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## Racial Bias in Risk Allocation and Resource Utilisation: A Contributing Factor to Ethnic Minority Overrepresentation in Missing Person Investigations?

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### Abstract

Statistics from the National Crime Agency reveal that people from ethnic minority backgrounds are over-represented within the missing population in the United Kingdom, and previous archival studies have shown there is a discrepancy in the recovery of ethnic minority missing persons compared to White missing persons. A wider body of research shows that racial bias is prevalent in the criminal justice system and law enforcement, resulting in different outcomes for victims depending on their racial background. Such outcomes have yet to be examined in the context of missing persons. Therefore, this study tries to address this gap in the literature by examining whether racial bias within the investigative process is a potential factor contributing to the documented over-representation. Using a 2 x 2 between-groups vignette study, police officers in the UK with experience in missing person investigations were presented with one of four hypothetical missing person scenarios. Race of the missing person (Black or White), and risk factors present (no suicide or suicide risk), were manipulated. Participants were asked to make a risk assessment and indicate how likely they were to use available investigative resources to find the missing person. Quantitative results indicate that police officers were not more likely to allocate resources to the White missing woman in either risk condition, although a thematic analysis reveals patterns in risk allocation that are different dependent on race. These findings give insight to the decision-making process of police officers that have implications for the development of policies within missing person investigations.

### Keywords

Missing Person Investigations, Risk Allocation, Resource Utilisation, Racial Bias

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### **Abstract**

Statistics from the National Crime Agency reveal that people from ethnic minority backgrounds are overrepresented within the missing population in the United Kingdom, and previous archival studies have shown there is a discrepancy in the recovery of ethnic minority missing persons compared to White missing persons. A wider body of research shows that racial bias is prevalent in the criminal justice system and law enforcement, resulting in different outcomes for victims depending on their racial background. Such outcomes have yet to be examined in the context of missing persons. Therefore, this study tries to address this gap in the literature by examining whether racial bias within the investigative process is a potential factor contributing to the documented overrepresentation. Using a 2 x 2 between- groups vignette study, police officers in the UK with experience in missing person investigations were presented with one of four hypothetical missing person scenarios. Race of the missing person (Black or White), and risk factors present (no suicide or suicide risk), were manipulated. Participants were asked to make a risk assessment and indicate how likely they were to use available investigative resources to find the missing person. Quantitative results indicate that police officers were not more likely to allocate resources to the White missing woman in either risk condition, although a thematic analysis reveals patterns in risk allocation that are different dependent on race. These findings give insight to the decision-making process of police officers that have implications for the development of policies within missing person investigations.

## Introduction

In England and Wales, six calls per 1,000 residents are made related to missing persons every year (UK Missing Persons Unit, 2021). A concerning trend throughout recent years is the overrepresentation of individuals with an ethnic minority background in the missing persons. Most notably, Black individuals make up 14% of the UK missing while representing only 3% of the general population, and 23 forces in England and Wales saw disproportionately more Black missing cases compared to the general population (UK Missing Persons Unit, 2021b).

Moreover, there is evidence to suggest inequality in the chances of recovery. A study examining New York State records of missing children saw that Black children are overrepresented and twice as likely to remain missing compared to their White counterparts (van de Rijt et al., 2018). Newiss (2005) analysed data from 1992 to 2001 from the Police National Missing Persons Bureau (PNMBP; an organisation that collects data from people who remain missing for more than two weeks in the United Kingdom) and found that long-term missing people from Afro-Caribbean descent are four times the proportion of the general Afro-Caribbean UK population. Advocates for families of Black missing people, such as London-based charity Minority Matters, state that relatives feel like their cases are not given the same priority because of their ethnic background (Brown & Osunsami, 2019; Missing People, 2021; White, 2021).

With a finite number of resources available for use in missing person investigations, police officers must triage and allocate resources appropriately according to risk level, assessed on basis of the apparent risk of harm to the missing person or members of the public presented in the case. Risk is categorised between no apparent risk (absent), low, medium, and high risk, with the level of police activity and resource deployment increasing

with every level (College of Policing, 2022). However, with the sentiment in Black communities that the police do not prioritise their cases, questions surrounding racial bias in decisions regarding risk allocation and resource utilisation are raised (Missing People, 2021).

