# THE PSYCHOLOGY OF CLOTHING: Meaning of Colors, Body Image and Gender Expression in Fashion

## **Duje KODŽOMAN**

University of Zagreb, Faculty of Textile Technology, Zagreb, Croatia dkodzoman@ttf.hr

Scientific review UDC 391:159.937

DOI: 10.31881/TLR.2019.22

Received 16 December 2018; Accepted 14 February 2019; Published Online 20 February 2019

#### **ABSTRACT**

We select clothes that we're purchasing and wearing according to the meaning we believe them to have, or the messages we believe them to send. But what are psychological consequences of clothing, and how does clothing express something about the user? To assess the state of knowledge about the communicative nature of fashion, the aim of this review was to provide a concise and succinct literature overview of over twenty empirical studies of the above-mentioned concept. The psychology behind clothing is classified into 3 thematic categories in this paper: a) the meaning of colors in clothing psychology; b) the socio-psycological impact of clothing; and c) gender (in)equality regarding clothing. Finally the last chapter brings a concise study of a few recent fashion shows, brands and trends. It is doubtless that both clothing and appearance serve as an important socializing influence and a form of communication.

#### **KEYWORDS**

Clothing, psychology of clothing, social interface, fashion communication

#### INTRODUCTION

In early civilizations, the key purpose of clothing was to keep us warm and relatively dry. In the 21st century we should be aware that protection is only one function of clothing (along with identification, modesty, status and adornment). This means that clothing allows people to be recognized as members of a specific group; it covers the body in a proper way; shows position or rank within a group; and it helps people express their uniqueness and creativity.

In many societies, dress sense embodies personal wealth and taste, and this was specially noticeable in the past. George Taylor demonstrated this most vividly with the Hemline Index – a theory presented in 1926. Taylor noted that as a country enters recession, women often show a preference towards longer dresses. On the other hand during times of prosperity, the opposite result can be seen – hemlines (the level of the lower edge of a garment such as a skirt, dress or coat) often become shorter [1].

Our dress sense is quite important to our reputation, because the clothes we wear send powerful signals to our peers and strangers, projecting the self image of us that we want to display. Any artefact placed on the body takes on social meaning in relation to its wearer [2]. Clothing serves an important socializing influence and acts as a symbol of social status and identity [3]. It also plays a crucial role in the identity politics of urban societies.

From the perspective of fashion, clothing is our first social interface. Clothing functions as an important and necessary social tool that interfaces our bodies with society [4]. Through clothing we inform others of our personal and collective affinities. Clothing can signal many aspects of a person's social identity including socio-economic status, gender, religion, and occupation. Doctors, nurses, soldiers, police and military men, postmen, judges, priests (...) are all identified and called upon by their attire.

As soon as clothes are put on the body, they can influence one's mood [5]. It has been documented that individuals reinforce their mood and express their feelings through their clothing [6]. Also, clothing reflects the self — the identity, the material practice we engage with in daily life [7,8]. One's wardrobe is known to be an extension of the diverse aspects of one's beliefs and constructs social identity [9,8].

To understand what fashion communicates via person perception, it is important to consider the content of person perceptions. This topic has been studied in the context of general person perceptions, not necessarily those conveyed by fashion [10]. This paper examines and reviews an interdisciplinary, conceptual framework – study of clothing behavior, based upon a synthesis concepts from cognitive social psychology and symbolic interactionism. However, complexity in terms of the interdisciplinary nature of this area is not shown in detail in this review.

#### **REVIEW OF LITERATURE**

## The Meaning of Colors in Clothing Psychology

Color is critical to creating attractiveness or unattractiveness. In today's society both genders use color to enhance their visual and aesthetic appearance. The use of color has become an important expression of who we are, how we feel and what we believe.

From the Renaissance period, the color of clothing became more important. Certain colors were only to be worn by the upper classes and royals. Medieval Europeans developed sumptuary laws that allowed only the nobility to wear costly colors such as purple that was extracted from Mediterranean seashells [11]. These defined those who could wear certain colors, the amount of color allowed and when the color could be worn [12]. The color developed deep symbolic meaning indicating the individuals' cultural learning, place in the social hierarchy and economic status [13].

Color is a critical cue for sexual signaling, but what the preferred colors actually are in humans, is difficult to predict. Human vision and perception contributes to how a color appears to the individual. Perception is unique to each individual and is constantly changing due to the influence of a range of variables. No two people see color or experience its effects in the same way, so color provokes different responses according to various situations. The use of color is important in improving one's aesthetic character. Women choose those colors that they perceive to be more "seductive"[14].

