MASKING IN MURDER: AN EXPLORATORY STUDY INTO THE ACT OF COVERING THE VICTIM'S FACE IN UK HOMICIDE.

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Abstract

Previous literature suggests that covering of a homicide victim's face by an offender indicates a pre-existing relationship. Operational definitions discriminate between three forms of victim covering (i) Masking (ii) Cloaking and (iii) Concealment. 126 UK homicide cases were examined to explore whether any evidence-based investigative inferences could be supported in cases of victim covering viewed through an instrumental/expressive framework. No statistically significant differences were found between face covering behaviour and the relationship between victim and offender, previous convictions, and offender age, although there was a high frequency of elderly female victims of masking. The findings are discussed in relation to offender-profiling.

Introduction

Within the United Kingdom (UK) homicide is relatively rare, with a stable rate of approximately 12 per million population in England and Wales over the last 3 years (approximately 700 homicides per year); Office for National Statistics, 2020). However, the number of homicide offences resulting in no charge or summons has continued to rise over this period, from 17% in 2016-17 to 33% in 2018-19. In a climate of political austerity, which has reduced the resources available to UK police forces nationally, the Commissioner of the London Metropolitan Police has warned that murders are becoming harder to solve (Shaw, 2018).

Maximizing the investigative success in homicide offences is thus a continuing challenge, and one which is now regularly supported in the UK by an established professional cadre of Behavioural Investigative Advisers (BIAs; Rainbow, Gregory & Alison, 2014). BIAs routinely draw inferences in relation to a particular offender on the

basis of a comprehensive crime scene assessment – a process commonly referred to as predictive (or offender) profiling. The BIA will endeavor to make accurate assessments in relation to objective and verifiable elements of an offender's background, with consideration given to the likely age of the offender, their relationship to the victim, whether they are likely to have previous criminal convictions and if so what these may be, and where they may reside or be based. The goal of such contributions is to allow the investigation to focus on areas of investigation most likely to identify the offender (Rainbow & Gregory, 2011).

Underpinning the relationship between offender characteristics and crime scene behaviours is an assumption of homology, which supports the theory that offenders who exhibit similar offence behaviours will share similar background characteristics (Petherick & Ferguson, 2012). One example of such assumed homology is within a set of behaviours collectively interpreted as 'undoing' and the likelihood of a pre-existing relationship between victim and offender. 'Undoing' is defined as present when the offender alters the crime scene in an attempt to symbolically reverse the enactment of murder (Russell, Schlesinger, Leon & Holdren, 2018). The objective of this study is to explore the conceptually related but potentially distinct forms of undoing

Undoing

First noted by Douglas et al. (1992) in the Federal Bureau of Investigation (FBI) Crime Classification Manual (CCM), undoing was interpreted as a form of personation – an unusual behaviour by an offender, beyond that necessary to commit the crime. Such undoing may manifest as repositioning the victim's body so that they appear to be sleeping (Douglas, Burgess, Burgess & Ressler, 2006), redressing the victim (Schröer & Püschel, 2007), washing the body, or covering the body (Russell et al. 2018).

A later revision of the CCM made explicit that undoing frequently occurs when there is a close association between the victim and offender, or when the victim represents someone of significance to the offender. The offender may, for example, cover the victim's face as an act of remorse – an attempt to emotionally undo the murder (Douglas, Burgess, Burgess & Ressler, 2006, p.34).

Russell et al. (2018) conducted a case by case analysis of eleven 'undoing' homicides curated by the FBI Behavioural Science Unit. Ten of the cases were found to involve an offender who had a close familial or intimate link with their victim. The reported undoing behaviours included redressing the victim, combing their hair, cleaning their wounds or covering the victim's face post-mortem. Face covering was reported as the most prevalent of the exhibited undoing behaviours, occurring in 55% of the cases. The research considered the close association between the offender and victim to be the motivating factor in the elicitation of the undoing. In one case, the offender did not hold an actual relationship with the victim, but instead had engaged in significant stalking behaviour prior to the homicide. The evidence of a fantasy relationship created by the offender, who covered the victim and her wounds post-mortem, was forwarded as further evidence of the interpretation of undoing as a psychological expression.

In corroboration, an analysis of 182 homicide offenders in Finland investigating gender differences in Finnish homicide offence characteristics (n=91 female offenders and n=91 male offenders) reported which crime scene behaviours correlated most with the victim being an intimate partner or acquaintance of the offender (Häkkänen-Nyholm, et al, 2009). Intimate partner killings were found to correlate most with a blunt weapon being used against the victim, and the victim's body being covered, but only among female offenders. The researchers interpreted the behaviour as indicative of

feelings of shame evoked by the relationship the offender held with the victim. Among male offenders, however, covering the body co-occurred with moving the body as part of a concealment attempt, and was associated with acquaintance rather than intimate partner homicides.

Litzcke, Horn and Schinke (2015) sample of 137 sexual homicides committed in the German state of Barvaria between 1979-2008, found 15 cases of undoing. They found that there was a relationship between the offender and victim in 57.1% of the homicides displaying signs of undoing, compared to 39% across the entire sample. However, none of the offenders within the undoing sub-set were family members or intimate partners of their victims, contrasting with the underlying base rate of 10% across all 137 offences.

