

# Fashion Illusion as a Design Technique in Addressing Potbelly Challenges Among Men

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**Abstract:** Possessing a potbelly has been identified as a major problem that affects the self-esteem and social appeal of affected men. Efforts to deal with the condition include exercise and diet which present a major challenge to most people on the grounds of health and fitness. The study sought to explore the principle of fashion illusion as an alternative means of dealing with potbelly in affected working-class men. The study aims at integrating fashion illusion in garment design and construction to flatter pot bellies in men as means of enhancing their social appeal and self-esteem. The study employed a qualitative research method using a case study design. Observations and interviews were used as instruments to collect relevant information about the respondents in the Asokwa, Subin and Oforikrom Metropolis all in Kumasi, the Ashanti Region of Ghana. The selected Sub-metros were characterized by significant commercial activities involving the targeted working-class men with pot bellies. The study found that potbelly resulted in negative self-esteem, reduced happiness, and poor appearance among affected men. The respondents embraced fashion illusion as a positive means of enhancing images and making people feel better about themselves. It was recommended that the fashion illusion technique should be popularized to enhance the shape of potbellied working-class men, making them feel self-esteem and productivity.

**Keywords:** Fashion, Illusion, Pot Belly, Design Technique, Challenges

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## 1. Introduction

Wearing clothes is an important distinguishing feature of human beings. Judgment can be made of people based on the kind of garments they wear. A person's choice of clothing, personality, grooming, and body image play important parts in success at work and in social or personal life. Grooming has been considered essential for career success for both women and men. Style of the garment, fit of garment and the kind of job engaged in by a person are crucial considerations in selecting appropriate clothing for the occasion or job. Suitable clothing selection is influenced by the requirements of the occasion, design, colour, comfort and fit to enhance the personality, wellness, and safety of the individual [1]. Today,

fashion is considered one of the basic elements in life. People have developed an interest in getting information about what is in fashion. There is an obsession to look good and unique in the minds of many people with men not an exception to this trend. This obsession is synonymous among men with potbelly as well. In recent times, focus on bodybuilding and 'fat shaming' have become a major part of society influenced by the negative effect of consistent exposure to social media as well as the media's portrayal of what is an attractive physique or figure. This has led to the consumption of protein powders and supplements among some of those men who are concerned about having an attractive body image. A report published by the Telegraph in 2015 indicated that about 82 per cent of men reported feeling stressed about their

lack of an impressive figure than they were just about five years back. Most importantly, the youth demographic and the working class of the population seem more affected by such development to have a figure that impresses others as a result of being influenced by their peers on social media and comparing themselves to men or celebrities with ripped abdomens (abs) and pumped-up arms. Hence, some young adults tend to abuse steroids to build their bodies. It has been reported that the number of young adults who use illicit drugs have more than doubled from 2009 to 2012. Some men are body-conscious and are influenced by psychological factors to go every length to develop a certain level of masculinity to become acceptable and attractive to society and to feel important [2]. Men generally are preoccupied with their general body image therefore spend a lot of money and effort to develop that perfect figure through investment in good clothes and grooming to look handsome. As a result, several promotions are aimed specifically at men to get their interest in many fashion products.

Fashion design is an emerging industry in Africa in general and in Ghana specifically. The fashion industry is making a positive contribution to Africa's development and Ghana for that matter. The fashion industry in Ghana and Africa involves significant creativity and innovation to satisfy both the aesthetic design and utility requirements of local consumers. Fashion designs are a manifestation of culture, art, and symbolism in society. Globally, the fashion industry is a multi-billion-dollar sector where jobs are created for people in the fashion industry such as models, designers, make-up artists, beauticians, textile designers, manufacturers, event organizers and producers [3]. Africa's fashion industry also has a huge potential in relation to both economic value and size. Currently, Nigeria and South Africa are the leading fashion markets on the continent. Countries such as Mauritius and Ethiopia are also rising [4]. Chinese imports are cheaper than the locally produced fabrics which have contributed to the decline in garment and textile industries in Ghana and other African countries [5]. Africa only commands a significantly small proportion of the \$1.5 trillion total fashion industry, with the footwear and apparel market in sub-Saharan Africa estimated to be only \$31 billion [6].