Many studies have been carried out on color preference phenomena, in which the aim was towards determining population preferences. Jastrow carried out one of the earlier documented studies of color preferences, in 1893, at the World's Columbian Exposition in Chicago. 4556 visitors were asked to vote for their single favorite color out of a set of 12 paper rectangles varying in their color. The more preferred colors were blue, red, light blue and blue-violet. The less popular colors were orange, yellow-orange, and red-orange [15]. In a study by Guilford [16], the results showed that greens and blues were preferred while yellow and yellow-green were the least favored colors. Lind conducted a study on 138 university students to determine any preference in clothing colors. Purple-blue and blue clothing colors were preferred and the least preferred clothing colors were yellow-red and green-yellow [17].

Roberts, Owen & Havlicek [18] investigated attractiveness judgments of both sexes by contrasting attributions based on six different colors. They took digital photographs of ten male and ten female participants while wearing t-shirts of six different colors: red, black, blue, green, yellow and white. Analyses confirmed significant effects of color in both comparisons. Raters awarded highest scores to images in which targets wore red or black. They found that clothing color affects ratings of attractiveness. Their results showed that females are influenced by clothing color in judgments of male attractiveness, and that they are thus sensitive to color cues in social contexts. It has been suggested that such functional responses to color, particularly to the color red, may also influence perception of individuals when they wear different colored clothing (for a review, see [17]). Wearing red is associated with success in both individual combat [19] and team sports [20], and in multiplayer computer games [21].

Frank & Gilovich [22] showed that an individual's behaviour can be influenced by the colour of their clothing only. In their experiment they manipulated the colour of the subjects' uniforms (black or white). Results showed that subjects who wore black uniforms were more aggressive than their white counterparts. Adams & Osgood [23] concluded that black is seen, in almost all cultures, as the colour of evil and death. Vrij [24] conducted two experiments to investigate the impact of black clothing on impression formation. Results revealed that black clothing evokes negative impressions. Offenders and suspects made a more aggressive impression when they wore black clothing than when they wore light clothing. Moreover, the offender dressed in black evoked the most irritation, and the suspect dressed in black made the most guilty impression. Of course it would be premature and hasty to conclude that black clothing would evoke negative impressions in all circumstances. However, previous mentioned findings strengthen Frank and Gilovich's [23] conclusion that black clothing is likely to evoke negative impressions in situations that possess elements of competition, confrontation and physical aggression.

The psychological impact of clothing color is noticeable also in animals. Putman [25] quantified the effects of four T-shirt colors on flight initiation distances (FID) and on the ease of capture in western fence lizards (Sceloporus occidentalis). The research was based on the assumption that animals will have the greatest tolerance to the color of a T-shirt that is their sexually appealing color. T-shirts that were used in this study were dark blue, blue, gray and red. Quantitatively, the two blue T-shirts (dark blue and blue) resemble more to the lizards' throat and abdominal patches. Reduced escape occurred most often under the dark blue treatment, facilitated easy capture of lizards, and suggests that they might have a preferential bias toward this color [26].

The color, style and texture of personal aesthetics express a position with respect to gender, ethnicity, race, class, nationality, religion, sexuality, and age. People use color to express their social identity, hierarchy, emotions, political leanings, personal identity, self-image, and aesthetic tastes [12,27,28,]. Clothing color conveys values, attitudes, personalities, and tendencies towards conformity or individuality [27].

## The Socio-psycological Impact of Clothing

An individual's body image play an important role in clothing preferences and attitudes [29]. Clothing is an extended dimension of one's bodily self [30] and is used to change the appearance of the body [31]. Reed [32] found that an individual's clothing style is influenced by aspects of selfconcept such as identity, value, attitude, and mood. Sontag and Lee [33] recognized the importance of body image in relation to clothing and included a body image dimension in the Proximity of Clothing to Self scale. They stated that body image may affect clothing behavior and clothing may affect body image and self-feelings. Thus, how we perceive our bodies can affect how we use clothing.

Research using clothing as a variable has indicated that discordance between attire and verbal message [34] or between attire and role/stereotype [35,36,37] can result in less positive judgments by a perceiver. Thus from a cognitive approach, clothing or other appearance cues are viewed as stimuli that may be selected by a perceiver in order to undertstand an observed person.

Formal clothing is often worn to follow norms [38]. Wearing formal clothing is associated with perceptions of more professionalism but also less approachability [39,40]. Wearing formal clothing is related to psychological formality and social distance, whereas casual clothing is related to intimacy and familiarity. People who wear formal clothes describe themselves as more competent and rational [38]. As formal clothing is associated with enhanced social distance, Slepian proposes that wearing formal clothing will enhance abstract cognitive processing.

Gurney et al. [41] confirmed that competency ratings of individuals vary by their posture [42,43,44] and their attire [45,46]. In their study they also confirmed an interaction effect of posture and clothing by showing that perceptions of people in different attire can be altered by the posture they adopt while wearing it. They report that both men and women benefit from dressing smartly and adopting a neutral posture when doing so.