Importance of the Face

The significance of the face in relation to one's identity has long been recognized across different aspects of the psychological literature. Simion and Di Giorgio (2015) suggest faces as being the most important of all social cues, as they convey relevant social information such as identity, age, gender and emotions. Research from eye-tracking studies demonstrates that during the appraisal of other faces the eyes are preferentially attended to above all other facial features (Thompson, Foulsham, Leekam & Jones, 2019). This bias is automatic, difficult to inhibit and therefore only avoided when the eyes of the target are physically obscured (Laidlaw, Risko & Kingstone, 2012).

Similar recognition of the importance of facial identity is evident within the profiling literature, emphasizing the face as of greater symbolic importance to the offender when the victim represents someone of significance to them. Salfati and

Dupont (2006) reported that offences, where victims had injuries to the head and face, were indicative of a very emotional attack, where the offender was attacking the core representation of the person. Trojan and Krull (2012) found that victims who held intimate relationships with their offender are more than twice as likely to receive injuries to their face during homicide compared to victims who are acquaintances or strangers to the offender. This observation is not exclusive to homicide, with the head, neck, and face identified as the most common sites of a victim's injuries during intimate partner assaults (Sheridan & Nash, 2007). It is suggested that the direction of violence specifically towards the face may reflect an affectively motivated attack, where the victim's intimate association to the offender induces an attempt to depersonalize their victim using facial wounding (Salfati & Canter, 1999).

Instrumental/Expressive

As can be seen from the above, both undoing behaviours in general and the specific attention to the victim's face in homicide offences are usually interpreted as expressive behaviours, where the offender's focus is directed towards the core representation of the person due to the emotional meaning the face reflects (Salfati & Canter, 1999). In expressive offences, the main focus of the offender's aggression is to cause harm to the victim. Expressive homicides represent an emotional response and are often characterized by a display of impulsive and uncontrolled aggression (Thijssen & De Ruiter, 2011). The covering of the victim's face may be construed as a post-mortem manifestation of this emotional response where such activity signals the offender's shame (Keppel & Birnes, 1997; Salfati, 2000).

It is well established that expressive homicides more often involve offenders with a close association with their victim (Trojan & Salfati, 2010). Last and Fritzon (2005) report that the closer the relationship between the offender and their victim, the

more expressive the crime scene behaviours. Offenders who were related to the victim could be robustly discriminated from those who were strangers or acquaintances of the victim based on the presence of expressive behaviours such as excessive violence or manual wounding. This established overlap between expressive homicides and offenders known to the victim, complemented by the interpretation of face covering as an expressive behaviour, lends further support to the inferred association between the behaviour and the offender-victim relationship.

A competing interpretation of covering the victim's face during a homicide offence suggests that the behaviour may serve a more practical function, reflecting an instrumental rather than expressive mode of homicide. Instrumental homicides describe killings where the motivations of the offender are directed more towards obtaining objects or status, and thus the importance of the victim is secondary. Fritzon and Garbutt (2001) included covering the victim's face and body within an instrumental category of homicide, based on an examination of 191 homicides in Washington State, USA. The research utilized Smallest Space Analysis to produce a spatial map representing the relative strength of relationships between different crime scene variables. Covering the victim's face post-mortem was clustered with variables suggesting that objects had been stolen from the scene or that property had been disturbed. Theft often indicates an instrumental homicide where the death of the victim was secondary to the ulterior goal of material gain. Unlike the expressive interpretation of face covering, the study found little association between the victim being covered and typically expressive behaviours such as wounding to the face and frenzied violence.

Although not specifically focusing on covering the face, Salfati (2000) corroborated this categorization of covering the victim's body as an instrumental

behaviour. Covering the body was reported to be associated with theft, arson or sexual assault of the victim, and not indicative of the offender being known to the victim. Covering the victim's eyes may therefore allow the offender to mark the end of their interaction with the body and allow them to continue with pursuing the primary goals of the offence. From the perspective of the offender, conducting a search of the property as part of a burglary may be easier to complete when the face, and eyes, of their victim have been obscured. Thus, it may be argued that the offender-victim relationship has less influence on the presence of victim face covering when viewed within the wider context of post-mortem actions of the offender.

The categorization of victim face covering within an instrumental typology of homicide does not however wholly undermine that the behaviour may still be associated with an offender known to their victim. Fritzon and Garbutt (2001) describe covering the victim's face, alongside destroying evidence or concealing the body, as indications that the offender recognizes their connection to the victim. Santtila, Hakkanen, Canter and Elfgren (2003) support the notion that although classified as instrumental behaviours, expressive offenders who cover a body, or attempt to destroy forensic evidence are likely to have had a prior connection to the victim, leading to a desire to create distance from the victim and the crime scene.

Thus, whilst this observation moves away from the expressive 'symbolic reversal' interpretation of masking it still suggests an association between the behaviour and the offender-victim relationship. Conversely, however, Reynolds, Estrada-Retnolds and Freng (2019) found that covering a body did not reveal a prior victim-offender relationship.

