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The Evolution of Masculinity and Dress Aesthetics: A Data-Mining Approach to Analyzing Social Media Discourse

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This exploratory research investigates how social media platforms shape and reflect contemporary perspectives on Abstract masculinity and dress aesthetics while exploring the evolving perceptions of masculinity across a spectrum of viewpoints with Connell's theory of masculinity as a theoretical framework. Using a data mining approach, including sentiment analysis, topic modeling, and content analysis, this study explores patterns and topics in Twitter conversations related to masculinity and men's dress aesthetics. Findings suggest that overall sentiment was more positive than negative for evolving masculinity and identity expression through dress aesthetics. Additionally, topic modeling and content analysis of the Twitter data suggest that although there is continued representation of traditional hegemonic masculinity ideals, there are equally individuals that supported shifting attitudes and willingness to discuss non-traditional masculinities and masculinities that include self-care, identity, and appearance management strategies, social responsibility, inclusivity, and intersectionality. Furthermore, while some found social media to allow for negative criticism and toxic masculinity representation, many found it to be an engaging environment to shape the changing landscape of the masculinity construct and to seek and promote dress aesthetics that align with multiple masculinities and their identity performances.

Keywords Aesthetics, Dress, Fashion, Masculinity, Data Mining, Social Media

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Introduction

In recent years, the global menswear market has seen significant growth, valued at \$483 billion U.S. dollars in 2018 and an expected increase to \$740.76 billion by 2025 (Statistca, 2022). This growth, coupled with the ubiquitous influence of social media platforms like Twitter, has significantly impacted contemporary men's dress trends and aesthetics. A key aspect of this development is the role of masculinity and its relationship with dress aesthetics. Dress, as defined by Roach-Higgins and Eicher (1992), is "an assemblage of modifications of the body and/or supplements to the body" (p.1). Many individuals use dress to promote a

masculine identity that reflects their self-concept (Connell, 2005; Goffman, 1959; Stone, 1975). Therefore, understanding the evolving notion of masculinity in relation to dress aesthetics becomes essential not only for fashion designers, but also fashion marketers, academics, and social scientists; especially those who are interested in tracking the evolution of modern masculinity and the aesthetics of menswear. This study proposes to augment this understanding by objectively analyzing Twitter data through a data science approach, thereby providing an authentic snapshot of societal discourse on these topics.

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Scholars addressing dress aesthetics have indicated that literature on aesthetics, including the apparel and textile (AT) field, can be categorized into five main areas: creator, creative process, object, appreciation process, and appreciator (Fiore, Kimle et al., 1996a, 1996b; Fiore, Moreno et al., 1996). Furthermore, research suggests that aesthetic experience can be affected by varied social and cultural influences, such as gender (Fiore et al., 1996), age (Eckman, 1992; Holbrook & Schindler, 1994), interaction between apparel and the body (DeLong, 1987), and sensitive periods in development (Bernardoni & Stannard, 2022). Within the AT literature, one study finds that individuals are more likely to dress in sex-specific clothing based on their sex rather than their gender identity (Davis, 1985) and traditional gender roles (Gupta & Gentry, 2016). An area of prominent focus in AT studies has been the examination of masculinity in female dress practices in the context of job interviewing and employment (Fiore & DeLong, 1993; Forsythe, 1988; Johnson & Roach-Higgins, 1987; Johnson et al., 1994). Given the number of studies involving the female body and aesthetics, the literature devoted exclusively to the male body, masculinity, and dress aesthetics is relatively small.

This lacuna of research may be the result of long-held beliefs that concern for physical appearance, grooming, and dress aesthetics are the domain of female pursuits and the projection of femininity (Gough et al., 2014; Mishkind et al., 1986). However, with the rise of individualism, self-care, and the maintenance of appearance seem to be increasingly degendered (Bennett & Gough, 2013; Gough et al., 2014). Prior research on appearance management in relation to masculinity emphasized muscularity and physicality, which was believed to be prioritized in hegemonic masculine identity performance (Adams, 2023; Daniel et al., 2014; Rudd & Carter, 2006), and that body satisfaction affects the desired fit of dress items (Chattaraman & Rudd, 2006). However, widening definitions of masculinity appear to be giving rise to newly acceptable appearance management practices and gender performance including skincare and divergent dress aesthetic options, especially apparent by male influencers on social media platforms (Ariella et al., 2023; Ma, 2023).

