

Exploring the relationship between uniform and perceived employee happiness and productivity

Moody, L.

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Exploring the relationship between uniform and perceived employee happiness and productivity

Abstract

Purpose: The purpose is to contribute an understanding of employee's relationships with their uniforms and the perceived impact on their experiences at work. An improved understanding of this relationship may provide benefits for both the employee and the organisation. Recognising an ageing workforce and increasing female representation, differences based on gender and age are of interest.

Approach and method: The study aimed to explore employee views and perceptions of uniform design and potential links to their happiness and productivity at work. An online survey was developed and completed by 2560 uniform wearers. The data was analysed through descriptive and inferential statistics. Exploratory factor analysis uncovered latent variables from among the large number of survey items. A two-way factorial ANOVA compared perceptions based on gender and age.

Findings: The results suggest participants feel that their uniform has an impact on their happiness and behaviour at work. Differences in responses to their uniform were found based on gender and age. The survey tool enabled consideration of employee views and exploratory factor analysis identified five constructs of uniform design priorities: *positive feelings, experience at work, suitability and practicality, tailored to the individual, visibility and brand*.

Originality: This research is believed to be the first survey exploring the views of UK-based uniform wearers. Key elements of uniform design have been prioritised from the employee perspective to offer an emerging model to understand employee perceptions of uniform design. These findings inform uniform manufacturers and employers in designing and developing uniform to address the needs of employees.

1 Introduction

Uniforms or work-wear are worn across many industries including transport, hospitality, healthcare, manufacturing and retail. The Professional Clothing Industry Association Worldwide (2021) reports that the UK Personal and Protective Equipment (PPE) and work-wear markets are valued at over £8.6 billion and employ over 44,000 people. Uniforms fulfil a range of psychological and functional purposes for the employee, customer and employer (Nazarko, 2014). They can provide the wearer with a sense of community and team-belonging, a sense of professionalism and pride. From an employer perspective uniforms can ensure the organisation is meeting health and safety requirements, build brand awareness, foster equality, as well supporting performance of specialised tasks and roles (Horridge *et al.* 2002; Mok and Xie 2021; Nazarko 2014, 2008; Zhang *et al.*, 2015).

In light of the number of uniform wearers, and the size of the market, research that informs uniform design is of commercial, and academic interest. Often uniform is designed from the company perspective with a focus on practicality and brand. Research has tended to focus on uniform sizing, comfort, needs related to specific job roles, company branding and enhanced protection (Gupta 2014; Tynan 2019). The needs of the employee may not always be at the centre of the design and development process (Mok and Xie, 2021), with relatively little published on uniform design from the perspective of the wearer.

It is argued here, that wider consideration of the impact uniform design has on how an employee feels at work, is of value to both the individual and the organisation. The research seeks to contribute knowledge of the employee perspective, considering differences based on age and gender, and extending understanding of how uniform design may affect how an employee feels at work.

The following research questions are addressed:

RQ1: How do employees feel about their uniforms?

RQ2: What do employees desire from a uniform design?

RQ3: Can uniform design influence how employees feel (happiness, confidence, productivity) at work?

RQ4: Are there differences in how employees feel about their uniform based on age and gender?

2 Literature Review

2.1 The organisational perspective

In the wider study of fashion and clothing, clothes are considered to affect how the wearer feels and acts (Mair 2018). Understanding this relationship is of importance in an organisational context, where the uniform may affect how the wearer feels about work, behaves and performs (Judge et al. 2001).

There is an increasing focus in organisational development, policy and processes on positive factors such as employee satisfaction, well-being and work motivation (Bakotić 2016; Bin 2015; Isham et al. 2020; Smith et al. 2020, de Neve and Ward 2017; Nirenerg *et al.* 2017). Job satisfaction is perhaps the most studied field of organizational behaviour (Anwar, 2017). It is generally considered that how an employee feels about work and their satisfaction, drives retention and productivity influencing worker (Bin 2015, Smith et al. 2020) and organisational performance (Bakotić 2016, Isham et al. 2020).

