**The superhero effect: How enclothed cognition can impact on the perceptions and actions of serving UK police officers**

**Key words:**

Enclothed Cognition; police; police uniform; body armour; police welfare; police wellbeing

**Abstract**

The theory of 'enclothed cognition' posits that clothes alone can significantly alter their wearer's outlook on life. Based on this idea, this artile examines the world view of uniformed British police officers seeking to understand whether their uniform impacts on their attitudes and behaviours. Using data from a survey of 91 uniformed officers, results suggest that their uniform does indeed affect how they behave and their perceptions of self. Recommendations are made for changes to uniforms with the intent to reduce assaults by and against officers and complaints, as well as increase morale and productivity.

**Introduction**

Superman is renowned for having to find the nearest phone box in which to spin around and don his (in)famous red underwear, blue jumpsuit and cape before he can effectively save those in unfortunate predicaments – apparently not being able to do so in his ‘civilian’ attire. For British police officers, the transformative idea of their uniform as an invulnerability shield is well-known anecdotally, but no studies have yet formalised this idea empirically. The aim of this work therefore is to understand the psychologically transformative power of police uniform on its wearer under the concept of ‘enclothed cognition’ (Adam & Galinsky, 2012). The placement of the police in society will be considered in relation to both social identity theory (Tajfel, 1978) – as to whether the uniform influences ideas of in-groups and out-groups; and structural functionalism (Durkheim, 1893) with regards to the specific role that uniformed officers play in society and within the police itself. Groupthink (White, 1952) (Janis, 1971) is also considered, with regards to whether officers are more likely to conform to behaviours demonstrated by colleagues even if they may not agree with them, simply as a result of them being in the same easily identifiable group. This is further linked to the principle of de-individuation, whereby members of an anonymising group, such as large uniformed organisations like the police, may behave differently - “doing together what we would not do alone” (Myers & Twenge, 2022, p. 205) (Joseph & Alex, 1972) (Shaw, 1973). Infamous experiments such as the ‘The Stanford Prison’ (Haney, et al., 1973), and Milgram’s (1963) obedience testing delivering electric shocks, have demonstrated the power of this collective thinking in response to uniforms; this seeks to understand their impact on the group of tightly regulated and monitored people that comprise the police.

This study limits itself to an examination of *police officer perspectives* of their uniforms, whilst acknowledging that there is a parallel aspect regarding public perceptions of police uniform that is only loosely acknowledged herein, as a result of having been more extensively studied and considered in existing literature e.g (Simpson, 2017) (Quill, 2016) (Nickels, 2008) (Konnikova, 2014). Evidence towards this ‘cloak of invincibility’ effect is obtained through means of an anonymous survey conducted by uniformed officers across multiple police forces within England and Wales (*n =* 91*)* the results of which are then interpreted to establish conclusions about the wearer’s perceptions of their safety and responsibilities. It also seeks to establish their confidence in reliance on the uniform to exert their authority when dealing with those who may seek to do them harm; i.e. are they more likely to be emboldened to intervene in dangerous incidents when in uniform than when not. The recent Covid-19 pandemic also provided an opportunity to understand police officer conceptions of safety in relation to medical conditions in comparison to fear of physical injury in and out of uniform.

**Background**

‘Enclothed cognition’ is the idea pioneered by Adam and Galinsky (2012) that suggests the clothing, and the societal expectations surrounding certain garments, can affect the behaviours of the wearer. In their foundational work they conducted an experiment with participants donning a white lab coat and being told separately that it was a doctor’s coat, painter’s smock, or not given any prompt. The study demonstrated that those participants told they were wearing a doctor’s coat performed significantly better at cognitive tests than the other two groups. The authors suggested that this phenomenon may apply in other ways to other influential clothing types, including police uniforms, asking whether they might make the wearer more courageous (Adam & Galinsky, 2012, p. 922). Since their 2012 question, there are only a small number of studies that have sought to address their concept and only from a limited number of different perspectives. All have supported the original findings of the power of clothing alone to alter abilities and perceptions.