The appearance of research investigating non-traditional

masculine identity performance supports the notion that masculinity is a construct that is socially constructed rather than conveyed at birth (Connell, 2005; Wedgwood, 2009). The constructed standards for masculinity performance have been traditionally acquired and reinforced from a young age through social, educational, and occupational contexts (Bussey & Bandura, 1999, p. 685; Nielson et al., 2023), and perpetuated through mass media (Carrigan et al., 1985; Hatfield, 2010; MacKinnon, 2003). However, there is a lack of studies investigating the intersection of masculinity, dress aesthetics, and the role of social media platforms like Twitter. While recently, society's shifting attitudes within the cultural consciousness on topics such as gender roles, gender and sexual identity, race, and the rights of many minority groups have been considered (Bochicchio et al., 2023; McGuire & Reilly, 2022; McKinley, 2023a, 2023b), these emerging topics do not address how new social and cultural understandings are expressed in terms of extant constructs like masculinity. Therefore, the purpose of this study is to fill this gap by analyzing a large dataset of tweets related to men's dress and masculinity to understand how social media platforms shape and reflect contemporary perspectives towards masculinity and dress aesthetics and to explore the evolving perceptions of masculinity across a spectrum of viewpoints.

This study explores various ways in which fashion aesthetics contribute to the construction and negotiation of contemporary masculinities on social media platforms, such as Twitter. This investigation will contribute to a better understanding of the evolving notions of masculinity and how they manifest in the realm of dress aesthetics. Considering the scarcity of literature on the evolving construct of masculinity in contemporary society, this study is positioned to contribute to the understanding of evolving masculinity, notably on social media. There is a need for more research that examines dress aesthetics and the ways in which men express their masculine identity on social media. To achieve this purpose, the following research questions were developed: (1) What is the prevailing sentiment surrounding masculinity and dress aesthetics on Twitter? (2) How is the concept of masculinity, including its relation to dress aesthetics and societal expectations currently presented on digital platforms like Twitter (3) What are the predominant topics discussed in this domain and how do they reflect the evolving construct of masculinity? And (4) How do users experience and engage with digital platforms in discussions on masculinity, and what implications does this engagement have for their perception of masculinity?

Using a data mining approach, including sentiment analysis, and topic modeling, this study explores patterns and topics in Twitter conversations related to men's dress aesthetics. Tweets were collected containing specific keywords related to masculinity and men's dress aesthetics. The selection of data was not confined to specific regions or communities, ensuring a diverse representation of perspectives in the data. Data were analyzed for their sentiment using Python code, followed by topic modeling using Non-Negative Matrix Factorization (NMF). This study contributes to the existing literature on masculinity and dress aesthetics by expanding on cutting-edge computational techniques used in previous AT research (Liu et al., 2021) to analyze social media data, providing new insights into the complex and dynamic notion of masculinity and its intersection with dress aesthetics.

The following sections of this paper are structured as follows: theoretical framework, methods, Results and Discussion, Conclusions, Implications, Limitations, and Future Research Directions for consumers and practitioners.

Theoretical Framework

This study explores the interplay between the evolving construct of masculinity and dress aesthetics on Twitter. To provide a solid foundation for this research, Connell's theory of masculinity emerges as an effective framework for investigating the complex dynamics of masculinity, especially the ways in which men use dress to construct, manage, and perform their gender identity.

Connell's Theory of Masculinity

Connell defines masculinity as "simultaneously a place in gender relations, the practices through which men and women engage that place in gender, and the effects of these practices in bodily experience, personality, and culture" (Connell, 2005, p. 71). The concept of masculinity has been described to exist in contrast to femininity (Carrigan et al., 1985; Connell & Messerschmidt, 2005), and within the concept itself, there are multiple masculinities within a complex hierarchy, with hegemonic masculinity being the dominant model in contrast to nonhegemonic masculinities (Connell, 2005; Connell & Messerschmidt, 2005). Hegemonic masculinity is defined as "the masculinity that occupies the hegemonic [or leading] position in a given pattern of gender relations" (Connell, 2005, p. 76), whereas nonhegemonic masculinities has been defined as "lesser than or aberrant and deviant to hegemonic masculinity, such as effeminate men" (Messerschmidt, 2019, p. 86). Hanke (1992) highlights the notion that traditional stereotypes of hegemonic masculinity, such as aggressive behavior, gun violence, muscularity, and strength, are reinforced through mediums such as films and television. However, Connell and Messerschmidt's (2005) retreatment of hegemonic masculinity argues against it as a rigid social ideal; presenting hegemonic masculinity as a dynamic concept that presumes subordination of other masculinities, adaptable to regional and global influences, and although hegemonic masculinity is culturally and socially dominant, it may not be the most common identity performance in the daily lives of boys and men (Connell & Messerschmidt, 2005). Subordinate masculinities include not only gay men, but other heterosexual men (Connell, 2005), masculinepresenting females (Dormanen et al., 2020), and may include transgender or non-binary individuals (Adomaitis et al., 2021; McGuire & Reilly, 2022).