### **Decision-Making Under Uncertainty**

Every report of a missing person comes with a substantial challenge where police officers must first establish whether this is an intentional or unintentional absence. It brings a great amount of ambiguity to the investigative process, a factor that can influence the most appropriate police response (Fyfe et al., 2015). Ambiguity in the limited information available, coupled with the quick response that is required in missing person investigations, allow for potential biases to influence the decision-making process, as individuals are likely to rely on heuristics and stereotypes they are familiar with (Correll et al., 2014; Kahneman, 2011; Valutis, 2015).

While heuristics and stereotypes are often effective at saving time and making sense of ambiguous situations, previous literature have established that they can be unreliable, even when used by experts (Davidow & Levinson, 1993; Tversky & Kahneman, 1974). For example, harmful stereotypes regarding Black individuals persist in society, and a body of research has shown that people tend to interpret ambiguous behaviour as more violent or suspicious when the actor is Black, versus when the actor is White (e.g., Devine, 1989; Madon et al., 2001; Pickett et al., 2012; Welch, 2007). The influence of stereotypes has also been shown in the rates of stop-and-searches, and in police decisions to shoot. For example, a systematic review of 16 empirical studies found that Black men were most frequently stopped and searched, that this disparity could be attributed to racial prejudices, and that this problem persists in a multitude of countries, including the United States, England,

Wales, the Netherlands, and Brazil (Carvalho et al., 2021). Additionally, a literature review on racial bias in the decision to shoot found that participants had a greater tendency to shoot Black targets than White targets. Both laypeople and police officer participants were found to demonstrate racial bias, with racial bias in the latter group being demonstrated by their response times (i.e. were faster to shoot unarmed Black targets and to choose not to shoot unarmed White targets) (Correll et al., 2014).

The influence of stereotypes on missing person investigations can be considered within 'scenario-based searching', reviewing possible scenarios for the missing person's disappearance. This stage of the search is noted as one that can help determine whether the case is an intentional or unintentional absence (College of Policing, 2012). Fyfe et al. (2015) noted that this narrative is not neutral, as it is developed by police officers. Thus, interpretation of early-stage information used to create this narrative can potentially be affected by biases that officers hold (see Foy, 2004). For example, when it comes to missing Black children and adolescents, many believe they are often unjustly classified as runaways or criminals (Hill, 2021; Horton, 2020). While demographic figures regarding the classification of runaways are unavailable, advocates for Black missing people are concerned that this represents a significant pattern. Additionally, Robert Lowery, the vice president of The National Center for Missing and Exploited Children, states that people dismiss runaway cases as voluntary and not harmful (Dwyer, 2017). Often, when someone is classified as a runaway, there will be limited or even no further action taken in that investigation (Cotterill, 2020). Disproportionately classing missing Black people as runaways therefore raises concerns about law enforcement to pull back on resources spent on Black missing cases (Mitchum, 2017). It additionally raises concerns about the preconceived notion that young Black people who go missing do so voluntarily and are therefore not in danger, resulting in a

lower risk assignment. Todd Mathews, the Case Management and Communications director at the National Missing and Unidentified Persons System (NamUs), notes that the longer a child is missing, even if it is voluntary, the bigger the chances are they fall to harm (Lohr, 2017). Previous research supports this statement (Biehal et al., 2003). As a result, it can be detrimental to the cases of Black missing people when officers disproportionately assume they are runaways and went missing intentionally.

### **Racial Bias in Police Decision-Making**

Drawing upon an extensive body of literature from various investigative contexts, there seems to be a consensus that racial bias is prevalent in police decision-making, and that it results in different outcomes for victims depending on their race. Firstly, it is vital to note that previous research has suggested that racism and racial prejudices in policing are not only more extreme, but also more widespread than in the general population (e.g., Bowling & Phillips, 2008; Uhnou, 2015). Supporting this, a body of research suggests that police decision-makers are likely to allocate more resources for the investigation of crimes against high-status White victims, and in turn neglect or even end up ignoring crimes against non-White victims (Baldus et al., 1983; Corsianos, 2003). Indeed, in sexual assault and rape cases, African-American rape victims have been found to experience victim blaming significantly more than White rape victims, which then resulted in less secondary help from police officers and social workers (Foley et al., 1995; Sjöberg & Sarwar, 2020; Willis, 1992). Furthermore, a systematic review by Shaw and Lee (2019) saw that police were more likely to deem Black rape victims uncooperative and blame them for the lack of progression in their case, which was in turn found to be detrimental to the number of investigative steps taken. As such, Black rape victims' investigations were found to be significantly less likely to result in a suspect line-up or interview. Taylor et al. (2009) similarly concluded that violent crime cases with African-American victims were significantly less likely to be cleared than violent crime cases where