Summary

The covering of the victim's face by the offender has been repeatedly inferred as a behaviour indicative of an offender with a close association to the victim (Schröer & Püschel, 2007; Russell, Schlesinger, Leon & Holdren, 2018) and is commonly believed by investigators to be an expressive indication of intimacy between victim and offender (Reynolds, Estrada-Reynolds & Freng, 2019). However, many researchers and practitioners acknowledge that beyond anecdotal examples and a small number of case studies, there exists no comprehensive analyses to support these claims.

Clarifying the validity of such claims will support more accurate inferences regarding an offender's relationship to the victim in cases where the victim's face has been covered. Such an approach is consistent with UK BIAs adoption of Toulminian philosophy of argument methodology to support inference generation and prioritization in major crime investigations (Alison et al, 2003; Almond, Alison & Porter, 2007).

Research Aims

The primary aim of this study is to investigate whether there are significant evidence-based investigative inferences that can be made to support UK homicides involving covering of the victim concerning the relationship between the victim and offender. It also aims to reflect on the interpretation of masking as either an instrumental or expressive behaviour, to both contribute to this debate within the existing literature and to contextualize the findings regarding victim-offender relationship. Given the focus of BIA activity on predicting investigatively useful facets of unknown offenders' backgrounds, this study will also explore any relationships between covering the victim in UK homicide and the presence or absence of offender previous convictions and offender age.

In order to address the ambiguity within the existing research literature and to enhance operational utility, definitive operational definitions were utilized. These were developed to discriminate between the conceptually related but potentially distinct forms of undoing relevant to the current focus on the covering of the victim's face.

Cloaking – The covering of any part of the victim's face by the offender which causes the victim to be unrecognizable as an individual which is an artefact of a more general covering of the body, but does not represent a clear and obvious attempt to prevent discovery.

As an illustrative example, a victim discovered on the floor of her bedroom with a duvet over her whole body would be classified as cloaking.

Concealment – The covering of any part of the victim's face by the offender which causes the victim to be unrecognizable as an individual which is an artefact of a clear and obvious attempt to conceal the body to prevent discovery.

As an illustrative example, a victim discovered in a wooded area covered by branches and vegetation would be classified as concealment.

Masking – The exclusive covering of any part of the victim's face by the offender which causes the victim to be unrecognizable as an individual. An identified focus to obscure the face must be present to distinguish between those cases where such covering may have (according to pathology) caused or contributed to death, or is an artefact of a more general covering of the body (cloaking) or a determined effort to prevent discovery of the body (concealment).

As an illustrative example, a victim discovered in her lounge with a tea towel placed over her face would be classified as masking.

It is hypothesized (H1) that masking would be significantly more associated with expressive offences and that cloaking and concealment would be significantly more associated with instrumental offences.

It is further hypothesized that a significant relationship will exist between the type of covering employed by the offender and victim-offender relationship, specifically;

H2: masking will be significantly associated with a known victim-offender relationship, particularly an intimate relationship.

H3: cloaking will be significantly associated with a stranger victim-offender relationship.

H4: concealment will be significantly associated with a known victim-offender relationship.

Due to their exploratory nature and lack of relevant research findings, no specific hypotheses are proposed with respect to the type of covering employed by offenders and their age, their victims age or criminal history.

Method

Sample

The sample consisted of 126 single offender cases of homicides which occurred between 1966-2019 in the United Kingdom. 103 of the victims were female and 23 were male, whilst only 2 (1.6%) of the offenders were female and the remaining 122 (98.4%) were male, in two cases the offenders' gender was not recorded. The age of the victims ranged from 0-90 years of age, with a median of 27 years. The age of the offenders ranged from 14-64 years of age with a median of 31.

In terms of ethnicity, 109 (89.4%) of the offenders were White European, 6 were African Caribbean, 4 were Asian, 2 were Oriental and 1 offender was Arabic.

The ethnic distribution of the victims was largely similar. 113 (93.4%) of the victims were White European, 3 were Oriental, 2 were Asian, 2 were Other and 1 of the victims was African Caribbean. For 5 of the victims and 2 of the offenders, their ethnicity was not known or recorded.

15 of the cases were assigned to the masking condition, 73 cases to the cloaking condition, with the remaining 38 cases being assigned to the concealment condition.

Procedure

All of the offences included in the study were sampled from the Violent Crime Linkage Analysis System (ViCLAS), a database held by the Serious Crime Analysis Section (SCAS) within the National Crime Agency (NCA). The database is contributed to by every police force within the UK as mandated by Section 39 of the Police Reform Act (2002). According to this mandate, all murders involving a sexual or unknown motive, all rapes, and all lesser sexual offences that involve excessive violence, weapons or burglary, are to be recorded on the database. Whilst the focus of case collation is directed towards those where the relationship between the victim and offender is that of a stranger, the dataset also contains offences where it was not immediately clear if the victim and offender knew each other and hence includes offences committed by known associates of the victim.

Sampling directly from the ViCLAS database enhanced the ecological validity and operational utility of the study, accurately aligning the data to the types of cases BIAs will be requested to support (i.e. sexual and unknown motive homicides, offender unknown).