Ghana and other West African countries have been known as the heart of Africa's fashion with a relatively rich history and tradition of producing textiles and garments. The kaftan, boubou and the Kaba are the most popular garment styles in West Africa. Another popular fashion is the smock which is worn by Ghanaian men and is very common for a hiding pot belly. Ghanaian and African fashion designers creatively select different types of styles and materials which are combined with creativity to give a nice appearance to the wearer including men with potbelly [7]. A potbelly is a situation whereby the tummy gains excess fat and causes weight gain. Potbelly is a problem faced by both young and old men and they are very difficult to reduce. Potbelly is caused by factors such as consuming high-calorie foods, lack of exercise, stress, alcohol, and fat, overfeeding and late-

night eating [8].

Ageing also plays a role in the development of potbelly in men. At one age, muscle mass is lost especially if one is not engaged in physical activity. Reduction in muscle density causes a decline in the rate at which calories are used by the body making it difficult to maintain a healthy weight. The Dietary Guidelines for Americans for the 2015-2020 periods have indicated that men in the 50 years group should consume about 200 fewer calories per day than those in their 30s as they age and are low in physical activity. The genes of the individual can also contribute to one's chances of being overweight or obese, developing a potbelly or where fat is deposited in the body. However, having balance inactivity and the number of calories consumed will help in the prevention of weight increase despite genetics and ageing factors [9].

Potbellies have become a common phenomenon in men as a result of how fat is stored in their bodies. Men generally store fat around their abdominal region while women rather tend to accumulate fat in their pelvic and thighs regions. Men's bellies, therefore, become bulging and unattractive while women form a shapely and attractive rear from the fat deposition. This is the reason potbelly generally develops in men as they grow older. Though not all men develop potbelly with age, it tends to be high among men who reduce their levels of activity and do not engage in active physical activity. The potbelly is formed by the accumulation of fat between the skin and muscles in the abdominal area. Once the layer of fat in the abdomen becomes more than an inch thick, the man will have a pot belly [10].

Fatty tissue accumulated under the skin is known as subcutaneous fat which is extra fat stored by the body for future use. The stored fat can be broken down for energy that is used in body function. The stored fat also acts as a cushion to absorb shock or trauma to the body and further insulates the body from loss of heat in cold weather conditions. When fat stored in the body is excessive, it causes pot belly or enlargement at the back of the arms or around the shoulder blade or around the hip in a layer of fat called adipose tissue or subcutaneous tissue which constitute about 15-20% of the bodyweight of an individual. Subcutaneous tissue in the form of potbelly is unsightly and causes the skin to stretch. It is a strong desire of most people to lose this excess fat to be beautiful or handsome. People engage in regular aerobic exercises to help them burn the stored energy in the body which can lead to potbelly.

Fat in the body was not always seen as very bad as it is in modern times. In the 1930s for example, arguments were made about considering obesity as a disease condition or as a cosmetic issue. The perception as to being obese or overweight has changed a lot over the last 100 years in the same way as the body has undergone a lot of changes. Some of these changes in perception has come because of medications now available for use in achieving weight loss. In the early periods of the twentieth century, negative perceptions were not associated with being fat. During that time, Tuberculosis (TB) was widespread and caused

emaciation among persons affected by the disease. Therefore, a level of chubbiness was perceived as an indication of being in good health. This led to the stereotype of the comical fat man, which is still portrayed in the form of Santa Claus and in some African cultures. Some people value plumpness for aesthetic reasons and as a sign of having risen from poverty to a more economically enhanced livelihood [11].