the victim is White. Taken together, this wider body of research suggests racial biases are present within a multitude of different investigative processes.

It is important to acknowledge that research has often been conducted in the context of sexual assault and violent crime investigations, with no studies conducted in the context of missing persons. Furthermore, as far as we are aware, there has been no previous research published that investigates whether and/or how initial risk assessments are influenced by the race of the missing person. Research and the development of risk assessments have been criticised for not recognising and exploring ambiguity as a critical challenge in the process (Johansen & Rausand, 2015). Therefore, research is urgently needed to understand the influence of race on risk assessment and the processes of a missing person investigation.

### **Present Study**

Currently, the vast number of studies examining racial bias in investigative contexts exclude missing person investigations. As such, the present study was designed to address this gap. The aim is to examine police officer perceptions relating to whether the race and mental health status of the missing person influences decision making in a hypothetical missing person investigation. Mental health was selected as another variable as this has been identified as a leading cause of people going missing (REF). Further, research shows that Black individuals are at higher risk of mental health problems, are disproportionately affected by social detriments associated with mental health problems, are less likely to access mental health care, and are more likely to experience disparities in diagnosis, assessment and treatment of mental illness compared to White people (Bignall et al. 2019; Jongsma et al., 2020). Thus, the following research questions have been formulated:

Research question 1: Does the race and/or mental health status of the missing person influence the perceived allocation of risk?



Research question 2: Does the race and/or mental health status of the missing person influence the perceived likelihood of resource utilisation?

## Method

### Design and Participants

The study used an experimental 2 (Race: Black woman, White woman) × 2 (Mental health status: Suicide risk, No suicide risk) between-participants design. The dependent variables were the allocation of risk (medium vs. high), and the likelihood of resource utilisation relating to External parties, Location search, Family and friends, Canvassing, and Records check (0% to 100%).

Participants were recruited with the help of the UK Missing Persons Unit at the National Crime Agency (NCA), and charities; Missing People and Locate International. These organisations circulated the link to the study internally within their networks and posted it on platforms such as Twitter and LinkedIn. The final sample comprised 127 police officers, with between 28 and 35 participants in each experimental condition. Regarding demographics, 70 (55.1%) identified as male, 54 (42.5%) identified as female, and 3 (2.4%) identified as other/preferred not to say; and 124 (97.6%) identified as White and 3 (2.4%) identified as other/mixed ethnic group. The average length of experience investigating missing person cases was 11.14 years ( $SD = 10.21$ , ranging from 0 to 46 years), with most participants working in areas where 0 to 10 people go missing each day (89, 70.1%), followed by areas where 11 to 20 people go missing each day (25, 19.7), and areas where 21+ people go missing each day (13, 10.8%).

This study received ethical approval from a university ethics committee and was conducted in accordance with British Psychological Society ethical guidelines. A priori power

analysis using G\*Power produced a total sample size of 128 participants to ensure the study was sufficiently powered (effect size 0.25, alpha level 0.05, power 0.80).

## **Materials**

This study used an online questionnaire powered by Qualtrics. Participants could therefore access the questionnaire and complete the study using any device with internet access.

*Informed consent questions.* Instructions and information about the study were provided, including an explanation of participants' rights to withdraw at any time, confidentiality, and anonymity. Additionally, participants were directed to the full General Data Protection Regulation (GDPR).

*Demographic questions.* These pertained to participants' gender, ethnicity, job role, how many years of experience they have working in missing person investigations, and how many people go missing each day in their area of work.

