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A cross-cultural study of the proximity of clothing to self between millennial women in South Korea and Mongolia

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Abstract

As a part of material culture, clothing embodies the cultural specificity based on the influence of that culture on individuals. The cultural value model of Hofstede broadly describes the dimensional characteristics of each country. At the same time, the proximity of clothing to a self-scale represents the level of psychological closeness of clothing to identity. Even though it is theoretically correct that these two concepts—culture and clothing that expresses one's self—are related, few studies have highlighted this connection. In this study, we investigated the effect of cultural values on how the individuals involve their clothing with their social identity by focussing on the differences between two culturally different countries: South Korea and Mongolia. Quantitative surveys from 179 in South Korea and 262 in Mongolia and *t*-tests showed cultural differences in both countries' individualism and indulgence vs their restrained disposition. The multiple regression analysis results revealed that uncertainty avoidance and indulgence correlate with three dimensions in the proximity of clothing to self: clothing to self as structure, clothing as a response to others' judgements, and clothing-related to self-esteem. The moderating effect of each country was not found. This result implies that knowing the cultural values of a particular group can infer their clothing consciousness. Thus, when fashion companies target millennial women in South Korea and Mongolia and establish a more significant presence abroad, examining a country's or a group's culture helps identify the target market's clothing perceptions.

Keywords: Cross-cultural study, Eastern Asian cultures, Hofstede's cultural value, Proximity of clothing to self, Millennial women

Introduction

Hofstede's cultural value model represents the attitudes, beliefs, and values individuals share within a society or a group (Guo et al., 2018). The model describes the relationship among the concepts of self, personality, and identity of an individual belonging to each different culture (De Mooij & Hofstede, 2010). Culture is an assembly of objective and subjective elements created by people who share a common language in the same place and time (Triandis, 1989). Values hold broad tendencies to prefer certain states of affairs over others (Rokeach, 1973), which include standards for guiding and determining

behaviours, attitudes toward objects and situations, and means of expressing oneself to others above all (De Mooij, 2017).

Despite the criticisms about overly simplified dimensions, restricting the sample to a single global firm, failing to represent culture's malleability throughout time, and disregarding cultural diversity within countries (Kirkman et al., 2006; Sivakumar & Nakata, 2001), Hofstede's framework has been widely adopted in cross-cultural research. Also, based on the assumption that cultural characteristics may explain the tendency of individuals of a society (Hofstede & McCrae, 2004), this framework has been used in the domain of management and applied to psychology since the 1970s (Angelova, 2016; Kirkman et al., 2006), inclusive of decision-making (Marshall & Boush, 2001; Mitchell et al., 2000; Steensma et al., 2000), motivation (Erez & Earley, 1987; Eylon & Au, 1999; Huang & Van De Vliert, 2003), perception (Carlson et al., 2019; Ebbeler et al., 2017; Sheridan et al., 2016) and personality (Grimm et al., 1999; Kwan et al., 1997; Satterwhite et al., 2000; Tafarodi et al., 1999; Wojciszke, 1997).

Meanwhile, clothing is an effective medium that reflects the specificity of each culture and expresses an individual's identity (Entwistle, 2015). Such cultural or collective values serve as the cause of differentiating the mode of one group's dressing from another (Eicher & Evenson, 2014). Nevertheless, the research correlating culture and clothing psychology in different countries is sparse (Millan et al., 2013). Cultural traits may relate to people's perception of clothing and, by extension, the distinct cultural values make a difference in clothing consciousness. This study verifies whether cultural traits of a nation influence an overall tendency of the clothing perceptions of individuals in a society.

In fashion studies, the *proximity of clothing to self* (PCS) has explained the relationship between the self and the clothing (Sontag & Lee, 2004). As clothing plays a vital role in visualising identity, self-regard, or belief, successful communication of these values through one's appearance can give individuals satisfaction. This leads us to assume that the differences in clothing culture—how these individuals set a psychological distance from the clothing to the self—between two countries may come from the gap in their respective cultural values.

South Korea and Mongolia, both East Asian countries, have developed different historical, geopolitical, and economic backgrounds, despite both countries exhibiting homogeneous national cultures (Aramand, 2012). There are many gaps in lifestyle and culture between South Korea, which is rooted in its agriculture, and Mongolia, rooted mainly in its nomads (Kim, 2009). Moreover, both countries' political-economic backgrounds have created a distinct difference between democracy and capitalism in South Korea and socialism in Mongolia. Lastly, while South Korea's borders are coastal, Mongolia is a land-locked country, leading to differences in lifestyles, industries, and international cultural exchanges. As Mongolia's third-biggest trading partner, South Korea has established a close economic and cultural relationship with Mongolia (Dorjmaa & Shin, 2019). More than 10% of the whole Mongolian population has visited South Korea (Odmankh et al., 2016), and Koreans visiting Mongolia are also rapidly increasing (Hwang, 2019). Moreover, the trade of articles of apparel, knits, or crocheted has increased around 24% from Mongolia to Korea and 13% from Korea to Mongolia between 2017 and 2019, showing an upward trend (Trading Economics, 2022a, b). Increasing cultural/economic

exchanges in the fashion and textile industry require a mature mutual understanding of clothing culture for sustainable growth of the exchanges. More specifically, it is essential to reveal the clothing-self relationship of individual consumers in the context of cultural differences between the two countries, but no study has investigated it yet.

This research explores the correlation between cultural values and the proximity of clothing to self by focussing on millennial women in South Korea and Mongolia. Millennials, also known as Generation Y (Brown, 2017), represent the largest and most influential consumers in South Korea and Mongolia (Ahn et al., 2020; Gantuya & Oyunsuren, 2019). They have more significant disposable income (Tomkins, 1999) and spending power (Morton, 2002; Noble et al., 2009), are characterised as fashion-conscious (Tee et al., 2013; Williams & Page, 2011), and have become important markets for the apparel industry (Colucci & Scarpi, 2013; Kim et al., 2009; O’Cass & Choy, 2008; Park et al., 2006). In particular, millennial female consumers show a higher self-awareness of their appearance (Hong, 2014) and spend considerably more money, time, and mental energy for shopping than males (Bakewell & Mitchell, 2003; Dholakia, 1999; Falk & Campbell, 1997; Jansen-Verbeke, 1987). Therefore, female millennials in South Korea and Mongolia should show a more apparent relationship between their cultural backgrounds and clothing perceptions.

