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Research in Fashion in India: A promising trend

Deepshikha

Abstract

The paper introduces different domains within the fashion industry, namely – Fashion Apparels, Textile, Accessories, Fashion communication (Graphics, Photography, Styling and Journalism), Fashion History, Fashion marketing, Fashion Technology and Production, Trends and Forecasting studies, Crafts, Visual Merchandising, Management, Marketing, Innovation in fashion industry – Smart/ Technical Textiles, AR VR in Retail and Production, Sustainability, Ethical issues and Certifications. Primary, secondary and tertiary research forms an important part for undergraduate and post graduate research along with a design deliverable. Evaluation of designs may or not be studied in great detail at this level as much as in doctoral research. Social media narratives and storytelling with oral research methods are widely used for fashion journalism. Research in fashion photography revolves around understanding user behavior, interaction with environment and object, interpretation of cultural media and artefacts utilized for presenting images as illustrative element to communicate concepts and ideas for evaluation. Ethnography and ethno-methodology based qualitative and quantitative research is widely used for studying craft traditions. Doctoral research includes quantitative and qualitative methods, interview, observation, ethnographic models, text analysis, visual analysis, object analysis, critical analysis, collection and presentation. The paper presents a glimpse of 12 thesis studied from a premier fashion institution of India – the objectives, methodology, user

studies, experimentation, findings, contribution and manner of reporting the theses. The paper summarizes into key areas in which prospective fashion, textile and accessory designers may pursue research.

Keywords: *Fashion, Textiles, Accessories, Research, Methodology*

Introduction

Various sub domains exist within the fashion academia, namely – apparel, textiles, leather, footwear, jewellery, communication journalism, photography, styling, social media marketing, marketing and retail, management, merchandising, production, and so on. Designers and students from this domain often acquire essential knowledge in these domains and join the industry or start a new label sooner or later. Many work as craft enthusiasts, join advertising, switch between work profiles or domains many a times. Few of these students or professionals aspire to head towards doctoral research and join academia as researchers, practitioners or educators. Research is important in Fashion domain as well as it helps to quantify design, creativity, preferences, trends and promotional activities that have been happening over the decades, enquire, document, experiment and analyze creators' and customers' thought processes and outcome. Objectives of this paper are – (i) To study doctoral theses from fashion academia and present its summary; (ii) Propose a research map for prospective researchers in the same domain. The work primarily focusses on Indian fashion academia, industry and research as little has been gathered about the Indian fashion research in comparison to institutions outside of India.

Methodology followed for the article

12 theses were studies and summarised as reported in section 3 under the following content analysis approach - objectives, methodology, user studies, experimentation, findings, contribution and manner of reporting the theses. Theoretical framework derived by author for prospective researchers in fashion academia has been discussed further.
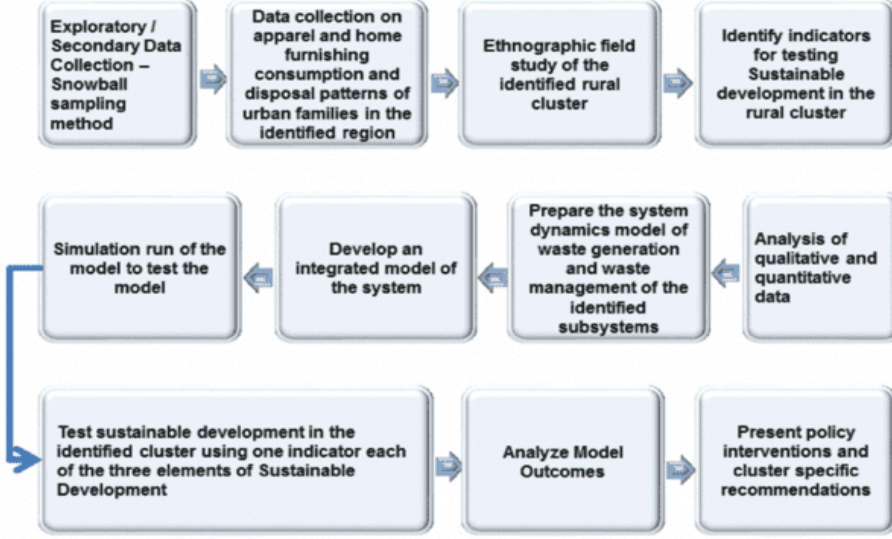
Summary of 12 theses study

The summary has been listed in Table 1.