Howlett et al. [47] coducted a study by photographing models in realistic settings and by manipulating an additional independent variable — a camisole. In their study of subtle clothing changes, participants rated women as less competent when their blouses were unbuttoned as compared to buttoned. Women who appear "sexy" are judged as less competent, less intelligent, and less moral than those who dress "appropriately" [48,49]. Their research shows that women in provocative clothing are rated as less competent. Whereas it is clear that dressing provocatively can indeed have negative consequences, these findings suggest that the right combination of clothing can also project power.

Women's use of high-heeled shoes is a prevalent phenomenon in both developing and modernized societies [50,51]. In the United States alone, over \$8,000,000,000 is spent annually on high-fashion footwear [52]. However, despite the widespread prevalence of high heels, the reasons why women wear high heels are not well understood. Lewis et al. [53] study provides evidence of high-heeled shoes' concurrent effects on women's lumbar curvature and attractiveness, and reveal a precise, lumbar curvature-dependent effect of high heels on women's attractiveness. This study along with some other studies that employed distinct methods shows that when women wear high heels, their lumbar curvature increased and they were perceived as more attractive.

One very visible component of police identity is the police uniform. Previous studies have shown that police uniforms can induce feelings of safety in those around the uniformed person [54]. Other research show that uniforms are associated with the perception of increased competence, reliability, intelligence, helpfulness, status, and authority [55,56,57,58]. Civile & Obhi [59] investigated the question of whether the police uniform itself might induce a bias in social attention. Their results demonstrate that wearing a police-style uniform may induce a kind of "status-profiling" in which individuals from low-status groups become salient and capture attention.

Individuals have been found to be more aggressive when wearing a black sports kit [24] or a hood and cap [60], while women are less aggressive when wearing a nurse's uniform [61]. These observations can be explained through the concept of enclothed cognition, a term proposed by Adam & Galinsky [62]. Enclothed cognition is the phenomenon of people adopting the traits and properties they associate with the clothes they wear. Forsythe [63] found that participants judged women to be more forceful in job interviews and were more likely to recommend them for hiring when they were dressed in a more masculine style (a navy suit) compared with a more feminine style (a beige dress).

## **Gender (In)equality Regarding Clothing**

Many studies on fashion and clothing for older people have considered only female participants. Studies on men's fashion are typically limited, and those on fashion for older men are even more so, because fashion and clothing are culturally considered to be feminised. However, additional studies on menswear clothing and modern masculinity have indicated that men should be studied as a part of fashion [64,65]. Modern men of all ages are at present more interested in fashion, and studies on menswear should be viewed in a more positive light as those concerning womenswear [66].

Contrary to commonly held beliefs, men have been shown to be often more self-conscious than females with regards to their personal dress sense and the way in which they are viewed in public [67]. Therefore, we need to understand the significance of clothing choices regardless of our gender. Whether you are male or female, your fashion choices can affect both your self image, the impression that you convey to others and in turn, the way in which people behave towards you. They can influence everything from the outcome of a sports match [19], to an interviewer's impression of your ability to perform effectively in a job position [63]. Chowdhary [68] and Spruiell & Jernigan [69] have found that both older men and women are attracted to stylish clothing that fits them well, makes them feel well-dressed, and looks current. Fit and price are major attributes for garment purchases by older people [70]. Holmlund et al. [71] indicated that older women prefer fabrics with good quality, good finish, a loose and comfortable fit, an elastic band in the waistline, natural fibres, elasticity, and suitability for their shape as well as breathable fabrics.

Study by Au, Lam & Ho [72] examines the psychological dimensions of older men and women in terms of fashion involvement and clothing needs, design preferences, and views and experiences when choosing fashion in Hong Kong. Older men had a significantly lower preference for certain eye-catching vibrant colours, but they welcomed subtle colours such as black, white, and blue. Older women tended to look for multiple functions in fashion, they were not concerned with being noticeable, because they preferred red and warm colours over dull colours such as black and white. Older males were more concerned with comfort compared with older women. Regarding the experience of older people making fashion choices, older women exhibited significantly more difficulties buying clothes because of a changing body figure, and experienced a stronger need for a new size specification for fashion compared with older men.

The clothing style of each professional has an important impact on presentation, credibility and appearance. Hartmans et al. [73] conducted a study whose aim was to investigate the influence of the general practitioners attire on the confidence that patients have in their practicioner as a medical expert. Participants completed a survey after seeing images of six models of three different age categories (25-35 / 35-50 />50), each in five different clothing styles (leisure clothing, casual, semiformal, formal and professional). The study found that patients have the most confidence in a female doctor wearing a white coat, and the age of the female doctor did not affect this preference. As regards the male doctor, there was a preference for semi formal attire: in both the younger doctor, as the middle-aged doctor. This study showed a clear influence of the GP's attire on the patient's confidence in the GP as a medical expert. The gender of the physician played a role: patients had most confidence in a female GP when she wore a white coat, while the male young and middle-aged practitioner was trusted when presenting in semiformal attire.