Happiness at work has been identified as important to an employee's job satisfaction, performance and productivity (Bryson *et al.* 2017; Crede et al. 2007; Fisher 2010; DiMaria *et al.*, 2020; Krekel *et al.* 2019). Experimental research has suggested a direct link, with happiness potentially leading to 10-12% more productivity (Oswald *et al.* 2015). Bellet *et al.* (2019) report finding a strong effect of happiness on sales performance based on survey results; whilst Krekel *et al.* (2019) found a strong positive correlation between employee satisfaction and employee productivity and customer loyalty, and strong negative correlation with staff turnover.

Professional articles written by business and marketing professionals argue the link between uniform and employee satisfaction, happiness and productivity at work (Business first Family 2018; CEO Today 2018, 2019; HR & Employee Engagement Community). There is emerging evidence to indicate that uniform may affect motivation (Mayra et al. 2005) and confidence at work (van der Laan 2016), and may also play a role therefore in performance (Mackay 2010; Diamantidis & Chatzoglou 2018; Krekel et al 2019). However, there is a relatively little exploratory research exploring the impact of uniform on the employee.

2.2 The impact of uniform on how the employee feels and behaves

The concept of 'enclothed cognition' argues that clothes have an impact upon those the wearer interacts with, as well as the wearer's own psychological processes (Adam and Galinsky 2012; Adam and Galinsky 2019). According to Adam and Galinsky (2019) enclothed cognition depends on two independent factors: the clothes need to embody a symbolic meaning, and the person needs to physically wear the clothes. They found, for example,

that people who wore a lab coat experienced increased ability to focus compared to people who did not wear a lab coat. Furthermore, people who wore a lab coat described as a doctor's coat experienced increased selective attention compared to people who wore the same coat described as a painter's coat. Gamble and Walker (2016) found that wearing a helmet, compared to wearing a baseball cap, led to greater risk taking and sensation seeking. Whilst Lipson *et al.* (2020) interviewed 20 women who regularly wore athleisure, and found that it encouraged them to feel more confident and athletic, and motivated them to engage in activity.

Empirical research has sought to explore this connection in the context of uniform or work-wear design. López-Pérez *et al.* (2016) demonstrated experimentally that wearing a nurse's tunic elevated empathy in comparison to wearing the same tunic described as a cleaner's tunic, or being asked to identify with the nurse's tunic without wearing it. Mendoza (2020) examined the effect of embodying the role of a police officer by wearing a uniform, and found participants in uniform were more likely to shoot unarmed targets on a reaction-time measure (the Shooter Task). Caspar and Pech (2021) investigating the effect of civilian, military and Red Cross uniforms on cognitive and psychological processes. They found that wearing a Red Cross uniform increased empathy for others' pain; civilian clothing led to them administering less shocks themselves, and military uniform increased the sense of participant agency.

The majority of studies of enclothed cognition are experimental; here the focus is on taking a descriptive and explorative approach to exploring enclothed cognition. It is aimed to explore employee views on their uniform, and how they feel at work including their happiness, motivation, confidence and perceived (or self-assessed) productivity. By better understanding this relationship it may be that uniform can be designed to influence how an individual experiences and performs at work.

2.3 Understanding the needs and preferences of employees

User-centred design practices focus on placing the user, and in this case the wearer, at the centre of the design and development process (Wilkinson & De Angeli, 2014). By capturing input from everyone involved; users, designers and stakeholders throughout the development process it is aimed to achieve better designs. Similarly, employee-centred human resources practices are advocated to improve employee wellbeing at work (Wang *et al.* 2021).