This study aims to provide a deeper understanding of Mongolian cultural values that were ruled out in Hofstede’s investigation (Hofstede Insights 2020). To do this, this study compares South Korea with Mongolia, two countries with different socio-cultural backgrounds, with the expectation of adding value to cross-cultural studies on the area that have not been studied sufficiently. In addition, with the significant influence of millennial females in the fashion industry, understanding women born in 1982–2000 in South Korea and Mongolia benefits fashion conglomerates’ efforts to comprehend the local consumers’ tastes and styles in both countries. This research can be used as primary data to avoid cultural appropriation and provide satisfactory products and services suitable for each nation’s context and situation (Roudometof, 2016). We also expect this research to show how the social psychology of clothing can use country-level comparisons to enhance our understanding of each individual’s dress-related attitudes and perceptions. Within the context of cross-cultural comparisons based on the variables, including Hofstede’s Cultural Dimension and PCS, the research questions were formulated as follows:

- Is there a significant difference between South Korea and Mongolia millennial women regarding cultural values and PCS?
- Do the cultural values of South Korea and Mongolia correlate with PCS? What are the critical cultural dimensions that influence PCS in millennial females in South Korea and Mongolia?

Literature review

Hofstede’s cultural value model

Hofstede’s (2013) cultural framework comprises six cultural dimensions: Power Distance (PDI), Individualism (IDV), Masculinity (MAS), Long-Term Orientation (LTO),

Uncertainty Avoidance (UAI), and Indulgence Versus Restraint (IVR). These are valued between 0 and 100 to enable cross-national comparisons. By dimension, PDI is how people from a lower social class are expected to comply with the upper class's norms and regulations. IDV is the extent to which individuals in a culture emphasise their interests rather than their social group's interests. MAS reflects a clear distinction between gender roles, emphasising the stereotypes of masculine and feminine roles. LTO represents the extent to which a society encourages and rewards future-oriented behaviour, and UAI refers to a society's tolerance for uncertainty and ambiguity. Finally, IVR refers to how much a society allows free gratification of the desire to enjoy life and to have fun (De Mooij, 2011; Hofstede & Minkov, 2013; Hofstede et al., 2010).

There have been attempts to explain how people deal with their appearance as a variation of themselves in the social environment based on Hofstede's framework. De Mooij (2011) said three cultural values—power distance, individualism/collectivism, and uncertainty avoidance—relate to the variance of people's needs for appearance. In high PDI cultures, dependence on others causes people to be more other-directed in their self-presentation. They may spend more money on clothing than in an individualistic country. Also, when going out and meeting people on the street in collectivistic societies, people dress well and adequately to avoid losing face and maintain their in-group harmony. When people in a strong UAI go out into the street, they tend to be formal, well-groomed, and match colours of accessories and their designer-brand clothing to ritualise an ambiguous world. Further, highly individualistic and low UAI people do not dress up in public because they are unconcerned about their appearance (De Mooij, 2011). Meanwhile, people in high PDI, collectivistic, and masculine cultures buy new clothes for self-enhancement and self-esteem instead of dressing according to the latest fashion trend (De Mooij, 2011; Watkins et al., 1998). Masculinity serves as a variable used to explain people's needs for social status, which shows their success. As clothing is a representative hedonic consumption product (Morris & Elizabeth, 1982) and IVR is regarded as a dimension associated with one's consumption for pleasure (Kazmi & Rahman, 2019; Mukhopadhyay & Johar, 2009), a highly tolerant society may contribute to increased clothing consumption.

When using Hofstede's framework to make correlations from group data aggregated on a country level to individual behaviours, ecological fallacy can occur (Brewer & Venaik, 2012; Rinuastuti et al., 2014). The argument of the ecological fallacy in the context of the cultural dimension model at the individual level is valid when the pre-aggregated cultural dimension scores (e.g., what Hofstede collected and disclosed on the website) are analysed with/without other individual-level psychological scales. These pre-aggregated scores do not have information about the individuals who contributed to the national-level scores. However, it is possible to remark on the tendency among the people within a cultural group (predominantly a nation) if the researcher(s) has the actual response data measuring the cultural dimension (De Mooij, 2013).

Cross-cultural studies investigating the impact of culture are recommended to measure the cultural dimensions to see how the individuals vary within these dimensions, especially in a society where an ongoing cultural convergence is expected (Taylor, 2005, 2007). The 2013 Value Survey Module (VSM) manual describes how to measure and calculate cultural dimensions and opens the possibility of using cultural dimensions to compare groups within a country (Hofstede & Minkov, 2013).

The current study explores the influence of the culture on the proximity to self and clothing, which requires the actual measurement and analysis of the cultural dimensions at the individual level to see the overall tendencies within the culture(s). These studies measured the cultural dimensions and used them for individual-level psychological/behavioural analysis (Al-Nashmi & Zin, 2011; Sheldon et al., 2020).

Proximity of clothing to self

In the psychology of clothing research, the PCS scale has been developed to explain clothing's psychological closeness to self. PCS consists of four dimensions: 1) Clothing in Relation to Self as Structure, 2) Clothing in Relation to Self as Response to Judgements of Others, 3) Clothing in Relation to Self-Esteem, and 4) Clothing in Relation to Body Image and Body Cathexis (Sontag & Lee, 2004).

Clothing in Relation to Self as Structure (PCS1) refers to how much clothing occupies a part of the material self that reflects a person (Lee & Sontag, 2010; Sontag & Lee, 2004). In this scale, clothing intimately correlates with the self's expression, reflecting a person's identity, personality, self-regard, values, attitudes, beliefs, or moods. Clothing in Relation to Self as Response to Judgements of Others (PCS2) focuses on being evaluated by other people (Lee & Sontag, 2010; Sontag & Lee, 2004). This dimension shows the clothing's role as a tool to be accepted or respected by others by wearing a particular style or brands concerning others' judgement. Clothing in Relation to Self-Esteem (PCS3) explains the effect of clothing on a person's cognitive and affective evaluation, such as self-worth, self-regard, or self-respect (Lee & Sontag, 2010; Sontag & Lee, 2004). Clothing can affect self-satisfaction or self-judgement of competence positively or negatively by a personal or social standard. Clothing in Relation to Body Image and Body Cathexis (PCS4), the last dimension, shows how much a person emphasises the adjusted body shape created by clothing (Lee & Sontag, 2010; Sontag & Lee, 2004). Clothing can enhance a person's self-feelings and self-esteem by creating or improving a body image or body cathexis in the way the person wants. While the culture defines the self through identities communicated by clothing, they are also influenced by a culture's moral and aesthetic standards that change through time (Roach-Higgins & Eicher, 1992). Clothing, therefore, represents the self-being shaped in a specific cultural and social framework.

