi, Studies related to Khadi and Customer Preferences were also reviewed.

SECTION II- Consisted of reviewing Design and Clothing: Concepts like, Art and Design, Essentials of a Good decorative design, the Fashion design process along with designing an apparel line were reviewed. Surface Enrichment Techniques, The Process of Development of selected surface enrichment techniques such as Patchwork, Applique, Painting, Quilting, and Sewing Techniques were studied in depth.

SECTION III- The emphasis in this section was mainly on reviewing aspects related To Infant And Clothing: Definitions Of Infant, Physical growth of an infant, Importance
and procedure of measuring an Infant were reviewed in detail. The section also covered aspects like Infant clothing and its history, The pictorial history of baby clothing, The Pictorial list of Clothing for Babies & Toddlers. Aspects like Importance of color and value in clothing ,The Infants’ World and Implications for Clothing, Selection of Materials for Infants clothing, Clothing and Its’ Designing, Clothing and the Current demand were also critically examined. Various research studies related to physical growth of a child, taking body measurements and drafting patterns, clothing preferences, Designing of Garments and purchase behavior were also reviewed.

RESEARCH GAPS

A critical analysis of review of the literature revealed that a number of studies had been conducted on documenting the history of Khadi and understanding closely every aspect from the point of view of Mahatma Gandhi, Financial performance of Khadi Institutions, Survey of Khadi and Village industries Institutions but hardly any formal effort was ever made to document the use of Khadi in present day environment. Very few evidences were found on design development of Khadi .There was lack of researched evidence in the field of Customer’s acceptance of Khadi as infant wear. Even fewer studies were found on application of surface enrichment techniques on Khadi apparels, and no study was found on need based design development of garments for infants in Khadi. The review however established that there was clothing available in Khadi cotton but no attempt to introduce Infant Wear in Khadi was ever made. Hence the attempt was made to fill this gap. The present study was the first ever attempt to Design and develop a need based range of Infant wear in Khadi.

JUSTIFICATION OF THE STUDY

From time immemorial mothers have been making beautiful pieces of clothing for their children. Immediately after the mother conceives a mother starts planning for her child’s clothing, keeping in view that her child shall be comfortable, the clothing shall not be harsh for the child, the clothing shall be breathable and devoid of chemical processes, the clothing shall be able to protect the child from the harshness of the climate and the ever increasing pollution which has led to Global warming. The piece of clothing shall be
easy to be worn and removed, and above all that her child should look the most beautiful. But times are changing now, mothers still bear children, they still want to plan the child’s clothing, they still want that their child should look the most beautiful but, they have no time….Today’s mother is shouldering an equal responsibility with her husband to run the family, thus she tends to miss on this most beautiful experience of creating garments for the newly born. The need of the hour is to develop a designer range of the clothing for the infants keeping in view the feelings of a mother for her child. Clothing protects the skin and there is a need to design special clothing for infants. A critical analysis of review of the literature reveals that a number of studies have been conducted on promotion and marketing strategies and a few on design developments in Khadi but hardly any effort has been made to design a kids range in Khadi. However, no effort has been made to develop infant wear using this natural, beautiful and comfortable fabric. The type of fabric selected for infant- wear bears a direct relation to the health of an infant. Majority of the clothing available for infants is either in terry-cot or other blends. The consumers today are looking for safe and hygienic clothing for infants. Khadi cotton, being hand spun and hand woven is health and environment friendly. A wide variety of Khadi fabrics ranging from coarser to the finer counts are available. Moreover Khadi emphasizes the idea of decentralization in production and self-sufficiency at the local level. In a country like India, where thousands of children are born every day, if Khadi is used by parents for their clothing, the Khadi industry will get a great boost. Thus, it will also help in solving the problem of unemployment in villages where hundreds of men are either totally or partly unemployed. Being a natural fiber and being hand woven and hand spun, without any chemical finish, it is very comfortable for the soft skin of the infant and also safe for the environment. Thus it will not only give comfortable wear to the child but also satisfaction to the mother. Therefore more demand for Khadi garments will lead to more employment which will further lead to the economic growth of the country. This is the basic idea of introducing Khadi in preference to the mill made cloth which is loaded with chemical finishes for infant wear. Observing the above advantages of Khadi, an initiative to carry out the present study on “Design Development and Acceptance of Khadi as Infant wear” was taken.
SCOPE

The study was planned in Chandigarh-U.T. as well as the capital city of Punjab and Haryana. Chandigarh represents the population belonging to upper, upper middle, middle and lower socio-economic strata. Due to the extreme climatic conditions in Chandigarh, the people of Chandigarh had a great acceptability for cotton fabric, and this fabric did not only confine till parents, the influence was also seen on children. Thus, Chandigarh was found to be the most appropriate area to conduct the study.