Through an analysis of awards, canons, and evaluative discourses, Stokes [74] article has shown how gender and sexuality shape symbolic success in fashion design. Gay male designers receive more prestigious awards and their names appear more often in elite design canons. Stokes study analyzed canonizing lists of elite designers and award recipients, and conducted a qualitative content analysis of 157 entries in Voguepedia (a canon of elite designers) and 96 articles from broader fashion media. Stokes found that men, most of whom are publicly identified as gay, are canonized and awarded more than women, and that commonly used discourses of value and legitimacy construct a gendered image of the ideal cultural producer.

## The Psychology of Clothing as Shown by Most Influential Fashion Brands Today

Insights from psychology suggest that our feelings and identities may have a great influence on which brands we choose. Psychology concepts that might explain what makes us love brands are emotional decisionmaking and identity formation [27]. What we choose to wear, has become a statement, and fashion has become all about the alter ego – who do I want to be today.

Every quarter, fashion search platform Lyst analyses the behaviour of more than five million online shoppers to determine the most influential brands and products. Lyst takes into account data from its own search engine and Google, as well as engagement statistics, conversion rates and sales worldwide to form its quarterly Index. In the second quarter of 2018 Gucci reclaimed the top spot on the list, while Vetemants took sixth place. In the same data report Supreme's logo has been voted the most powerful in the world. It's not a suprise these brands show up at the top of the list, since they are reflecting modern society and tackling it's issues concerning gender, age and social status (aforementioned and discussed concepts) in their own "true to brand" way which results in unique and genuine identity.

Gosha Rubchinskiy, Demna Gvasalia, Vejas Kruszewski, to name but a few, make the kind of clothes many would call "ugly", but fashion houses seem to appreciate them. Gosha Rubchinskiy has become the face of a new generation of Russian youth and a global fashion phenomenon. His aesthetics takes influence and inspiration from the fall of the Iron Curtain, Russian street, and youth culture of his home country. With Gosha Rubchinskiy fashion stopped showing only a highly luxurious and flashy image of itself. Suddenly aesthetic standards have changed. For him glamour is a parody. His garments are everywhere from highend boutiques to street style galleries. Rubchinskiy's collections bring something to the fashion-streetwear



Figure 1. Gosha Rubchinskiy Spring/Summer 2018 Collection

Source: https://fgukmagazine.com/wp-content/uploads/2018/01/gosha-rubchinskiy-spring-summer-2018-lookbook-4.jpg

genre that we've never seen before, and it is indisputable that his approach to fashion is different from the ones we are used to. All his models are chosen on street casting. His shows are held in alternative locations such as the Orthodox Church, the basketball court, bus station... For several seasons, he collaborates with a Moscow musician who performs under pseudonym Buttechno. Every season he creates a different sound depending on the mood and atmosphere of Rubchinskiy's collection. Comme des Garçons distributes his collections at Dover Street Market in London, and his collections routinely sell out - for example Spring/Summer 2016 Collection was sold out within two days. The production is led by Comme des Garçons, which makes Rubchinskiy able to produce the highest quality jackets and the finest knitwear, but he does not want it. He chooses to produce and sell sportswear with allusions of Russia. While it is possible to ask what are the elements that stand out Gosha from other designers, and how can we justify and explain the hype for his clothing, it should be clear that street clothing always carries a certain message and Rubchinskiy knows this well.

Demna Gvasalia is another Russian designer who is shaping global fashion industry at the moment. He is founder of Vetements – the French fashion house, created by the collective of 16 designers, that today is among the most lauded labels around. At first glance, Vetements looks like the rare example of an overnight success story in fashion. Demna Gvasalia – the seemingly public face of the brand studied at the Royal Academy of Art in Antwerp and worked as senior womenswear designer for Maison Martin Margiela. Currently he is the creative director at French luxury house Balenciaga. The essence of Balenciaga has always been about forward-thinking, and that's in a way what Demna has done, especially through a continuation and a development of the aesthetic he has coined within Vetements. Vetements is a recent fashion phenomenon; their research largely consists out of information from the Internet – a lot is directly pulled from social media like Facebook, and there is lots of sociological research involved. Vetements streetwear feels revolutionary because it is democratising and open. Reviewers for some venerated publications -Vogue, The Times, Washington Post – have declared Vetements the house to breathe new life into fashion. Luxury vendors who stock the collection - Net-A-Porter, Browns Fashion, Matches and so forth - indicate that it sells very well. With items like an \$885 Leo DiCaprio hoodie and deconstructed jeans in the \$1000plus range, the brand manages to sell out of inventory each season. They sell DHL T-shirts for \$330 while it is possiblle to request one from the de facto delivery service for \$14.99.