Influence of culture on an individual's clothing behaviours

Clothing is a representative medium that expresses an individual's identity and symbolises an individual's taste, values, beliefs, social and cultural background, social status, situations, and context. The motivations for dressing up are diverse and related to social and cultural factors.

Cultural values and PCS1: cultural effect on clothing in relation to self as structure

In an individualistic society, individuals are encouraged to express their uniqueness through clothing (Creekmore, 1980; Joung & Miller, 2006). Individualists who depend more on self-reliance, independence, pleasure, affluence, and happiness may disseminate their identity through clothing (De Mooij & Hofstede, 2011). Especially in terms of appearance, which is related to variations of the self, individualism shows different results depending on the other factor of uncertainty avoidance. In an individualistic

country with a high UAI, the self must be presented uniquely but structured, leading to a high interest in fashion. In contrast, in individualistic and low UAI societies, people do not concern about their appearance (De Mooij, 2011). Therefore, we assume that an individualistic and high UAI culture will positively correlate with PCS1.

H1 Individualism with a high UAI may positively influence PCS1.

Cultural value and PCS2 and 3: Cultural influence on clothing in response to judgements of others and self-esteem

Clothing can express one's social status, success, and power in society related to PDI and IDV (De Mooij & Hofstede, 2011; Hofstede, 1998). Achieving and expressing status through consumption is one of the most basic needs of social human beings (Goldsmith et al., 2012). The motive for social status is relatively strong in societies where people have a defined position in the hierarchically structured society and need to demonstrate their social position to win respect from others, which is a common phenomenon in Asia (De Mooij, 2017). More importantly, expensive clothing is a means to convey how important an individual is within the group and how much status an individual has within a group concerning other members of the community (De Mooij, 2011; O'Cass & Frost, 2002). Consumers with high power distance tend to consume status goods that identify wearers as members of a "desirable" group (Kuksov & Xie, 2012) that shows an interest in fashion and status attire and prefers globally known brands (Millan et al., 2013). Even in a collectivistic culture, luxury brands and expensive goods symbolise one's status (De Mooij & Hofstede, 2011). These status goods allow people to gain satisfaction by showing their superiority over others within the group (Goldsmith et al., 2012). Therefore, there is a high tendency for individuals in high power distance and collectivistic cultures to present themselves by being conscious of others (De Mooij & Hofstede, 2011).

Meanwhile, masculine culture values self-enhancement, leading to self-esteem (Watkins et al., 1998). People in a highly masculine society prefer well-known brands that boost their social status (De Mooij, 2011). In addition, they tend to prefer expensive watches and suits that show their success in life. On the contrary, a feminine culture highlights modesty, consideration, and warm mutual relations, and it prefers more functional products or relatively low-priced watches (De Mooij, 2011). In a masculine culture, the purpose of consumption is to show off to others, while people in a feminine society consume for actual use. Besides, feminine societies prefer attire that reveals one's personality rather than being conscious of drawing others' attention (De Mooij, 2011; Millan et al., 2013).

Accordingly, the high power distance, masculine, collectivistic culture is highly likely to judge others' success and status based on attire. As one attains superiority and satisfaction through status and expensive clothing, one will dress in attire that shows they are fully conscious of others' opinions. Such behaviour can be inferred from the relevance between PCS2, which concerns one's attire in response to others' evaluation, and PCS3, which is about gaining self-esteem through clothing.

H2 Individualism value may negatively influence PCS2 (a) and PCS3 (b).

H3 Power distance value may positively influence PCS2 (a) and PCS3 (b).

H4 Masculinity value may positively influence PCS2 (a) and PCS3 (b).

In cultures with substantial uncertainty avoidance, people tend to groom themselves well when they go out in order to avoid potential negative judgements about their appearance. This leads to massive spending on clothes and shoes in an attempt to structure an ambiguous world (De Mooij & Hofstede, 2011). Maintaining a well-managed appearance in a high uncertainty avoidance culture helps overcome inner insecurities and anxieties and boosts one's self-confidence (De Mooij, 2011; Hofstede, 1998). The culture with high uncertainty avoidance values a long history and tradition, where it values globally known brands and favours fashionable clothing (Millan et al., 2013). Therefore, the higher the uncertainty avoidance, the more likely one will gain confidence by wearing a well-known brand's attire as one becomes conscious of other people's attention. As a result, such a correlation infers a strong relationship with PCS2, which concerns one's dress in response to others' judgement, and PCS3, which is about gaining self-esteem through clothing.

H5 Uncertainty avoidance value may positively influence PCS 2 (a) and PCS 3 (b).

In IVR, indulgence has a link with the degree of happiness people experience, the perception of life control desired without social restrictions, and the importance of leisure (Hofstede et al., 2010), and restraint includes values such as hard work and thrift (De Mooij, 2017). Since IVR is the most recently added dimension, it is not easy to find studies directly related to attire; however, it has been revealed that IVR has associations to one's consumption for pleasure or self-reward (Kazmi & Rahman, 2019; Mukhopadhyay & Johar, 2009). Clothing is one of the representative hedonic consumption products related to humans' leisure activity (Morris & Elizabeth, 1982). In terms of consumption for pleasure, clothing serves as a symbol to reveal an individual's identity. When one purchases clothes that fit one's self-concept, this can cause satisfaction and happiness, thus increasing self-esteem. Besides, considering that clothing is a means of communication, as one's identity is conveyed to others through their clothing when sharing meanings with others, the consideration of others' evaluation can influence dressing up.

H6 Indulgence vs Restraint value may positively influence PCS2 (a) and PCS3 (b).

Cultural value and PCS4: Cultural effect on body image and body cathexis

PCS 4 is about body cathexis and body image, which mutually influence clothing behaviour. Clothing can contribute to establishing the preferred body shape, while the body cathexis encourages clothing behaviours by affecting satisfaction (Sontag & Lee, 2004). Many cultures still have an ideal beauty standard in body shape. High collectivistic, masculine societies with considerable power distance tend to impose the members' stereotype by creating social pressures (Forbes & Jung, 2008; Kowner, 2004; Mahmud

& Crittenden, 2007). This creates overall body dissatisfaction in society (Stojic et al., 2020), which leads to clothing behaviours to achieve a better body shape.