*Scenarios.* Four scenarios were created for the study. Each one described a woman who did not show up to an appointment to meet her friend. The concerned friend then contacted the police to report the woman missing, as this behaviour was out of character. The scenarios differed slightly according to the experimental condition. Race was manipulated by changing the name, physical description, and country of origin of the missing woman. Mental health status was manipulated by including or excluding mention of the missing person experiencing suicidal thoughts: in no suicide risk conditions the missing person had a history of depression; in suicide risk conditions the missing person had a history of depression with additional suicidal thoughts. For illustration purposes the White-No suicide risk scenario is provided below:

*Emma went missing 1 day ago. She was supposed to meet her friend to have a walk in the park, but she never showed up. Her friend has tried to contact her through calls and texts, to no avail. Her friend is worried because Emma has a history of depression that she only just started to get treatment for, via a course of anti-depressant medication. Originally from Belgium, Emma is a 5'5" white woman with an average build. She is 22 years old, has blonde hair, light skin and was wearing a grey sweater and dark blue jeans when she was last seen in front of her flat in Croydon, London. She was presumably coming home from her job as an office administrator at a local Pilates studio. this behaviour is out of character for Emma, which is why her friend contacted the police.*

*Test phase questions.* Participants were asked to indicate the risk level of the missing woman presented in the scenario (low, medium, high), and to justify their answer.

Participants were then presented with a list of 14 resources that could be allocated to the hypothetical investigation (see Appendix). These were drawn from a list of resources provided by the NCA and the College of Policing website (see College of Policing, 2016b). Participants were asked to indicate, in percentages (0% to 100%), how likely they were to allocate each available resource in the missing person scenario described in the scenario.

## **Procedure**

UK-based police officers with experience in missing person investigations were invited to take part in an online study looking at perceptions of risk and the subsequent resource utilisation in a hypothetical missing person investigation. After providing informed consent to take part, and answering the demographic questions, participants were randomly allocated into one of four versions of the scenario. They were then asked to read through the scenario carefully, and to indicate the risk level they determined this case to

have. Participants were invited to elaborate on their decision in a designated open-field textbox. They were then asked to start planning the hypothetical missing person investigation by indicating how likely they were to implement a series of available resources. The end of the study was immediately followed by a debrief explaining the purpose of the study. In addition, links to available resources regarding ethnic minority overrepresentation in the missing population were provided, alongside the contact details of the researchers should participants have any questions or want a summary of the findings.

### **Data Analysis**

The study adopted a mixed-methods approach to data analysis. Quantitative data were analysed using IBM SPSS Statistics Version 27 and qualitative data were analysed using Braun and Clarke's (2006) six-step thematic analysis method. Regarding the quantitative analyses, logistic regression was performed to examine the influence of race (Black vs. White) and mental health status (no suicide risk vs. suicide risk on the allocation of risk (medium vs. high). Low- and medium-risk categories were collapsed for the purpose of analysis because of the small expected frequency of the low risk category. Of note, only three participants indicated the risk level as 'low', and all three were found in the Black conditions. Principal components analysis (PCA) with direct Oblimin rotation was then performed to examine the underlying structure of potential resources. This analysis identified five components – 'External parties', 'Location search', 'Family and friends', 'Canvassing', and 'Records check' (further details are provided in the Results). Finally, a series of  $2 \times 2$  analyses of variance (ANOVAs) were performed to examine the influence of

race and mental health status on the likelihood of resource utilisation relating to the five identified components.

Regarding the qualitative analyses, 27 participants did not fill in this open question, and thus 100 entries were analysed using Braun and Clarke's (2006) six-step thematic analysis method. This method involved initial familiarisation with the dataset, and the coding and generation of initial themes. These themes were then further developed and refined to ensure they captured the entire dataset, before being defined and named. This analysis identified five themes – 'Mental health', 'Risk of harm', 'Behaviour', 'Vulnerability', and 'Possible alternative explanations' – and 11 subthemes (further details are provided in the Results). To ensure a good level of reliability, 20% of responses were coded by a second researcher. This process yielded a Cohen's kappa of .72, revealing a substantial strength of agreement between the coders (Landis & Koch, 1970).

## Results

Logistic regression and Braun and Clarke's (2006) six-step thematic analysis method were performed to examine the influence of race and mental health status on the allocation of risk. PCA and a series of 2 x 2 ANOVAs were then performed to examine the influence of race and mental health status on the likelihood of resource utilisation.