Table 1. Summary 12 theses studied

SN	Content	Summary
	Author 1	
1	Research Title	Influence of social media in promoting sportswear brands and consumer decision making [2]
2	Research area	Social media marketing for sportswear
3	Objectives	To explore influence of social media for communication; to enquire influence of social media on decision making of consumers; to study the influence of promotion mix on decision making of consumers
4	Methodology	Research Onion by Saunders et al., 2003 was followed [1]. An exploratory research design based on analytical approach was employed. Quantitative analysis of hypotheses testing was used – i. Graphical method ii. Simple percentage method iii. Chi-square iv. Factor analysis v. T-Test vi. Regression analysis.
5	User studies	Pilot study with 61 respondents and a final study with 400 respondents

6	Experimentation	None
7	Findings	Use of social media and sportswear is not gender specific. Young age group 15-29 is very active on social media of sportswear brands and sports. Most of the respondents were in the age group 3-8 lpa. Facebook and Youtube are most popularly used by the respondents. Nike and Adidas are most favored brands as per social media. Respondents look for information 1-5 times per month spending average of 2000INR every 1-2 months. Social media has influence on consumer decision making and promotion mix of sportswear brand. Need recognition is influenced most by promotion mix.
8	Contribution of research	Finding significant impact of social media on promotion mix – Advertising, Sales promotion, Public relations and direct selling; and Consumer decision making – Need recognition, Information search, Alternative evaluation, Purchase decision and post purchase behavior.
9	Sequence of thesis report	Introduction; Literature review; Research Design; Data Analysis and Interpretation; Findings and Recommendation; Future Scope; References
	Author 2	
1	Research Title	To standardize body measurements for urban women of Uttar Pradesh [3]
2	Research area	Anthropometry for women apparel design
3	Objectives	To study preferences and clothing patterns of women 35-45 years of age in Uttar Pradesh; To study size chart of women apparel for the domestic Indian market; TO collect body measurements of urban women 35-45 years of age; to derive standardized measurements for urban women of UP between 35-45 age group
4	Methodology	Locale of study – Lucknow, Kanpur, Allahabad. Questionnaires for garment industry. Tools and techniques

		for taking body measurements; Validation of body measurement charts quantitatively – Chi square test, ANOVA, Multiple comparisons table, KMO and Bartlett's Test, Principal Component Analysis, Extraction Method, Rotation Method.
5	User studies	Pilot study with 75 female respondents in Lucknow and further with 200 female respondents in Lucknow. 2600 final sample size. 14 garment industries in Delhi, Bangalore and Mumbai approached for existing body measurements for domestic market. Qualitative and quantitative.
6	Experimentation	Body measurement for 2600 female from Uttar Pradesh
7	Findings	Information on readymade garments, fitting problems, purchase patterns, frequency and expenditure of shopping were found; problems with readymade apparel; comparison of apparel size measurements for different brands; Standardization of body measurement charts for 35-45 years women in Up
8	Contribution of research	Body size nomenclature for 35-45 age group female apparel wearers of Uttar Pradesh
9	Sequence of thesis report	Introduction; Literature review; Methodology; Result and Discussion; Conclusion; Implication and Further research; References
	Author 3	
1	Research Title	Study of recycling of post-consumer textile waste in a selected area of North India and framing a model for sustainable development [4]
2	Research area	Recycling post-consumer textile waste – sustainable development
3	Objectives	Examine the usage of 4 R's in apparel and furnishing sector; To analyse post-consumer textile recycling in the identified cluster; To identify indicators for sustainable development

		in the identified cluster; To use systems theory to develop integrated model of waste generation and waste management of post-consumer textiles; to analyse model outcome and present interventions
4	Methodology	 **Research design**
5	User studies	Case studies, Field studies, questionnaire with 171 respondents and expert interviews
6	Experimentation	None
7	Findings	Mathematical model of recycling to map consumption and post disposal cycle and developed an overall framework, there exists an employment opportunity, solid waste management, existing market for durries, product diversification
8	Contribution of research	Recommendations & Policy Interventions for post-consumer textile waste consumption
9	Sequence of thesis report	Introduction; Literature review; Research Methodology; System study of recycling system; Consumption and disposal pattern of textiles in Urban region; Recycling of textiles in Manglor Cluster, Uttarakhand; System dynamics modeling for sustainable development; Findings and