Connell and colleagues' work on hegemonic masculinity provides an essential theoretical framework for studying the complexities of masculinity and its interaction with dress aesthetics, which is the primary goal of this paper (Connell & Messerschmidt, 2005). The concept of hegemonic masculinity has been criticized in psychological research for its oversimplification of the subject and essentialist approach (Demetriou, 2001). However, the literature review suggests that re-conceptualizing hegemonic masculinity in several key areas may be necessary. Firstly, contemporary research has shown the complexity of the relationships among different constructions of masculinity, providing a necessary nuance that must be considered in the study of dress aesthetics

(Messerschmidt, 2019). Additionally, the concept of masculine hierarchy and the subordination of women have played a significant role in shaping the construction of masculinity in contemporary society (Boothby, 2013), which has practical implications for the study of dress aesthetics. Lastly, research indicates the viability of non-hegemonic patterns of masculinity that may represent well-crafted responses to physical disability, class inequality, race/ethnic marginalization, or stigmatized sexuality (Anderson, 2010; Bridges & Pascoe, 2014). In comparison to the stereotypical behaviors first associated with hegemonic masculinity, research suggests a shift to "new" masculinities that incorporate heretofore considered feminine activities, such as grooming regimens, into acceptable styles of masculine identity performance (Messerschmidt & Messner, 2018). Although these new hybridized masculinities have evolved Messerschmidt and Messner (2018) note that they "involve the incorporation of subordinated styles and displays (masculine or feminine, or both) into privileged men's identities, in the process simultaneously securing and obscuring their access to power and privilege" (p.48). These insights provide a more comprehensive understanding of the complexities of masculinity and how they influence dress aesthetics.

Connell's theory of masculinity suggests that certain forms of masculinity are culturally valued and dominant within a society (Connell, 1995). This theory provides a framework through which the evolving discourse of masculinity on social media can be examined. Furthermore, Connell's theory allows for the data in this study to be analyzed for not only hegemonic or dominant forms of masculinity, but also emerging alternative representations and constructions of masculinity in dress aesthetics on Twitter that are representative of societal attitudes. Moreover, the evident prevalence of fashion and aesthetic discourse in social media lends itself to the analysis of how these elements interact and influence the perception of masculinity. These constructions can be examined for the reinforcement of traditional notions of masculinity or present a challenge to them, further giving way to alternative or marginalized masculinities. The research questions stem from this theoretical landscape, illustrating a temporal segment of the complex interplay between dress aesthetics and masculinity in the digital age.

Method

This study partially replicated the methodological approach and data representation presented by Liu et al. (2021) which has three stages: data collection, data preprocessing, and data analysis, in order to answer this study's research questions related to masculinity and dress aesthetics by mining and analyzing Twitter data.

Stage 1: Data Collection

To gauge the efficacy of social media to measure shifting attitudes toward masculinity in regard to dress aesthetics, data were collected from the Twitter platform. Data mining on social media has been used in AT research in various studies ranging from the monitoring of fashion event-goers (Zhao & Min, 2019), trend forecasting (Zhao et al., 2021), and studies involving clothing consumption during the Covid-19 pandemic (Liu et al., 2021). Although most of these studies used Twitter application programming interfaces (API) for easy access to Twitter data (Liu et al., 2021), changes to the Twitter platform in early 2023 limited developer's ability to mine tweets from the platform (Mehta & Singh, 2023). For this reason, tweets that were within the search parameters of this study were manually located on the Twitter website and then scraped using NCapture, an NVIVO web extension.

The search criteria were developed using keywords related to the purpose and research questions of this study. Therefore, the search keywords were (masculinity OR male OR men OR men's) AND (clothing OR clothes OR apparel OR style), as advised in previous studies (Liu et al., 2021), the word "fashion" was excluded to prevent the inclusion of extraneous unrelated data. The date range of the search was set to August 01, 2019, to April 01, 2023. A total number of 32,209 tweets were scraped for data analysis in this study. To ensure a diverse representation of perspectives, systematic sampling was not confined to specific regions or communities.

Stage 2: Data Processing

Data were collected from Twitter related to masculinity and dress aesthetics. The large dataset was preprocessed to ensure the quality of the data and its relevance to the purpose of this

research. Data preprocessing is a necessary step to transform the data into a usable and manageable form (Alasadi & Bhaya, 2017; García et al., 2015). Data preprocessing can take many forms and has been used in the analysis of data in other AT literature (Liu et al., 2021, 2023; ul Hasan et al., 2023). In the current study, Python code was written to perform the data preprocessing and consisted of data cleaning (removal of irrelevant content, stop words, special characters, and punctuation), transformation (text normalization-lowercase transformation and lemmatization) (Liu et al., 2021; Plisson et al., 2004), followed by tokenization where phrases are deconstructed into words or useful units or tokens (Verma et al., 2014). The tweets were then replicated and weighted using Term Frequency-Inverse Document Frequency (TF-IDF) transformation to give importance based on the number of "likes" and retweets (Qaiser & Ali, 2018). The total number of tweets after applying the weighted replication was 27,985,196. The preprocessing pipeline was entirely implemented using Python, including libraries such as Pandas for the manipulation of data, NLTK for natural language processing. and Scikit-learn for machine learning and text processing.