OBJECTIVES OF THE STUDY

1. To study the existing Infant wear Brands and Purchase Behavior of Mothers in Chandigarh.

2. To develop different Surface Enrichment Techniques on selected fine count Khadi.

3. To design and develop a range of clothing for infants (0-3months).

4. To test the acceptability of developed range in Khadi over other most extensively used fabrics for Infant wear.

HYPOTHESIS

A hypothesis in research is a specific, clear, and testable proposition or predictive statement about the possible outcome of a scientific research study based on a particular property of a population, such as presumed differences between groups on a particular variable or relationships between variables. Hence hypothesis is a tentative statement the validity of which remains to be tested.

a. Null Hypothesis H\(_0\): Infant wear developed in Khadi and the infant wear already available in other fabrics is the same on an average.

b. Alternative Hypothesis H\(_A\): Developed Range of Infant Wear in Khadi is preferred to Infant Wear of other Brands
METHODOLOGY

The study was conducted in three phases by collecting data both from primary and secondary sources. The Research methods adopted in the study were planned on the basis of standards used in reviewed literature, survey of methodologies and participating in various Seminars and Conferences.

PHASE-I

It included carrying out a survey to study the existing Infant Wear brands and Purchase Behavior of the Mothers in Chandigarh, for which the details were sought from the Shopkeepers selling Kids Wear and the Would-be mothers through a questionnaire.

a) Brand Study

It was done by collecting the data from shopkeepers-The selection was done through Simple random sampling and stratified sampling technique. Chandigarh was divided into 20 wards.10 odd wards were selected. These included ward numbers; 1,3,5,7,9,11,13,15,17 and 19 (map-3). These 10 wards included 25 sectors. This led to the selection of sectors, one sector from each of these ten wards were randomly selected, thus making it to a total of 10 sectors. The total numbers of shops selling readymade garments in the markets of the sectors finalized were surveyed. There were a total of 148 shops selling readymade garments out of which 105 shops were selling clothes for Adolescents and Adults, and only 43 shops where selling Kids wear for different age groups ranging from neonate to 12 years of age .The shopkeeper of these 43 shops were the sample from whom the data was collected. The focus was to understand the available infant wear products in the market and the need gaps.

b) Purchase Behavior of Mothers

The data was collected from the Would-be mothers who had to deliver with in next six months. (At the time of getting the information filled) Selection of expecting mothers was done as per the records available with hospitals. (2012-oct) The expecting
mothers who were likely to deliver after six months (April-2013), fifteen days ahead and behind starting from a specific date were taken. On the basis of the data available with the hospital there were 80 women registered with Government Medical College and Hospital sector–32 and 100 women were registered for regular checkups and delivery with the Government Multispecialty hospital sector–16. Following this random sampling was used to finally select the sample of Would-be mothers. Every sixth women registered for delivery during that time was taken. Thus, a sample of 14 Would-be-mothers from Government Medical College and Hospital sector–32 and 16 Would-be-mothers from Government Multispecialty hospital sector–16 were taken, making it to a total of a sample of 30.

PHASE-II

This phase dealt with the Process of Design development: keeping in view the Elements of Art and the Principles of Design the complete range of clothing starting from the development of the Surface Ornamentation Techniques, Designing the Silhouettes for the clothing items and the Application of the finalized Technique on the clothing items was carried out in this phase. The following steps were followed in this Phase of design development.

The panel of judges consisting of a Pediatrician, Dermatologist, Kids wear Designer, Clothing and textiles expert, Expert on behalf of the industry, Expecting mother and mother of an Infant was very carefully selected keeping in view a minimum of 15 years of association and experience in their related fields and was asked to evaluate and finalize the following.

1) Development of surface enrichment techniques.

a) Finalization of the fabric to be used-

Through Lab tests and judgments of the panel

b) Finalization of the concept behind Design development-

Done by the panel
c) Development of 20 samples of each of the five surface techniques finalized.
   
i. Patch work
   
ii. Applique work
   
iii. Painting and Embroidery
   
iv. Quilting
   
v. Sewing and Embroidery
   
The techniques were finalized on the basis of the previous surveys conducted on shopkeepers, Would-be mothers, and the suggestions of the panel.
   
d) Finalization of the best surface technique.