The Ghanaian and African traditional perception was that 'the bigger the potbelly, the richer the person. However, this perception has changed with most men in Ghana and around Africa becoming more conscious of their weight and growing potbelly [3]. Media influence has been identified as a factor that is driving people towards a desire for thinness in both men and women as a way of gaining self-esteem [13]. Moreover, overweight and obesity have increased in recent a decade, which has a substantial effect on mental and physical health. A study was performed in May 2016 on 246 soldiers who were selected among soldiers in the Tehran Barracks through cluster sampling. Self-esteem was assessed by use of Rosenberg's questionnaires with Cronbach's coefficient of 0.84. It was found that 37% of people had low self-esteem due to their potbelly or abdominal obesity. People with generalized obesity had a higher risk of having lower self-esteem [14].

Several studies have found that obese individuals and men with potbelly have a larger tendency of suffering from physical, emotional, and psycho-social issues, according to the Centers for Disease Control, USA. Obese adults are not emotionally stable, are socially inactive and less confident. They suffer from social discrimination, experience a hard time in making friends, approaching the opposite sex and are treated differently in social gatherings. In addition to this, individuals with potbelly also have a poor outlook of themselves, feel 'ugly' or unattractive, which negatively affect their self-confidence to interact socialize and interact with others. Therefore, obese people and men with potbelly could feel lonely and awkward in society [15]. Furthermore, people with pot bellies or who are obese also experience embarrassment and guilt because they are less productive compared to their colleagues who have not developed pot bellies or are not overweight. Obese individuals shy away from the limelight which becomes evident in several ways such as avoiding things of fun, being limited in their social interactions, and demanding less attention from others. Boosting the self-confidence and self-esteem of obese and individuals with the potbelly is very important [15]. A relationship exists between exposure to media, body dissatisfaction and social self-esteem in men [16]. This awareness of socio-cultural perceptions and standards of appearance has a significant tendency of predicting the quest for thinness in both males and females [17].

The term 'illusion' refers to the phenomenon in which things of fact are interpreted differently, due to a disruption or deviation in how things would have normally been perceived. Illusion is also employed in fashion to create garments of special effect such as to hide pot belly in men or

increase height. For fashion illusion to be successful, blind spots in human eyes may distort how the brain gathers and processes signals coming from the optic nerves in a wrong manner. Therefore, while the brain and the eye are trying to see reality, they could also produce an illusion called "Optical Illusion." Although the effect of optical illusion has no clear scientific clarification, it is however generally known that psychological and physiological processes both contribute to the occurrence of illusions. Illusion has no clear scientific clarification; it is however generally known that psychological and physiological processes both contribute to the occurrence of illusions. It has been found that fabrics with vertical, horizontal, and diagonal lines and stripes exert some sensory effects on people. For instance, a horizontal line made on the hip of a dress may result in the body looking shorter than it is.

Clothes designed with optical illusions give a much slimmer look by giving the person an hourglass appearance when contrasts such as black and white are used to achieve the fashion illusion effect [18]. Visual perception begins when the individual processes vision through choosing a range of objects, shapes, and colours, in the environment [19]. A difference in perception depends on the distance from the object, perspective, colour, shape, illumination and darkness or brightness levels [20]. Although the effects of optical illusion have no clear scientific clarification, it is however generally known that both psychological and physiological processes affect illusions [21]. Physical factors affecting optical illusion are the relationships between the weight and size of objects. It has been found that fabrics with horizontal, diagonal, and vertical lines used in various cuttings of clothing for models for various brands and designers create fashion illusion effects. Stripes, depending on their densities (intervals, directions, sizes and tones), exert sensory effects on individuals. These senses include the perception that vertical lines are longer and thinner while horizontal lines are thicker and shorter. Different optical illusions are created in the eye depending on the figures and shapes of the garment designed. Horizontal lines for example, in the hip level of a dress, can cause the body to look shorter than it is [18].