Stage 3: Data Analysis

To explore the evolving construct of masculinity and connections to dress aesthetics expressed on social media, the data analysis procedures used by Lui et al. (2021) were partially replicated. The data were organized by weeks producing weekly units. This temporal analysis allowed for the examination of patterns and trends in the data on a weekly basis. To evaluate public sentiment towards contemporary masculinity, sentiment analysis was conducted which allows for the identification of positive, negative, and neutral sentiments expressed in the tweets. Sentiment analysis was followed by topic modeling using NMF employed through Python coding. Computational approaches like sentiment analysis and topic modeling are data science approaches that allow for objective data analysis without the subjective biases inherent in human-driven analyses (Liu & Zang, 2012; Valdez et al., 2018). Topics with their representative keywords were extracted during the NMF process and were content analyzed for their congruency with masculinity and dress aesthetics. These topics were then manually grouped thematically based on their relevance to the theoretical framework. These and similar data-driven analytical approaches have been successfully employed to gauge opinions and beliefs on a variety of AT research topics (Liu et al., 2021; ul Hasan et al., 2023; Zhao et al., 2021).

Results and Discussion

Findings are presented primarily in conjunction with the research questions. First, the results and discussion of the sentiment analysis are discussed in order to answer research question one and to explore the prevailing opinions and beliefs surrounding masculinity and dress aesthetics through tweets; users' perceptions across the Twitter platform provide an understanding of the evolving construct of masculinity. Additionally, the sentiment analysis provides insights into opinions of masculinity and dress aesthetics over time. The results of topic modeling and content analysis are then presented to answer research questions two through four.

Sentiment Analysis Results

A sentiment analysis (see Figure 1) was performed on the Twitter data to provide objective insights into the attitudes or general tone of tweets related to dress aesthetics and masculinity. The sentiment category distribution indicated that the majority of the weighted tweets were neutral, accounting for 22,978,584, out of the total 27,985,196 weighted tweets. The remaining tweets were positive (n=4,307,604), and negative (n=699,008).

The prevalence of neutral tweets indicates that a majority of the discourse related to masculinity and the intersection with dress aesthetics could be centered around information-sharing, descriptions, or generally neutral overall instead of emotive or opinionated. These results could imply that this intersection on social media is discussed objectively or without strong opinions. Additionally, it could indicate that it is an ongoing topic within the current cultural climate.

The sentiment polarity score is a measure that ranges from -1 (indicating extreme negativity) to 1 (indicating extreme positivity). The polarity score across this dataset was 0.0271. Although the value's proximity is close to zero,

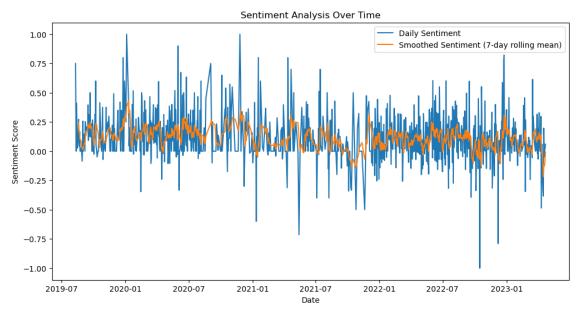


Figure 1. Results of sentiment analysis

indicating a relatively neutral sentiment regarding masculinity and dress aesthetics on the Twitter platform, the score leans towards the positive end of the spectrum, implying that the overall sentiment surrounding masculinity and dress aesthetics is more positive than negative. It is important to note that although the score is positive, it is a relatively low score which could imply that the expressed sentiment is not strong. However, the smoothed polarity score (0.2293), which is a more robust measure of overall sentiment, is also positive and confirms the observed positivity of the sentiment regarding masculinity and dress aesthetics on the Twitter platform.

Topic and Content Analysis Results

Topics were extracted from the mined Twitter data during topic modeling and were content analyzed to explore the evolving construct of masculinity and dress aesthetics on social media. Twelve topics emerged: men's fashion and style, luxury and brands, health and fitness/wellness, social issues/activism/responsibility, digital media and technology/innovation, personal grooming and self-care, fashion and environment, travel and exploration, masculinity and gender

roles, career and professionalism, leisure and hobbies, and toxic masculinity perceptions. These topics were organized into five themes based on the theoretical framework proposed for this study based on Connell's (2005) theory of masculinity: contemporary attitudes towards masculinity and dress aesthetics, well-being and self-care in the masculine identity, advocacy, and social impact on masculinity and fashion, evolving notions of masculinity and identity representation, and digital engagement and the shaping of masculine discourse.