The database was searched for all cases of homicide committed by a single offender, whose relationship with the victim is known. In addition, only offences where

the offender had been convicted for the homicide were included. In order to identify relevant cases, the offences were searched using the following terms; ‘cover’, ‘head’, ‘hid’, ‘face’, ‘eye’. The cases were then manually categorized as either masking, cloaking or concealment according to their congruence with the operational definitions made explicit above. This was achieved through examination of the narratives which accompanied each case providing a detailed description of the crime scene, supported by the viewing of crime scene photography where available.

The categorization process was overseen by the Senior Behavioural Investigative Advisers at the NCA to establish interrater reliability. All but one case achieved perfect agreement between three independent raters; in this instance a discussion was held and consensus agreement reached.

Each of the 126 cases were coded for the presence or absence of 28 crime scene behaviours in accordance with Salfati (2000) expressive/instrumental homicide model. Each case was then classified as expressive, instrumental, hybrid or unclassifiable. Criteria for dominance followed Salfati’s (2000) methodology in which the percentage of themed behaviour per case must have been twice that of the opposing theme to be considered dominant. If an equal percentage split occurred, that case was classified as hybrid. All other cases that did not reach this criteria were considered unclassifiable. Following descriptive analysis, inferential analysis using Fisher’s exact tests first established whether there was a difference in covering type by expressive or instrumental dominant themes, before repeating this same process with the addition of the hybrid classification.

Chi-square tests were then used to establish if there was a significant association between covering type and known or stranger offenders. Subsequently, Fisher’s exact tests established if significant associations existed

between covering type and specific relationship types, including current or ex-intimate partner, family member, friend or acquaintance, and stranger types. Fisher's exact tests were used to examine whether there was an association present between covering type and the offender having previous criminal convictions. Finally, Kruskal-Wallis examined whether there were significant differences in victim age and offender age across covering type. In all analyses effect sizes were calculated using Cramer's phi.

Results

Dominant behavioural theme

As illustrated in Table 1. only 43 (34.1%) of the 126 cases could be classified as displaying a dominant theme; expressive (24.6%), instrumental (9.5%). A further 21 cases could be classified as hybrid (16.7%), leaving nearly half of the sample as 'unclassifiable' (49.2%). Reference to the Table reveals that when a dominant theme could be assigned to cases where masking was present, 100% of such cases were expressive, with no cases of masking displaying a dominant instrumental theme.

A Fisher's exact test examining the relationship between victim covering type and dominant expressive/instrumental theme almost reached significance ($X2$ (2, N = 43) = 5.93, p = 0.052). When considering only dominant behavioural themes (i.e., excluding hybrid and unclassifiable cases) masking cases were significantly more likely to be expressive than instrumental (($X2$ (2, N = 5) = 5, p = 0.025). Similarly, cloaking cases were significantly more likely to be expressive than instrumental ($X2$ (2, N = 24) = 8.17, p = 0.004). In the concealment cases there was an equal proportion of dominant expressive and dominant instrumental. However, it should be noted the majority of cases were either hybrid or unclassifiable. When exploring victim covering

type and dominant/hybrid/unclassifiable crime scene behavioural classification no significant association was found, (X2 (6, N = 126) = 10.5, p = 0.11).

Table 1-Victim covering behaviour across dominant behavioural theme, relationship, previous convictions and age

	Masking	Cloaking	Concealment
Dominant Behavioural theme			
Expressive	5 (33.3%)	19 (26%)	7 (18.4%)
Instrumental	0 (0%)	5 (6.8%)	7 (18.4%)
Hybrid	5 (33.3%)	12 (16.4%)	4 (10.5%)
Unclassifiable	5 (33.3%)	37 (50.7%)	20 (52.6%)
Relationship			
Intimate partner	0 (0%)	9 (14.1%)	9 (30%)
Family member	0 (0%)	3 (4.7%)	1 (3.3%)
Friend/Acquaintance	8 (66.6%)	26 (40.6%)	13 (43.3%)
Stranger	4 (33.3%)	26 (40.6%)	7 (23.3%)
Previous convictions			
Yes	10 (76.9%)	49 (67.1%)	27 (71.1%)
No	3 (23.1%)	24 (32.9%)	11 (28.9%)
Age			
Victim age (Mdn)	56	25	24.5
Offender age (Mdn)	28	32	29

Victim and Offender Relationship

Information concerning the relationship between the offender and victim was known in 106 out of the 126 cases analyzed (84.1%) (Table 1).

The descriptive statistics reveal that almost two thirds (65.1%) of all offenders in this sample where the relationship between offender and victim was recorded were previously known to their victims, as either an intimate partner, family member, friend or acquaintance.

The observed rates of masking were highest in cases where the offender was a friend/acquaintance of the victim; twice as high as in cases where the victim and offender were strangers. No cases of masking where the offender was an intimate partner or family member of the victim were recorded.

In cases of cloaking, a similar bias towards friends, acquaintances and stranger offenders was observed, although a small number of cases also involved more intimate victim-offender relationships and family members. With the concealment group, there was a higher level of offenders previously known to their victims, with disproportionately less strangers than in the other two types of victim covering.