Despite support for these principles, relatively few studies have elicited employee views to inform uniform design. Mok and Xie (2021) undertook an interview based study to understand movement-related comfort. They interviewed 15 wearers' from eight different

industry backgrounds in Hong Kong, capturing their needs for, and perceptions of their uniform fit, movement and comfort. Eom and Lee (2020) also focused on comfort and functionality undertaking interviews to form functional requirements for construction work-wear. Moving beyond comfort and functional requirements, research in Finland has explored work identity and wellbeing amongst those wearing uniform within a restaurant setting (van der Laan 2016). Brandewie *et al.* (2021) have focused on police uniform design in the USA identifying opportunities for enhancing the design by examining psychological and emotional aspects including performance, comfort, professionalism and empowerment, as well as satisfaction levels with fit, fabrics, aesthetics and functionality. These studies vary in their approach but are pre-dominantly qualitative, and focus on small samples, and/or specific employee groups. Here we seek to expand on these studies and develop and administer a survey to address a wider range of employees, explore views and perceptions, and determine a range of factors that describe the employee perspective on uniform design.

2.4 Designing for age and gender

It is important that uniform design takes into account the diversity of the workforce. The views, experiences, needs and requirements of employees will vary. Clothing and fashion can reinforce or undermine social hierarchies; and uniform in particular has the potential to create images of specific ideologies and social attitudes (Tynan and Godson 2019).

The UK has an ageing population and workforce, with one third of all workers now over 50, and a narrowing employment rate gap between people aged 35 and 49 year and those aged 50 and 64 years (Centre for Ageing Better 2020; Institute of Fiscal Studies). Physical and psychological clothing needs change with age (Au *et al.* 2016; Liao and Hu, 2021; Rahman and Yu 2018). Rahman and Yu (2018) found early, and late female baby boomers evaluated clothes based on style, fit, comfort and colour. Age appropriateness was found to be important with participants expressing disappointment with their current body type, and the industry offer.

Over the past 40 years, the UK has also seen a sustained increase in the number of women in employment, with 1.57 million more female employees than a decade ago (House of Commons Library 2021). Work-wear has the ability to facilitate integration, yet especially in male dominated occupations the needs of women have been neglected (Bjerck 2016). Both work-wear and personal protective clothing have traditionally been designed for the male form, and failed to adequately represent female requirements and identity (Dolatabadi *et al.* 2021; McQuerry *et al.* 2019; Pant and Amit 2017; Troynikov *et al.* 2017).

An understanding of how uniform wearing experiences and needs vary with age and gender, is important to extend research, organisational thinking, and shape the direction of uniform

design accordingly. Therefore whilst examining the needs and views of employees, we specifically consider differences by age and gender.

Hypotheses

Having established the benefit to both employees and the organisation of understanding and addressing employee's views, needs and experience of wearing uniform, a survey was developed and administered to address the following hypotheses:

- H1. Uniform affects how a wearer feels at work
- H2. Uniform affects how a wearer performs at work
- H3. The perceptions of uniform differ based on gender
- H4. The perceptions of uniform differ based on age

3 Research Methodology

This survey-based study was approved by [REDACTED] Ethics committee (P1000070).

3.1 Survey development

The broad themes for the survey were established through a review of the literature on uniform wearing experiences and design, and the notion of encloded cognition suggesting that the uniform may affect how wearers feel and act. As a novel survey tool, there was not a similar published or validation survey to build and develop from, but the first version of the questions were then informed by the work-wear design company marketing and customer satisfaction indicators. To meet both academic and practical requirements, demographic questions and additional questions were added in response to discussion and feedback from the work-wear design company [REDACTED] through a collaborative and iterative process. The questions were further refined with a group interested in the design, selection and procurement of uniform during a UK-based stakeholder event.

A full question set was formed and piloted online by 10 attendees from the stakeholder event who completed the survey online and gave feedback via email. This led to changes in the wording and language of some of the questions to add clarity, simplification of the informed consent text, and more consistent scale alignment across the questions. Page breaks were also added to reduce the amount of page scrolling required for online completion on a small device.

3.2 Survey instrument

The survey consisted of 5 demographic questions (based on [REDACTED] customer segmentation) and 52 closed response questions. The questions related to how employees felt about wearing a uniform, the effect they felt it had on them at work, and the

importance of particular design elements. The questions were answered on a 10-point Likert scale which allowed variation in responses and removed the option of a neutral response using a mid-way point, encouraging the participant to make a decision between a negative or positive opinion on each question. 10-point scales have previously allowed greater expression of feelings by respondents than shorter scales, whilst still being easier to use (Preston and Colman 2000). In the majority of questions, 10 indicates strong support, importance or agreement, and 1 no agreement /or low importance.