Amongst the studies assessing the impact of ‘enclothed cognition’ and with particular relevance to the police, is that by Mendoza & Parks-Stamm (2020). Their work examined the impact of wearing a police uniform on non-police officers, when deciding to shoot simulated targets in a firearms training exercise. The authors found that the effect, when accounting for the wearing of police uniform as the only distinguishing variable in randomised control tests (RCT’s), was to increase the chance of un-armed targets being erroneously shot.

A different study by Civile & Obhi (2017) demonstrated that students asked to wear a police uniform whilst undertaking cognitive tasks performed demonstrably less well when images of persons wearing hoodies were displayed to them, compared to the control group not in uniform, or those wearing mechanic’s overalls. The intent of this was to play into the participants’ subconscious bias in perceiving those in hoodies as being of a lower socio-economic standing, and therefore presumably presenting greater threat. The authors concluded in line with Mendoza & Parks-Stamm’s (2020) findings, that those participants in the police uniform were adversely impacted, *solely by the uniform.*

These findings lend strong credence to Becker’s (1963) labelling theory; that participants are on some level identifying themselves as police officers and behaving as they feel that a police officer might. This is itself supported by studies into the ‘Pygmalion Effect’ – or self-fulfilling prophecy – which indicates if labels are applied to someone they will generally live up to these labels (Cooper & Good, 1983) (Tauber, 1998). This could have serious implications for modern British police officers who contemporarily find themselves continually berated as being ‘racist’ (Grierson, 2022) (White, 2022), ‘misogynistic’ (Dodd, 2022) (Hamilton & Fish, 2022), and ‘corrupt’ (Dearden, 2021). If they see these epithets as attacks on the police uniform, to what extent does putting on that uniform affect their behaviour and decision-making?

**Enclothed cognition and the British police**

With regards specifically to the idea of enclothed cognition, there are numerous extant studies that may well impact on serving police officers. In 1829 when London’s Metropolitan Police Force (The Met) was established, often cited (incorrectly (Goldsmith, 2002)) as being the first professional police force in Britain, the idea of their uniform was at the forefront of their founders’ minds. ‘Bobbies’ were issued navy blue swallow-tail tunics, reflecting the fashion of the day, and to be distinct from the army at the time who wore red. This was intended to demonstrate to the public and the officers that they were not a paramilitary force, but a civilian law-enforcement body (Cowley, 2011, p. 25); thus directly contributing to the public’s and officers’ perceptions of the force through their clothing – long before the concept of ‘enclothed cognition’ was conceived. Over time this uniform changed to blue shirts and tunics, until the introduction of white shirts put paid to the veracity of the nickname of the ‘boys [and other genders] in blue’. All forces across the UK today (with the notable exception of the Met) wear black wicking t-shirts and black trousers, replete with body armour and often Tasers, creating the unfortunate effect of making them appear more paramilitary than their creators no doubt would have wished for.

The effect of the current all-black uniforms links back once again to the impact that such apparel has on its wearers. Research has demonstrated that sports persons wearing black attire are notably more aggressive than participants in other colours (Frank & Gilovich, 1988) (Peña, et al., 2009). Later studies have suggested however that this phenomenon does not apply to police officers, by contrasting US states which wear vastly different uniforms (Johnson, 2013) (Lupo, 2017). Additional research shows that perhaps counter-intuitively public perception of the police, at least in America, is actually *increased* when they wear black over alternative colours (Nickels, 2008). Brandewie et al. (2021) looked at the impact uniform appearance and style can have on both the wearer’s morale and sense of belonging; concluding that a move to more sporty apparel (such as the British police’s current black wicking tops) increased the comfort and subsequent welbeing of police officers. They similarly found that it created a strong sense of identity to an social identity ‘in-group’ (Tajfel, 1978), which is of particular relevance herein, and supports findings by Greenaway et al. (2015) that group identity through shared cultures can significantly improve output.