On the other hand, individualistic and feminine cultures also encourage celebrating and managing their own body through the clothing's expressive use (Swami et al., 2006). In IVR, while restraints may help control the body for functional purposes, indulgence advocates consumption to establish the images (Kazmi & Rahman, 2019). People in high-level, long-term orientation groups showed more control over their bodies, while short-term orientation values social reputation (Dioikitopoulos et al., 2020; Fang, 2003). High uncertainty avoidance creates strong stereotypes to stick with (McFarlane, 2014), and low uncertainty avoidance will explore opportunities to create a new body image. In this way, each cultural dimension has an ambivalent influence on clothing behaviour for body image. Since the fourth dimension of the PCS questionnaire infers clothing behaviour from both positive (to express and celebrate their own body) and negative (to conform to the socially ideal body) intentions, finding a difference in PCS4 between cultures is challenging.

Cultural distinctions between South Korea and Mongolia

Both South Korea and Mongolia belong to Eastern Asia, and both countries exhibit homogeneous nationwide cultures (Aramand, 2012). However, they have walked different paths in terms of political and socio-cultural history, including the agricultural/nomadic lifestyle, ideas of capitalism/socialism, and coastal/land-locked territorial boundaries. These are two different countries that potentially can show their differences and similarities in culture and clothing identities.

According to Hofstede, South Korea is a collectivist society like other East Asia countries like China, Japan, and Hong Kong (Hofstede Insights 2020). However, Rarick et al. (2014) indicated Mongolia is the only individualistic society among neighbouring countries in East Asia (Rarick et al., 2014). Furthermore, South Korea shows the highest level of long-term orientation globally with a score of 100 obtained from VSM 2013 (Hofstede & Minkov, 2013; Hofstede Insights 2020), while Mongolia shows the highest level of masculinity with a MAS score of 103 (Rarick et al., 2014), which is higher than Slovakia's score of 100—the highest in Hofstede's research (Hofstede Insights 2020). These two countries showed the opposite tendencies in PDI, IDV, and MAS dimensions (Table 1). Especially concerning individualism, the score of Mongolia (71) from Rarick et al. (2014) is significantly higher than other countries in the Asian region, including Israel (54) and Bhutan (52), the highest and second-highest rankings in *Hofstede Insights* (2020). This score for Mongolia is even higher than Germany (67) and is the same as France (71), which is considered an individualistic society in Western Europe (Hofstede Insights 2020). These results are significant as East Asia countries are considered collectivist

Table 1 Cultural scores for South Korea and Mongolia from preceding research

	PDI	IDV	MAS	UAI	LTO	IVR
South Korea (Hofstede, 2013)	60	18	39	85	100	29
Mongolia (Rarick et al., 2014)	18	71	103	92	71	–

PDI Power Distance Index, *IDV* Individualism Index, *MAS* Masculinity Index, *UAI* Uncertainty Avoidance Index, *LTO* Long Term Oriented, *IVR* Indulgence versus Restraint Index

societies with relatively low IDV scores (Korea: 18, China: 20, Hong Kong: 25, and Japan: 46) (Hofstede Insights 2020).

Comparing South Korea and Mongolia using the scores from these two studies is critical. Hofstede (2013) and Rarick et al. (2014) collected data with samples in different conditions to compare and examine variables such as age, gender, and level of education. However, this does not meet Hofstede's requirement that covariates be homogeneous except nationality in a cross-culture study. Also, Rarick et al. (2014) did not include the IVR, the newest dimension in Hofstede's framework. More critically, employing indirect values as an inference approach may cause extrapolation of the groups' cultural values (Rinuastuti et al., 2014). Accordingly, this study analyses the cultural values of both South Korea and Mongolia from the samples with equivalent demographic variables to acquire valid and comprehensive results and avoid an ecological fallacy.

PCS between South Korea and Mongolia

Based on the assumption that clothing comprises not just materials but also symbolic values formed by social structure and ideology (Hamilton, 1987), the current research aims to understand the different cultural values affecting the psychology of clothing between two countries. As a manifestation of self-in-society, the identity presentation through clothing reflects one's cognitive structure shared by people of the same culture (Hamilton & Hamilton, 1989). With the interaction of cultural components, clothing communicates identities based on assigned and achieved positions within social structures (Roach-Higgins & Eicher, 1992). Cultural values, therefore, can affect the identity or social self of the individuals, which will be reflected in their clothing.

Millan et al. (2013) are currently the only researchers on the cross-cultural variations and their influence on clothing-related consumer behaviour. Their cross-cultural study compared cultural value dimensions of the Czech Republic and Bulgaria, the Eastern European countries, which show political, economic, and cultural differences when using Hofstede's framework. The researchers examined the national cultural effect on consumer behaviour, including interest in clothing (9 items), susceptibility to normative social influence (4 items), preference for self-expressive and hedonic meaning (5 items), preference for status meaning (5 items), preference for affiliation meaning (4 items), and preference for well-known clothing brands (5 items). However, the items used to measure variables were not presented and verified in the manuscript.

Therefore, the current exploratory study examines the effect of cultural values on the psychology of clothing by using the PCS scale developed by Sontag and Lee (2004). Their research verified the instrument's content and constructed validity and reliability. Hypotheses (7–11) have been developed concerning the relationship between hypotheses 1–6 and a country's cultural differences. Furthermore, the country's moderating effect will be examined (H12).

H7 The country with higher individualism may have lower PCS1 (a), PCS2 (b), and PCS3 (c).

H8 The country with a higher power distance may have higher PCS2 (a) and PCS3 (b).

H9 The country with higher masculinity may have higher PCS2 (a) and PCS3 (b).

H10 The country with higher uncertainty avoidance may have higher PCS2 (a) and PCS3 (b).

H11 The country with higher indulgence may have higher PCS2 (a) and PCS3 (b).

H12 The country may moderate the relationship between cultural values and proximity of clothing to self.

Methods

Data collection and samples

This study's target group is millennial women in each capital city of South Korea and Mongolia born between 1982 and 2000 (Moore, 2012), ages 19 to 37 in 2018. From January 10 to March 11, 2018, data collection took place via online surveys using Google Forms in a convenient sampling method in accordance with the research protocol of the Institutional Review Board. We collected the survey results from 179 in South Korea and 262 in Mongolia and provided participants with a mobile gift card worth about 2 US dollars as compensation. However, according to Hofstede's VSM 2013, as the two groups should be as homogeneous as possible other than nationality, we controlled the samples as millennial females who graduated from BA or MA programme and dwelling in their capital cities. Finally, 167 South Korean (M_age: 26.35) and 140 Mongolian (M_age: 24.87) were selected.

Questionnaires and measures

We used a questionnaire developed based on the English version of Hofstede's VSM 2013 (Hofstede & Minkov, 2013) and the PCS scale (Jeon & Park, 2008; Sontag & Lee, 2004). Multi-item measures with a 5-point Likert scale assessed each item ranging from 1 (strongly disagree) to 5 (strongly agree). We conducted all statistical analyses, including variable calculation using Statistical Package for the Social Sciences (SPSS) 26. Ensuring the conceptual/statistical equivalence in responses from different groups is critical in cross-cultural studies. Construct equivalence is often related to understanding a particular concept, while measure equivalence is about the measuring units or scoring procedures to avoid hidden bias (Craig & Douglas, 2005).