Striped clothes attract people's attention in either a positive or negative way. Today, designers suggest that stripes are ever extra-fashionable, are original and can be used in creating different optical illusions in a garment or costume. "Optical illusion" has been employed in garment construction for a long time. They have been used to create false shoulders, puffed skirts or high waistlines. They have also been successfully used in creating the "op-art" style clothes which require geometrically exact coupling of lines, plaids, stripes, and transformation of a plane of fabric into an illusionary three-dimensional space. Garments designed with optical illusion effect have gained popularity over a long period of time as people have tried to use the effect to enhance their appearance from A-line dresses that accentuate the waist, to striped trousers that provide a visual elongation of the individual's strides. However, knowing the right type

of garment to provide the right fit for the figure of the individual can be a challenge. A study led by Professor Jessica Ridgway and Professor Jean Parsons who is a textile and apparel management expert was set out to help understand how women perceive dresses made with optical illusion effects and how these type of dresses affected their perception of body shapes. Those participating in the survey were shown seven different dresses with optical illusions fitted to their unique avatars and asked to evaluate each option.

In the study, a TC2 Body Scanner was used to collect body measurements of 21 of the participants. The researchers used the waist, hip, bust and high hip body measurements to categorize the participants into one of the nine body shape classifications. The participants were then reduced to the women with the three most body figure shapes commonly found in women rectangle, hourglass and spoon. It was observed that those with the hourglass shape did not find optical illusion dresses appealing. Rectangle-shaped women appreciated the garments with optical illusion. A conclusion was made that the first and most important role in creating fashion illusion is to highlight areas that the individual is confident about and reduce or minimize areas with problems with small patterns or darker colours.

It was advised that individuals with a spoon shape should select clothing that draws attention from the hip area. Dresses with fashion optical illusion effects such as colour blocking or stripes can change how people perceive their bodies. Hence, many retail designers employ optical illusion effects in the design of their clothing lines. Some of the illusions are well created to flatter the body but does not work well with somebody's shape [22]. Being seen as fashionable is seen as very important in modern times. Therefore, both men and women alike follow fashion trends in order to select garments that make them appear good with significant aesthetic appeal to others and help them to express themselves. Fashion designers, therefore, play the most important role of translating designs that gives the best expression to both men and women. Moreover, the close relation of fashion designers with art enables them to create a garment that gives the desired effect [23].

Many fashion designers use optical illusions to show bodies as slim through the hourglass appearance when they use the contrast of colours such as black and white. A black background makes the garment give a slimmer appearance. Vertical lines created at equal intervals gives optical illusion effect of making the waist look slimmer. The optical illusion effect also gives a taller appearance because the panels are vertical and in dark colours [18]. Men in Ghana, especially those with a potbelly, have body image issues. Changing the clothes worn by such men can have a huge effect on how they look and effectively hide the potbelly. Some men wear male corsets underneath their clothes to help hide the potbelly. If a man is large around the middle, it is recommended to follow certain men's fashion tips on how to dress for a good body appearance and a slimmer look. It is recommended that a person with a potbelly must

select a style of dressing to hide it. A fashion optical illusion is a way to make the potbelly men look taller, slimmer, curvier or masculine. Fashion illusion can help form the body shape of men affected by potbelly [24]. It has been observed recently that those optical illusions are being introduced into clothing and fabrics used in fashion design. Many fashion designers use the colours and styles on their designs to provide fashion illusions. Changes in people's lifestyles are shaping fashion design. Some designers and brands have been designing to make the body form look slimmer through optical illusion effects. Colour contrasts and vertical contrast panels have helped to generate fashion illusion effects [25].

Layering is another great way of making a pot-bellied man look slimmer if they are not bulky. This could be combined with choosing similar dark colours for the dress to have an even more slimming effect. You can wear a dark colour shirt or top with trousers and wear a different colour of blazer or jacket over it. You combine the layering with the dark similar colours. It is advisable to wear only long-sleeved shirts since they create a more proportioned look on the body. Sleeveless or short-sleeved shirts draw more attention to the potbelly. Stripes can have a big effect. Horizontal stripes are absolute no go. Vertical stripes (although not too wide) do help because they will stretch out the look of your body. Diagonal lines will certainly draw attention to your belly like the horizontal ones because of the widening impact. A great tip is the use of Pinstripe shirts as they can be more slimming. Team these with dark colour trousers. Small prints (not too small) that are spaced wide apart will also make you appear slimmer. Vests are another great method to conceal your man's gut. According to Ağaç and Sakarya, a fashion designer must use good design concepts and optical illusions to create garments that are well-fitting and attractive [18]. As further indicated, fashion optical illusions can be achieved by the following:

- a. Vertical lines: They have a slimming effect on the body wherever they are placed. The closer they are spaced together the slimmer the individual will look.
- b. Horizontal lines: They make the individual look wider, especially when placed at a wider part of the body.
- c. Diagonal lines: they are very slimming and, like vertical lines, no matter where they are placed on the body, they will slim that area.
- d. Divergent vs. lines that convergent: It is one of the easiest dressing tricks for persons with large thighs as it suggests a wider neckline because of the counterbalance that is created between the top half and lower half of the body.

Cartner-Morley has it that two things matter about optical-illusion dresses [26]. First, they are designed to make the individual look slimmer, and secondly – and just as importantly, optical-illusion dresses imitate hourglass-shaped panels. In fashion, the desire to look thin is a major concern for most people. The fashion industry glorifies extreme thinness while being fat is not seen as





Table 2. Concept one.

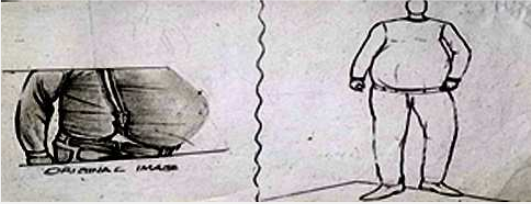
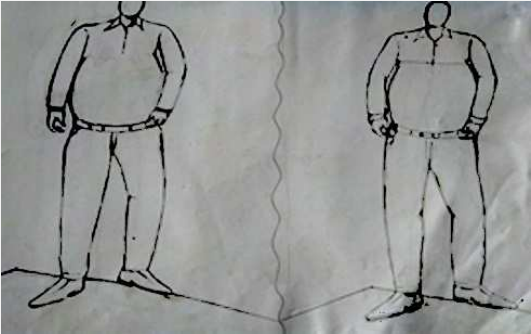
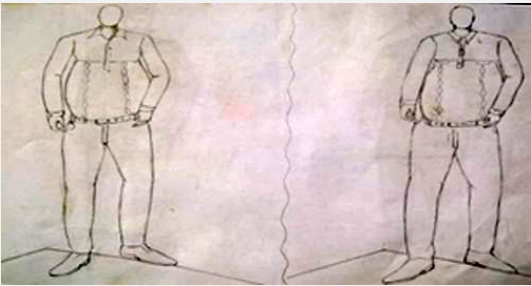
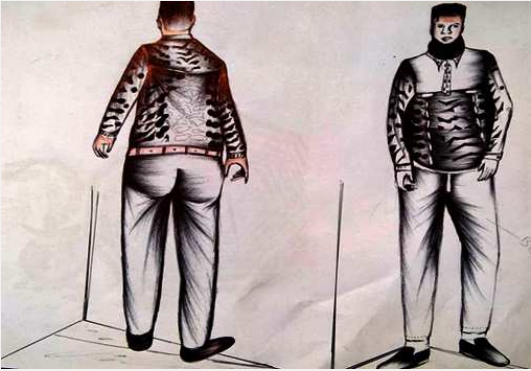
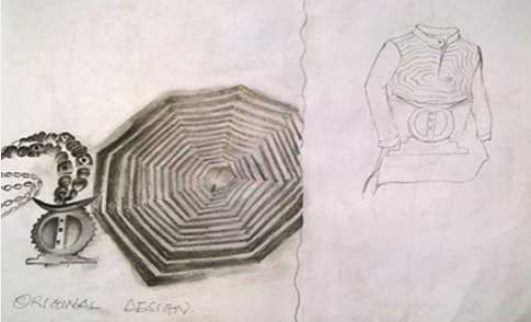
Stage	Sketch
1	
2	
3	
4	

Table 3. Concept two.