The police is also traditionally perceived as a hyper-masculine role (Brewer, 1991) (Miller, et al., 2003) (Evans, et al., 2013) (Kurtz & Upton, 2018), and the current all-black uniform falls in line with research suggesting that black is perceived as a colour favoured by males (Mohebbi, 2014), representative of anger and power (Aslam, 2006). This view of stereotypical gender roles may also lead to uniformed officers, both male and female, to feel a subconscious pressure to conform to this perceived gender-construct (Swan, 2016) (Hayder, et al., 2021), in line with the idea of ‘pluralistic ignorance’ which is especially prevalent in perceived masculine roles (Miller & McFarland, 1991) (Van Grootel, et al., 2018). This may be especially true in the arena of public order policing, where officers are required to wear head-to-toe protective gear, including full-face helmet. The anonymising effect of this clothing may lead to strong feelings of both a need to conform (McRaney, 2012, pp. 183 - 189) as well as encourage the effects associated with de-individuation (Myers & Twenge, 2022); a hypothesis that will be examined herein. The impacts of this potential anonymising effect can be seen with the regular allegations of excessive use of force by police at public order events (HMIC, 2009) (Barker, et al., 2021) and the subsequent need, going back to the very foundations of the police and allegations of brutality at riots in July 1855, for officers to visibly and clearly display their identifying ‘collar’ numbers (Melville Lee, 1901, pp. 319 - 326). In more recent times these have additionally displayed at least some part of the officer’s name as well (Diffin, 2010); all intending to reduce the anonymising effect.

The only study to date which examines the impact of British police uniform on its wearers is that by De Camargo (2016) which focuses on the *sociological* aspects of belonging and conformity, specifically relating to female officers, but only hints at the psychological aspects. She concludes that officers feel an overwhelming subconscious need to conform, and that the uniform can present both a physical and mental barrier to abilities. This study aims to fill the psychological void, as to whether officers fundamentally *think* differently as a result of their uniforms. It further seeks to address a potential issue that there is no training identified on the national policing curriculum to provide new officers an insight into the effects of wearing uniforms or the subsequent psychology, including the masculinity impact and conformity (College of Policing, 2023). This seems a large gap considering the potential impacts when left unchecked, such as the aforementioned Stanford Prison and Milgram experiments (Haney, et al., 1973) (Migram, 1963); and indeed may be a significant contributor to the current police culture that has resulted in crises through abuse of such power and authority e.g. Wayne Couzens and David Carrick (Dodd & Siddique, 2021) (Dodd & Sinmaz, 2023).

**Method**

The aim of the research is to therefore establish whether serving uniformed British police officers do indeed perceive themselves differently when in uniform. This is further broken down into whether they perceive themselves differently *on*-duty to *off-*duty through a change in attitude or behaviours when in uniform; if they perceive a dichotomy between themselves and plain-clothes (detective) officers; and if they view their position in society as different because of the uniform they have chosen to wear.

A survey was sent to voluntary participants, all of whom are currently serving uniformed police officers, comprising a series of questions seeking both quantitative and qualitative data. Utilising a mix of qualitative and quantitative data, or ‘triangulation’, can provide the a more comprehensive understanding of social research, mixing numerical statistics with qualitative detail to gain a holistic view (Campbell & Fiske, 1959) (Webb, et al., 1966) (Jick, 1979).

The aim of these questions was to understand the impact of the uniform on those that wear it, considering factors such as: stereotyping; masculinity and gender perceptions; social identity theory (Tajfel, 1978) and structural functionalism (Durkheim, 1893) – both in terms of the role of the police vs. civilians, and uniformed vs. plain clothed officers; alongside other insights the results might yield.

The use of a survey was chosen in order to provide an initial baseline assessment to support or disprove the hypothesis that uniform does indeed alter officers’ perceptions of self, thereby potentially opening a gateway to further experimentation. A digital survey was created and advertised for serving police officers to participate via social media, with preliminary screening questions to weed out non-relevant respondents. This was shared on police-specific social media sites as well as specific requests to officers in geographically varied forces. The questionnaire itself was anonymous with the only personal characteristics requested off respondents being their gender, in order to answer the above described question as to whether there are gender imbalances in officer perceptions of self. Anonymity in surveys has been shown to increase honesty and truthfulness in responses (Klein, et al., 1967) and this is exacerbated in policing as a profession where officers are perhaps less inclined to be critical of their employers. This is also in line with the ethical guidelines of the Social Research Association (2021) regarding anonymity, and their and others’ ideals that the rights and privacy of subjects should be foremost in a researcher’s mind (Dingwall, et al., 2017). There are recognised limitations with this method in that it cannot be identified which forces officers have replied from (or not), and more detailed analysis around age, and ethnicity for example cannot be undertaken. As the principle aim at this time however, is to identify whether or not there is an effect of the uniform on police officers, these more in-depth analyses are secondary and can form part of subsequent intended follow-up investigations.