A Chi-square test of independence was performed in order to examine the association between the victim-offender relationship and type of victim covering. No significant relationships were found between either the dichotomous coding of victim-offender relationship (i.e., known versus stranger) (X^2 (2, N = 106) = 2.70, p = 0.259). or within the more discrete relationship categories (i.e., intimate partner, family member, friend/acquaintance, and stranger) (X^2 (6, N = 106) = 9.28, p = 0.159).

Offender previous convictions

Information relating to the previous conviction status of the offenders was known in 124 of the 126 cases analyzed (98.4%). This resulted in thirteen cases of masking, seventy-three cases of cloaking and thirty-eight concealment cases reported in Table 1.

The results reveal that the majority of offenders (69.4%) within the sample had previous convictions of some kind. Chi-square analysis indicated that covering type had no significant association to whether or not the offender had any previous convictions (X^2 (2, N = 124) = 0.573, p = 0.746).

Victim and Offender Age

Information relating to the age of the victims and offenders was known in all 126 cases analyzed (100%) as reported in Table 1. The descriptive statistics illustrate a relatively consistent median offender age across all three victim covering types (28-32 years)

but a noticeably higher median victim age in masking cases compared to cases where victims were cloaked or concealed.

A Kruskal Wallis test confirmed that median victim age scores were found to be significantly different between the three covering types, $H(2)=11.71$, $p=.003$, $\eta^2=.09$. Post-hoc analysis revealed significant differences in victim age between masking and cloaking ($p=.003$), and between masking and concealment ($p=.006$), with masking victims significantly older than other victim groups. However, cloaking and concealment covering did not significantly differ ($p>.05$). A further Kruskal Wallis test confirmed a non-significant difference between covering type and offender age $H(2)=1.69$, $p=.43$, $\eta^2=.01$.

Discussion

This study is the first to empirically examine the association between the covering of the victim's face and victim-offender relationship in UK homicide cases. The central finding is that the presence of such activity and victim-offender relationship are independent of one another, dispelling a prevailing profiling myth held by (some) practitioners and investigating officers alike.

Informed by the literature that interpreted masking as an expressive act which forms part of a dominantly expressive homicide, and cloaking and concealment as instrumental acts within dominantly instrumental homicides, this study first explored whether the dominant themes of behaviour were significantly associated with the type of victim covering. Whilst no significant association was found between overall dominant theme (i.e., expressive, instrumental, hybrid and unclassifiable) and victim covering type, further analyses focused exclusively on cases characterized by either an expressive or instrumental dominant behavioural theme found two significant associations. Both masking and cloaking cases were significantly more likely to be

expressive than instrumental, although there was an equal proportion of dominant expressive and instrumental behavioural themes within the concealment cases. These results lend tentative support to the hypothesis that masking would be significantly more associated with expressive offences but contradict the associated hypotheses that cloaking and concealment would be significantly more associated with instrumental offences.

However, it is highlighted that these significant results were only revealed when analysis was restricted to those offences with an identifiable dominant behavioural theme. Whilst no cases of masking were characterized by a dominant instrumental theme, the remaining cases were split equally between expressive, hybrid and unclassifiable dominant behavioural themes.

Similar ambiguity was found within the cloaking group. Whilst almost four times more offences involving cloaking were classified as expressive than instrumental, approximately two thirds of all cloaking cases displayed either a hybrid behavioural theme or were unclassifiable.

As such, from both a theoretical and practitioner perspective, these findings fail to provide compelling or operationally useful support to the first hypothesis of this study and suggest that contrary to previous findings, the post-homicide covering of victims' faces could not be reliably described or understood through the interpretative lens of an instrumental/expressive framework.

However, as alluded to above, it should be noted that from the total sample of 126 homicide cases, only 43 (34%) could be classified by a dominant behavioural theme. This percentage of cases categorized as displaying a dominant theme is much lower than in previous homicide studies, which have consistently replicated a predominant expressive classification (Thijssen & de Ruiter, 2011; Trojan & Salfati,

2010; Santilla et al., 2003). The lack of dominant theme displayed within these homicides is therefore somewhat surprising and worthy of further exploration.

One explanation may be that the simple (dichotomous) categorization of expressive and instrumental may be insufficient in distinguishing between homicide offenders. Recent works (Del Mar Pecino-Lattore et al., 2019) have identified subtypes of expressive homicides and instrumental homicides[1], with correspondingly high rates of dominant theme classification (95%) lending support to this consideration of an over-simplified dichotomy. It would thus be of interest to examine whether the use of such enhanced differentiation when used in parallel with the similarly heightened delineations between specific face covering behaviours utilized in this study yield more promising results.