3.3 Survey distribution

Once finalised, the survey was made available both on paper and online (using onlinesurveys.ac.uk) and shared by [REDACTED] with their database of current and potential customers for distribution amongst employees. The distribution list included retail companies, banking, service and courier, engineering services, manufacturing, and facilities management. The survey was open for completion for a 3 month period during 2019 (pre the COVID-19 pandemic).

3.4 Data analysis

The data was collated by the survey software and extracted into Microsoft Excel. Descriptive analysis was undertaken on the raw data, with mean and median responses determined. Inferential statistics were employed using IBM SPSS Statistics 26 to determine differences in responses between participant groups based on age and gender. Extended analysis involved exploratory factor analysis to determine the number and nature of underlying constructs within the survey and inform the development of a model from the larger set of survey items. A two-way factorial ANOVA was applied to determine whether the age or gender of the participants had an effect on the experiences or feelings towards uniform when applying these constructs.

4 Findings

4.1 Exploratory Analysis

The survey was completed by 2560 participants (34.2% female, 64.8% male). Participant job roles included operations and warehouse roles, driving and delivery, customer advisors, checkout operators, desk and office based staff, engineers, shop floor staff and retail store managers. Table 1 indicates the breakdown of participant characteristics in terms of age, gender, and whether, or not they held a customer-facing role (based on [REDACTED] internal categorisation system). There was some variation in response rate per age and gender, and a higher number of completions by participants in customer-facing roles.

INSERT TABLE 1 ABOUT HERE

4.1.1 Views on wearing a uniform

Participants were asked if they liked wearing their uniform, and if they took pride in wearing it. The median response to both questions was 8 (mean 7.25 and 7.55 respectively).

Participants were asked which feelings wearing their current uniform invoked. They were given 15 feelings and asked to indicate their agreement. They responded with a 10 to indicate the feelings that they strongly agreed with, through to 1 for those they disagreed with. The mean scores across participants can be seen in Figure 1.

INSERT FIGURE 1 ABOUT HERE

The ratings suggest that their current uniform helps participants feel recognisable and part of a team. It provides a professional identity and helps them to feel positive and proud in their role. Moderate scores were given to their current uniform helping them to feel motivated and happy. There were very low levels of agreement with less positive feelings.

4.1.2 Uniform Design and Fit

The survey asked participants to indicate the importance of 20 uniform design factors. They were asked “*It is important to me to have a uniform that...*” followed by the 20 factors. The participants responded on the scale with a 1 to indicate a factor of very low importance, and 10 of very high importance. The factors have been ordered in Table 2 based on mean scores across participants (see Table 2).

INSERT TABLE 2 ABOUT HERE

The data suggests that it is important that uniform is comfortable and suited to the work and work environment. It is also important that it is easy to take care of, and the right number of garments are provided. The list suggests participants recognise the importance of brand identity and company representation. ‘Fit’ features in the top half of the list, but more personal elements of the design (flattering, age appropriate) do not score as highly.

4.1.3 Feelings at work

In addressing ‘*H1. Uniform affects how a wearer feels at work*’, the survey explored the relationship between uniform design and employee perceptions of happiness, enjoyment and positivity at work. Table 3 presents a summary of the median responses to three

questions with the median values ranged from 7-10, indicating an employee perception that uniform does affect how they feel at work work.

INSERT TABLE 3 ABOUT HERE

The participants were presented with the uniform design requirements listed in Table 2, and asked to consider the impact having these factors addressed in the design of their uniform would have on their happiness at work. From a comparison of the responses to the 2 survey questions (Figure 2), we can infer support for H1 and the impact design may have on happiness:

- *My uniform makes me feel happy*
- *If all the factors (previously mentioned) were right, how much happier would you feel?*

INSERT FIGURE 2 ABOUT HERE

A 21.64% increase in mean response was found between the two questions. The Friedman test indicated the difference is significant [$\chi^2(1) = 502.50, p < .001$], suggesting that improving uniform design by addressing these factors would help employees feel happier at work.

