



From Sacrifice to Style: A Study of Fashion Adaption During World War I

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ABSTRACT:

World War I marked an intense transformation in fashion, where requirement and sacrifice regularly give rise to new forms of style, transforming it commencing an expression of luxury to a medium of sensibleness, identity and flexibility. The war adapted fashion under condition of scarcity, textile shortages, rationing and the entry of women into the workforce, fashion adapted to the demands of soberness and functionality. By analyzing wartime policies, cultural innovations and production records, this research traces the relationship between political pressures and aesthetic innovation.

Keywords: World War I, Fashion Adaptation, Textile Scarcity, Material Shortage, Rationing



1.0 Introduction:

One of the biggest turning points in fashion history came during the First World War I (1914-1918). Before the war people, especially in Europe, wore very decorative and formal clothing. Women's dresses were long and heavy, often with corsets, silhouettes loosened with a move away from the restrictive corseted forms of the Edwardian era. Waistlines rose shortly and hemlines gradually climbed just below the knee. This allowed for greater ease of movement, a necessity for women performing tasks previously considered men's work. Skirts became more streamlined, with less emphasis on fullness and layers. Fashion was seen as a symbol of wealth and beauty. When the war started life changed quickly. Materials like fabric and leather became scarce and many items were rationed. Men went to fight on the front lines and women began working in factories, hospitals and offices. This new way of life demanded practical and comfortable clothing. As a result, women started wearing simpler dresses, shorter skirts and clothes inspired by military uniforms, instead of luxury, fashion became more about necessity. The world of fashion was suddenly disrupted, and traditional social norms were reversed. Clothing material such as wool, leather and silk were required for military uniforms, boots and parachutes. The appearance of tailored suits,

functional dresses and trousers for woman marked not only a practical response to wartime needs but also a representative step toward gender roles equality and independence, began a sign of modern womanhood. This meant scarcity of the very materials needed for opulent fashions. Silk imports plummeted, and even basic fabrics like wool became more expensive. In the account of construction of the Great War, women were exclusively representation through symbolic stereotypes. As recalled by Francoise Thebaud, these symbols are in disparity to the efforts of women during the years of conflict, in fact they had ensured through their work in agriculture, industry and services, economic and social support of nations.

2. Objective:

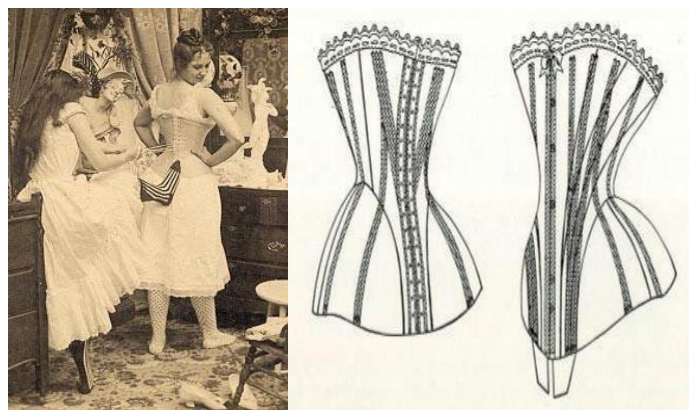
- To understand how the events of World War I, including the restrictions and demand for fabrics in countries allowed for improvement in mass production techniques.
- To examine how World War I influenced clothing trends and material usage in different countries.
- To access the long-term influence of World War I fashion adaptations on post-war and contemporary fashion.



3.0 Literature Review

ARTICLES

Fashion during World War I, the essay lays fashion shifts to broader social dynamics women and men, entering the workforce, fabric scarcity and economic recovery. Designers such as Georges Douillet who introduced a new style for the era that revived the empire waist and Paul Poiret, whose design prevailed throughout the first decade of the 20th century. Before the eruption of World War I, Poiret's hobble skirt design and the re-emerging directories styled dress, which gave women freedom of movement with higher waistlines meaning there was no need of corsets. No one thought the war would last longer than a few months. Hence in August 1914, when Germany officially declared war against France, Paris saw no reason to cancel their autumn show.