		recommendation; References
	Author 4	
1	**Research Title**	Study of Tangaliya craft of Saurashtra - A model for sustainable development through design intervention [5]
2	**Research area**	Textile craft and sustainable development
3	**Objectives**	To study history, technique and design of Tangaliya craft in detail; compare various centers of Tangaliya craft production, study livelihood of craft practitioners and revitalization of craft; develop and evaluate integrated model for design intervention
4	**Methodology**	Qualitative and quantitative
5	**User studies**	Artisan case studies from 3 different centres, Craft practices and livelihood, Development of new products for urban market, Study with design students, professionals for response to designed products, exhibition of products at retail chain, Synthesis and analysis of data towards development of a sustainable model
6	**Experimentation**	None
7	**Findings**	Original documentation of the craft and design intervention model
8	**Contribution of research**	Original study on history, technique and design of Tangaliya craft in detail; new products developed through design intervention
9	**Sequence of thesis report**	Introduction; Literature review; Research Methodology; Result and Discussion; Summary and Conclusion
	Author 5	
1	**Research Title**	Pattern Development for Menswear using Block Method [6]

2	Research area	Menswear pattern making
3	Objectives	Developing basic menswear sloper using block method using method followed for womenswear Defining fit parameters for menswear Test patterns developed on the fit parameters study (block and sloper often used interchangeably, is a basic pattern used as building block for developing other patterns for garment construction)
4	Methodology	Literature study, 2 user studies with industry professionals and academicians; development of menswear pattern, sloper and test fitting; evaluation of garments; development of final menswear sloper and evaluation with sample population. Qualitative and quantitative.
5	User studies	Study with designers, pattern makers and industry technicians to understand practices followed in industry; Study with academicians to understand academic practices using a questionnaire
6	Experimentation	Evaluation of sloper developed with sample population
7	Findings	Identified approach to designing menswear contemporarily in the industry; menswear sloper generated on the basis of womenswear patterns; established effectiveness of pattern developed by user evaluation
8	Contribution of research	Sloper designed for menswear on the basis of womenswear blocks and evaluated
9	Sequence of thesis report	Introduction ; Literature review; Research Methodology; Primary Research; Methodology for sloper development; Block development; Fit evaluation; Experiment; Result and Conclusion; Limitations and further research
	Author 6	

1	Research Title	Costuming in Hindi Films (1950 – 2010) [7]
2	Research area	Costume in Films
3	Objectives	To study evolution of costuming in Indian Hindi films from 1950 to 2010; To evaluate the role of designers in character portrayal in Indian Hindi films from 1950 to 2010; To analyse the strategies used by the design facilitators while costuming for their films; To assess the influence of films on fashion in India and preferences of the viewers in the decade 2001-2010
4	Methodology	Interview for pilot study; Archival Studies and Visual Analysis for studying history and evolution; Case Studies for understanding role of designers in costuming; Interview Viewers' for fashion preferences. The research is based on hermeneutics, phenomenological methodologies, with content analysis, comparative case studies, archival studies and interviews used to answer key the questions and to address the research objectives.
5	User studies	Pilot study - field visit to understand the contemporary scenario for costume development; Study history and evolution of costume in Bollywood; Analyse the role of designers in costuming; assessment of influences of film on fashion preferences of viewers with 388 respondents
6	Experimentation	None
7	Findings	Costumes lead to appeal of a film, costumes help in describing a character, Costumes help in creating identity of a character, film costumes influence fashion preferences of viewers
8	Contribution of research	Substantial research has been done on costuming and Hollywood, the research tries to address the gap for Bollywood films from 1950-2010.
9	Sequence of thesis report	Introduction; Literature review; Methodology; Result and discussion; Summary and conclusion; Limitations; Scope for further study; References