As with any research it is difficult to overcome the ‘Hawthorne Effect’, whereby the participants overthink their responses in anticipation of what they suspect the researcher wants to hear (Oswald, et al., 2014), however the dissemination of the survey by an organically generated random self-selection process with no direct researcher interaction was intended to limit this to the greatest extent.

**Results**

Evidence in support of the ‘superhero effect’ hypothesis is found with over half of respondents (*n* = 50, 55%) having heard of the idea that police officers feel more invulnerable when putting their uniform on. Officers were also strongly inclined to become involved in dangerous situations when in uniform, with nearly all respondents (96%, *n* = 87) saying they would not intervene in a fight involving weapons when out of uniform, but 58% (*n* = 53)confirming they would intervene directly and immediately when *in* uniform (the remainder standing off and observing temporarily whilst waiting for back-up).

To account for the impact that personal protective equipment (PPE) has on this decision-making, officers were asked whether they are authorised to carry a Taser conductive energy device as part of their duties. 63 respondents did not carry a Taser and of those, 35 (56%) stated they would still intervene directly in the above scenario; 28 participants were Taser carriers and 18 of those (64%) would also intervene directly. Whilst this shows that Taser as a specific item of PPE may have *some* bearing on the involvement decision, it is negligible and the impact of the uniform alone is greater. This was undermined however when participants were specifically asked “What impact do you feel your Personal Protective Equipment (ASP, CS, Taser (if issued), Body-worn video and body armour) has on your own perceptions of safety”. In responses on a 10-point Likert Scale (Likert, 1932) question with 1 being no impact and 10 being the most significant impact, the Mean value was 7.15 and the Mode 8. This may be a demonstration of the Hawthorne Effect where the question was asked in a more direct way which participants expected to answer in a certain manner.

Perhaps surprisingly given the traditional nature of the dangers faced by police officers, only 12% (*n* = 11) stated that they felt less safe during the pandemic. Qualitative data from that minority highlighted how officers felt that being in uniform made them “felt vulnerable more than ever have as police officer” (participant 70) because “more people threatened assault by coughing and spitting” (participant 56). There is evidence however that several respondents misunderstood the question, with qualitative answers such as “During the early stages I walked around with my police leather gloves on, even in the heatwave of the first lockdown, as I didn't want to touch anything” (participant 4) and “Uniform often makes you more of a target not less” (participant 6) accompanying the answer “I felt no change in my personal safety during the pandemic compared to before”. It is therefore difficult to extrapolate meaningful findings in this area.

The impact on respondents’ psychology from their uniforms was supported by questions that examined perceptions of on-dutyofficers who have served both in uniform and front-line plain clothes roles where they are expected to interact with the public and make arrests. Only those who had undertaken both roles were asked these questions (*n* = 63). 92% (*n* = 58) felt that the public interacted with them differently in plain clothes and 75% (*n* = 47) felt that being out of uniform was a key decision-making factor on whether to interact with someone and how to do so. Of that 75%, the Mean value for how important of a factor it was when deciding to stop someone (10 being the most important factor) was 7.08 and the Mode 8, indicating that uniform alone is a hugely influential consideration about the officer’s perceptions of safety.

This was then asked directly of all respondents: “what impact do you feel your uniform has on your own perceptions of safety?” which interestingly generated a significantly different result. The Mean response to this question was 5.68 and the Modal value 7. Whilst these findings indicate a good correlation with the ‘superhero effect’ hypothesis, they differ from the subset of officers who have worked in plain clothes. This may be indicative that those who have not worked in plain clothes roles do not consider the comfort blanket afforded by the uniform as important as it may in fact be.