### Allocation of Risk

A logistic regression was performed to examine the influence of race and mental health status on the allocation of risk (medium vs. high). The model was statistically significant, correctly classified 76.4% of cases, and explained between 5.3% (Cox & Snell  $R^2$ ) and 7.9% (Nagelkerke  $R^2$ ) of variance,  $\chi^2(2, N = 127) = 6.853, p = .033$ . A summary of the logistic regression is presented in Table 1.

---Table 1 about here---

The analysis revealed one significant main effect relating to the allocation of risk: examination of the odds ratios showed that participants were 3.02 times more likely to classify the case as high risk in the suicide risk condition than in the no suicide risk condition (OR = 3.02, 95% CI = 1.25 to 7.28,  $p = .014$ ). There was no significant main effect for race or significant interaction effect for race and mental health status.

A thematic analysis was conducted and identified five themes (and 11 associated subthemes) that participants drew upon when making decisions regarding the allocation of risk. Table A1 in the Appendix presents the number and percentage of participants who drew on each theme and subtheme as a function of race and mental health status. Each theme and associated subtheme will now be considered in turn (most participants drew upon multiple themes and subthemes).

### ***Mental Health***

Sixty-three percent of participants drew upon the reference to mental health as part of their reasoning for allocating a certain risk level. Three subthemes emerged: (a) medication, (b) suicidal thoughts, and (c) minimisation.

*Medication.* Eighteen percent of participants considered the presence of medication as a contributing factor when determining a suitable risk level. To illustrate, participant GHT03 stated: “History of depression, not having kept plans that were made and not having contacted her friend to say she couldn’t make it, no contact on the telephone or in person since. The fact it is out of character for her also is of concern.” Medication was brought up more often in the Black suicide risk condition than the Black no suicide risk condition (27.6% vs. 4.4%), but no such difference was found in the White conditions (16.0% vs. 21.7%). Participants in the suicide risk conditions drew upon this subtheme more often than participants in the no suicide risk conditions (22.2% vs. 13.0%).

*Suicidal thoughts.* Thirty-five percent of participants noted the presence of suicidal thoughts as a reason for their allocation of risk. Participants who drew upon this theme took the mention of suicidal thoughts to be an immediate cause for concern. As participant YTE06 commented: “Anyone who talks of suicidal thoughts, has depression that is only just being treated, and this is out of character to not turn up to a meeting then this is a concern. We should not take this lightly and the chance of serious harm is very likely”. More participants mentioned suicidal thoughts in the suicide risk conditions (Black 34.5%; White 48.0%) compared to the no suicide risk conditions (Black 4.4%; White 8.7%), which was to be expected as mental health status was manipulated by including or excluding mention of the missing person experiencing suicidal thoughts. There were no discernible differences between the Black and White suicide risk conditions. Importantly, the suicidal thoughts and minimisation subthemes illustrate the suggestive interpretation of risk, as participants mentioning suicidal thoughts in this subtheme raised a sense of urgency, whereas participants mentioning suicidal thoughts in the next subtheme did not consider them to be a cause for concern.

*Minimisation.* Twelve percent of participants drew upon the minimisation subtheme, meaning that suicidal thoughts and/or mental health were mentioned, but were not considered relevant in the allocation of risk. Participant LER11 wrote: “I have not immediately categorised this as high risk because there Imani did not communicate beforehand that she was considering self-harm. Having suicidal thoughts is not the same as indicating she intends to self-harm. Many missing people do have suicidal thoughts but do not self-harm”. Only one participant in the no suicide risk conditions drew upon this theme, compared to 15 participants in the suicide risk conditions. Notably, considerably more participants commented on this theme in the Black suicide risk condition (27.6%) compared

to the White suicide risk condition (16.0%), signifying that flagging suicidal thoughts and/or mental health without it being a factor for allocating risk occurred mostly in the Black suicide risk condition.

### ***Risk of Harm***

Fifty-five percent of participants indicated risk of harm to self to be a contributing factor to their allocation of risk. Three subthemes were identified: (a) no direct risk of harm, (b) further enquiry needed, and (c) direct risk of harm.