The results also indicate participants agreed strongly that their uniform also has an impact on their confidence and interactions with customers (see Table 4).

INSERT TABLE 4 ABOUT HERE

Participants were asked for their agreement with the following statements (see Table 4):

- *My uniform makes me feel confident*
- *If all the factors were right (i.e. priorities listed in Table 2), how much more confident would you feel?*

Analysis indicates an 11.41% increase in mean responses between the two questions. This was found to be statistically significant using the Friedman test [$\chi^2(1) = 175.284, p < .001$], suggesting that improving uniform design through these factors could help employees feel more confident at work.

INSERT FIGURE 3 ABOUT HERE

Participants were asked 'How much of a factor is uniform on willingness to join and stay at a company' (1= of very low importance; 10= of very high importance). The results suggest uniform has limited effect on *Willingness to Join* (median 6; mean 5.79) and *Willingness to Stay* (median 6; mean 5.81) with the most common ratings given to both being 5. Higher ratings were given to role of the uniform in ensuring the employee is visible to the customer (median 9; mean 8.63), with participants agreeing that the customer would judge the company based on their uniform (median 8; mean 7.81).

4.1.4 Performance at work

The impact uniform has on employees' perceived ability to do their role, their motivation and productivity was explored. Table 5 indicates that participants strongly agreed that it is important to have a uniform that enables them to do their job (median 10; mean 9.20) and that they like (median 8; mean 7.7). They felt that a well-designed uniform could enable them to be more productive (median 8; mean 7.42) supporting 'H2. Uniform affects how a wearer performs at work'.

INSERT TABLE 5 ABOUT HERE

Error! Reference source not found. summarises responses to questions related to employee motivation and professionalism at work. The findings suggest a relationship between motivation and uniform design (median 7; mean 6.42). There are higher responses to the impact of a 'liked uniform' on a feeling of professionalism (median 8; mean 7.69) and being able to give 100% in a role (median 8; mean 7.42).

INSERT TABLE 6 ABOUT HERE

4.1.5 Gender

The data was explored in terms of the gender of participants (see Tables 3-6). Analysis through Kruskal-Wallis test by ranks provided support for the hypothesis 'H3: Perceptions of uniform differ by gender' and revealed:

- Female participants like [$\chi^2 (1) = 175.284, <.001$] and take greater pride [H (1)= 12.555, $p < 0.001$] in their uniform than participants identifying as male.
- Female participants indicated stronger agreement than male participants that their uniform affects their enjoyment of work [H(2)= 25.15, $p < .001$], happiness [H(2)=

20.5; $p < .001$], confidence with customers [$H(1) = 26.06$, $p < .001$], productivity [$H(1) = 29.45$, $p < .001$], and professionalism [$H(1) = 6.97$, $p < .01$].

4.1.6 Age

The individual question responses were explored in terms of age (see Tables 3-6). The Kruskal-Wallis analysis revealed a difference by age in the extent to which participants liked [$H(4) = 43.302$, $p < .001$] and took pride in wearing their uniform [$H(4) = 36.147$, $p < .001$]. Older adults (50+ years) indicated that they liked their uniform more, and felt a greater sense of pride in wearing it.

The perceived relationship between uniform and happiness at work [$H(4) = 16.29$, $p < .01$] and enjoyment of work [$H(4) = 22.98$, $p < .01$] both differed by age. In both cases the strong agreement / highest ratings were given by participants aged 25-34 years.

The results for interactions with customers [$H(4) = 11.48$, $p < .05$]; productivity [$H(4) = 43.57$, $p < .001$]; and performance in the job [$H(4) = 13.11$, $p < .05$] also varied based on age. Participants under 50 years indicated stronger agreement than those over 50 years. Differences were also found in motivation [$H(4) = 13.92$, $p < .01$] and feeling professional [$H(4) = 13.19$, $p < .01$], with lower levels of agreement from those under 35 years.