Moving away from the sense of safety afforded by the uniform, there is strong evidence that it has a significant role to play with regards the culture of the police. Over a third of respondents (39%, *n* = 36) stated that when they were in uniform they felt a certain pressure to conform to a generic identity of ‘being a police officer'. This was further broken down with 14% saying they ‘tried to remain true to themselves but felt themselves occasionally slipping into a role’; 10% saying that like a chameleon they changed their persona when in work to out of it; and 15% saying that they no longer recognised their former selves and now felt like they “have adopted the persona of a police officer in- and out-of-work”. This was supported by 51% of respondents (*n* = 46) who indicated that they had witnessed and action by a colleague they had not agreed with but felt pressured to go along with because they perceived themselves as all being on the ‘same team’. Of those who chose to support this question with a subsequent qualitative answer (*n* =15) most commonly mentioned themes were use of force issues (*n* = 9) and rudeness (*n* = 4), with a short length of service also being cited twice as being a barrier to reporting those of more experience.

The suggestion of a ‘macho’ culture also bears out, with 55% of respondents agreeing with that statement. Interestingly, only 29% of those who stated it existed, felt pressured to live up to that culture, and only 27% of that same group, or just 12% of the total respondents, self-identified as fitting that description. ‘Pluralistic ignorance’ – the idea of a commonly held belief by a group, that isn’t actually true (Miller & McFarland, 1991) – evidently plays a key role in maintaining this perception, but social mimicry not so much (Chartrand & Bargh, 1999).

There is also a strong sense of structural functionalism (Durkheim, 1893) with some evidence of a divide between uniformed and CID officers. Whilst 62% of respondents (*n =* 56) stated they viewed non-uniformed colleagues equally to themselves, 34% (*n =* 31) said there was “a strong sense of them and us”. Only 27% however felt that they could rely on CID officers equally to uniformed colleagues to assist them in a dangerous situation. 23 of the 56 respondents who provided more qualitative detail mentioned a lack of PPE and / or radios being carried by detectives as being a key factor in that. One opined that CID officers “came off a uniform role as soon as they could because they couldn’t cope with conflict” (participant 55) and another (participant 73) said “From doing OST [officer safety training] with someone from major crime it was clear they were very hesitant to get involved with conflict, even made a comment about not going to a job or “going anywhere near” someone with a knife”.

Physical comfort was another important factor in officers’ perceptions of their uniform with 35% (*n* = 32) feeling physically uncomfortable in uniform, compared to just 11% (*n =* 10) who felt uncomfortable *mentally*. By far the most uncomfortable aspect of clothing was body armour (*n* = 59, 65%) which perhaps interestingly, given the focus on female body armour comfort in literature (Malbon, et al., 2020) (Malbon, et al., 2022), seemed to be of equal concern for men (64%) as women (64%). Trousers were the next most common comfort complaint (*n* = 29, 32%), but this was far more of an issue for female officers (n *=* 18, 50%) compared to male (*n* = 11 / 53, 21%). These results may be particularly important for calls to change women’s uniforms (De Camargo, 2016), given that the issues apparently impact on men too, whether to a lesser or similar degree, providing even greater evidence to address concerns which affect the entire workforce.

The final questions focused on the arena of professionalism, and whether different uniform styles affected this self-perception amongst officers. These questions were asked to participants who had worn both the current wicking style t-shirts and another form of police clothing (*n* = 53). The overwhelming majority (*n* = 39, 74%) felt more professional in the traditional white shirts; but when re-opened to all participants and asked whether “the wicking tops are better for appearance than the old white (or blue) shirts?” this majority shrunk to just 55%, suggesting younger-in-service officers (those who have only experienced the wicking tops) prefer the appearance of those. This may mean that appearance is a shifting concept in line with generational fashion trends (Kawamura (Ed.), 2018); however 59% of those surveyed (*n* = 54) felt that the public wanted to see officers in traditional shirts. This could reflect either ‘pluralistic ignorance’ based on media coverage and ‘rosy retrospection’ (looking back through rose-tinted glasses) (Mitchell, et al., 1997), or could indeed reflect their true-held beliefs.

**Discussion**

The results of this study could have significant real-world impact, especially in the arena of officer safety and wellbeing. Findings from a series of Federal Bureau of Investigation-commissioned research in America (Pinizzotto & David, 1992) (Pinizzotto, et al., 1997) (Pinizzotto, et al., 2006) suggest that in up to 66% of assaults on officers, offenders were motivated by a perception that the officers weren’t fully mentally prepared, leading protagonists to believe they could ‘get away with it’. This belief was, in part at least, brought on by a perception of the officer’s conveyed professionalism (or lack thereof).