	Author 7	
1	Research Title	Design And Development of Toddler's Footwear - A User Centric Approach [8]
2	Research area	Footwear Design
3	Objectives	To understand footwear related issues for toddlers between 9 months – 3 years of age; To understand problems faced by parents while buying footwear for toddlers; To study feet measurement of toddlers and compare it with existing measurements of products in domestic market; To identify suitable materials and finishes for toddlers' footwear; To understand aesthetic preferences of toddlers for footwear design
4	Methodology	Identification of user needs, construction parameters for footwear, identification of materials based on functionality, aesthetic design, prototype development, evaluation of prototypes. User centric design process for design and evaluation.
5	User studies	500 toddlers' foot measurements were taken, 8 expert interviews, 6 interviews with industry manufacturers, interviews with 3 orthopedic doctors and 2 physiotherapists, interviews with 4 playschool teachers, interviews with 10 retail vendors, questionnaire-based evaluation of prototype with 25 toddlers (questionnaire filled by parents on behalf of toddlers)
6	Experimentation	Prototype design and evaluation
7	Findings	Problems in toddlers' footwear; problems with the sizing system for toddlers' footwear; effect of wrong sized footwear studied through gait analysis; identifying constructional requirements of the toddlers' footwear; identifying the aesthetic preferences of Indian toddlers for designing of footwear upper

8	Contribution of research	Systematic approach to designing footwear for toddlers
9	Sequence of thesis report	Introduction; Literature review; Methodology; Study on problems associated with toddlers' footwear in India; Study on selection of materials for designing; Identification of aesthetic requirements of toddlers' footwear; Conclusion; References
	Author 8	
1	Research Title	Determinants of fashion trends for Salwar, Kamiz, Dupatta (SKD): A Delhi/ NCR perspective [9]
2	Research area	Apparel trend research
3	Objectives	To study progression of trends in SKD across 20th Century; To derive fashion cycles for SKD 2006-11; To determine women clusters on the basis of orientation, psychological profile and social influence
4	Methodology	Qualitative Delphi method and quantitative (Factor analysis, ANOVA, Cluster analysis). Exploratory and conclusive research design descriptive in nature. Content analysis for 144 documents analysed.
5	User studies	Study 1 was Structured interviews with experts, designers, stylists and managers. Study 2 was respondent's awareness and adoption of the recognized trends and map their diffusion into the social framework in Delhi-NCR.
6	Experimentation	Second study to understand trends among women in Delhi NCR a questionnaire-based study with 500 respondents
7	Findings	Observation of six years of fashion curves in SKD showed one directional trend; Gradual Fashion Change; Fashion Need Identification; Fashion Involvement; Fashion Innovativeness; Interpersonal Communication; Awareness and reaction to changing trends; Preference for design elements, alternatives, mix and match; Purchase

		expenditure and trends
8	Contribution of research	First hand Indian trend study on Indian apparel for women that sets trend for other fashion apparel segments and accessories to be covered
9	Sequence of thesis report	Introduction; Trends and Indian context; Trend theories and models; Research design and methodology; Analysis and findings; Conclusion and recommendations; References
	Author 9	
1	Research Title	Contemporary articulation and sustainability of painted textile tradition of South India - A case study on Kalamkari/ Vraatapani [10]
2	Research area	Textile crafts
3	Objectives	To study the contemporary status of Kalamkari with respect to the changing patterns, styles, techniques and forms; To evaluate the sustenance of the craft with respect to its practice; To study the progression of Kalamkari as a medium of textile fashion; To initiate design intervention with a focus towards current market preferences and test the impact on sale-ability
4	Methodology	Triangulation, Ethnomethodology, Ethnography, Exploratory research. Preliminary Study; Case studies of the artists; Case studies of organizations involved in welfare of the craft and their role in sustaining the craft skills; Study of progression of Kalamkari as a medium of textile fashion; Explorations on new fabric base; Study of the garment industry: on the acceptability of explorations; Study of the sample subjects: on the acceptability of the explorations among the fashion conscious youth; Critical review by expert panel; Conceptualization and development of a fashion collection; Opinion poll for testing relevance and acceptability