It was in 1915 that the true extent of the war began to be realized, and the fashion houses took heed. At the start of the First World War, no one could have predicted the upheavals that were about to take place. In-fact, no one thought the war would last longer than a few months. Hence in August 1914, when Germany officially declared war against France, Paris saw no reason to cancel their autumn show. Fashion was not determined by the whims of the wealthy but revolved around the needs of the lower classes. Women donned nurses' overalls or wore trousers in the arms factories, unaware that a whole new way of life was being born. Jumper blouses also became popular because they were highly versatile, allowing for use with several types of clothing and rise of the hemline. As large quantities of materials were being consumed for soldier uniform's, Armor, hats etc., what was available for women's fashion was hugely affected.

Certainly, because of shortage of fabric, in 1915, women's skirts rose above the ankle, and then by 1916 to mid-calf. With the shift in priorities domestic labor decreased drastically and clothing that required extensive care and upkeep became increasingly impractical. Evening wear became less common and the longstanding tradition of dressing four times per day has dropped. Women even started wearing breeches and participating in sporting events. Military look also crept into fashion designs, bringing military-style tunic jackets, belts, and epaulets. Cuts and pockets were added to the designs of women's day wear. It was at this time that the trench coat was introduced using a chemically processed fine cotton gabardine that was originally used in for farm workers and approved for military use.

The need to mourn the increasing number of dead, visits to the wounded and the general gravity of the hour meant that darker colours became the norm during the First World War. They ushered in a monochrome look that was, at that time, unfamiliar to young women in comfortable circumstances. The colour Khaki even appeared on Vogue in 1915. The biggest change in the design of wartime dress was brought about by Gabrielle Chanel. She designed sporty clothing which were ideal for 'wartime chic'. She also designed the world-famous Jersey Suit. They became the virtue of simplicity. The Chanel suit became known for a "new uniform for afternoon and evening". In conclusion, amongst all the loss and devastation of World War I, fashion recorded a more hopeful side. With men away at war, women's traditional roles in society changed and there was in shift in cultural values. Thus, women discovered a newfound freedom, both in society and in fashion. (KANUPRIYA GOENKA, 2018)

The pre-war era was dominated by Parisian Haute Couture, a world of luxurious fabrics like silk and velvet, intricate lacework and beading and a focus on emphasizing the female hourglass figure achieved through tightly laced corsets. This focus on opulence and restricted movement stood in stark contrast to the harsh realities of war. The war disrupted the global supply chains that fed this fashion industry. Trade routes became risky, and resources were unfocused to the war effort. This meant scarcity of the very materials needed for lavish fashions. Silk imports dropped and even basic fabrics like wool became more expensive. (JDINSTITUTE, 2024)



Women began to travel by train, play sports and to ride bicycles but above all, to play a more active role in the labour market reaching a new social awareness. Seamstresses, milliners, corset-makers, other worked in the textile industry and many were nurse maids and housemaids with lower wages than men, 1, 26,529 women worked in industry but probably several women escaped the official statistics (spinner, weavers and home dressmakers). **(CINZIA CAPALBO)**



During war time production faced significant challenges due to shortage of traditional materials like: - Cotton, Wool, and Flax Because of the shortage of capacities, paper for spinning was imported at high price from Sweden and Norway. The increasing scarcity of textile fibers forced linen manufacturers and later makers of cotton and wool products to turn to paper yarn. The paper cutting machines came from Maschinenfabrik Jagenberg in Düsseldorf, Germany.

The manufacture of paper and blended paper textiles was something of a challenge. The marketing and distribution under wartime conditions was also anything but easy. Although paper yarn products were not new – they had been known in the Far East for centuries and were also used to a limited extent in Europe and the USA – they were not popular. They were difficult to wash and look after and people feared that they would get damaged.

Within a very short time after the outbreak of war, uniforms had to be provided for entire armies. Domestic textile fibers were in short supply, however. Paper textiles made of wood pulp from domestic forests were thus used above all to supply the civilian population.

The war increased not only the demand for metals but also for clothing, as uniforms had to be found for hundreds of thousands of soldiers. Production of plant and animal fibers in the Habsburg monarchy had been declining, however. The cultivation of flax had decreased since 1875 by around 40%, and two thirds of the flax had to be imported. Since the 1850s the sheep population had also shrunk by a third, and wool was obtained from Argentina, Australia and other countries. Cotton was also imported from the USA and India.