Younger participants indicated that improving uniform design by addressing a range of factors could help them feel happier (age 16-24 years = 30.50% and 25-34 years = 24.06% increase) and more confident at work (age 16-24 years = 15.11% and 25-34 years = 17.77% increase). The data supports the hypothesis that '*H4: Perceptions of uniform differ based on age*'.

4.2 Extended analysis

The data collection employed a novel, exploratory survey. Extended analysis was undertaken to uncover latent constructs from among the large number of survey items, and then determine the consistency and reliability of the emerging model.

4.2.1 Emerging model of impact of uniform design

An exploratory factor analysis was used to determine the number and nature of factors which explain the covariance structure of the data. The method defines constructs from a list of survey questions/ items which are grouped together based on the loadings. This reduces the number of variables and can be used to inform the development of a model from a relatively large set of items.

Using SPSS 26, factor extraction was undertaken using principal components as no priori model or theory exists. Two of the most common methods of factor rotation were considered, varimax and oblique, and the results from both were very similar. The results using the varimax method are discussed as this has the advantage of providing independent rather than overlapping constructs. Bartlett's Test of Sphericity was significant ($p < .001$) indicating factor analysis as a suitable approach. In addition, the Kaiser-Meyer-Olkin measure of sampling adequacy was 0.941 which also indicates the sample size is adequate for Factor Analysis (Hutcheson & Sofroniou, 1999).

Initially 10 constructs were extracted with Eigen values >1 , accounting for 69% of the variance. However following examination of the scree plot, there was a clear "elbow" providing support to consider just the first five underlying constructs; 49 items were loaded on the five constructs (see Appendix for Rotated Component Matrix). Four items were removed as they did not load on any construct. The five constructs explained 58% of the variance of the entire data set which would be considered good and are described below:

- Construct 1 measures the respondent's 'Positive Feelings' invoked by uniform. The items loaded on this construct were related to the feelings participants have towards their uniform.
- Construct 2 'Potential Impact on the Individuals Experience at Work' included items related to the effect a well-designed uniform could have on enjoyment, performance, happiness, willingness to stay in the role.
- Construct 3 'Suitability and Practicality' included items related to the extent the uniform suits the work and worker e.g. comfort, easy to care for, suited to the role.
- Construct 4 'Tailored to the Individual' included items related to the extent the uniform meets individual needs or preferences e.g. customisable, flattering, age appropriate.
- Construct 5 'Visibility and Brand' relates to the effect the uniform has on the customer experience and perceptions, and the brand of the company.

The rotated factor loadings and variance explained by each construct are summarised in Table 7.

INSERT TABLE 7 ABOUT HERE

The Cronbach's alpha was assessed to confirm the internal consistency and scale reliability. Cronbach's alpha ranging between 0.65 and 0.70 are often considered acceptable. The five factors have moderate to high alpha levels (all constructs are 0.80 and above). This confirms the internal consistency and reliability of the model.

4.2.2 Differences by gender and age

Through the analysis it was determined whether the perceptions of uniform differed by the age or gender of the participants. The relationships are plotted in Figures 4-8 with the data summarised in Table 8.

INSERT FIGURES 4-8 ABOUT HERE

A two-way factorial ANOVA with each of the five constructs as dependent variables revealed that there was not a statistically significant interaction between gender and age for construct 1 ($p=0.64$), construct 2 ($p=0.78$), construct 3 ($p=0.91$), construct 4 ($p=0.44$) or construct 5 ($p=0.50$).

INSERT TABLE 8 ABOUT HERE

As reported in Table 8, simple main effects analysis showed that age and gender did not have a statistically significant effect on constructs 1, 3 or 4. For construct 2 there was evidence that age had an effect on the 'Potential impact on experience at work' ($F(4,665)=3.41$, $p<.01$). Post-hoc analysis (Tukey HSD) and Figure 5 indicate borderline evidence for the younger participants scoring higher with differences between those in the 23-34 years and 50-60 year categories ($p=.046$) and 16-24 years and 50-60 year categories ($p=.075$). Construct 5 'visibility, brand and role identity' was found to differ based on gender ($F(4,665)=8.87$, $p<.05$) but not on age ($p=.62$).