Contemporary Attitudes Towards Masculinity and Dress

Aesthetics. Analysis revealed several topics related to the current attitude toward masculinity and dress aesthetics, such as men's fashion and style, luxury and brands, and fashion and environment. In general, it appears that modern men use social media as an information-seeking tool to not only get advice about creating a personal style but to find ways to improve personal style, such as consulting men's magazines, for example, GQ. Some tweets directly addressed paying attention to one's style and advocated for putting "thought into it beyond flipping through a few fashion magazines." Additionally, there were tweets about trying to "stand out

from the crowd" by "not wearing the same old boring clothes everyday." In contrast, there were tweets stating that men's clothing "usually doesn't have a lot of variety in style and colours." However, there was evidence that many tweets advertising new trends were retweeted. These activities and the frequency with which masculinity and dress aesthetics was discussed online indicate that men are using or considering style and dress as a medium to express their identities. The presence of keywords like "personal style," "dressing," "outfit," and "trends" in the context of Twitter discussion surrounding masculinity and dress aesthetics suggest that men are consciously using dress practices for self-expression, and identity management. This phenomenon contrasts with notions of traditional hegemonic masculine behaviors as men appear to be curating their personae through dress choices and practices (Carrigan et al., 1985; Connell & Messerschmidt, 2005).

Additionally, the importance of this curated image seems to appear in the luxury fashion and brands topic where men are using these dress items as status and power symbols, which aligns with Connell's (2005) theory of masculinity. This concept is supported by keywords such as "exclusive," "high-end fashion," and "luxury products" and displays a link with luxury brands. The majority of tweets on this topic focused on asking for advice on how to live a luxurious lifestyle, with many tweets about travel, locating luxury dress items like watches, and what to wear to indicate a luxurious identity. However, some were concerned about cost in this area, for example, one tweet indicated "high end men's clothing is also ridiculously more overpriced than woman's clothing."

An emerging topic in the theme of Contemporary Attitudes towards Masculinity and Dress Aesthetics was fashion and environment. This topic illustrates engagement and awareness with sustainability practices, suggesting a shift away from the traditional construct of masculinity toward a more responsible one. Several tweets and retweets advocated for sustainability, green living, and green fashion. Furthermore, some tweets criticized environmentally unfriendly practices with one tweet expressing "the fashion industry has known for years that it needs to change its profligate ways and clean up its environmental vandalism." However, several tweets

indicated confusion over what sustainability in fashion meant, with one tweet attempting to explain that fashion consumers should "treat the Earth gently." This may be an indication that more sustainability education could be directed to male fashion consumers.

These findings indicate that men use dress and style as a medium of expression for their self-identities or for playing purposeful roles in the public eye. This concept is even more explicit in the distinct departure from traditional understandings of hegemonic masculinity where men are devoting time to the curation of their personae through dress practices and self-care. However, the focus on green fashion and interaction with the intersectionality perspective, implied in the rethought hegemonic masculinity theory, further shifts masculinity norms emphasizing an increased awareness of sustainability and the environment (Connell & Messerschmidt, 2005).

Wellbeing and Self-Care in the Masculine Identity. Topics under this theme are indicative of an expanding definition of masculinity while including ideas of personal grooming, wellness, fitness, and self-care. Prominent keywords in this theme were "fitness," "self-care," "mental health," "diet," and "physical health," which indicate an attention on holistic health and well-being. There were both traditional and expanding concepts related to masculinity and self-care. For example, tweets that represented a more expanded and modern notion of masculinity discussed "creating optimal conditions for your health," foods to eat to benefit "skin and hair health," and 'the impacts of fashion on the environment and human health," while a more traditional tweet emphasized "the importance of sports for men's health."

Moreover, a shift in the narrative on masculinity emerges with discussion on personal grooming and self-care, where keywords, such as "beard," "skincare," and "haircut" appear in the data. Given the frequency in which tweets in this theme occurred, grooming could now be considered an integral part of masculine self-care, whereas traditionally it was associated with femininity. Although beards were considered the "pinnacle of masculinity," "supremely masculine," and one tweet commented that his beard made him "noticeable in a crowd and gives me that aura of masculinity," there was equal interest in grooming the beard and discussion on products and oils to use for the beard and hair. Skincare was

highlighted as well, with one Twitter user asking, "shouldn't men be concerned about their skin issues, looks, body, hygiene, health, etc.?"

Further topics on masculinity and well-being that intersected with dress aesthetics were discussions on leisure activities, sports, arts, travel, and the masculine identity. This discourse further indicates a broadening of the concept of masculinity, especially where considerations of dress and appearance during these activities were used to promote a masculine identity. Although tweets emphasized "comfort" during travel and leisure activities, there were also tweets that considered being "stylish" during these times as well. While "dressing" was a topic of interest like "travel shirts," "jackets," and "swimwear" there were also tweets that highlighted a concern for men's accessories during travel like toiletry bags.