Industry started by using blended fabrics and various types of synthetic wool obtained from old rags and spun clothing. The processing of nettles into fabric in fact had something of a tradition, but it was not followed up in practice to any significant extent. The best substitute was paper textiles. The raw material, wood pulp, was abundantly available in domestic forests and could also be used for other purposes. Most companies made sulphatic pulp, however, and few supplied the stronger and more robust soda pulp, which was better suited for the manufacture of paper for spinning. One company making this pulp was the gräflich Henckel von Donnersmarck'sche Papier Fabrik AG in Fran Schach, Carinthia. **(HUBERT WEITENSFELDER)**

MOVIES - "All Quiet on the Western Front"



Here how soldiers reused and repurpose the uniforms. In this movie, soldiers get their uniforms from dead soldiers as a practical solution in midst of war. When Heinrich Gerber (German Soldier) dies, Paul Baumer is given Heinrich's old uniform this part highlights the harsh realities of war' where resources are less and demand are high, so soldiers must rely on what available. We saw how uniforms are removed from dead soldier's bodies and washed with water for future soldiers to use. This plot detail emphasizes the brutal and utilitarian nature of war, where even death doesn't exempt individuals from contributing to the war effect.

“The forgotten Battle”

The film subtly shows how clothing was practical and influenced by shortages-no glamorous dresses on rich fabric, only simple, durable garments. This reflects the real war time fashion shift from elegance to necessity. The members of Dutch resistance wear everyday clothes rather than uniforms, often dark and practical, so they could blend in while carrying out underground activities.



4.0 Research Methodology:

Both qualitative and quantitative mixed approach used for study. In quantitative study, data has been collected from NIFT students and others by circulating a Google forms. A structured questionnaire used for collecting the data. For qualitative research we studied how fashion changed during World War I (1914–1918) by reading articles, watching movies and documentaries. Study kept an organized record of our steps and sources as here public materials were used and did not worked with people directly, so no special permission was needed. Existing articles and movies gave a brief view of how fashion and how World War I directly and indirectly helps to introduce synthetic fabric to the world because of the shortage of natural fibers. After comparing what different sources said and checked movie scenes against written records to make sure the facts were right. This research adopts a qualitative methodology, combining historical analysis with content review and visual interpretation in understanding how World War I influenced fashion. Photographs, movies such as All Quiet on the Western Front and The Forgotten Battle, wartime records and production documents were reviewed for three main factors that molded fashion: scarcity, military needs, and social changes. Secondary data, including academic articles, fashion histories, and archival reports, were examined to understand the broader cultural and economic milieu. Thematic analysis was conducted to trace key patterns such as material shortages, functional design, and the shift in women's roles within the socio-economic sphere. Further the use of film and wartime images explored how garments fit and was worn in life and screen environments. This integrated approach thus provides a broad and accurate view of how the pressure of politics and societal movements within WWI changed global fashion.

5.0) Data Analysis:

5.1) Demographics

Statistics				
		Gender	Age	Occupation
N	Valid	130	130	130
	Missing	0	0	0
Mean		1.45	1.21	1.48
Median		1.00	1.00	1.00
Mode		1	1	1
Std. Deviation		.500	.444	.828
Skewness		.188	1.985	1.796
Std. Error of Skewness		.212	.212	.212

Table No 5.1.1

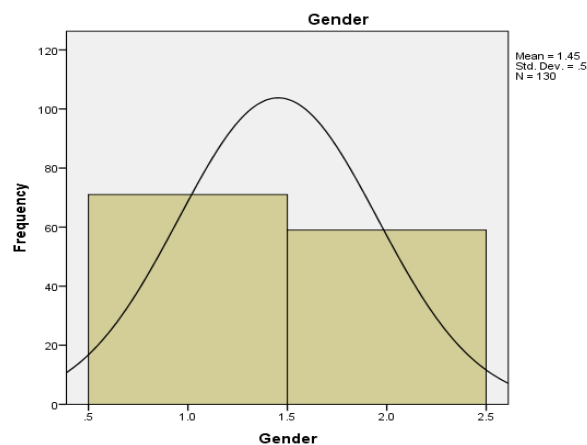
This table shows that the gender, age and occupation variables, all shows mean median and mode, indicating that the respondents chose the first category of each variable. Age and gender are positively skewed with high skewness value; most participants are younger and strong in the first occupation

category. The calculated standard deviations are small, indicating low variability in gender and age and slightly higher variation in occupation. Overall, this is dominated by young respondents and a primary occupation group.