5 Discussion

Despite the number of workers across sectors that wear uniforms or work-wear, there is limited research on the impact it has on the wearer. It is argued here, that if uniform can affect the wearer's feelings, psychological processes and behaviour (Adam and Galinsky 2012; Adam and Galinsky 2019, Mair 2018), it could potentially influence individual and organisational performance and productivity. Whilst employee happiness and productivity are ongoing employer priorities (DiMaria *et al.*, 2020; Krekel *et al.*, 2019; Bryson *et al.*, 2017), there is limited research focused on the role uniform design can play within this context.

5.1 Employee perceptions and priorities

The descriptive analysis of responses indicated that in general participants liked, and took pride in their uniform, tending to associate positive feelings with wearing it (proud,

respected, positive, confident; construct 1). They recognised the value offered to the company in terms of ensuring employees are recognisable, look professional and identify as part of the company or team. This is in line with previous research suggesting uniforms provide the wearer a sense of community and team-building, and a sense of professionalism and pride (Mok and Xie 2021; Nazarko 2008). There were very low levels of agreement with the suggestion that the uniform they wear is embarrassing, or wearing it creates a sense of dread.

Often uniform is designed with a focus on practicality and brand. The needs of the employee may not always be at the centre of the design process. Whilst a small number of studies have elicited employee views to inform future design (Mok and Xie 2021; Eom and Lee 2020; Brandewie *et al.*, 2021), these have tended to focus on specific employee groups through interview studies. Uniform providers and employing organisations are likely to consider wearers views, needs and requirements, but the outcomes are not widely available to inform design. Here views have been drawn across a wide range of roles and organisation to give a broad sense of wearer's views and priorities.

Employee priorities included comfort, suitability to the job and environment, and the uniform being easy to care for and wear (construct 3). Customer recognition of the employee in their uniform was considered important, with participants recognising the organisational perspective and the importance of brand and company representation (construct 5). 'Fit' was rated as important, but there was less importance given to the uniform meeting individual needs and personal preferences (e.g. being age appropriate, flattering, trendy, customisable, covering tattoos; construct 4). The results seem to highlight the understanding the individual has of the role of uniform from the company perspective.

5.2 The impact of uniform on how an employee feels at work

It has been shown here that employees feel that a well-designed uniform has an impact on their happiness at work, positivity and would add to their sense of enjoyment (construct 2). The relationship between uniform and happiness seemed to be strongest amongst participants aged 25-34 years and participants identifying as female. This may suggest that the current designs are less well tailored to their needs, or may relate to the value and meaning specific groups place on clothing.

Uniform was also perceived to affect confidence. The link between uniform design and confidence did not seem to be as strong as happiness. Nonetheless, the results suggest design could play a role in increasing confidence, especially during customer interactions. Further exploration of this link, especially for those in customer facing roles, is argued to be

of value to employees, the customer and the employing organisation. It should be noted here that the data is skewed towards those in customer-facing roles. Whilst uniforms are most commonly associated with customer-facing role, uniforms are provided for other reasons (e.g. team morale, protection, differentiating roles etc). The findings here are heavily influenced by those in customer-facing roles, and further research is required to explore the impact for different sectors and role

5.3 The impact of uniform on performance and productivity

Employee productivity is of interest to many disciplines, but there has been little consideration of employee perceptions of the link between uniform design and productivity. The sample did believe that the design of their uniform could affect productivity. Empirically determining the impact on productivity would be complex, but the relationship warrants further research, considering the practical benefits the uniform can bring to performing a task, as well as the link to how someone feels and behaves at work. Employees indicated strong agreement with the link between the uniform and their confidence, interaction with customers, motivation and professionalism. These individual benefits may, or may not affect employee performance, but the strength of the views emphasise the importance of employee involvement and consultation when developing a new uniform.