Figure 2. Collaborative fashion item from DHL X Umbro

Source: https://inmotion.adrivo.com/images/870/uploads/content/2017/03\_Fashion/vetements-hong-kong-pop-up-18.jpg

A similar approach of the garments production to aforementioned is also noticeable within Supreme. In 1994, Supreme opened as a skate shop in lower Manhattan, and the shop started making T-shirts in small runs; then hoodies and sweaters; then shoes in collaboration with Nike and Clarks, coats with The North Face and Stone Island, hoodies with Comme des Garçons and jeans with A.P.C. Majority of its customers were people in the skateboarding community and young adults. Their initial price range was affordable for the quality of the products they were producing. What drove the prices up was the resell market for skate paraphernalia. Today every time Supreme releases new stuff at its ten stores across Europe, America and Japan (which is every Thursday from the start of each collection) hundreds of people skip school or work to get first dibs. They release limited amounts of new collections and designs at specific timings. After the drop is done and the items are sold out, the items are never restocked and thus gone forever. What makes people want to buy Supreme is the competitive, social aspect – to be able to go out in public and feel like you're less likely to be wearing clothes that everyone else is wearing. When the Louis Vuitton X Supreme collab dropped, people queued for days to get in and bought as many as they were allowed. Most of the people in line are there simply to resell the items. Despite all this craziness, the demand for Supreme products is still there and it's not looking to slow down anytime soon.



Figure 3. Supreme Fall/Winter 2017 Collection Source: https://1.bp.blogspot.com/-qS2CuuNjOds/WZGXETmKzQI/AAAAAAAAAk/6B93tGf]Btk4r8IkSJuij3jk5KJsWYeQCLcBGAs/s1600/header.jpg

Alessandro Michele, Gucci's creative director since January 2015, has been the key to giving Gucci a strong new identity, and its bright, elaborate looks have expanded the brand's following particularly among younger customers. Michele entirely redefined what Gucci could represent, working in the very contemporary idiom of eclecticism with a vintage approach, along with accessories that he likens to the relics of saints. He is using vintage pieces as inspirational starting points, and many prints are taken from antique textiles. The flora and fauna motifs, along with the sense of handicraft are what he tries to weave into all his collections. The brand, the biggest in French luxury group Kering, has been revamped with a new style over the past two years under Michele. A/W18 collection staged his show in a brutal, overlit surgical theatre. One model sprouted sheep horns, another carried a baby dragon, and another, most alarmingly, toted a "human" head.



Figure 4. Gucci Fall/Winter 2018/2019 Collection

Source: https://1.bp.blogspot.com/-JjEepKwKBgY/WpJaDXCeeoI/AAAAAAABogI/4nAeYRRCB9ARzSMnENy\_0iphtQ14oFWwg CLcBGAs/s1600/Gucci\_Collage\_Fotor\_Collage\_2.jpg

### CONCLUSION

Clothing serves many purposes: it protects the wearer from the elements by enhancing safety; it protects by providing a barrier between the skin and the environment; it can insulate against cold or hot conditions; it can provide a hygienic barrier... Wearing clothes is also a social norm. It may also function as a form of adornment and an expression of personal taste or style... Finally, it is possible to conclude that clothing expresses a lot about the user. However, it is intuitive to think of clothing as mere covering, or the means by which we project our image to other people, beacuse clothes can influence ourselves too.

An array of psychological surveys that have been reviewed in this article have revealed the true impact of clothing choices on the way in which we perceive and judge each other and ourselves. The research method underlying data processing in this paper implies a systematic and analytical review of the literature concerning the psychology of clothing. The databases that were searched are mainly journals and magazines (60), books (17) and conference papers (2). The period involved in the analysis is the period from 1959 to 2018. A statistical method was based on the principle of impartial presentation of the collected published data. This review has attempted to define and explain the nature of the psychology behind clothing. In order to do this, it has had to investigate meaning and communication and explain what sort of meaning fashion has and what sort of communication it can accomplish. Meaning and communication have been explained in terms of colors in clothing psychology, the socio-psycological impact of clothing, and gender (in) equality regarding clothing. Color is critical to creating attractiveness or unattractiveness. It is also a critical cue for sexual signaling. In today's society both genders use color to enhance their visual and aesthetic appearance. The use of color has become an important communication tool. People use clothing color to express of who they are, how they feel and what they believe; to express their social identity, emotions, self-image, and esthetic tastes. Since fashion and clothing are culturally considered to be feminised, studies on men's

fashion are limited. The days when skirts were just for women and trousers were just for men are gone long time ago, gender no longer dictates the way people dress. It is important that we understand the significance of clothing choices regardless of gender, since clothing is influenced by our identity, attitude, and mood. Whether you are male or female, your fashion choices can affect both self image, and the way in which people behave towards you.

This article provided an overview of the development of interdisciplinary field of fashion design and psychology, it clarified the role that clothing has in psychological and sociological practice, and finally it provided a comprehensive list of theoretical approaches that show how clothing choices affect, reflect and express something about the user and ourselves.