Frequency Table:

Table No 5.1.2

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	71	54.6	54.6	54.6
	Male	59	45.4	45.4	100.0
	Total	130	100.0	100.0	

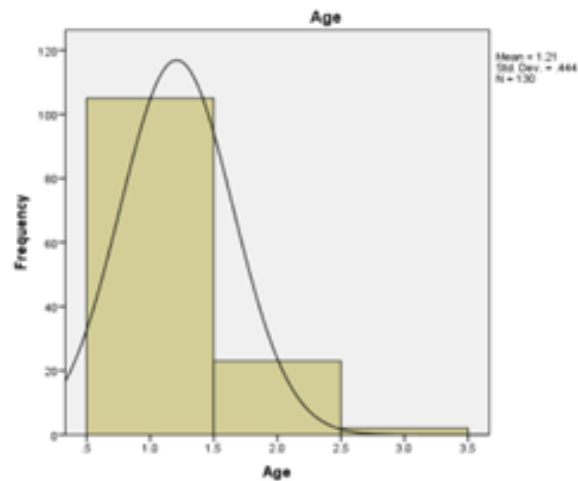


This table shows the gender distribution of 130 respondents. The majority in the sample are female, with a percentage of 54.6% while the percentage of males is 45.4%. The female's participation has a minor edge over the males. The sample is somewhat balanced between the two genders. The cumulative percentages stand to confirm that together they account for the entire respondent group.

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16-29	105	80.8	80.8	80.8
	30-50	23	17.7	17.7	98.5
	51-65	2	1.5	1.5	100.0
	Total	130	100.0	100.0	

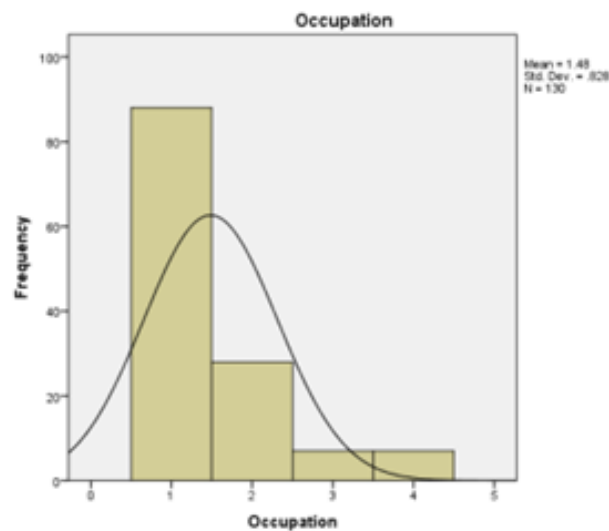
Table No 5.1.3

This table shows the distribution of age from 130 respondents. The majority is nearly 81% between the ages of 16 and 29 years. This means that the sample included many young people. A smaller portion falls in the 30–50-year at about 18%, while only some 2% were in the 51–65 age brackets. The data shows that the survey or study reflects the views or sort of a younger population.



Occupation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Occupation	88	67.7	67.7	67.7
	Professional (Doctor, Engineer, Lawyer, etc)	28	21.5	21.5	89.2
	Business Owner/Entrepreneur	7	5.4	5.4	94.6
	Artist	7	5.4	5.4	100.0
	Total	130	100.0	100.0	

Table No 5.1.4



This table shows the occupational distribution of the 130 respondents. The majority of the respondents 67.7% reported their occupation simply as "Occupation," thus indicating that it is either of a general nature or not mentioned. The second category is professional jobs, at 21.5%, with doctors, engineers, and lawyers. Business owners and entrepreneurs, at 5.4%, represent that share of the sample, as do artists. Generally based on occupation, the sample is dominated by those in a general or indefinite category, followed by an outstanding percentage in professional fields, with just a few people in entrepreneurial or artistic careers.

5.2) Psychographics:

- Cross tabulation of gender with respect to scarcity does not lead to fashion changes during World War 1.

		Which of the following scarcity does not lead to fashion changes during world war?"			Total
		Utility Clothing (Minimal Design)	Agriculture Devastation	Modernity	
Gender	Female	26	15	30	71
	Male	17	26	16	59
Total		43	41	46	130

Table No 5.2.1

This crosstab shows the responses of 130 participants. Females chose Modernity most often at 30, followed closely by Utility Clothing / Minimal Design at 26, and Agricultural Devastation at 15. Males most often chose Agricultural Devastation at 26, with Utility Clothing at 17, and Modernity at 16. Totals are Modernity at 46 and Utility Clothing at 43, over Agricultural Devastation at 41. It appears from these findings that there is some gender difference in which of these scarcity variables was not perceived as influencing wartime fashion, with females more likely to choose Modernity and males more likely select Agricultural Devastation.