The focus on health, fitness, wellness, and self-care, especially surrounding dress aesthetics in this theme, represents an evolution in the construct of masculinity. This evolution might indicate a departure away from the stoic, self-sacrificing archetypes of hegemonic masculinity in the direction of a more holistic and balanced view of manhood. Concerns traditionally viewed as the domain of femininity, such as grooming, and skincare are becoming integrated into the masculine discourse which challenges hegemonic masculinity norms. Travel, hobbies, and leisure activities broaden the vocabulary of modern masculine identities, which is a departure from activities strictly related to career or work.

Advocacy and Social Impact on Masculinity and Fashion. Topics in this theme were social issues, activism, and responsibility, suggesting that men's engagement within these areas is shifting towards a more active and conscious masculinity. Keywords in this topic, such as "activism," "change," "ethical," "sustainability," and "social issues," could depict men in a more socially and environmentally conscious light. Several tweets support this concept such as "Masculinity is morals, not (just) muscles," and "I would rather be morally and ethically correct than politically correct." In terms of dress and the fashion industry, one tweet commented "finding ethical clothing brands in general can be a struggle, but especially for men. There are a limited number of brands that use sustainable materials, ethical practice, and offer clothing for men." However, some tweets advocated for

shared responsibility as one tweet illustrated "ethical consumption can't be the burden of the shoppers alone." Additionally, some tweets actively tried to promote a more positive masculinity by saying "masculinity is not toxic," and supported nonviolent approaches to problem-solving by suggesting "the pen is mightier." This is in stark contrast with more traditional beliefs about masculinity such as "violence is wired into what men classify as masculinity," and others who believed that film or media "brainwashes you into thinking masculinity is toxic."

Despite polarized beliefs about masculinity on the Twitter platform, men's engagement in social issues, activism, and discussions of responsibility reflects an expanding perspective on modern masculinity. The departure from traditional beliefs of hegemonic masculinity indicates that a faction of men is seeking a way to transform their masculine identity performance that promotes them as agents for positive change and conscientious consumers. This theme could also engage with the intersectionality of masculinity in that some individuals seem to use their social standing and influence to advance and advocate for change.

Evolving Notions of Masculinity and Identity Representation. Discussions on the topics of masculinity and gender roles, including LGBTQ-related topics, and toxic masculinity perceptions were debated with regular frequency, indicating that this theme is a dynamic topic in the online space. Prominent keywords that formed this topic were "masculinity," "equality," "transgender," "toxic masculinity," "queer," "fluid," and "modern masculinity," and paint a vivid picture of continued discourse surrounding masculinity and its representation. Tweets in this theme did not fit categorically into one ideological framework but spanned the spectrum from traditional to progressive.

At one end of the spectrum, more traditional notions of masculinity were present, evident in comments such as "being a man is not about character, that would be the gender called masculinity. Gender is BS. Being a man is merely biology." This quote illustrates the perspective of those who continue to align gender and biological sex, asserting implicitly the rigidity of traditional gender roles.

However, sentiments were not unidimensional, various tweets illustrate an evolving paradigm toward nontraditional

and inclusive ideologies of gender and masculinity. For example, some tweets intimated that societal norms should not restrict gender representation, such as "clothes should not define your gender." A portion of the conversation addressed LGBTQ+-related topics that illustrated the experiences of gay and transgender individuals and their interaction with societal expectations of masculinity. Although some comments reflected somewhat traditional perspectives, such as "there's a beauty in true femininity and masculinity that trans people will never understand," other voices from LGBTO+ and allied communities boldly challenged such notions. For example, one tweet "making transphobes lives miserable by existing" underscores the resilience of the transgender community while asserting a right to exist and be accepted while encountering prejudice. Furthermore, others critiqued societal norms that disproportionately scrutinized those who do not conform to traditional gender roles. This was seen in tweets, such as "the incredible scrutiny of trans women, femme men, and drag queens is also misogyny; in a culture that views men and masculinity as better." This dialogue underscores the interaction of toxic masculinity and misogyny and the impact on those who challenge gender norms. However, other voices called into question the link between sexuality and masculinity, such as "I know plenty of gay and bi-men that are more masculine than 90% of men I see walking around and on TV. Sexuality has nothing to do with masculinity or femininity. You're conflating unlike topics."

An evolving perception of masculinity was also suggested as users critiqued the association between masculinity and aggression. For instance, one tweet stated, "If your masculinity is defined exclusively by the capacity for violence, then what a shriveled dead thing your sense of manhood must be." Such statements emphasize the desire for a more nuanced conception of masculinity that values character traits beyond physical strength. However, individuals also expressed an abandonment of traditional masculinity performance based on societal pressures with the passage of time, as illustrated by "now that I'm old I no longer feel the pressure to express my masculinity in this fashion."