Stage	Sketch
1	

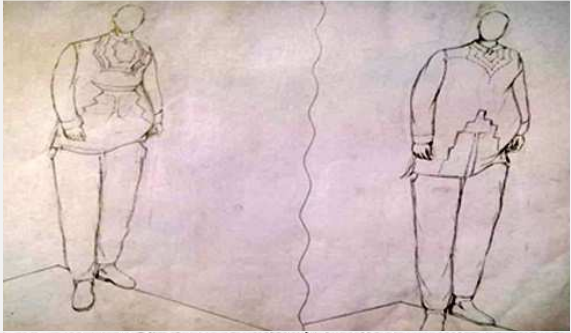
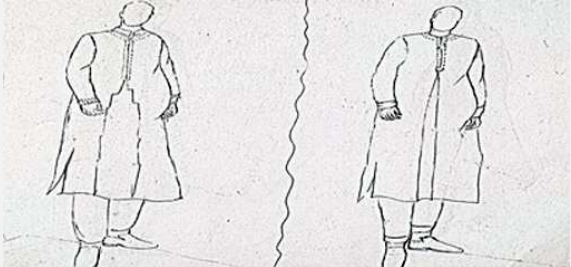

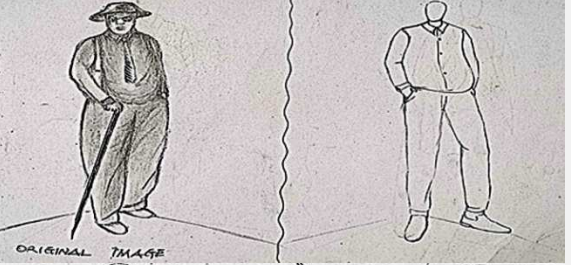
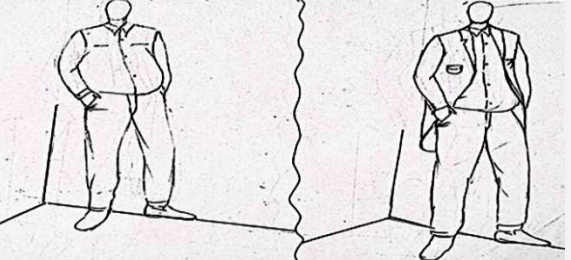
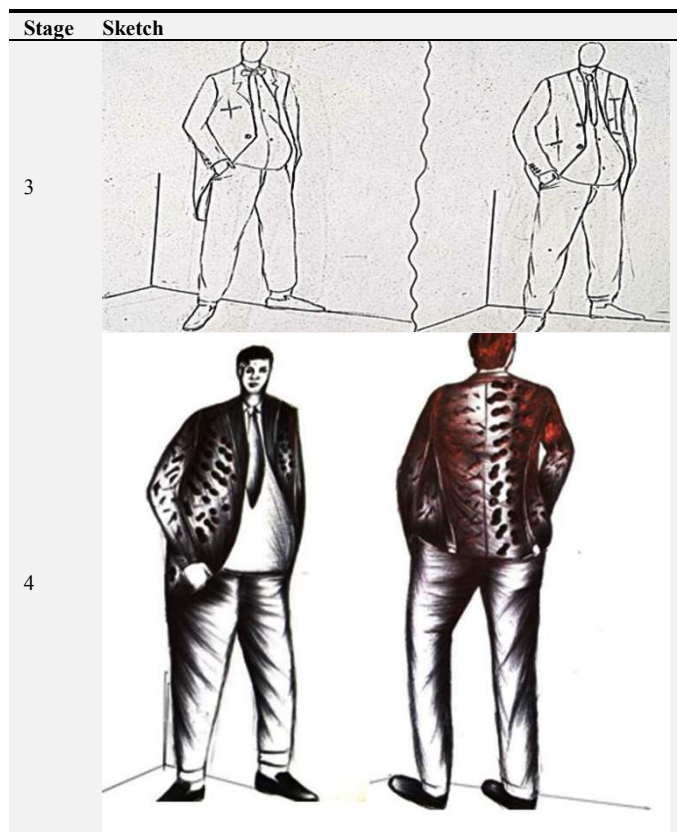
Stage	Sketch
2	
3	
4	

Table 4. Concept Three.