The high rates of hybrid and unclassifiable cases observed may also be a function of more complex and inconsistent underlying motivations of the offender. Findings from dismemberment research (Almond, Pell & McManus, 2018) support BIA experience that post-mortem acts engaged in by the offender might represent a distinct phase of the offence, whereby offenders experience a shift in their motivations between the act of murder and subsequent post-mortem activity. As such, efforts to interpret the underlying motivation of offenders engaged in such victim face covering based on the sum of their behaviour across the overall offence of homicide may represent a fundamentally flawed endeavor. Recognition that more instrumentally oriented offenders may cover their victims' faces for more expressive reasons, and vice versa, somewhat undermines any practical, operational utility of such an approach with a profiling perspective. Put simply, such theoretical considerations

[1] The authors identified 3 subtypes of expressive homicide (expressive-impulsive, expressive-distancing and expressive –family) and 2 subtypes within instrumental homicide (instrumental-opportunities and instrumental-gratification).

regarding the instrumental or expressive interpretation of masking, cloaking or concealment remain somewhat unanswered by the aggregated interpretation of the offence, and certainly appear unhelpful when attempting to support pragmatic, investigative inferences concerning the potential offender.

This finding has obvious implications for evidence-based predictions regarding the potential victim-offender relationship in cases where the victim's face is covered within homicide offences. It remains possible that such masking behaviour is indeed indicative of shame, remorse or a desire to undo the murder, but it does not in itself support the investigative inference regarding a close, pre-existing relationship between victim and offender. The results from this UK sample of homicides reveal that no intimate partners or family members were responsible for masking, although two thirds of such cases were committed by a friend or acquaintance.

However, no significant relationships were found between either the dichotomous coding or victim-offender relationship (i.e., known versus stranger) or within more discrete relationship categories (i.e., intimate partner, family member, friend/acquaintance, and stranger) and victim covering type. These failures to support the assumed homology between undoing behaviours and victim-offender relationship are further amplified by the explicit sub-categorization of cases (designed to minimize the potential noise resulting from the inclusion of cases where the observed 'undoing' behaviour may have been incongruent with its intended scope and interpretation). However, even when a specific and explicit interpretation of the most commonly reported undoing behaviour of face covering was utilized (masking), no significant association with victim-offender relationship was found.

As highlighted above, the hypotheses regarding masking and a known, particularly intimate, relationship between victim and offender was based on the

concept of symbolic reversal, where covering the victim's face enabled the offender to psychologically undo the violent and fatal act they had just committed.

Chancellor and Graham (2014) suggested that covering the face allows for the offender to commute their victim from a recognizable individual to an anonymous body. The researchers suggest that once depersonalized, the offender is provided with momentary distance and relief from the victim's murder. Whilst the findings of the current study fail to find evidence in support of this interpretation of masking, it may be that such symbolic reversal was achieved through other means not captured within the current sample. Since masking has been defined as a concerted effort to hide the face of the victim, this may have been achieved by turning the body over or leaving the location. Both of these examples still mean the face of the victim is no longer visible to the offender. Furthermore, Keppel and Birnes (1997) propose that not only does turning the body over allow for the face to be hidden but in many instances also requires less effort than finding something to cover the victim with. Therefore, it is acknowledged that there may be an association between masking and the offender having a close personal relationship to their victim, but only when the definition of masking is refined to consider other such manifestations.

In a similar vein, the related behaviours of cloaking and concealment also failed to demonstrate any significant association with victim-offender relationship. Again, such findings may best be interpreted through the prism of heterogeneity, with different offenders engaging in similar behaviours for different reasons. Such results serve to further remind us that BIA and profiling efforts are more than the sum of univariate comparisons between individual crime scene features and isolated investigative inferences, and the significant contribution of context and holistic thinking in successful behavioural analysis.

Consistent with the above findings, when exploring offender previous convictions (coded as present or absent) and victim covering type within homicide, no associations were found. This is a disappointing finding given the emphasis BIAs place on unknown offenders' criminal history as part of their support to major crime enquiries (Rainbow & Gregory, 2011). However, it is acknowledged that such initial focus on the absolute presence or absence of previous convictions, particularly when viewed against the high base rate of presence, may have obscured some potentially revealing findings with respect to either specific or more thematic offence types within offender's previous criminal notice. More detailed exploration of offender intelligence, arrest and conviction histories is therefore deemed desirable.

Finally, with respect to offender age, no significant differences were found between type of victim covering and offender age, again thwarting any support to BIAs task of inferring offender age from this behaviour. However, it is of note that the only other significant association found within the entirety of the analyses undertaken was that victims of masking are significantly older (Mdn=56 years) than victims subject to either cloaking (Mdn = 25 years) or concealment (Mdn = 24.5 years) by the offender. Whilst such a finding fails to offer any investigative utility in such cases (the age of the victim will be known), this significant difference in age of masking victims compared to other victim covering groups, is of interest and warrants further investigation. Are these examples of "mercy" killings?

Caveats and Limitations

The current study had several limitations. First is the inherent bias towards cases being detected and solved, in order to be included in the sample. This sample characteristic is a limitation shared by much of the literature in the profiling domain and is an intrinsic flaw of forensic research. A homicide may not be solved for a

myriad of reasons such as a lack of resources or evidence, but the characteristics of the offender or the victim may also contribute. Balemba, Beauregard, and Martineau (2014) found significant differences in the characteristics of the homicide patterns between solved and unsolved cases. Unsolved cases were significantly more likely to involve the body being abandoned outdoors and involve victims considered to be vulnerable.