*No direct risk of harm.* Most participants drawing upon the risk of harm theme mentioned there was no indication of direct risk of harm (36.0%). To illustrate, participant EEN8 stated: “Out of character and recent mental health issues, but no immediate risk of harm to self has been made apparent”. There were no discernible differences between the Black and White conditions, nor between the no suicide risk and suicide risk conditions.

*Further enquiry needed.* Further enquiry needed was the second-most mentioned subtheme (33.0%), with some participants explicitly stating this is to revise the currently assigned risk level. As participant RCH03 stated: “There is no information to suggest an immediate risk to self but enough to suggest there is some risk – i.e., low mood. More investigation and information is required and then it will be reviewed”. As with the previous subtheme, there were no discernible differences between the Black and White conditions. However, more participants in the no suicide risk conditions drew upon this subtheme compared to the suicidal conditions (39.1%, vs. 27.8%).

*Direct risk of harm.* In contrast, only 2.0% of participants indicated that there is a direct risk of harm. All participants remarking there being a direct risk of harm were found in the White suicide risk condition.



## **Behaviour**

This theme indicates elements of the missing woman's behaviour identified by the participants and how they relate to their decision regarding the allocation of risk, with 51.0% of the participants drawing upon this theme and the following two subthemes: (a) out of character, and (b) no contact with/did not meet friend.

*Out of character.* Forty-six percent of participants noted the missing woman's behaviour was out of character. As participant MCC08 stated: "We have to be cognisant to the red flags that jump out from the text, key phrases are, 'out of character', 'history of depression' – she hasn't been seen for a whole day now, and the last info placed her outside of her own flat. It would be useful to have known if she had a history of being reported as missing." More participants in the no suicide risk conditions drew upon this subtheme than in the suicide risk conditions (54.3% vs 38.9%). There was no discernible difference between the Black and White conditions.

*No contact with/did not meet friend.* Nineteen percent mentioned the specific behaviours from the scenario they found helpful for their allocation of risk, namely not having contact with her friend or the missing woman not showing up to her appointment. For example, participant ILS12 stated: "1. She has failed to meet a friend for an arranged meet. (is this out of character?) 2. Her friend has tried to contact her through calls and texts, to no avail." This subtheme was drawn upon more in suicide risk conditions than no suicide risk conditions (22.2% vs. 15.2%). Similar differences between the Black and White conditions were found, with more participants drawing upon this subtheme in the Black conditions than in the White conditions (21.2% vs. 16.7%).

### ***Vulnerabilities***

Participants drew upon vulnerabilities the least in this study. Two subthemes were identified, (a) no apparent vulnerabilities, and (b) ethnicity.

*No apparent vulnerabilities.* Nine percent of participants explicitly stated that a contributing factor to their allocation of risk was the fact that the missing person had no apparent vulnerabilities or was a capable woman. As participant AKR10 stated: “Although out of character, the time frame of no contact is not extreme, the fact that the individual is not vulnerable by age or disability. Although there are recent indications she has had suicidal thoughts there is not yet knowledge of a plan or attempts.” Twice as many participants drew upon this subtheme in the no suicide risk condition than in the suicide risk condition (13.0% versus 5.6%), and there were no discernible differences between the Black and White conditions.

*Ethnicity.* Only three percent of participants mentioned ethnicity. One participant drawing upon this theme was found in the no suicide risk condition, the other two participants were in the suicide risk conditions. One participant in the White suicide risk condition noted that the missing woman, being from another country, might not have a support network that could help her through her mental health struggles. The other two participants were allocated to the Black conditions, and both took ethnicity into consideration, but had different approaches regarding how it influenced their decision-making. In the suicide risk condition, Participant URY02 stated: “...5. BAME individuals over-represented in mispers and suicide in the UK”, and in the no suicide risk condition, participant SHA06 wrote: “Because even though the APP [Authorised Professional Practice] definition of medium risk is above the level of perceived risk on the information above, culturally I would be criticised for placing the misper as low risk”.

### ***Alternative Explanations***

Alternative explanations were not given by many participants in this study (8.0%), although all participants who drew upon this subtheme were in the no suicide risk conditions. Participants with the Black woman missing offered more alternative explanations than participants with the White woman missing (30.4% vs 4.4%). For example, as participant ALE01 wrote: “There is nothing to suggest that the friend has visited the home address to see if she is there. She may also have been admitted to hospital and lost her phone charge. The phone may have been lost”. No participant offered the possibility of alternative explanations in either suicide risk condition.