As construct equivalence can often be achieved by an iterative translation/back-translation (Okazaki & Mueller, 2007), two bilingual translators independently translated the questionnaires into Korean and Mongolian. Back-translation was performed more than two iterations to enhance the consistency and comprehensibility of the instrument. In terms of the measurement equivalence, a previous study investigating the cultural dimension of Mongolia confirmed the 5-point scale is valid for the country and was also used for South Korea for Hofstede's database (Rarick et al., 2014). No physical or monetary measurement was included.

We calculated both countries' cultural variability through Hofstede and Minkov's VSM (2013) based on six indices (PDI, IDV, MAS, UAI, LTO, and IVR) with four questions per dimension (PDI: questions no. 07, 02, 13, 15; IDV: questions no. 04, 01, 09, 06; MAS: questions no. 05, 03, 08, 10; UAI: questions no. 11, 07, 15, 16; LTO: questions no. 13, 14, 19, 22; and IVR: question no. 12, 11, 17, 16). The scores were on five-point scales (1–2–3–4–5), as shown in Fig. 1.

We measured PCS based on four constructs: PCS1: Clothing in relation to self as structure (7 items), PCS2: Clothing in relation to self as a response to judgements of others (4 items), PCS3: Clothing in relation to self-esteem (8 items); and PCS4: Clothing in relation to body image and body cathexis (5 items). Based on the exploratory factor analysis, one item from PCS 1 and 4, respectively, and two items from PCS 3 were removed due to low factor loadings. In all cases—South Korea only, Mongolia only, and both—four of the same PCS dimensions were extracted, which explained > 56% of the total variance.

Cronbach's alpha for each factor showed acceptable reliability (>0.7 for PCS 1–3 and >0.6 for PCS 4). Table 2 describes the four factors with the factor loading of each item. All the items showed factor loadings higher than 0.6 to their factors, except one item in PCS 3 and 4, respectively, and lower than 0.3 to the other factors, except one in PCS 3 (0.376 to PCS 2), which is partially satisfactory to construct validity of the scales.

To examine measurement invariance between the two groups, multigroup confirmatory factor analysis (MGCFA) was conducted in R. The results show the responses based on the PCS scales from each group are fair to be compared: CFI (Comparative Fit Index) = 0.874, RMSEA (Root Mean Square Root of Approximation) = 0.075, and SRMR (Standardised Root Mean Square Residual) = 0.068.

Results

The difference between millennial women of South Korea and Mongolia in cultural value and proximity of clothing to self

Hofstede's suggested that new sample scores should be anchored to the existing framework (Hofstede et al., 2010; Nasierowski & Mikula, 1998). As *Hofstede Insight* (2020) provided South Korea's scores but not for Mongolia, South Korea was regarded as a

- Power Distance Index (PDI) = $35(m07 - m02) + 25(m13 - m15) + C(pd)$
- Individualism Index (IDV) = $35(m04 - m01) + 35(m09 - m06) + C(ic)$
- Masculinity Index (MAS) = $35(m05 - m03) + 35(m08 - m10) + C(mf)$
- Uncertainty Avoidance Index (UAI) = $40(m11 - m07) + 25(m15 - m16) + C(ua)$
- Long Term Orientation (LTO) = $40(m13 - m14) + 25(m19 - m22) + C(ls)$
- Indulgence versus Restraint Index (IVR) = $35(m12 - m11) + 40(m17 - m16) + C(ir)$

Note. m: mean score for each question (e.g. m07: mean score for question number 07)
C(pd): constant of PDI, C(ic): constant of IDV, C(mf): constant of MAS, C(ua): constant of UAI, C(ls): constant of LTO, C(ir): constant of IVR

*Constant can be chosen by users and be positive or negative to shift the scores of each dimension to values between 0 and 100.

Fig. 1 Formulas for index calculation of Value Survey Module (VSM) 2013

Table 2 Factor analysis results for PCS

Construction/item	Factor loading	Eigen-value	Explained variance (%)	Cronbach's Alpha
PCS 1: Clothing in Relation to Self as Structure		6.50	17.61	0.83
1.What I wear is consistent with who I am	0.69			
2.My clothing is a part of me, not just simple possession	0.73			
3.I often wear certain clothing to let people know what kind of person I am	0.62			
4.I want my clothes to make a statement about me without any need for words	0.70			
5.What I wear and the way I wear it to show others my attitudes	0.76			
6.Through my clothing, I can show my values to others	0.73			
PCS 2: Response to Judgements of Other		1.81	15.99	0.78
1.How I look in my clothing is important because	0.65			
2.I want others to accept me				
3.It matters to me that people make judgements about the type of person I am by the way I dress	0.71			
4.I care about what other people think of how I look in my clothes	0.84			
5.I'm careful in wearing certain styles or brands of clothing because they affect how people respect me	0.65			
PCS 3: Clothing in Relation to Self-esteem		1.61	12.57	0.83
1.My self-confidence increases when I dress appropriately	0.82			
2.Good quality clothes that look good on me make me feel competent	0.55			
3.When I feel good about what I am wearing, then I have confidence in myself	0.77			
4.Certain clothes make me feel good about myself	0.63			
5.When I look good in my clothes, I feel good about myself	0.61			
6.I feel good about myself when I have something new to wear	0.69			
PCS 4: Clothing in Relation to Body Image and Body Cathexis		1.30	9.90	0.62
1.I avoid certain styles or colours in clothing that do not enhance my body build or figure	0.47			
2.I wear certain clothing styles to change the way my body looks	0.77			
3.When I'm dissatisfied with a part of my body, I wear clothing that draws attention away from it	0.64			
4.I choose clothes that accent the parts of my body that I like	0.72			
Total Variance explained			56.06	

comparison point in calculating cultural variability. We calculated the absolute values without the constant using the index formula of Hofstede and Minkov (2013) and then drew constant values from the difference between Hofstede's index scores and our newly calculated scores for South Korea. Finally, we adjusted Mongolia's value scores by adding the constant value. The calculated cultural value indices are, as shown, in Table 3.