2) Development of the silhouettes of clothing items - a) Dress, b) bib, c) nappy
   
a) Finalization of the Measurement Chart
   
b) Developing standard Bodice Block (0-3mths)
   
c) Development of Adaptations
   
d) Finalization of the silhouettes of clothing items
   

3) Application of the selected Surface technique on the approved clothing silhouettes. Dress, Bib and Nappy.
   
a) Final development of two sets of Infant wear.
   
   All the above mentioned approvals were sought from the panel for the final development of the clothing items. The panel marked the work and the same was later ranked. The top ranks as per the requirement were thus used to carry out the further steps.
PHASE-III

The Acceptability of the Designed range of Infant Wear in Khadi was tested in this phase. It was done through a survey conducted on the mothers. At this level in order to do this 30 sets of the clothing range approved and finalized were fabricated. The developed sets were then handed over to the selected mothers who delivered in end of March and beginning of April. The set of mothers was same as that of the Would-be-mothers, assuring the authenticity of the data to be collected. The mothers were then asked to make their infants wear the clothing minimum twice in a week and at least for 2 hours a day, to be able to respond to the questionnaire. The information was collected from the mothers at the end of 3 months.

As an extension of the second phase of the study and keeping in view the responses of the mothers, an effort was made to apply the research in the form of Development of an Infant wear Brand in Khadi. The following procedure was followed:

a) **Registration of Brand:**

1) Name of the Brand

2) Design Development and Finalization of the Logo representing the Brand

3) Designing and finalization of Tags

4) Design Development and Finalization of Labels

**STATISTICAL TOOLS**

The study “Design Development and Acceptance of Khadi as Infant wear” involved the usage of Questionnaires, Lab reports, Design sheets and evaluation sheets for collecting the data. Since the major part of the study consisted of the approvals from the judges, in the form of ranks, thus the statistical analysis involved deriving mean, mode, standard error, skewness and kurtosis values.
The Factor Analysis was used. Where the dependence amongst the variables under study was checked with Kaiser Meyer-Olkin measure (kmo) and Bartlett’s test of sphericity and the variables shortlisted.

The comparison of the Infant Wear developed in Khadi (after use) over infant Wear in other fabrics was checked by using t-test assuming that the samples were independent of each other Tables, bar diagrams, scree plots were used to depict the collected and analyzed data.

Microsoft Word-2010, Microsoft Excel-2010, SPSS-16, Corel Draw-5, Adobe Photoshop, Tuka Design and Tuka Mark packages were used to process the data.

MAJOR FINDINGS

After analyzing the data the major findings were computed in phases as under-

PHASE-I

a) **Brand study:** The Analysis of the data collected from the shopkeepers revealed the following.

- The Shopkeepers selling branded clothing were 67% and the shopkeepers who were selling both branded and non-branded clothing were 31%. Thus making it clear that the trend of purchase of kids wear is more towards branded clothing.

- It was seen that 74% of the shopkeepers were selling clothing for children up to 12 years, however only 26% are limited to selling clothing for Infants and Toddlers. It is thus evident that no shop was selling clothing only for Infants. This gives a reason for development of clothing for infants and establishment of a brand there of.

- Most of the clothing items being sold for kids were in 100% Cotton, with an exception of material i.e. Terry cotton for Bibs and Cotton Spandex for T-shirts, thus it was a very important and an encouraging finding for development of Infant Wear in Khadi Cotton.

- Regarding the preference of garments for Infants the views of the shopkeepers were that, 91% of the respondents preferred Dress, 86% preferred Bibs followed by Nappy
which was preferred by 58% of the respondents. It was clear from the data that these three clothing items if made as a part of essential clothing for infants will give a successful start to the sale of clothing under a brand and will fulfill the essential requirements of clothing for the child.

- Results revealed that on most of the clothing items being sold by the shopkeepers for kids, the surface enrichment technique which got the maximum response of the respondents was printing by 91% followed by embroidery by 73%, with Patchwork as the next popular technique by 67%, followed by applique work, lace work, quilting, crocheting, Hand Painting and Sewing Techniques.

- As per the views of the shopkeepers the most preferred colors for the Infant wear were light colors which were preferred by 53% of the customers, 30% people preferred white color for their infants, followed by 26% people whose preference was Bright colors.