### **Underlying Structure of Potential Resources**

PCA with direct Oblimin rotation was performed with 13 of the 14 potential resources because one resource – ‘circulate on PNC’ – is a minimum action as described by the College of Policing (College of Policing, 2016b). Minimum actions should be taken in every missing person case, therefore, this resource suffered from ceiling effects (with averages of 93.87% to 99.64% likelihood across the conditions). As such, this action was removed from subsequent analyses. All assumptions were checked prior to the analyses and met.

The PCA identified five components with eigenvalues greater than 1, accounting for 75.0% of variance in the data. Table 1 presents the loadings for the 13 resources.

---Table 1 about here---

Component 1 was labelled ‘External parties’ due to high loadings on items that involved using expertise of others, including reaching out to DNA specialists, the National Crime Agency, and media outlets. This component comprised three items and explained 30.3% of variance (Cronbach’s  $\alpha = .779$ ). Component 2 was labelled ‘Location search’ due to

high loadings on items relating to the searching of two specific locations: hospitals and houses. This component comprised two items and explained 16.1% of variance (Pearson's  $r = .725$ ,  $p < .001$ ). Component 3 was labelled 'Family and friends' due to high loadings on items relating to seeking information from close family and friends of the missing woman. This component comprised two items and explained 10.9% of variance (Pearson's  $r = .749$ ,  $p < .001$ ). Component 4 was labelled 'Canvassing' due to high loadings on items that involved searching house-to-house, checking CCTV, and seeking information from neighbours. This component comprised three items and explained 9.7% of variance (Cronbach's  $\alpha = .804$ ). Finally, Component 5 was labelled 'Records check' due to high loadings on items relating to the checking of mental health, phone, and transport records. This component comprised three items and explained 8.0% of variance (Cronbach's  $\alpha = .510$ ). All three items of Component 5 were retained because Cronbach's  $\alpha$  would have been further reduced if any of the items were deleted.

### **Likelihood of Resource Utilisation**

A series of  $2 \times 2$  ANOVAs were performed to examine the influence of race and mental health status on the likelihood of resource utilisation relating to External parties, Location search, Family and friends, Canvassing, and Records check. A summary of the ANOVAs and associated means and standard deviations are presented in Tables 2 and 3.

---Tables 2 and 3 about here---

The analyses revealed one significant main effect relating to the Record check component: mental health status was found to have a significant effect whereby participants in suicide risk conditions ( $M = 92.59$ ,  $SD = 13.30$ ) were significantly more likely to use the resources presented compared to the participants in no suicide risk conditions ( $M$

= 86.20,  $SD = 16.18$ ),  $F(1, 123) = 6.07$ ,  $p = .015$ ,  $\eta^2 = .047$ . There were no other significant main or interaction effects for race and mental health status.

### Discussion

This study aimed to explore police officer perceptions of whether the race and mental health status of the missing person would influence their risk allocation and resource utilisation in response to a hypothetical missing person investigation. We examined the risk level participants assigned to their scenario, their reasoning for doing so, and the likelihood they would allocate certain resources to the hypothetical scenario. Regarding the allocation of risk, the only significant effect found was that participants in the suicide risk conditions were more likely to accurately assign a high-risk level. There was no tendency found to allocate a higher risk dependent on the race of the missing person presented. In addition, the only significant effect regarding the likelihood of resource utilisation revealed that participants in suicide risk conditions were more likely to use the resources presented, compared to participants in no suicide risk conditions. Similar to the allocation of risk, there was no racial bias detected with the likelihood of resource utilisation to the scenarios.