Such analyses illustrate that solved cases are unique from unsolved homicides and therefore cannot fully represent the offence as a whole. The implications for the present study are that the findings only reflect the association between masking, cloaking and concealment and the victim-offender relationship in cases where the offender was identified and the case was solved. Unfortunately, this limitation is difficult to address given that in order for the offender's relationship with the victim to be included as a variable the case must be officially solved.

Although this sample contained all of the convicted cases of face covering from the SCAS database, a further limitation of the study is the relatively small sample size. Future research would aim to collect cases of face covering from other Countries.

In addition, the conditions of the independent variable, which refer to the different relationships held between the offender and the victim are partially subjective. The variable is coded by the Serious Crime Analysis Section based on the details of the case submitted by police investigators. The inferred relationship is therefore vulnerable both to the assessments of the investigation team and the subsequent interpretation by analysts during encoding. For instance, offenders who have been classified as 'strangers' to their victim may have actually had even peripheral contact with their victims but this information was not made available to

the authorities. The implication of this limitation is that there may be a small proportion of cases that have not been accurately allocated to the conditions of the independent variable, potentially undermining the associations found. This limitation is discussed by Safarik et. al (2002) who suggested that analyses should distinguish between complete strangers and relative strangers, especially given the absolute lack of interaction implied by the 'stranger' definition.

Conclusion

The central strength of the current study is its challenge to the current assumptions about face covering within the profiling literature. The findings contradict suggestions within the FBI Crime Classification Manual that masking is indicative of an offender who has a close association with their victim. The study indicates that when a homicide includes some form of victim covering, the type of covering, whether masking, cloaking or concealment, does not differentiate or assist with nominal prioritization.

The results also suggest that more theoretical concepts such as instrumental or expressive interpretations of offender behaviour and motivation have little practical utility for BIAs when viewed against single behaviours in isolation of overall context. It is hoped that the clarity provided by these results regarding the independency between masking behaviour and victim-offender relationship, offender age and offender previous convictions should help dispel the prevailing myths within (some) practitioners and investigators and hence mitigate against errors of decision making that are of arguably great consequence within an investigative context.

References

Alison, L., Smith, M. D., Eastman, O., & Rainbow, L. (2003). Toulmin's philosophy of argument and its relevance to offender profiling. *Psychology, Crime, & Law, 9*(2), 173-183. doi.org/10.1080/1068316031000116265

Almond, L., Alison, L. J., & Porter, L. E. (2007). An evaluation and comparison of claims made in behavioural investigative advice reports compiled by the National Policing Improvement Agency in the United Kingdom. *Journal of Investigative Psychology and Offender Profiling, 4*(2), 71-83.

Almond, L., Pell, C., & McManus, M. (2018). Body Part Removal: A Thematic Exploration of UK Homicide Offenses. *Journal of Interpersonal Violence.* doi: 10.1177/0886260518814268

Balemba, S., Beauregard, E., & Martineau, M. (2014). Getting away with murder: A thematic approach to solved and unsolved sexual homicides using crime scene factors. *Police Practice and Research, 15*(3), 221-233. doi: 10.1080/15614263.2013.846548.

Chancellor, A. & Graham, G. (2014). Staged crime scenes: Crime scene clues to suspect misdirection of the investigation. *Investigative Sciences Journal,* 6, (1).

Del mar Pecino-Latorre, M., Del Carmen Perez-Fuentes, M., Patro-Hernandez, R. M., & Santos-Hermoso, J. (2019). Expressiveness and instrumentality of crime scene behaviour in Spanish homicides. *International Journal of Environmental Research and Public Health, 16*(22), 4526. doi: 10.3390/ijerph16224526.

Douglas, J., Burgess, A., Burgess, A., & Ressler, R. (1992). *Crime Classification Manual: A Standard System for Investigating and Classifying Violent Crime*. San Francisco, CA: Jossey-Bass.

Douglas, J., Burgess, A., Burgess, A., & Ressler, R. (2006). *Crime Classification Manual: A Standard System for Investigating and Classifying Violent Crime* (2nd ed.). San Francisco, CA: Jossey-Bass.

Fritzon, K., & Garbutt, R. (2001). A fatal interaction: The role of the victim and function of aggression in intrafamilial homicide. *Psychology, Crime & Law, 7*(4), 309-331. doi: 10.1080/10683160108401800.

Häkkänen-Nyholm, H., Putkonen, H., Lindberg, N., Holi, M., Rovamo, T., & Weizmann-Henelius, G. (2009). Gender differences in Finnish homicide offence characteristics. *Forensic Science International, 186*(1-3), 75-80. doi: 10.1016/j.forsciint.2009.02.001.

Keppel, R. & Birnes, W. (1997). *Signature Killers*. New York: Pocket Books.

Laidlaw, K. E., Risko, E. F., & Kingstone, A. (2012). A new look at social attention: orienting to the eyes is not (entirely) under volitional control. *Journal of Experimental Psychology: Human Perception and Performance, 38*(5), 1132- 1143. doi: 10.1037/a0027075.