Table 3 Results for Cultural Values with a *t*-test and power analysis

	PDI	IDV	MAS	UAI	LTO	IVR
Absolute value:						
South Korea	-4	34	-12	-18	11	77
Mongolia	-12	8	-18	-10	7	23
Hofstede's Results for South Korea	60	18	39	85	100	29
Results for Mongolia adjusted to South Korea	52	-8	33	93	96	-25
<i>t</i> -value	1.704	4.830	-0.234	-1.030	1.040	7.542
<i>p</i> -value	0.089	0.000	0.815	0.304	0.299	0.000
Power	0.397	0.998	0.056	0.179	0.177	1.000

PDI Power Distance Index, *MAS* Masculinity Index, *IDV* Individualism Index, *UAI* Uncertainty Avoidance Index, *IVR* Indulgence versus Restraint Index

Table 4 Independent samples *t*-test results for PCS

	Variable	Mean		<i>t</i> -value	<i>p</i> -value	Power
		South Korea (N = 178)	Mongolia (N = 140)			
Proximity of clothing to self	PCS1	3.55	3.90	-4.10	0.000	0.983
	PCS2	3.38	3.17	2.12	0.042	0.532
	PCS3	4.11	4.37	-3.38	0.000	0.920
	PCS4	3.71	3.79	-1.04	0.298	0.071

The mean value for PCS is based on the 5-point scale

PCS1 Clothing in Relation to Self as Structure, *PCS2* Clothing in Relation to Self as Response to Others Judgment, *PCS3* Clothing in Relation to Self-esteem, *PCS4* Clothing in Relation to Body Image and Body Cathexis

Meanwhile, Hofstede highlighted that the absolute value is meaningless, and only the differences between groups must be described (Hofstede et al., 2010). Regardless of constant values, this research reveals that Mongolia shows a lower level of power distance, individualism, masculinity, long-term orientation, and indulgence and only shows higher long-term orientation than South Korea, which is not consistent with the results of previous studies (Hofstede Insights 2020; Rarick et al., 2014). An independent *t*-test showed significant differences between the two countries in IDV ($t=4.830$, $p=0.000$) and IVR ($t=7.542$, $p=0.000$) with a power of 0.998 (IDV) and 1.000 (IVR).

Independent *t*-test analysis identified the significant difference in PCS 1, 2, and 3 between the two countries, as shown in Table 4 (in PCS2 at the level of $p < 0.05$). The table shows that Mongolian women tend to consider clothing as part of their self and their clothing was related to their self-esteem more than South Korean women. In contrast, South Korean women were more conscious of others' judgement than Mongolian women. Regarding power analysis, PCS1 and PCS3 achieved over 0.8 with 0.983 and 0.920, respectively, and PCS2 showed 0.532. A statistic power of 0.8 is typically adequate for most areas of research. However, given the many psychological research with a power lower than 0.5 (Bakker et al., 2012), PCS2 cannot be excluded from the discussion.

The effect of cultural value on proximity clothing to self

The effect of cultural values of each dimension on PCS1, 2, 3, and 4 was analysed in the South Korean and Mongolian sample data, respectively, as well as in the combined data. However, the moderating effect of the nation was not found in all cases. Therefore, H12 was rejected.

We performed a multiple regression analysis to verify the hypothesis with combined data.

Firstly, in terms of the relationship between individualism and PCS, the IDV of the countries closely correlates with an individual's identity expressed by clothing. H1 states that individualism with high UAI positively influences PCS1, but it was rejected. Instead, the result showed IDV with high UAI is negatively related to PCS1. According to both countries' cultural values, while South Korea and Mongolia showed high UAI scores, both were not individualistic but collectivistic, so this does not meet the conditions of H1. To verify the result of our study, further investigation with individualistic countries is required. H2 (a) states that IDV will negatively affect PCS2, which means one's concern about attire in response to others' evaluation, and H2 (b) postulate that IDV will negatively correlate with PCS3, which means that self-esteem is gained through clothing. The results supported H2 (H2 (a): $\beta = -0.197$, $p = 0.000$, H2 (b): $\beta = -0.184$, $p = 0.001$). In other words, the results demonstrated a positive correlation for collectivism with PCS2 and PCS3. In these cases, the variance inflation factor (VIF) was lower than 2, which indicated that multicollinearity between the cultural values was not a concern.

Secondly, we examined the relationships between power distance and PCS and masculinity and PCS. As a result, H3 (a) and (b) that PDI may positively affect PCS2 and PCS3, and H4 (a) and (b) that MAS may positively affect PCS2 and PCS3 was rejected. The reason behind this may be due to the relatively high-power distance cultures in both South Korea and Mongolia, which both have a low level of masculine culture (which means a high level of femininity). High PDI and MAS cultures may be expected to positively correlate with PCS2 and PCS3, which explains one's concern about attire in response to others' evaluation and gaining self-esteem through clothing. However, South Korea and Mongolia have high PDI cultures, meaning they tend to boost one's position in the group and gain self-esteem through status clothing. This is offset by their feminine culture, in which they are expected to be modest and prefer practical clothing. According to cultural values in Bulgaria and the Czech Republic, the offsetting effects of power distance and femininity have been verified in studies on clothing purchasing patterns (Milan et al., 2013).

Thirdly, in terms of the relationship between uncertainty avoidance and PCS, the results verified that H5 (a) and (b) are true, stating that UAI may positively influence PCS2 and PCS3. Both South Korea and Mongolia have high UAI, which explains their value on group tradition and history. With high UAI, individuals from the two countries tend to maintain a well-organised appearance to overcome external uncertainties and wear designer clothing brands due to their preconditions that will give them confidence and acceptance into groups. Therefore, our results show that UAI has minor positive influence on PCS2 ($\beta = 0.123$, $p = 0.042$) and it is positively correlated with PCS3 ($\beta = 0.155$, $p = 0.012$).