If, as these findings suggest, officers believe that the public consider them to be more professional in a white shirt, the ‘Pygmalion effect’ suggests those officers will in turn act more professionally to live up to that expectation. Those respondents who had worn both wicking tops and traditional shirts, overwhelmingly felt more professional in the latter, indicating that under the theory of ‘enclothed cognition’ would also lead to increased professionalism on their part. This is turn could reduce the number of assaults on officers, if the findings in Pinizzotto et al. (2006) are transferable to the UK. It could also lead to other associated benefits such as a reduction in complaints and increased productivity through the generation of a professional mindset. These are certainly the views of Stephen Watson, chief constable of Greater Manchester Police, and a philosophy he has credited with turning the force’s fortunes around during his year’s tenure at the helm (Hymas, 2022).

Headwear is equally as important for these self-perceptions, with answers of ‘feeling more like a police officer’ (*n =* 19) and ‘feeling smarter’ (*n* = 15) when wearing a men’s Custodian or women’s bowler hat ranking highest in a wide-ranging question on headwear preferences; after only the practicality of how easy it is to transport the alternative baseball cap. Nearly half of respondents (41%) stated they felt more authoritative in a Custodian / bowler as opposed to less, or the same as without headwear. This supports research by Volpp and Lennon (1988) who concluded that any form of police headwear (as opposed to none) gave the wearer more authority in the eyes of the public; again feeding into the ‘Pygmalion effect’. This sense of authority when dwjhand will be of particular relevance to Leicestershire Police, who having recently trialled rigid ‘bump’ baseball caps, have reverted to the traditional Custodian / bowler, again citing a “renewed commitment to standards” (Patel, 2022).

Equally as important as image to officers mentally, was comfort. It has been demonstrated that a significant percentage of officers do not feel comfortable in their uniforms, with the key issues in descending order being: body armour; trousers; headwear; utility belt kit; tactical vest; t-shirt and boots equally; waterproof coat; fleece. Whilst body armour is a difficult issue to fix, due to limitations around fabric requirements (Prat, et al., 2012), there do exist coping strategies that could better be implemented across police forces to help wearers cope with the side-effects (Perry, 2018). There is necessarily also a cost-benefit analysis for police forces in terms of expense of the armour versus the frequency officers are likely to be shot at or stabbed in the torso (LaTourrette, 2010). Trousers however are a much easier win, with these being a ubiquitous item of clothing that can be manufactured at minimal cost. This concurs with the findings of Brandewie et al. (2021) who determined that the quality and feel of clothing, along with its suitability for the role, were key factors in police officers feeling proud of their role as well as increasing physical performance. Findings from the fashion industry also support this, with the concept of the ‘Four F’s’: ‘fashion’, ‘feel’, ‘fit’, and ‘function’ all being integral to a given piece of apparel’s acceptance (Goldman, 2005).

One of the biggest discrepancies between male and female perceptions of police culture occurred with beliefs around the existence of a ‘macho’ culture. Of those that answered this question that identified their gender (*n* = 65) 49% men felt that there was a ‘macho’ culture, compared to 70% of women. Research by De Camargo (2016) asserts that this may be linked to uniform design, where clothes traditionally designed for men naturally exclude women; findings which are supported by free-text responses from participants of this study such as:

“As a woman the uniform is incredibly uncomfortable and there is not enough choice to feel comfortable” (participant 37)

“Women forced to wear men’s trousers, have to explain why they need another pair when during [their] period can change size and bloat so often need more than one or two pairs trousers. Body armour not shaped to female body, uncomfortable” (participant 70)

“Despite the ‘unisex’ tags, the clothing is better suited to men. I don’t think there should be unisex clothing for all. I think there should be male, female and then unisex for those that may prefer it. Male trousers for example, do not fit female officers and do not facilitate the mobility required to carry out duties” (participant 76).