5	User studies	Study of the garment industry: on the acceptability of explorations; Study of the sample subjects: on the acceptability of the explorations among the fashion-conscious youth; Critical review by expert panel
6	Experimentation	Exploration, Experimentation and Design intervention as interpreted on the basis of the research data compiled; Collect feedback on the acceptance of the contemporary fashion orientation of the craft; Quantitative and Qualitative analysis of the feedback collected through questionnaires
7	Findings	Study of the changing craft profile; Prevailing sustenance links for furthering its practice; Accent and progression of Kalamkari towards a medium of textile fashion; Orienting towards wider markets
8	Contribution of research	Ethno-methodological fieldwork; Design intervention with acceptance study
9	Sequence of thesis report	Introduction; Literature review; Methodology; Contemporary status of Kalamkari (Vraatapani); Sustenance of Kalamkari; Progression as a medium of textile fashion; Design intervention; Conclusion; Limitations; Recommendations; References
	Author 10	
1	Research Title	An integrative analysis on values and lifestyle (VALS) of Indian youth in metro cities and its impact on their clothing colour preference, colour -emotion and colour-image association [11]
2	Research area	Color research
3	Objectives	To study and identify the values and lifestyle based psychographic segmentation of youth in metro cities (Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai) of India; To analyze and differentiate the clothing colour preference based on identified psychographic segments of youth in metro cities of India; To study and analyze the

		clothing colour emotion of youth in metro cities of India between the identified psychographic segments; To understand various image associations with the preferred clothing colours of Indian youth in metro cities on the basis of identified psychographic segments; To develop a taxonomy table and model associating identified psychographic segment with regards to the colour preference, colour emotion and colour image association
4	Methodology	Qualitative and quantitative. Pilot study; Development of Colour Card; Development of Psychographic questionnaire based on VALS items; Development of standard instruction guideline for viewing the colour card in study; User study with 400 participants; Development of taxonomy table and model or wheel
5	User studies	Pilot study 216 participants; Final User study with 400 participants
6	Experimentation	User study with 400 respondents from 6 metro cities - psychographic segmentation of youth in Indian metro cities; Colour preferences as per psychographic segment and gender; colour emotion association; colour image association; Analysis of the impact of psychographic segments on colour preference
7	Findings	There exists significant difference of clothing colour emotion association among the 5 psychographic segments of youth in metro cities of India, which not only varies segment-wise but also varies between genders in each segment. There exists significant difference of colour image association among the 5 psychographic segments. which not only varies segment-wise but also varies between genders in each segment.
8	Contribution of research	Original and firsthand study on values and lifestyle (VALS) with respect to color research among youth in India
9	Sequence of thesis report	Introduction; Literature review; Description of research work; Result and findings; Discussion and Taxonomy model

		development; References
	Author 11	
1	**Research Title**	**Design Education for Chikankari Artisans: A Tool for Social Innovation [12]**
2	**Research area**	**Craft Research**
3	**Objectives**	**Create a resource of tacit knowledge for Chikankari; To formulate, impart and evaluate a design curriculum for selected highly skilled craftswomen; To reflect upon changes in the role of craftswomen in the value chain to map social innovation**
4	**Methodology**	**Qualitative.**
5	**User studies**	**27 craftswomen for craft study; personal interviews of 18 experts from craft, sociology, research, innovation and entrepreunership;**
6	**Experimentation**	**Curriculum design**
7	**Findings**	**Traditional Design Grammar of Chikankari: across 20th century; Empathy with Chikankari Embroiderers: Challenges, Insights and Opportunities; Creation and Implementation of Prototype for Design Education of Chikankari Craftswomen; Measuring the Impact of Design Education on high-skilled Craftswomen**
8	**Contribution of research**	**Ethnographic study of Chikankari craft and design education of skilled craftswomen**
9	**Sequence of thesis report**	**Introduction; Literature review; Research design – methods and procedures; Result and discussion; Summary and conclusion; References**
	Author 12	

1	Research Title	Impact of store attributes on consumer buying behaviour in Indian Luxury apparel fashion segment [13]
2	Research area	Luxury apparel buying behavior
3	Objectives	To identify important store attributes which effect the consumer preferences in the luxury market in India; To identify distinct consumer segments based on the preferences of store attributes in the luxury market; To evaluate the preferences of various store attribute combinations by the luxury consumers on the basis of the utility value; To discriminate and predict the luxury consumers on the basis of affordable and premium luxury market segments; To identify the relative weightage of various store attribute affecting the purchase intention of luxury consumers and ascertaining the individual importance of the same; To examine the dependency of store attribute preferences of luxury consumers on various demographic factors like income, age, gender, etc; To test whether any significant differences exist between store attribute preferences of luxury consumers across the various groups based on demographic profile.
4	Methodology	The research design for the study was partly exploratory & partly conclusive in nature. Qualitative and quantitative.
5	User studies	Quantitative for enquiring consumer buying behaviour
6	Experimentation	Questions were designed to study store attributes and how they affect the approach and avoidance behaviour of respondents, the important factors that affect their purchase intention for luxury apparel, planning of shopping trips, etc.
7	Findings	As a part of the research, different profiles based on their relative preferences for various store attributes were found out. Also, preferred store attribute combinations, impact of store attributes on purchase intention of luxury consumers and further research on discriminating consumers into shoppers of affordable and premium luxury was carried out