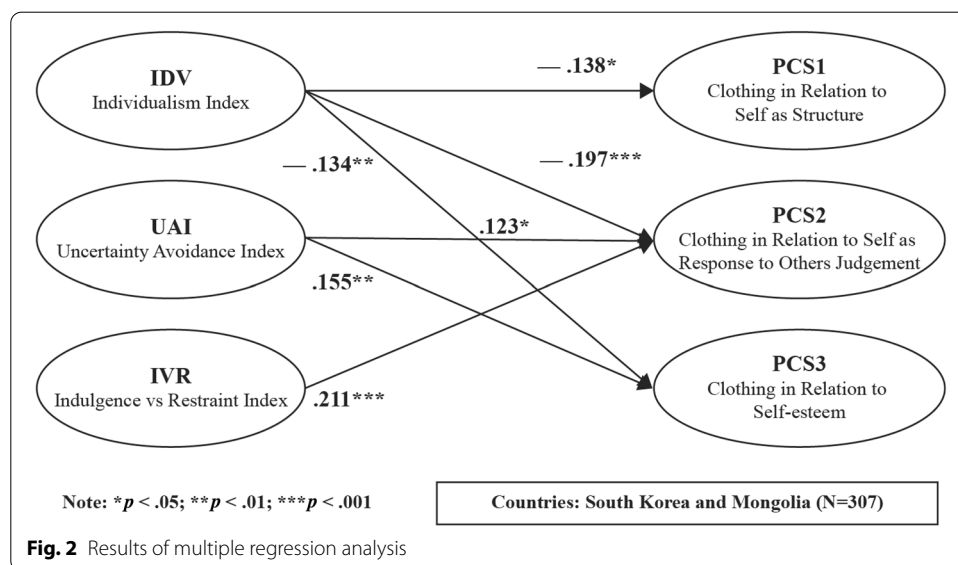
Lastly, we examined the relationship between indulgence vs restraint index and PCS. The result supported H6 (a) that IVR will positively affect PCS 2 ($\beta=0.211, p=0.000$), but rejected H6 (b), which states that IVR will positively affect PCS3. While the IVR of South Korea (29) and Mongolia (-25) were adjusted according to Hofstede’s standards, both countries had a difference, with both having low scores. The absolute scores before the adjustment were 77 for South Korea and 23 for Mongolia, without adding a constant. The higher score for South Korea suggests that millennial women in South Korea are more likely to consider purchasing clothing as a leisure activity when compared to other groups. Consumer purchasing for the sake of gratification is not only for one’s satisfaction and may be strengthened through positive feedback from others. H6 (a) was verified as true, as it is related to clothing based on other people’s evaluation. However, H6 (b) proposed that consumer purchasing for the sake of gratification will enhance self-esteem. Our results reject this hypothesis because of the contradictory results from combining Mongolia’s PCS results, which has low IVR, and South Korea, which has high IVR. This must be confirmed in the future by comparative studies on countries or groups with similar IVR scores.

Relationship between cultural values and PCS based on score difference

According to the analysis, only the individualism and Indulgence vs Restraint Index are statistically different, with the power of 0.8 between the two countries, as shown in Table 4. Therefore H8, H9, and H10 could not be verified, as they stated that countries with a higher power distance, masculinity, and uncertainty avoidance would score higher for PCS2 and PCS3. As previously explained in Fig. 2, PCS1, 2, and 3 correlate with individualism, while the only PCS2 is related to the Indulgence vs Restraint Index.

The results of validating the H7 and H11 by comparing only the scores of the absolute cultural values of the two countries are as follows.

Firstly, H7 (a) states that the country with a higher IDV would score lower for PCS1, which means that clothing constitutes an individual’s identity, was supported: South



Korea, which has a higher IDV (18) compared to Mongolia, had a lower PCS1 average (3.55) than Mongolia (3.87). Secondly, H7 (b) states the country with the higher IDV would score lower for PCS2, which refers to one’s concern about attire in response to others’ judgement. It was rejected as Mongolia (3.18) had a lower PCS2 average than South Korea (3.38). Thirdly, H7 (c) states the country with the higher IDV would score lower for PCS3, which refers that self-esteem is gained through clothing, was supported: South Korea, which has the higher IDV, had a lower PCS3 average (4.11) than Mongolia (4.29). Fourthly, regarding Indulgence vs Restraint, H11 (a) states that the country with a higher IVR would score higher for PCS2. This verified that Korea had a higher PCS2 average (3.38) than Mongolia (3.18). H11 (b) was rejected as South Korea, which has the higher IDV, had a lower PCS3 (4.11) than Mongolia (4.29).

H7 (b) and H11 (a) are contradictory. PCS2 showed a connection with both individualism and indulgence. South Korea has a higher IDV and IVR score than Mongolia. H7 (b), which states that the country with a higher IDV would have a lower PCS2, was rejected. However, H11 (a), which states that the country with a higher IVR would have a higher PCS2, was supported. Accordingly, we assume that the effect of indulgence on PCS2 is greater than that of IDV on PCS2.

All hypotheses’ results are as shown in Table 5.

Table 5 Hypotheses testing results

	Hypotheses	Result
Correlation between cultural values and PCS	H1: Individualism may positively influence PCS1	reject
	H2: Individualism value may negatively influence PCS2 (a) and PCS3 (b)	(a) support (b) support
	H3: Power distance value may positively influence PCS2 (a) and PCS3 (b)	(a) reject (b) reject
	H4: Masculinity value may positively influence PCS2 (a) and PCS3 (b)	(a) reject (b) reject
	H5: Uncertainty avoidance value may positively influence PCS2 (a) and PCS3 (b)	(a) support (b) support
	H6: Indulgence vs Restraint value may positively influence PCS2 (a) and PCS3 (b)	(a) support (b) reject
Comparison between countries	H7: The country with higher individualism may have lower PCS1 (a), PCS2 (b) and PCS3 (c)	(a) support (b) reject (c) support
	H8: The country with a higher power distance may have higher PCS2 (a) and PCS3 (b)	N/A
	H9: The country with higher masculinity may have higher PCS2 (a) and PCS3 (b)	N/A
	H10: The country with higher uncertainty avoidance may have higher PCS2 (a) and PCS3 (b)	N/A
	H11: The country with higher indulgence may have higher PCS2 (a) and PCS3 (b)	(a) support (b) reject
	H12: The country may moderate the relationship between cultural values and proximity of clothing to self	reject

N/A not applicable (H8-10 could not be verified as both countries’ PDI, MAS and UAI are not statistically different)

Discussion

Theoretical contributions

There is a lack of research on the relationship between cultural values and self-expression behaviour, especially in clothing, even though the alleged relationship between these two. As Hofstede and McCrae (2004) implied that cultural traits could influence the individual's personality (Hofstede & McCrae, 2004), and clothing could reflect the specificity of each culture and an individual's identity (Entwistle, 2015), this study stimulates the significance of this topic with empirical observation. Moreover, this study is meaningful because it has investigated the cultural differences in the context of the two countries' perceptions of clothing in South Korea and Mongolia millennial women, increasing cultural/economic exchanges and noticeable backgrounds.

As we measured the cultural values of South Korea and Mongolia to avoid ecological fallacy when applying Hofstede's theory at the individual level, there was a difference in individualism and Indulgence vs Restraint that is inconsistent with the previous study (Rarick et al., 2014). According to Rarick et al. (2014), Mongolia's individualism ranked the highest in Asia; instead, Mongolia is more collectivistic than South Korea in our study. Even though our study does not support the prior research, it is meaningful in that it reflects the possibility of cultural change responding to Mongolia's political, economic, and social systems compared to the early 2010s. As an unstable economic and political environment may cause cultural changes (Rinuastuti et al., 2014), revalidation of cultural values is required instead of a simple benchmark of Hofstede's analysis.