Stage	Sketch
1	
2	



### 2.3. Production of the Conceptual Outfits

After establishing the conceptual garment designs, the actual garments which have the power to hide pot bellies through illusions were produced. This was however preceded by preliminary activities including fabric sourcing, pattern drafting and cutting. Muted 'Woodin' plain and printed fabrics were used. The fabrics were used due to their ability to create illusions. Figure 3 shows the laying and cutting of fabrics as part of the preliminary stages in garment production.



Source: studio work

**Figure 3.** Laying and cutting of fabric.

Four garments were produced as aimed in the study; thus, to design garments that are well-suited for hiding potbelly among working-class men who have concerns about their

body image, social appeal and fitness among the 20- to 30-year-olds compete with.

### 2.4. Presentation

The garments were presented to customers and the general populace through the exhibition. Several comments which sum up to express the acceptance of the concepts by the populace were noted during the exhibition. Figure 4 shows the exhibited garments, the mood board and some matching accessories.



**Figure 4.** Exhibited garments.

## 3. Result and Discursions

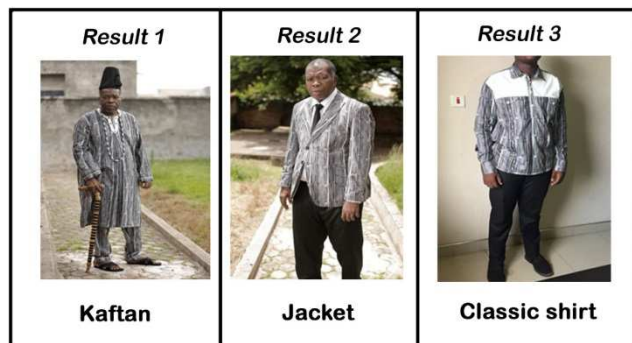
Potbelly results when weak abdominal muscles bulge outward, giving the appearance of a bulging belly. Where potbelly occurs, the affected men are seen as not having attractive shapes or figures it also makes it difficult for them to have the right choice of the garment to fit their shape. Men who have potbelly could have a negative view of their image and feel not accepted by society [29]. The researchers made personal observations of Banks, Universities and Market centres to ascertain the accessibilities with people with Potbellies.

The researchers engaged 100 pot-bellied men between the ages of 35-55. The information gathered showed that most pot-bellied men are concerned and are not happy about their condition but find it difficult to work towards reducing it. After interacting with the respondents, it was realized that 25 had past records of potbelly in their family, which was concluded to be hereditary. Among these respondents, the most affected ones were the aged (50-55) due to their inability to engage in frequent exercises. Seventy-five (75) of the respondents had no family records of pot belly. Bad eating habits and lack of proper resting were therefore figured to be some contributing factors to potbelly among those respondents. Lecturers and bankers among the respondents for instance expressed how busy their work schedule is, which adversely affect their way of eating, choice of food and resting time.

After a thorough assessment of these men, it was realised that, although they detest the condition, they find themselves



in, they had no option but to embrace their fate and carry out their daily activities. This observation informed the designers to design garments that can boost the confidence, attractiveness, and social appeal of potbelly men with illusion creation concepts in fashion design. Figure 5 shows the results of the studio research.



Source: Studio practice

**Figure 5.** Results of the studio practice.

Literature, observation, and personal communication for the project showed that pot belly is a major problem among men who are concerned about their looks and social appeal. This concern inspired the collection of relevant qualitative data to ascertain the characteristics of the affected men [30]. Through the information obtained, the degree to which the potbelly phenomenon negatively affected working-class men of 35 – 55 years old in the Subin, Asokwa and Oforikrom sub metros of the Kumasi Municipality in the Ashanti region of Ghana were determined.