Findings also suggested that living up to social expectations of masculinity was present in the data and included young men. For example, one tweet mentioned the "mounting pressures of teenage masculinity," which highlights the difficulties young men face to navigate their identity in areas that still maintain traditional expectations. Similarly, the tweet "some men have lost touch with their masculinity" indicates a perceived disconnect between personal identification with masculine traits and societal expectations.

The data also presented criticisms of toxic masculinity and its role in suppressing emotional openness among men. This is captured in the statement, "You see a guy asking for help and you start ridiculing him, then when it comes down to why men aren't more open, you blame toxic masculinity to absolve yourself." This example underscores the potential harm caused by societal pressures and perhaps indicates the need for a space in which men can safely express vulnerability.

Lastly, another tweet illustrated conversations around the changing symbols of dress aesthetics and their interplay with masculinity, exemplified by this quote, "I'll never get over how skinny jeans have become so normalized, they're now worn by conservatives lamenting the decline of traditional masculinity."

The evolving construct of masculinity and identity representation on social media illustrates the ever-changing landscape of gender-related discourse in society. The variety of perspectives and the frequency of sentiment in these discussions indicate that this theme is a dynamic topic that warrants continued investigation and understanding.

Digital Engagement and the Shaping of Masculinity Discourse. This topic highlights the role digital platforms take in shaping contemporary dialogue on evolving masculinity and dress aesthetics' place in shaping gendered identity performance. The digital engagement topic was comprised of keywords, such as "digital," "online," "social media," "technology," and "innovation." This theme emphasized the importance of online presence in the curation of self-presentation and the dissemination of personal and societal narratives. The theme of digital engagement traverses most of the topics in this research and sets the stage for the uninhibited discussion of masculinity, dress aesthetics, and identity. Users of the platform debated the evolving nature of masculinity and the role of dress aesthetics in that evolution. The online platform not only was used to express personal

opinions but also as a venue to advise on masculinity and its associated aesthetics, as is illustrated by this tweet "manning up. How to be a better man in today's society and digital world."

However, user experiences with the digital landscape were varied. Some individuals admitted their difficulties in navigating it, for example, "just an analog guy lost in a digital world." This quote illustrates the dichotomy between those that have adopted it naturally and those who grapple with the transition of integrating it into their lives. Additionally, the efficacy of social media in shaping the discourse was debated, and while many found social media to be a benefit to the ongoing dialogue on the many aspects of masculinity, others found it to be "all about judging people by their views, likes, and can result in feeling very defeated."

An emerging sub-theme highlighted the influence of toxic online communities and self-proclaimed masculinity influencers, illustrated by tweets, such as "I think that toxic online communities and so-called masculinity influencers have a lot to answer for. Men see themselves as victims, and they see women as objects to be controlled and derided." This quote reveals the potential dangers of online narratives that promote toxic masculinity, which could in turn lead to undesired effects.

Digital platforms equally appear to serve as a battleground where an individual's masculine identity performance can be scrutinized. This notion is depicted in tweets, such as "You do understand that by writing about these things in your little phone and posting them online, you've lost all masculinity?" This quote illustrates a level of judgment and bias concerning individuals' online activities that can be found in digital communities. Conversely, others illustrate the potential of digital platforms to be an alternative refuge from concepts like toxic masculinity, as revealed by this user's tweet, "I think it prob helps going to school online and not at school where toxic masculinity can run amok!"

Therefore, the theme of Digital Engagement and the Shaping of Masculinity Discourse highlights the complex function of digital platforms in the shaping and influence of discourse on masculinity, dress aesthetic, and identity performance. The spectrum of user experiences and perspectives that emerged from the data underscores the diversity,

potential, and challenges inherent in the digital landscape.

In summation, the sentiment analysis reveals a generally neutral but slightly positive prevailing sentiment surrounding masculinity and dress aesthetics on the Twitter platform. This insight directly answers research question one and provides a context in which the subsequent themes are discussed.

The thematic analysis identified five key themes: contemporary attitudes towards masculinity and dress aesthetics, well-being and self-care in the masculine identity, advocacy and social impact on masculinity and fashion, evolving notions of masculinity and identity representation, and digital engagement and the shaping of masculine discourse. Each theme uniquely contributes to the understanding and representation of masculinity on digital platforms, thus addressing research questions two and three.

Moreover, these nuanced themes helped in understanding how Twitter users experience and engage in discussions on masculinity, thereby addressing research question four. For instance, the theme of 'contemporary attitudes towards masculinity and dress aesthetics' and 'evolving notions of masculinity and identity representation' underscore the dynamic interplay between personal expressions of masculinity, societal expectations, and evolving aesthetics.