Last, S. K., & Fritzon, K. (2005). Investigating the nature of expressiveness in stranger, acquaintance and intrafamilial homicides. *Journal of Investigative Psychology and Offender Profiling, 2*(3), 179-193. doi: 10.1002/jip.36.

Litzcke, S. M., Horn, A., & Schinke, D. (2015). Sexual Murder in Bavaria: Victim, Crime Course, Perpetrator. *Verlag für Polizeiwissenschaft*, 1-513.

Office for National Statistics. (2020). *Homicide in England and Wales: year ending March 2019.* London: Office for National Statistics. Retrieved from https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/homicideinenglandandwales/yearendingmarch2019#what-do-trends-in-homicide-look-like.

Petherick, W., & Ferguson, C. (2012). *Understanding victim behaviour through offender behaviour typologies.* [Paper presentation]. 5th Annual Australian and New Zealand Critical Criminology Conference, Cairns, Australia. http://eprints.qut.edu.au/82082/.

Rainbow, L., & Gregory, A. (2011). What Behavioural Investigative Advisers actually do. In L. Alison and L. Rainbow (Eds.), *Professionalizing Offender Profiling: Forensic and Investigative Psychology in Practice.* (pp. 18-34). Oxon: Routledge.

Rainbow, L., Gregory, A., & Alison, L. (2014). Behavioural Investigative Advice. In G. J. N. Bruisma & D. L. Weisburd (Eds.), *Encyclopaedia of Criminology and Criminal Justice* (pp. 125-134). New York: Springer.

Reynolds, J. J., Estrada-Reynolds, V., & Freng, S. (2019). Investigator beliefs of homicide crime scene characteristics. *Applied Psychology in Criminal Justice, 15*(1), 60-85.

Russell, M., Schlesinger, L. B., Leon, M., & Holdren, S. (2018). "Undoing" (or symbolic reversal) at homicide crime scenes. *Journal of Forensic Sciences, 63*(2), 478-483. doi: 10.1111/1556-4029.13556.

Safarik, M., Jarvis, J., & Nussbaum, K. (2002). Sexual homicide of elderly females: Linking offender characteristics to crime scene and victim characteristics. *Journal of Interpersonal Violence, 17*(5), 500-525. doi: 10.1177/0886260502017005002.

Salfati, C. G. (2000). The nature of expressiveness and instrumentality in homicide: Implications for offender profiling. *Homicide Studies, 4*(3), 265-293. doi: 10.1177/1088767900004003004.

Salfati, C. G., & Canter, D. V. (1999). Differentiating stranger murders: Profiling offender characteristics from behavioural styles. *Behavioural Sciences & The Law, 17*(3), 391-406. doi: 10.1002/(sici)1099-0798(199907/09)17:3<391::aid-bsl352>3.0.co;2-z.

Salfati, C. G., & Dupont, F. (2006). Canadian homicide: An investigation of crime scene actions. *Homicide Studies, 10*(2), 118-139. doi: 10.1177/1088767906288449

Santtila, P., Häkkänen, H., Canter, D., & Elfgren, T. (2003). Classifying homicide offenders and predicting their characteristics from crime scene behaviour. *Scandinavian Journal of Psychology, 44*(2), 107-118. doi:

10.1111/1467-9450.00328

Schröer, J., & Püschel, K. (2007). Special Aspects of Crime Scene Interpretation and Behavioural Analysis. *Forensic Pathology Reviews, 4*, 193-202. doi: 10.1007/978-1-59259-921-9_8.

Shaw, D. (2018). *Met Police chief Cressida Dick: 'Murders becoming harder to solve'.* Retrieved March 18, 2020 from https://www.bbc.co.uk/news/uk-england- london-43752643.

Sheridan, D. J., & Nash, K. R. (2007). Acute injury patterns of intimate partner violence victims. *Trauma, Violence, & Abuse, 8*(3), 281-289. doi: 10.1177/1524838007303504

Simion, F., & Di Giorgio, E. (2015). Face perception and processing in early infancy: inborn predispositions and developmental changes. *Frontiers in Psychology, 6*(969), 1-11. doi: 10.3389/fpsyg.2015.00969

Thijssen, J., & de Ruiter, C. (2011). Instrumental and expressive violence in Belgian homicide perpetrators. *Journal of Investigative Psychology and Offender Profiling, 8*(1), 58-73. doi: 10.1177/0886260510369129.

Thompson, S. J., Foulsham, T., Leekam, S. R., & Jones, C. R. (2019). Attention to the face is characterised by a difficult to inhibit first fixation to the eyes. *Acta Psychologica, 193*, 229-238. doi: 10.1016/j.actpsy.2019.01.006.

Trojan, C., & Krull, A. C. (2012). Variations in wounding by relationship intimacy in homicide cases. *Journal of Interpersonal Violence, 27*(14), 2869-2888. doi: 10.1177/0886260512438285.

Trojan, C., & Salfati, C. G. (2010). Comparing the criminal history profiles of serial and single-victim homicide offenders. *Victims and Offenders, 6*(1), 38-63. doi: 10.1080/15564886.2011.534008.