Overall however, respondents were clearly proud to be outwardly identified as a police officer. There were no calls to abandon a uniform, with many respondents in fact commenting that: “It helps feel part of a team [… and] it also makes me feel proud” (participant 4); “I like wearing uniform as I feel equal and recognisable” (participant 23); and “uniform is an essential aspect of policing, individual and corporate identity and an outward sign of a disciplined organisation” (participant 59).

Conversely however, in spite of this pride and sense of corporate identity, the most common complaint about the uniform, including the impact factors associated with gender, was around the ‘four F’ factors. Of those who utilised the opportunity to give generic qualitative feedback (*n* = 23), 18 responses (78%) could be categorised as criticising at least one of the ‘four F’s’. This is perhaps best summarised by comments from participant 23: “I am yet to see a uniform that is evidence based, good quality, or comfortable”, and participant 20: “Police uniform quality standards are abysmal in my force, constant focus on cost cutting at the expense of comfort, utility and presentation”.

**Recommendations**

Whilst it is clear from the findings that officers perceive that the public might wish for a total regression to white shirts and tunics, clearly this is an impractical option for policing in the twenty-first century, and runs counter to the findings of (Brandewie, et al., 2021). The respondents themselves recognised this, with perhaps the best summation and analogy from participant 11:

“There is still a big disconnect between what society wants their police officers to look like and the role they expect police officers to perform. The traditional police uniform (tunic, pressed trousers, white/blue shirt, tie, custodian/bowler hat) is great for ceremonial purposes, but that is where those items should be kept. The Coldstream Guards don't go into theatres of war dressed in their red tunics and bearskin hats - they wear suitable clothing for the conditions. Police officers should have the same options”

Is there perhaps a happy medium to be had however? Whilst the public may find officers in black uniforms to appear more professional (Nickels, 2008), those findings relate to police officers in traditional black shirts – not wicking t-shirts. Crucially in America, police departments with uniform shirts design them to be worn over covert body armour (Carr & Lewis, 2014) (Bleetman, 2000, p. 22); although this leads to additional problems for larger-breasted women in conjunction with the wearing of bras – especially sports bras (Malbon, et al., 2020) (Niemcyzk, et al., 2020) (Coltman, et al., 2021). It is eminently possible for the British police to adopt a uniform consistent with this approach, by issuing breathable apparel to be worn underneath body armour, with a smart shirt over the top. There are drawbacks to this however, with the loss of key pocket and ‘Klickfast’ space provided by the current arrangement; and the current preference for Taser officers to carry the weapon on a body-rig or ‘tac-vest’. This current style was however called out for criticism by participant 81, who state that “officers now [look] like a Special Forces member with the amount of kit strapped to them”. American police office officers are able to carry both sidearm and Taser on a utility belt, so there would appear no reason why this is not transferable to UK policing.

Another alternative is to adopt the approach taken by the British Army, who issue tops that feature under body armour combat shirts (UBACS) to troops on routine duties. These feature wicking panels on chest and back, coupled with more traditional fabric sleeves and collar (see figure 1). There is no reason that such apparel could not be adapted for use for police purposes, in line with whatever colour was desired. This would allow officers to wear body armour over the breathable component, whilst the visible portions (sleeves and collar) could present a more professional appearance. This would allow officers to *feel* more professional and then through both ‘enclothed cognition’ and the ‘Pygmalion effect’, *act* more professionally. This is entirely in line with the findings of Brandewie et al. (2021) where the sense of identity with an institution, along with fabric choice, were both key factors when trialling various uniforms. Introduction of this style uniform, especially in white, may go a significant way to reverting police (and public) mindsets to a more professional outlook, as well as providing increased comfort – depending on material quality. This would also serve to achieve all of the ‘four F’s’ of Goldman (2005). [**Insert figure 1 after this paragraph]**

Figure 1: A British Army UBACS shirt. (Military Ops, 2022)

Improvement in the weight and comfort of the police uniform could also lead to enhanced abilities of police officers in physically demanding situations (Koedijk, et al., 2020). This decrease in weight may need to be achieved primarily by a change in body armour, but enhanced fabric performance in terms of wicking ability may also contribute to increased thermal transfer and therefore better comfort (Goldman, 2005). Redesign of the body armour however seems to be a fundamental aspect of reform if British police forces want to both attract and retain more female officers given the high numbers raising concerns both herein and elsewhere e.g (De Camargo, 2016) (Niemcyzk, et al., 2020) (West, 2019). There is significant additional research in existence examining and comparing various styles of body armour that could be drawn on to inform any reforms e.g (Schram, et al., 2018), (West, 2019) (Conroy & Park, 2022), including role specific examples (Goss-Sampson & Barnes-Warden, 2014). This increased comfort could in turn increase productivity and also link to an enhanced sense of professionalism and better officer – public interactions.