Given the correlation between the cultural traits and PCS in South Korea and Mongolia, the score gap infers the clothing behaviours of each country. Though both cultures are collectivistic, South Korea's individualism index is significantly higher than Mongolia's. Since Mongolian women would be more sensitive to other people's judgments, they may wear clothes to conform to the group's values and rules and gain self-esteem than South Korean (De Mooij, 2011; O'Cass & Frost, 2002). This study also found that South Korea and Mongolia have different tendencies in the Indulgence vs Restraint dimension. As South Korea is a more indulgent society than Mongolia, millennial females in South Korea may buy clothing as a leisure activity (Morris & Elizabeth, 1982), which can be strengthened through self-satisfaction and evaluation by others.

After examining the moderating effect of cultural values on the proximity of clothing to self in each country and the combined data, we did not find either country's moderating role in all the cases. Research results indicate that specific cultural values can influence PCS regardless of country. Thus, this implies that knowing the cultural values of a particular group can infer the group's perception of clothing. More specifically, PCS2 says that one wears clothes in the consciousness of others, and PCS3 says that clothes are related to self-esteem. Reversely, this result suggests that the collectivist culture recognises clothing as a tool for communication with others and an instrument by which one can raise one's self-esteem. In addition, uncertainty avoidance has shown positive correlations with PCS2 and PCS3, meaning that groups more inclined to avoid uncertainty tend to care about others' views on their attire and use clothing to improve their self-esteem.

Finally, indulgence showed a positive correlation with PCS2, which is interpreted as a group of people who appreciate their lives tend to enjoy the attention of others beyond

their satisfaction. Therefore, understanding a particular group's IDV, UAI, and IVR values could help infer the group's perception and behaviour regarding clothing.

Managerial implications

The distinct differences in IDV, IVR, PCS1 and PCS3 should be carefully considered in decision-making processes in the fashion business and cultural exchanges between the two countries. More assertive individualism and indulgence of South Korean millennial females may influence, for example, the strategy of Mongolian cashmere fashion brands for the Korean market to position themselves as more expressive with various style options that provide an exceptional wearing sensation based on the high-quality cashmere textiles. On the other hand, South Korean brands that would like to promote their fashion products with popular culture contents to Mongolia's young female customers may appeal to their peer culture by emphasising the functional aspects such as durability.

Higher PCS1 and PCS3 of Mongolian customers would imply that South Korean businesses may need to step up to propose a better self-identity than their products may provide compared to what they do in South Korea. Conversely, Mongolian fashion businesses may need to neutralise their strong visual or marketing statements affecting constructed identity when approaching the young female population in South Korea.

The influence of the cultural dimension revealed in this study may help the fashion brands not only in targeting Mongolia or South Korea but also other countries of which PCS dimensions or clothing-self-perception have not been investigated, especially in Asia. Since the cultural dimension scores of most countries are already available, the fashion companies can compare the culture of their own base country and the target market's base country so that they can carefully steer the strategy to attract the new millennial female customers. The influence of UAI on PCS2 and PCS3 is noticeable, considering the UAI may include personal endeavours to control one's outfit to deliver specific images to others and get feedback encouraging themselves. Fashion brands approaching countries with a high UAI can consider constructing a prestigious, outstanding, and novel brand image to appeal to the PCS2 and PCS3 of the consumers. The negative influence of IDV on PCS2 and PCS3 is undoubtedly interesting. We assume this result would apply to Asian countries with a dominant collectivistic culture. Marketers aiming at Asian countries with higher IDV should consider that the new target group may not feel that much self-attachment to the clothing they saw in their base country. However, we suggest that the brands targeting the countries outside of Asia be cautious before directly adopting the negative influence of IDV on multiple PCS dimensions. Lastly, those entering a country with higher IVR can create pleasant and fun-oriented marketing messages with careful consideration to what the product or the brand image gives the customers in the view of others in society because that would be what matters to them.

Conclusion and Limitations

The study's findings essentially confirmed the hypotheses regarding the correlation between Hofstede's cultural values and proximity of clothing to self, regardless of the country. Especially between individualism and PCS2, clothing as a response to others' judgment, and PCS3, clothing related to self-esteem. In addition, we revealed the

relationship between uncertainty avoidance and PCS2 and PCS3 and indulgence tendency and PCS2. Notwithstanding the research findings could apply further to diverse countries with similar cultural values to South Korea and Mongolia, there are several limitations.

Firstly, this study is limited to millennial women in South Korea and Mongolia. This may have a confounding effect on the result, primarily when the hypotheses are related to masculinity and femininity. As Hofstede and Minkov (2013) indicated, the follow-up study could examine and compare diverse groups' cultural values within a country to identify the validity of the findings. In addition, more comprehensive and meaningful results may be achieved if further research widens the sample's diversity of ethnicity, gender, and age group according to education and income levels and residential areas.

Secondly, although we verified the offset effect while combining two cultural values, particularly power distance and masculinity, on PCS1 and PCS2, this study left room for further investigation of the relationship between power distance or masculinity and PCS.

Thirdly, while we confirmed that several cultural values influence the same PCS item, we did not thoroughly inspect which dimension has a more substantial influence on each PCS item and the reason. A later study should scrutinise each combination of cultural values and PCS and the impact power of each dimension in diverse cultures to disclose the relevance of each case.

Lastly, the current research shows the correlation between cultural influence and the psychology of clothing focussed only on the proximity of clothing to a self-scale. Other constructs may be used to identify the cultural influences on self-expression, focussing on clothing behaviour in future research.

Abbreviations

COL: Collectivism; FEM: Femininity; IDV: Individualism; IVR: Indulgence versus restraint; LTO: Long term orientation; MAS: Masculinity; PCS: Proximity of clothing to self; PDI: Power distance index; South Korea: South Korea; STO: Short term orientation; UAI: Uncertainty avoidance index.

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Authors' contributions

JL and SYC originated the research idea. JL, JJ and SYC carried out the research and drafted the first manuscript. YL and JH contributed to the discussion. All authors read and approved the final manuscript.

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Availability of data and materials

The datasets generated and/or analysed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics

This research was conducted under the approval and supervision of the Research Ethics Board of Mongolia International University (REB 22-21082) regarding ethical issues including consent to participate.

Competing interests

The authors declare that they have no competing interests.

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