		in the study. Detailed analysis of purchase behaviour with respect to consumer demographics was also undertaken.
8	Contribution of research	Assessment of impact of store attributes on consumer buying behaviour in Indian Luxury apparel fashion segment
9	Sequence of thesis report	Objectives of the study; Introduction to research; Literature study; Research; Methodology; Findings and Analysis; References

Discussion

Figure 1 depicts various domains and sub-domains within Fashion which may be pursued for doctoral research and research by prospective fashion enthusiasts for a short term and long term period. The sub domains within Fashion include – Textiles (Prints, Weaves, Embroideries, Appliques, Surfaces, Dying, Textile science), Technology (AI, AR, VR, Wearables, Nanotechnology, Geotextiles), Leather Design (Footwear, Garments and accessories), Sustainability (Environmental impact, 3 R's, Value chain, Organic clothing, Climate change), Communication (Journalism, Photography, Film, Advertising, Styling, UI, UX), Marketing (Retail, Online, Offline, Merchandising, Branding), Knitwear (Casual, Evening wear, Sportswear, Lingerie), Crafts (Weave, Print, Embroideries, surfaces), Production (Supply chain, Machinery, Factory management, Workplace ergonomics), Management, Culture (Anthropology, Ethnography, Criticism, Controversies, Context), Creativity and Cognition (Aesthetics, Psychology, Design process, Color research), Apparel (Men, women, Children, Uniform, Ethnic, Casual, Evening wear, Special needs, Anthropometry), Accessories (Bags, Belts, Shoes, Hats, Headgear, Masks, Jewellery), Footwear (Men, women, Children, Therapeutic, Casual, Sports, Evening, Special needs, Anthropometry, Gait Analysis), Couture (Pret, Ready to wear, Mass market), Trends (Forecasting), Intellectual Property Rights

(Patent, Copyrights), History (Evolution, Theories), Innovation (Social, Economic, Environmental, Technological) and so on.
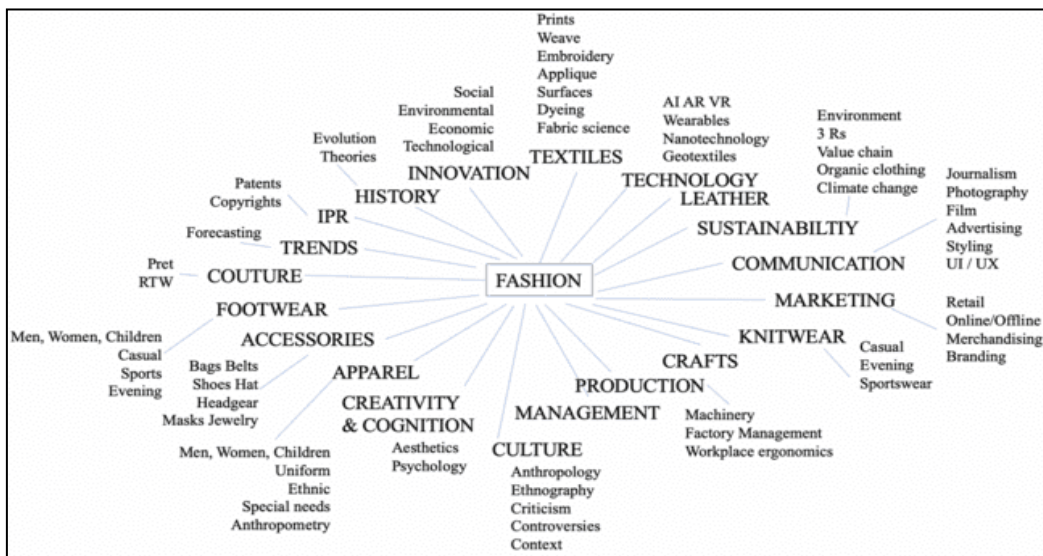

Figure 1: Research Map in the domain of Fashion

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