#### **REFERENCES**

- [1] Gilbert D. The Looks of Austerity: Fashions for Hard Times. Fashion Theory [internet]. 2017;21(4):477-499. Available from: https://www.tandfonline.com/doi/full/10.1080/1362704X.2017.1316057
- [2] Dunne L. Smart clothing in practice: Key design barriers to commercialization. Fashion Practice. 2010;2(1):41-66.
- [3] Kaiser S, Chandler J, Hammidi T. Minding appearances in female academic culture. In: Guy A, Green E, Bannin M, ed. Through the Wardrobe. Oxford: Berg; 2001. p. 117-136.
- [4] Barnard M. Fashion Theory: An Introduction. London: Routledge; 2014.
- [5] Tiggemann M, Lacey C. Shopping for clothes: Body satisfaction, appearance investment, and functions of clothing among female shoppers. Body Image. 2009;6:285-291.
- [6] Sullivan CR, Kazlauciunas A, Guthrie JT. Colored Apparel Relevance to Attraction in Humans. Journal of Fashion Technology & Textile Engineering. 2017; 5(3):1-12.
- [7] Lynch A. Expanding the definition of provocative dress: an examination of female flashing behavior on a college campus. Clothing Textiles Res. J. 2007;25:184-201.
- [8] Woodward S. Why Women Wear What they Wear (Materializing Culture). London: Bloomsbury Publishing; 2008.
- [9] Hill A. People dress so badly nowadays: fashion and late modernity. In: Breward C, Evans C, ed. Fashion and Modernity. Oxford: Berg; 2005. p. 66-77.
- [10] Burns LD, Lennon SJ. Effect of Clothing on the Use of Person Information Categories in First Impressions. Clothing and Textiles Research Journal. 1993;12(1):9-15.
- [11] Eckstut J, Eckstut A. The Secret Language of Color: Science, Nature, History, Culture, Beauty of Red, Orange, Yellow, Green, Blue and Violet. New York: Black Dog and Leventhal Publishers; 2013.
- [12] Faerm S. Fashion: design course. Hauppauge: Barron's; 2010.
- [13] Brannon E. Fashion forecasting. New York: Fairchild Books; 2010.
- [14] Cash TF, Dawson K, Davis P, Bowen M, Galumbeck C. Effects of cosmetics use on the physical attractiveness and body image of American college women. Journal of Social Psychology. 1989;129,349-355.
- [15] Hurlbert A, Ling Y. Understanding colour perception and preference. In: Best J, ed. Colour Design: Theories and Applications. Oxford: Woodhead Publishing Series in Textiles; 2012. p.129-157. [16] Guilford JP. A system of color-preference. The American Journal of Psychology. 1959;72: 487-502.
- [17] Elliot AJ, Niesta D. Romantic red: red enhances men's attraction to women. Journal of Personality and Social Psychology. 2008;95:1150-1164.
- [18] Roberts SC, Owen RC, Havlicek J. Distinguishing between perceiver and wearer effects in clothing colorassociated attributions. Evolutionary Psychology. 2010;8(3):350-364.