- According to the shopkeepers 42% of the market for the infant wear was being catered by the Assorted Domestic Brands.

- The most important factor affecting the purchase of Infant Wear was found to be Product quality, followed by comfort, product fit, price range and fabric quality.

- The results of the above brand study were quite motivating for the researcher to introduce a range of clothing for infants in Khadi and also to start a brand there off.

**PHASE-I**

b) **Purchase behavior of Would-be mothers** - The analysis of the data revealed the following:

- The analysis revealed that 53 of the Would-be mothers preferred to buy daily wear for their Infants in the range of ₹ 400/-–600/- and 40.0% of the Would-be mothers were ready to pay for Occasional Infant wear in the price range of 1000-1200.
- Would-be mothers preferred to purchase Infant Clothing from stores where they could get apparel for all age groups. The results showed that the Infant wear Brand even if sold from outlet selling apparel for all age group will sell better.

- Respondents made planned purchases for the essential clothing items like Dress, Bib and Nappies. However, the responses of the Would-be mothers for the remaining garments were a mix of impulse and planned purchases. 70% of the people made planned purchases for dress, 67% for bibs and 77% for nappies, making them the most essential and desirable garments. This data established the need of these garments to be designed and developed for the Infant wear range.

- With regards to branded clothing 33% of the Would-be mothers preferred to buy branded clothing and 63% of the respondents preferred both branded and non-branded clothing. Thus making it clear that the trend of purchase of kids wear was more towards Branded clothing.

- The findings highlighted that 30% of the Would-be mothers were very selective and Brand Specific. They would leave the store if the clothing item was not available in the desired brand and would go to the other store to buy the same brand. 60% of the Would-be mothers who were not so brand conscious would ask for the other brands. 10% of the Would-be mothers could not express a clear opinion. However no one waited for the late arrival of the brand.

- It was found that for 83% of the Would-be mothers, the most significant factor towards the purchase of Infant Wear was 100% Cotton fabric. This motivated the researcher and showed the possibility of great scope for Infant Wear in Khadi Cotton.

- While considering to buy infant wear the Would-be mothers considered Product quality foremost, next was the price, and after that only they considered other factors like Color, trendy design and prints, comfort and so on.

- Results highlighted that regarding the preference for fabric, 93% of the Would-be-mothers preferred 100% Cotton. It was very clear from the data that respondents were not aware about the possible usage of Khadi for infant clothing as a result the researcher was motivated to carry out the present study and develop a need based clothing range for Infants.
According to 53% of the expecting mothers, the most preferred color for the Infant wear was white. 33% respondents preferred bright colors for their Infants, followed by 27% Would-be-mothers whose preference was light colors. Therefore for the final development the base fabric was kept white, however the surface was developed using a mix of light and bright colors.

When asked, the Would-be-mothers preferred to have embroideries, sewing techniques, quilting, patchwork, hand painting, applique work, lace work and printing as the surface enrichment techniques on Infant Clothing in the order of preference. The first five most preferred techniques were finalized for design development.

In case of the preference of the Would-be-mothers regarding the silhouette features for the tops, the Would-be-mothers preferred round neck with explorations like tie ups and front buttons the most. This was followed by tie ups and front open garments. Buttons on the back were however least preferred by expecting mothers for the Tops. For the Bottom wear the Would-be-mothers preferred Buttons on the side with the score of 4.3 out of 5, however snap fasteners between legs, and elastic waist band were very less preferred having a score of 3.7 and 3.3 respectively.

Responses of the Would-be-mothers established that there was a rare availability of Infant Wear in Khadi. The little availability of Khadi as infant wear could be seen only in case of Assorted Domestic Brands. This was a great motivating factor in carrying out the present need based study on “Design Development and Acceptance of Khadi as Infant Wear”.

According to 77% respondents, the most important factor towards motivation for the purchase of Khadi Fabric was its comfort. However 73% and 67% respondents were motivated to purchase due to its being a reputed brand and its product quality respectively.

Regarding the expectations of the qualities from the existing Khadi fabric, the majority of the respondents wanted that Khadi should have beautiful surface development, color fastness and shrinkage control were the other two qualities expected.
• Good fit, followed by easy wash ability, good stitching and beautiful surface respectively were the main qualities expected from the Khadi Garments. This information helped in developing a range of Infant Wear in Khadi.