SA standardized manner of data collection was used to test the research hypothesis or to respond to the research questions by designing garments specifically for potbelly men [31]. Fashion illusion concepts were then incorporated into designing and constructing the garments for men with pot bellies. The qualitative empirical approach can help generate information for systematically planning and executing projects to the satisfaction of the clients who in this case are the potbelly men [32]. Potbelly negatively affected the self-esteem and happiness of men resulting in low self-esteem, self-confidence, and reduced happiness among men. Rahmani, Varkaneh, Yekaninejad and Dorostymotlagh also observed that people with generalized obesity including potbelly had a higher risk of having lower self-esteem [14]. They also suffer from emotional, psycho-social, physical and health issues due to their relatively 'unattractive' physique as was observed among Ghanaian men by the Centers for Diseases Control of the USA [12]. Based on this information, fashion illusion techniques were applied to design and produce fashionable garments that also hide pot belly in men. The garments produced had the desired effect of visually minimizing the potbelly among the affected men through fashion illusion. This made them feel better about themselves. They became more confident in public regardless of their profession or age. They also felt less lonely and less awkward in society thus giving the necessary confidence

better interact and socialize with people.

This observation is consistent with a finding that poor body image and possession of potbelly has a negative effect on self-esteem, self-confidence and societal acceptance [13]. Hiding pot belly by fashion illusion will therefore make men feel better about themselves. The fashion illusion garments created succeeded in incorporating all the style and garment design features that will make pot belly men fit better in the society as was also identified by [15]. Incorporating fashion illusion enhanced the elegance and social appeal of potbelly men who otherwise were not happy about their look and appearance. It is commonly believed that employing fashion illusion in garment design and construction for potbelly men will give them a more positive outlook and enhance their appearance and productivity. This is in line with the accession that a garment's style, fit, colour and design can enhance the personality and wellness of the individual [1]. With over 82 per cent of men reportedly feeling stressed about their lack of impressive body figures, instituting corrective measures through incorporating fashion illusion in the garment produces a positive impact on potbelly men. The perception that potbelly connotes wealth have changed among Africans in general and in Ghanaians specifically due to an increase in health consciousness and the desire to live a Lifestyle of Health and Sustainability [12, 33].

Fashion illusion applied to the design and construction of garments for men could draw attention away from the parts of the body that the target group were not pleased with, which is the potbelly, and at the same time direct attention to the other parts of the body potbelly man is confident to accentuate [34]. The combination of lines, fabric choice, fashion illusion and perfect sewing made the garments well-fitting to the desired taste and style that made pot belly men look elegant and attractive to themselves and others. It also made them look fashionable with an enhanced image of themselves and from society in general. In the Tower, confidence and happiness felt by the potbelly men through the fashion illusion design concept integrated into their garments could be the result of the release of the hormone dopamine. Modern fashion designers believe that dressing in a particularly exciting fashion increases dopamine neurotransmitter hormone levels in the brain which directly increases happiness in the wearer of the garment. Dopamine released into the brain gives the same boosting effect that results from the use of certain drugs [35]. The garments were modelled as a modification of the Casual Chic Style which "is an elegant style with clothes chosen mostly in black, white, and neutral colours. The whole look is very classy." It also fuses the Ethnic Fashion Style which "refers to clothing adopted completely or partially from traditional costumes. This style also proposes happiness and pleasure through the Dopamine dressing effect [36].

## 4. Conclusion

Appropriate design, shape, fabric and style help to create garments with fashion illusion effects. Fashion illusion garments have a successful potbelly and other body



imperfections in working-class men. It gives them high self-esteem, elegance and attractiveness to improve their body image, confidence, happiness and social appeal. Fashion illusion garments take attention away from areas of the body that one is conscious of and at the same time enhance the areas that one is confident to show. The use of local fabric has proved the potential of the Ghanaian fashion industry to make the best out of materials available locally to create garments with the desired positive effect of incorporating fashion illusion, which is one of the techniques that aids in solving figure problems.

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