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.057 ^a	2	.018
Likelihood Ratio	8.105	2	.017
Linear-by-Linear Association	.251	1	.616
N of Valid Cases	130		

Table No 5.2.1.2

The Chi-square results indicate that there is a significant association between gender and beliefs on which scarcity did not influence fashion changes during the World War 1, $df = 2$, $p = .018$.

• **Cross tabulation of gender with respect to were you aware that fashion changed significantly during World War 1?**

		Before this survey, were you aware that fashion changed significantly during World War I?			Total
		Yes	Maybe	No	
Gender	Female	33	25	13	71
	Male	16	23	20	59
Total		49	48	33	130

Table No 5.2.2

This crosstab shows that how awareness of fashion changes. Females appear to have slightly higher awareness, with 33 females saying yes and 16 males. Males showed a share of uncertainty or lack of awareness where 20 males and 13 females responded no. Both genders responded same number of no. Overall awareness levels are mixed but females showed more interest than men in this topic.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.413 ^a	2	.040
Likelihood Ratio	6.493	2	.039
Linear-by-Linear Association	6.344	1	.012
N of Valid Cases	130		

Table No 5.2.2.1

The Chi-Square test is significant (Pearson-6.413, $p = 0.040 < 0.05$), thus there is a statistically significant association between gender and perception of which scarcity did not lead to fashion changes during the world war.

- **Cross tabulation of gender with respect to materials was typically used for making corsets in the late 1800s and early 1900's.**

	Which of the following materials was typically used for making corsets in the late 1800s and early 1900s?						Total
	Wood	Cotton Fabric	Whalebone	Synthetic Plastic	Steel		
Gender	Female	13	4	9	35	10	71
	Male	6	10	7	18	18	59
Total		19	14	16	53	28	130

Table No 5.2.3

The crosstab shows gender responses for materials used for corsets in the late 1800s and early 1900s. Females chose mainly Synthetic Plastic (35), while males chose mainly Steel (18) and Synthetic Plastic (18). Overall, Synthetic Plastic was the most identified material; however, perceptions vary quite significantly across genders.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.135 ^a	4	.016
Likelihood Ratio	12.307	4	.015
Linear-by-Linear Association	.654	1	.419
N of Valid Cases	130		

Table No 5.2.3.1

This Chi-Square test, there is a significant association between gender and the perception of materials used for corsets: Pearson is 12.135, $p = 0.016 < 0.05$, hence males and females differ in response.

- **Cross tabulation of age with respect to fashion influence of World War 1 do you, see?**

		In this picture which fashion influences of world war one do you see?		Total
		Use of bright color & pattern	A functional design with military-inspired elements like the strong shoulders	
Age	16-29	26	79	105
	30-50	2	21	23
	51-65	0	2	2
Total		28	102	130

Table No 5.2.4

Most people perceived that the picture shows a functional, military-inspired design rather than bright colors or patterns. Most of the responses were from the 16–29 age groups and mostly selected the military style. Very few people selected bright colors or patterns across all age groups.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.439 ^a	2	.179
Likelihood Ratio	4.333	2	.115
Linear-by-Linear Association	3.366	1	.067

N of Valid Cases	130		
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Table No 5.2.4.1

The Pearson Chi-Square test shows no statistically significant relationship between the two categorical variables, 3.439, $p = .179$. Also, the likelihood ratio test shows that the significance level is at $p = .115$. The linear-by-linear association has a marginal p -value, $p = .067$, which still did not reach the statistically significant level of 0.05.

- Cross tabulation of age with respect to element in this garment you like the most?**

		Which of the elements in this garment do you like the most?			Total
		Silhouette	Fabric/Pattern	Accessories	
Age	16-29	42	42	21	105
	30-50	4	15	4	23
	51-65	0	1	1	2
Total		46	58	26	130

Table No 5.2.5

This crosstab indicates how different age groups responded to the question about which garment element they liked most. The largest group, ages 16–29 years, was reasonably evenly split among Silhouette and Fabric/Pattern, while fewer chose Accessories. For the age group 30–50 years, responses were clearly the highest for Fabric/Pattern, with very few others selecting Silhouette and Accessories. The smallest age group represented in the sample, ages 51–65 years, had only single responses for Fabric/Pattern and Accessories. When looking at the answers of all three age groups together, Fabric/Pattern was the most liked garment element, at 58, followed by Silhouette with 46 and Accessories with 26.