Analysis of the data clarified the need for Specific fabric type, Garments, Colors, preferred Surface enrichment techniques, the price range and the need for a brand in infant wear.

c) **Common findings of the conducted Brand Study and Survey to study the purchase behavior of the Would-be-mothers**

• There was a clear cut demand of Infant clothing in 100% Cotton, and no fabric could be better than Khadi cotton, which along with having all properties of 100% Cotton has the additional properties due to its being hand woven and hand Spun fabric.

• Five most preferred surface techniques were sewing techniques, painting and embroideries, patch work, applique work and quilting.

• Light and white colors were the most preferred for the Infant wear. Thus the Fabric for the collection was kept white, with the usage of light and Bright colors for Surface development.

• Product quality, price, comfort and the trendy design and prints were the major factors influencing the sale of clothing. Thus a collection which was the right mix of being made of comfortable fabric, good design, and silhouettes, along with best of the quality was developed.

• Dress, bib and Nappy were the most desired clothing items. The data established the need of these garments to be designed and developed for the Infant wear range.

**PHASE II**

This section involved analyzing the data collected through judgments of the panel of experts and Lab tests. The major highlights of the section were:
Fabric sample S1 was found to be superior from all other samples due to the use of finest cotton yarn with very high density per inch, with warp count (ne) 98.2, weft count (ne) 76.5, Epi-97, Ppi-84 which gives the fabric unique feel, make it breathable and comfortable for kids due to less tear strength too. S1 had minimum weight which is 48.7gm/square meter. The thickness of the sample was 0.20mm which improved the permeability and insulation properties of the fabric. It had minimum shrinkage characteristics which lead to durability of fabric due to less fiber orientation and consequently less fiber contraction and it was priced at Rs185/meter.

The base fabric for design development was kept “white. The surface development was done using all possible colors available in nature. The mood for the Design Development was kept “happy”. The inspiration was “nature”.

Sewing Techniques was found to be the best technique, for application on the final garment development. However as per the views of the panel, the same was mixed with embroidery to get a more acceptable surface.

The standard measurements as provided in the Metric Pattern cutting for Children’s Wear and Baby Wear were used. (Aldrich, 1991)

Basic bodice/Sleeve block as given in Metric Pattern cutting for Children’s Wear and Baby Wear (Aldrich, 1991) were used and method of making the jangia block was taken from the Book-Basic Processes and Clothing Construction by (Sherie Doongaji, 1986)

The application of the sewing techniques with embroideries was done on Dress, bib and Nappy. These three were found to be the most desirable and preferred garments.

DRESS D4c, DRESS D2c, NAPPY D5, and BIB D4 were finalized for application of the selected surface enrichment technique.

At the end of Design development two sets of clothing for the Infants were finalized to be fabricated. The sets included three pieces each.

SET-1: DRESS D4c ii Modified-Final; NAPPY D5i – Final; BIB D4ii - Final

SET-2: DRESS D2c iii Modified-Final; NAPPY D5iv – Final; BIB D4iv - Final
All the above mentioned approvals were sought from the panel for the final development of the clothing items. The panel marked the work and the same was later ranked. The top ranks as per the requirement were thus used to carry out the further steps.

**PHASE III**

**Feedback about the developed range of Infant wear:** The data was collected from the **mothers** who made their infants wear the developed range of infant wear in Khadi. The important findings were as follows:

- The comparison was done between Acceptance of Infant Wear in Khadi and the Infant wear in other fabrics using t-test, the p-value for variables involved like fabric, comfort, surface development, fit, stitching, satisfying patriotic feelings, Newness in terms of available products was <0.05. Hence Null Hypothesis \( H_0 \) was rejected and Alternative Hypothesis \( H_A \) was accepted, stating that there was a significant difference in acceptability of Infant wear in Khadi over Infant wear in other fabrics.

- Regarding the satisfaction level of the mothers after using the developed range of Infant wear for their infants it was found that 87% of the mothers were fully satisfied with the developed range of Khadi based Infant wear and 13.33% mothers had a neutral opinion.

- A Total of 83.33% mothers would prefer to buy the developed range if available in the market, and the remaining were neutral in their opinion. This indeed was very encouraging statistics, and motivated the researcher to carry out and recommend similar studies.

- The mothers were ready to pay within the range of ₹ 600/- to 800/- for the products developed. The analysis established the fact that the clothing developed in fine count Khadi for Infant matched the price expectations of the mothers, as the costing done for the products was within the range preferred by majority of the mothers.