In light of these findings, it becomes clear that the digital landscape, societal norms, and personal experiences exert a continual influence on the understanding of masculinity. This dynamical interchange is consistent with Connell and Messerschmidt's (2005) theory on the plurality of masculinities, which proposes that masculinity is not a fixed identity, but a constantly shifting one.

Conclusion, Implications, Limitations, and Future Research Directions

Gender identity has become a debated topic in the current cultural climate. Goffman's (1959) and Stone's (1975) research support the concept that dress aesthetics play an important symbolic role in the establishment of an individual's identity. However, little research explores dress aesthetics' role in the evolving understanding of masculinity's

presentation in contemporary society. The purpose of this study was to contribute to knowledge in the AT field by filling this gap and exploring sentiments and topics on social media, specifically Twitter, surrounding masculinity and dress aesthetics. Sentiment analysis was predominantly neutral, suggesting that the majority of users frequent social media for information-sharing on what to wear and where to find items in accordance with their chosen masculinity identity performance. However, overall, the sentiment was more positive than negative; topic modeling and content analysis of the Twitter data supported these findings by indicating shifting attitudes and willingness to discuss nontraditional masculinities including LGBTQ+ and Trans masculinities, but also Cisgender masculinities that are more accepting and less violent and aggressive as outlined in hegemonic masculinity theory (Carrigan et al., 1985). This evidence of intersectionality also supports Connell and Messerschmidt's (2005) updated masculinity theory. While more traditional hegemonic masculine attitudes were present in the data, there were those who revealed the damage pressures of masculine identity performance can have on the young; some users admonished toxic masculinities in favor of a more nuanced understanding of modern masculinity and an openness to dress aesthetics that allowed for a wider expression of the masculine self-concept. Although, as seen in the data, even more conservative groups have adopted aesthetic trends that persist despite not having originally been considered traditional expressions of masculinity, such as skinny jeans.

Additionally, the data indicated a shift in masculinity towards more environmentally conscientious attitudes where topics concerning sustainability, advocacy, and social responsibility were present. This more socially responsible and engaged transformation in masculine discourse indicates a shift away from the originally conceived hegemonic masculinity concept towards a more evolved and intersectional conceptualization, as individuals present an identity performance for positive change, but also use their influence to drive that change.

Social media platforms, such as Twitter, appeared to be a digital landscape where individuals were able to comfortably express their opinions freely about masculinity and dress aesthetics, while some thought that other users were overly critical and negative, the majority of users appeared to have free agency to debate their understanding of these concepts without hesitation. Therefore, the digital environment emerged as a significant medium of influence and source of information-sharing on masculinity and dress aesthetics. This finding is supported by the sentiment analysis which revealed constant variation over time, suggesting that the understanding of masculinity as a construct and its symbolic presentation through dress aesthetics is an ongoing negotiation.

This study has important theoretical implications. It demonstrates the application of Connell's theory in a modern, digital context and provides insights into how these digital discourses reflect and shape understandings of masculinity, including dress aesthetics' role in that impression. The identification of key themes can also serve as a basis for future theoretical development around digital expressions of masculinity.

The practical implications of this study involve a better understanding of how social media platforms, such as Twitter, can be leveraged to track evolving notions of masculinity over time. Furthermore, the findings highlight that academics, educators, policymakers, and society should continue to foster these evolving discussions on masculinity, in order to advocate for environments where the use of dress aesthetics can be explored in wider varieties to express personal identities, including all levels of masculinity, both traditional and non-traditional. Likewise, the data suggest that the fashion industry, designers, and marketing strategists should promote the ethical and sustainable aspects of their products that specifically target their masculine consumers. Additionally, their market strategies should also include positive and inclusive masculinity campaigns with product lines that cater to the full spectrum of masculine aesthetics and should include these messages on social media, such as Twitter.

This exploration illustrates the importance of dress aesthetics in expressing identity, departing from traditional notions of hegemonic masculinity, especially as society grapples with issues involving gender identity and expression. However, as this conversation evolves, this study has the limitation of being a snapshot in time, therefore, longitudinal

studies would be crucial to tracking and monitoring the evolution of the masculinity construct over time and how dress aesthetics evolve in tandem to represent that changing landscape. Also, given the vast amount of Twitter data, future studies could avail themselves of more advanced data mining techniques and machine learning algorithms to analyze larger and more diverse datasets. Furthermore, as menswear aesthetics has a long and gradually shifting history, future studies on recent changes to menswear aesthetics could benefit from a study on modern features that reflect historical features. Additionally, studies that identify the gender and geographical locations of users and their comments would further develop an understanding of the interaction between user perspectives and locations or cultural and social differences.

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