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.125 ^a	4	.129
Likelihood Ratio	7.775	4	.100
Linear-by-Linear Association	2.791	1	.095
N of Valid Cases	130		

Table No 5.2.5.1

These Chi-Square results showed that there is no significant association between variables, as the p -value (.129) is greater than .05. This would mean differences observed are likely due to chance.

- Cross tabulation of age with respect to time period this style belongs to.**

		Can you identify the time period this style belongs to?					Total
		1900-1904	1905-1909	1910-1914	1915-1920	1921-1925	
Occupation	Occupation	4	7	42	20	15	88
	Professional (Doctor, Engineer, Lawyer, etc)	1	6	9	6	6	28
	Business Owner/Entrepreneur	0	0	2	1	4	7
	Artist	1	1	1	2	2	7
Total		6	14	54	29	27	130

Table No 5.2.6

This crosstab indicates how respondents from different occupations identified the time period of a particular style. Most of the responses were from students, who mainly chose between the years 1910–1914 and 1915–1920. Professionals also selected similar periods, while business owners and artists contributed a small number of responses altogether. Overall, distribution suggests that across most professional groups, recognition of the style is concentrated in the mid-early 1900s.

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.785 ^a	12	.253
Likelihood Ratio	13.805	12	.313
Linear-by-Linear Association	.855	1	.355
N of Valid Cases	130		

Table No 5.2.6.1

The results of the Chi-Square test show that there is no statistically significant relationship between the variables because the Pearson Chi-Square value of 14.785 has a p-value of .253, which is greater than the .05 threshold level.

6.0) Findings:

- 1) Study shows that females with 42.3% chose modernity while males with 44.1% chose agricultural devastation. Overall totals are balanced – Modernity (35.4%), Utility clothing (33.1%) and agricultural devastation (31.5%).
- 2) Females show higher awareness of World War 1 fashion changes with 46.5% and males with 27.1% who said- YES. There was more uncertainty or lack of knowledge among males, as 33.9% responded- NO. While for females, the percentage was 18.3% which indicates a gender gap in familiarity with the topic.
- 3) Females selected Synthetic plastic with 49.3% while males show less selection for this option, instead showing more interest for steel with 30.5%. Females associate corsets with synthetic materials whereas males selected materials such as wood, cotton, whalebone and steel.
- 4) Among all age groups the majority identified military inspired design with 78.5% and 21.5% respondent's selected bright color or patterns. Preference was consistent among 16-29 age groups which show agreement that reflects World War 1 style military fashion.
- 5) The most preferred garment element across all age groups was Fabric/Pattern with 44.6%, followed by Silhouette at 35.4%, whereas Accessories received the least interest at 20%. Within this, younger participants aged 16–29 showed the widest range of preference, while older groups consistently leaned towards the Fabric/Pattern, therefore reflecting its wider general appeal.
- 6) Among occupations, the majority identified the style as belonging to 1910–1914 and was led by students at 47.7% and professionals at 32.1%. Strong consensus can be seen that the design reflects early 20th-century fashion. Business owners and artists were more diverse, yet still leaned toward the later styles of the early 1900s, with up to 57.1% of business owners choosing 1921–1925, reflecting more diverse interpretations in smaller groups.

7.0) Conclusion:

This study meant to learn how scarcity related to WW1, material constraints, production changes and cultural shifts formed fashion both during the war and in the post war period and those influences are still supposed today. Several meaningful patterns were outlined from the demographic and psychographic analyses of the respondents (130 in total). The sample is demographically dominated by young respondents aged 16-29 years who are students. This may suggest that the contemporary perceptions of historical fashion are informed mostly by younger, digitally connected and more uncovered generations. While the gender distribution is relatively well balanced, females showed higher level of awareness of and commitment with historical fashion subjects than males. Psychographic analysis exposed those particular elements of WW1 fashion remain specifically relevant to different demographic segments. Strong correlations appeared in views of wartime scarcity and awareness of wartime fashion change, and it is clear that gender is a factor in the way people understand the causes and effects of WWI fashion changes. Women linked "modernity" to fashion change while men connected agricultural devastation; there were indeed different interpretations of wartime scarcity. Awareness of historic fashion change was greater for women. Age proved to be a significant determinant of historical knowledge; younger respondents claimed fashion history was more relevant, while their answers also tended to be more specific about stylistic influences. This is reflective of the broader trend for younger generations to engage more frequently with digital fashion content, archival imagery, and fashion education.

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