- [19] Hill RA, Barton RA. Psychology: red enhances human performance in contests. Nature. 2005;435 (7040):293.
- [20] Attrill MJ, Gresty KA, Hill RA, Barton RA. Red shirt colour is associated with long-term team success in English football. Journal of Sports Sciences. 2008;26:577-582.
- [21] Ilie A, Ioan S, Zagrean L, Moldovan M. Better to be red than blue in virtual competition. Cyberpsychology and Behavior. 2008;11:375-377.
- [22] Frank MG, Gilovich T. The dark side of self- and social perception: black uniforms and aggression in professional sports. Journal of Personality and Social Psychology. 1988;54: 74-85.
- [23] Adams FM, Osgood CE. A cross-cultural study of the aective meaning of color. Journal of Cross-Cultural Psychology. 1973;4:135-156.
- [24] Vrij A. Wearing Black Clothes: The Impact of Offenders' and Suspects' Clothing on Impression Formation. Applied Cognitive Psychology. 1997;11:47-53.
- [25] Putman BJ, Drury JP, Blumstein DT, Pauly GB. Fear no colors? Observer clothing color influences lizard escape behavior. Plos One. 2017;12(8):1-13.
- [26] Madden JR, Tanner K. Preferences for coloured bower decorations can be explained in a nonsexual context. Animal Behaviour. 2003;65:1077-1083.
- [27] Wolfe MG. Fashion. Tinley Park, USA: Goodheart-Willcox Co; 2012.
- [28] Breward C. Fashion: Oxford history of art. New York: Oxford University Press; 2003.
- [29] Kaiser S. The social psychology of clothing: Symbolic appearances in context (2<sup>nd</sup> ed.). New York: Macmillan; 1990.
- [30] Shim S, Kotsiopulos A, Knoll DS. Body cathexis, clothing attitude, and their relations to clothing and shopping behavior among male consumers. Clothing and Textiles Research Journal. 1991;9,35-44.
- [31] Schilder P. The image and appearance of the human body. New York: International Universities Press; 1950.
- [32] Reed J. Clothing as a symbolic indicator of the self (Unpublished doctoral dissertation). Purdue University, West Lafayette, IN; 1973.
- [33] Sontag MS, Lee J. Proximity of clothing to self-scale. Clothing and Textile Research Journal. 2004;22, 161-177.
- [34] Knox LA, Mancuso JC. Incongruities in self-presentations and judgments about people. Perceptual and Motor Skills. 1981;52:843-852.
- [35] Kerr BA, Dell DM. Perceived interviewer expertness and attractiveness: Effects of interviewer behavior and attire and interview setting. Journal of Counseling Psychology. 1976;23:553-556.
- [36] Giles H, Chavasse W. Communication length as a function of dress style and social status. Perceptual and Motor Skills. 1975;40:961-962.
- [37] Rucker MH, Harrison A, Vanderlip N. Personalization of cover letters in mail surveys: The effects of similarity and consistency of cues on response rates. Paper presented at the meeting of the Western Psychological Association, Sacramento, Calif. 1982
- [38] Slepian ML, Ferber SN, Gold JM, Rutchick AM. The Cognitive Consequences of Formal Clothing. Social psychological and Personality Science. 2015;6(6):661-668.
- [39] Butler S, Roesel K. The influence of dress on students' perceptions of teacher characteristics. Clothing and Textile Research Journal. 1989;7:57-59.
- [40] Lukavsky J, Butler S, Harden AJ. Perceptions of an instructor: Dress and students' characteristics. Perceptual and Motor Skills. 1995;81:231-240.

- [41] Gurney DJ, Howlett N, Pine KJ, Tracey M, Moggridge R. Dressing up posture: The interactive effects of posture and clothing on competency judgements. British Journal of Psychology. 2016; 108(2):436-451.
- [42] Hall JA, Coats EJ, LeBeau LS. Nonverbal behavior and the vertical dimension of social relations: a metaanalysis. Psychological bulletin. 2005;131(6):898-924.
- [43] Murphy NA, Hall JA, Colvin CR. Accurate intelligence assessments in social interactions: Mediators and gender effects. Journal of Personality. 2003;71(3):465-493.
- [44] Weisfeld GE, Beresford JM. Erectness of posture as an indicator of dominance or success in humans. Motivation and Emotion. 1982;6(2):113-131.
- [45] Behling DU, Williams EA. Influence of dress on perception of intelligence and expectations of scholastic achievement. Clothing and Textiles Research Journal. 1991;9(4):1-7.
- [46] Dacy JM, Brodsky SL. Effects of therapist attire and gender. Psychotherapy: Theory, Research, Practice, Training. 1992;29(3):486-490.
- [47] Howlett N, Pine KJ, Cahill N, Orakçıoğlu I, Fletcher BC. Unbuttoned: The interaction between provocativeness of female work attire and occupational status. Sex Roles. 2015;72(3-4):105-116.
- [48] Graff K, Murnen SK, Smolak L. Too sexualized to be taken seriously? Perceptions of a girl in childlike vs. sexualizing clothing. Sex Roles. 2012;66:764-775.
- [49] Murnen SK, Smolak L. I'd rather be a famous fashion model than a famous scientist. The rewards and costs of internalizing sexualization. In Zurbriggen EL, Roberts TA, ed. The sexualization of girls and girlhood: Causes, consequences, and resistance. New York, NY: Oxford University Press; 2013: p. 235-256.
- [50] Miller D. Fashion and ontology in Trinidad. Cultural History. 1990;7:49-77.
- [51] Freeman C. High Tech and High Heels in the Global Economy. Durham, NC: Duke University Press; 1999.
- [52] Rossi WA. The Sex Life of the Foot and Shoe, 2nd Edn. Malabar, FL: Krieger; 1993.
- [53] Lewis DMG. Lumbar curvature: an evolved standard of attractiveness. Paper Presented at the Institute for Social Neuroscience Evolutionary Psychology and Social Neuroscience Symposium, Melbourne, VIC. 2017
- [54] Balkin S, Houlden P. Reducing fear of crime through occupational presence. Criminal Justice and Behavior. 1983;10:13-33.
- [55] Mauro R. The constable's new clothes: effects of uniforms on perceptions and problems of police officers. Journal of Applied Social Psychology. 1984;14:42-56.
- [56] Singer M, Singer A. The effect of Police uniform on interpersonal perception. The Journal of psychology. 1985;119:157-161.
- [57] Lawrence S, Watson M. Getting others to help: the effectiveness of professional uniforms in charitable fund-raising. Journal of Applied Communication Research. 1991;19:170-185.
- [58] Durkin K, Jeffery L. The salience of the uniform in young children's perception of police status. Legal and Criminological Psychology. 2000;5:47-55.
- [59] Civile C, Obhi SS. Students Wearing Police Uniforms Exhibit Biased Attention toward Individuals Wearing Hoodies. Frontiers in Psychology. 2017;8:62.
- [60] Zimbardo PG. The human choice: Individuation, reason, and order versus deindividuation, impulse, and chaos. Nebraska symposium on motivation. 1969:17,237-307.
- [61] Johnson RD, Downing LL. Deindividuation and valence of cues: eects on prosocial and antisocial behavior. Journal of Personality and Social Psychology. 1979;37:1532-1538.