- There were 90% of the mothers who would prefer to buy the developed range of Khadi based Infant wear from Khadi stores followed by 50% who would prefer to
shop from the Multi brand outlets. Thus sale of the infant wear brand at Khadi Showrooms will boost the sales as it already has its loyal customers.

- Findings revealed that 93.33% of the mothers preferred that a Khadi based Brand in infant wear should be started. 6.67% of the mothers had a neutral opinion, However there was not even a single respondent who was against starting a Khadi based Brand. This made it clear that the respondents were happy with the range of products developed.

- Majority of the mothers i.e. 90% would recommend the Khadi based infant wear brand to the others. This was a great percentage and established the fact that the developed collection of Khadi based Infant wear was accepted very well and there was a great scope for starting a Brand in Khadi based Infant Wear.

- Majority of the mothers’ i.e.73.33% believed that there will be a great demand for such a range of Infant wear in future. This factor established the sustainability of the Brand in Future.

The above findings led to filling the application for the registration of a kids wear Brand

- LOGO was finalized

- LABELS were finalized

- TAGS were finalized

- TRADE MARK for PRERNA-an inspiration….., a brand for Children’s clothing was registered.

CONCLUSIONS

Keeping in view the responses attained, the data collected and analyzed, the designs created and applied, it was concluded on the whole that during the study “Design Development and Acceptance of Khadi as Infant wear” the need based information collected at every level, worked as a platform for the next level leading to the systematic assessments of the needs to be incorporated in the Infant wear range.
The p-value for variables involved was <0.05, thus $H_0$ was rejected and $H_A$ was accepted, stating that there was a significant difference in acceptability of Infant wear in Khadi over Infant wear in other fabrics. It is thus concluded that this clear preference of Khadi over the other fabrics could be due to good qualities of hand spun and hand woven cotton Khadi over other fabrics. Fine count cotton Khadi is super soft against the skin and therefore very comfortable to wear, making it ideal for babies and children. Because cotton "breathes" it is the best choice for the kids, the hand woven fabric forms air pockets in the fabric due to the thick and thin places created during hand spinning and is therefore, cooler, softer, more absorbent and breathes better than highly uniform and compact machine made fabrics, keeping them cool in summer and dry in winter. The fabric is durable, versatile and easy to care for. It can be washed in the washing machine and either hung to dry or put in the tumble dryer. It is the ideal fabric - perfect for Kids. It is also concluded that the developed range of Khadi based Infant wear fulfils all the requirements related to comfort, healthcare, handle, easy care properties, design as well as performance expected from the infant clothing today. People who generally preferred to buy daily wear for their Infants in the range of ₹ 400/-–600/-, were however ready to pay in the Range of ₹ 600-800 for the developed product. This led to the conclusion that the mothers would be getting a good quality product for the price lesser than what they expect. This established the success of the developed collection, and study.

**APPLICATION OF THE RESEARCH STUDY**

Application of the research led to the registration of the Brand in Khadi based Infant wear. As soon as the sales will begin after the final evaluation of the present research study and when the Brand reaches the sale counters, a lot of demand for the Khadi Fabric would be generated for the fabrication of the range of Infant Wear. The demand will be a continuous process. If the market for the Infant wear is tapped properly it will be an ever increasing demand both at the National as well as the International level. This on the whole will give a lot of employment opportunities to the people dealing with the production of Khadi Fabric, the Manufacturers of a clothing range in Khadi, thus leading to the economic growth of the country through Khadi, our own Traditional Fabric with Philosophy.
LIMITATIONS OF THE STUDY

1. The study was limited to the Union territory of Chandigarh.

2. The study was limited to Government Hospitals of Chandigarh for sample collection.

3. The study was limited to the development of Summer Clothing only.

SCOPE FOR FURTHER STUDIES

Considering the positive results of the carried out study, various studies for further research are proposed as follows:

1. Mother’s preferences of usage of Khadi cotton for their preschool children.


4. Comparison between usages of fine Khadi cotton over coarse Khadi cotton for bed linen.

5. Design development and Acceptance of Khadi as Home Furnishings.

6. Usage of Khadi waste to develop a range of Accessories for infants.

7. Standardization of the process of attaining a consistent length of running Khadi yardage.

8. Exploration and Documentation of tools and Equipment used in the production of Khadi over the years.

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