Whilst the participants recognised that it is important to have a uniform that enables them to do their job, and that they like, they did not prioritise the design of the uniform when considering joining, or staying at a company; so arguably uniform is unlikely to significantly affect employee recruitment or retention.

This study was undertaken during the latter half of 2019; it may be that views on uniform have changed since the COVID-19 pandemic. The job roles and working patterns of many of the UK population have adjusted, and many of the changes may continue. The extent to which this has affected uniform wearers is still to be determined, but there is growing interest in the impact of the pandemic on work attire (Vogue 2021) and new guidance on uniform and work-wear policies emerging (Foster 2021). This may leave workers feeling quite differently about their uniforms post-pandemic, and provide an opportunity to re-consider how they are used and designed.

5.4 An emerging model to understand employee perceptions of uniform design

Through this research, an exploratory survey has been developed and administered that builds on both theory and practice in uniform design. The extended analysis has reduced the relatively large set of survey items to inform the development of a model of uniform design from the perspective of the wearer (see Figure 9). Five underlying constructs have been

shown to represent employees views on their uniform and the benefits they perceive could be achieved design.

INSERT FIGURE 9 ABOUT HERE

The model seeks to provide a practical tool for further validation and potential use by researchers and practitioners to determine employees' views and direct future design strategies.

5.5 Equality and individual needs in uniform design

In line with demographic trends, uniform design needs to take into account a more diverse workforce. The descriptive analysis suggested differences in employee views based on age and gender in terms of confidence, motivation, interaction with customers and productivity. Through application of the model above, the analysis indicated that the 'Potential impact uniform design could have on the individuals experience at work' (construct 2) differed by age, and the perceived importance of 'visibility, brand and role identity' (construct 5) differed based on gender.

Whilst this research does not yet point to how uniform design should be adapted to reduce gender and age disparities, it does highlight for organisations that uniforms are experienced and perceived differently between employee groups. This echoes the existing literature that argues clothing needs and experiences change with age (Au *et al.*, 2016; Liao and Hu, 2021; Rahman and Yu 2018) and based on gender (Bjerck 2016). Without further exploration it is hard to determine if the relatively low expectations of participants that uniform should be tailored to meet individual needs is related to an acceptance that customisation is unlikely, or a lack of desire for it. Meeting individual needs and ensuring inclusion whilst providing a well-fitting, high quality uniform is arguably worth the investment given the impact on well-being and productivity.

The survey can facilitate the identification of differing experiences and views between employee groups and better understand design priorities. Future studies might examine the sensitivity of the tool to changes in uniform design, and further sub-categorisation of employee groups. The value and meaning of uniform will vary for different levels of seniority and roles within an organisation, and the design should also address the needs of other stakeholder groups (e.g. senior leaders, managers, customers, potential employees). A multi-stakeholder perspective is recommended to explore the role user-centred and co-design can bring to individual and organisational performance and brand perception.

There was some imbalance within this sample between the categories of age and gender, as well as the use of unequal age and customer-facing role categories that could be improved in subsequent survey administrations. Nevertheless the emerging group-based differences are relevant as the workforce becomes more diverse and we drive for greater workforce inclusion. Strategies to engage with, and cater for the requirements of different groups are important to ensure the positive benefits that can be achieved through uniform design are available to all.

5.6 Conclusions

If the right uniform can influence how an employee feels, their happiness and ability to do their job, it in turn is likely to influence performance and productivity. With this in mind, this research sought to explore UK-based employee views and perceptions of uniform design. A tool has been developed to explore these views with the elucidation of five constructs to understand and map employee perceptions.

There are financial as well as employee wellbeing benefits to be achieved from a better understanding of how work-based happiness and performance can be influenced and improved through design. It is concluded that from the wearer's perspective, their uniform has an impact on how they feel and believe they act at work. Given these findings, further consideration of how fashion design can be applied in the workplace to influence happiness, inclusion and productivity is recommended.

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