- [62] Adam H, Galinsky AD. Enclothed cognition. Journal of Experimental Social Psychology. 2012;48(4): 918-925.
- [63] Forsythe SM. Effect of Applicant's Clothing on Interviews' Decision to Hire. Journal of Applied Psychology. 1990;20(19):1579-1595.
- [64] Edwards T. Men in the mirror Men's fashion, masculinity and consumer society. London: Cassell; 1997.
- [65] Twigg J. Clothing, age and the body: A critical review. Ageing and Society. 2007;27, 285-305.
- [66] Davies H. Modern menswear. London: Laurence King: 2008.
- [67] Solomon MR, Schopler J. Self-Consciousness and Clothing. Personality and Social Psychology Bulletin. 1982;8(3):508-514.
- [68] Chowdhary U. Self-esteem, age identification and media exposure of the elderly and their relationship to fashionability. Clothing and Textiles Research Journal. 1988;7(1):23-30.
- [69] Spruiell PR, Jernigan M. Clothing preferences of older women: Implications for gerontology and the American clothing industry. Educational Gerontology. 1982;8:485-492.
- [70] Yu W. Subjective assessment of clothing fit. In: Fan J, Yu W, Hunter L (ed.). Clothing appearance and fit: Science and technology. Cambridge, England: Woodhead; 2004; p. 31-42.
- [71] Holmlund M, Hagman A, Polsa P. An exploration of how mature women buy clothing: empirical insights and a model. Journal of Fashion Marketing and Management. 2011;15(1):108-122.
- [72] Au J, Lam J, Ho C. Design preferences and experience of older people's choice in fashion in Hong Kong. International Journal of Fashion Design, Technology and Education. 2016;9(3):183-191.
- [73] Hartmans C, Heremans S, Langrain M, van Asch K, Schoenmakers B. The Doctor's New Clothes: Professional or Fashionable? Primary Health Care. 2014;3(3):1-5.
- [74] Stokes A. The Glass Runway: How Gender and Sexuality Shape the Spotlight in Fashion Design. Gender & Society. 2015;29(2):219-243.
- [75] Benz JJ, Anderson MK, Miller RL. Attributions of Deception in Dating Situations. The Psychological Record. 2005;55:305-314.
- [76] Brown TA, Cash TF, Noles SW. Perceptions of Physical Attractiveness Among College Students: Selected Determinants and Methodological Matters. Journal of Social Psychology. 1986;126(3):305-316.
- [77] Butler S, Roesel K. Students' perceptions of male teachers: The effects of teachers' dress and students' characteristics. Perceptual and Motor Skills. 1991;73:943-951.
- [78] Dunlap K. The Development and Function of Clothing. Journal of General Psychology. 1928;1:64-78.
- [79] Guéguen N, Jacob C. Clothing Color and Tipping. Journal of Hospitality and Tourism. 2010;38(2): 275-280.
- [80] Howlett N, Pine K, Orakçioglu I, Fletcher B. The influence of clothing on first impressions: Rapid and positive responses to minor changes in male attire. Journal of Fashion Marketing and Management. 2013;17(1):38-48.
- [81] Ju-Young MK, Kim KPJ, Jieun K. Clothing functions and use of clothing to alter mood. International Journal of Fashion Design, Technology and Education. 2013;6(1):43-52.
- [82] Palmer SE, Schloss K. An ecological valence theory of human color preference. Proceedings of the National Academy of Sciences of the United States of America. 2010;107:8877-8882.

- [83] Regan ARG, Punke E, Brickner M, Badalamenti V. Power and provocativeness: The effects of subtle changes in clothing on perceptions of working women. The Journal of Social Psychology. 2018;158(2): 252-255.
- [84] Lennon SJ, Johnson KKP, Noh M, Zheng Z, Chae Y, Kim Y. In search of a common thread revisited: what content does fashion communicate?. International Journal of Fashion Design, Technology and Education. 2014;7(3):170-178.
- [85] Wolfe JB, Betz NE. The relationship of attachment variables to career decision-making selfefficacy and fear of commitment. The Career Development Quarterly. 2004;52:363-369.