Another important aspect to have come out of the research was aspects of in-group / out-group ideas, which were not limited to solely uniform and plain clothed officers. Comment from participant 2 highlighted the idea of “Specialist uniform seen as elite”, creating divisions between officers on different departments. There will always be a need for certain police departments to have different types of uniform – specialist firearms officers needing enhanced ballistic protection being one obvious example. There is no significant reason however that short of such very specialist equipment, a re-designed uniform as suggested above would not be suitable for all departments within the police. This would remove one factor towards creation of out-groups, which in turn would allow for better inter-departmental communications and co-operation, and thus improve overall productivity (Greenaway, et al., 2015).

A final recommendation would be to ensure that officers change into and out of uniform at the commencement and end of their tours of duty. 26% of respondents (*n* = 24) admitted to having some kind of routine or ritual to delineate their work and home lives, with qualitative responses as to why they did so including:

“A shift from work to home life. Leave troubles etc at work” (participant 4)

“Have to destress and leave work at work so I can switch off to go home” (participant 19)

“I change into civilian clothes to remind myself I'm off duty” (participant 36)

“Tying my hair in a neat bun whilst in the changing room helps to signify this change for me, as does taking my hair own at the end of shift.” (participant 54)

“To keep a separation between my home and work life” (participant 66)

“Like to leave parts of uniform at the station and also have to walk to a public car park a distance away from the station.” (participant 72)

When Post-Traumatic Stress Disorder (PTSD) affects 1 in 5 police officers (Brewin, et al., 2022), it must be worth any effort in trying various strategies to reduce this number. If a small psychological shift from ‘police officer’ to ‘civilian’ can re-frame an officer’s self-perception, this may have unknown benefits on officers’ mental wellbeing. It would perhaps take a significant longitudinal study however to correlate these empirically. It has been demonstrated herein that the theory of enclothed cognition, whereby a police officer feels more like one in uniform, holds true. Therefore, if a mandatory change *out* of uniform when going off-duty were enforced, it may help to differentiate the job role from the person and reduce subconscious psychological influence.

**Conclusions**

It has been shown that clothing and appearance has a significant impact on the wearer’s psyche, and indeed is fundamental in a person’s hierarchy of needs (Maslow, 1943), recognised by scholars as early as 1803 (Sinclair, 1803). This research suggests that police forces do not place nearly enough importance on the clothing issued to police officers, but that an increased focus on this area, at a time of record low-morale in the service (Police Federation, 2021), might significantly enhance officer wellbeing. This is both in terms of a reduction of physical assaults on them (Pinizzotto, et al., 2006), as well as increased productivity through an enhanced sense of professionalism (Volpp & Lennon, 1988) (Brandewie, et al., 2021).

It appears that officers both feel more professional and authoritative in a more ‘traditional’ British police uniform, as well as believing that is what the public want to see. The ‘Pygmalion effect’ demonstrates that this perception will, almost of its own, bring about improvements in officer behaviour, attitudes and effectiveness (Cooper & Good, 1983) (Tauber, 1998).

With regards to the idea of enclothed cognition that remains the underlying focus of the paper, this concept can be clearly supported with the findings from officers’ perceptions of self and reactions to scenarios in- and out-of-uniform. A majority of officers appeared to agree with the ‘superhero effect’ that “it does make me feel more invulnerable” (participant 3).

More practical research is now needed to test these initial findings to further support these results; such as RCT’s involving different uniform styles measured against various metrics; or longitudinal studies assessing police officer morale and mental wellbeing, as well as retention, through trialling different aspects of uniform. Ultimately the findings and recommendations are summed up by participant 58, when she says “My uniform gives me the confidence I need to perform well”. Better uniform therefore must mean better performance.

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