Despite the non-significant quantitative results, the thematic analysis highlighted interesting patterns regarding their decision-making. Overall, mental health, risk of harm, and behaviour were key aspects participants focused on when determining risk. With respect to mental health, more participants who acknowledged mental health and/or suicidal thoughts without taking it into consideration when deciding the risk level were found in the Black suicide risk condition than any other condition. Furthermore, regarding risk of harm, “direct risk of harm” was drawn upon the least, however, all participants who drew upon this subtheme were found in the White suicide risk condition. “Further enquiry needed” was drawn upon more in the no suicide risk conditions overall, reflecting the

ambiguity of the risk of harm in the scenario and the medium-risk allocation. The final theme, “alternative explanations”, was drawn upon the most in Black no suicide risk condition. In sum, these findings in the thematic analysis uncovered racial differences within the decision-making process for the allocation of risk. For example, the theme “alternative explanations” is exemplar of scenario-based searching whereby officers must consider all possible scenarios for their absence (College of Policing, 2012). While the results indicate no effect to risk allocation and resource utilisation due to the racial discrepancies found within this theme, advocates for Black missing people have flagged concerns that such alternative explanations are more often attributed to a missing person when they are Black. Moreover, the finding that this occurred most in the Black no suicide risk condition (with no suicide risk considered most ambiguous in this study), supports evidence from previous literature that drawing upon heuristics and stereotypes is often carried out in ambiguous contexts (e.g., Tversky & Kahneman, 1974).

It is worth examining other factors that could contribute to the overrepresentation of ethnic minority individuals in the UK missing population beyond the investigation. The top five reasons for adults to be missing relate to mental health, relationships, drugs or alcohol, depression or anxiety, and suicide attempts (UK Missing Persons Unit, 2021b). Ethnic minorities are under-represented in outpatient mental health settings and when they do enter the outpatient mental health system, they receive fewer therapy sessions than their White counterparts and are more likely to quit treatment prematurely (Cooper-Patrick et al., 1994; Crow et al., 2016; Dixon et al., 2016). These disparities are attributed to multiple factors. First, ethnic minority individuals have unequal access to mental health care and ethnic minority communities have less resources to distribute to health services (Buchmueller et al., 2016; Penner et al., 2014). Even when systemic differences in access are

controlled for, racial mental health disparities persist (Smedley et al., 2013). A review that examined the low engagement of African and Caribbean communities with mental health services in the UK has determined that Black people have experienced mainstream services to be inhumane, unhelpful, and inappropriate for their communities, therefore being fearful of seeking help (Sainsbury Centre for Mental Health, 2002). For instance, White clinicians, due to exposure to negative stereotypes and implicit racial biases they hold, behave differently with Black patients and believe that Black patients are less cooperative (Cooper et al., 2012; van Ryn et al., 2011). Additionally, Adams et al. (2014) reported that British and American primary care doctors experienced difficulties diagnosing depression in African Caribbean patients, more likely inferring physical problems rather than emotional ones. Furthermore, ethnic minority individuals are significantly more likely to enter the mental health system with more serious and chronic mental illness and through adverse pathways (Department of Health, 2005). In fact, Black British patients are over four times more likely to be detained under the Mental Health Act than White patients (NHS Digital, 2019). In addition to unequal access to mental health care and treatment, attitudinal factors such as stigma can influence the way Black communities feel towards seeking mental health care (Abdullah & Brown, 2020; Alvidrez et al., 2008; Gary, 2005). In sum, it is possible that racial disparities in mental health care are a contributing factor to the ethnic minority overrepresentation seen in the official statistics of missing person cases.

Furthermore, the results of this study have flagged the suggestive nature of risk assignment. The classification of risk is informed by professional judgement and acknowledged to be subjective (College of Policing, 2021). As expected, participants who assigned a high-risk level had a higher average likelihood of resource utilisation than participants who assigned a medium-risk level. The College of Policing (2022) provides a risk

assessment table containing the risk level, the definition of said risk level, and the appropriate level of response. The usage of words such as “active and measured response” in the medium-risk level is ambiguous enough to be open to interpretation to what the appropriate level of response will be, and the same case might receive vastly different responses when classed by different officers. Greenhalgh and Shalev Greene (2021) found that, especially with the reduction of officers, high-risk cases are prioritised while lower risk cases do not get the investigation they need, with implications for complex vulnerabilities that might be missed in lower risk cases. Additionally, while the subjective nature of the current risk assessment relies heavily on professional experience and knowledge of the officers, a report by Smith and Shalev-Greene (2014) uncovered that almost 50% of English officers did not feel like they were adequately trained or had the knowledge to accurately do so. These patterns suggest the urgent need for training and standardisation in the risk assessment. Finally, of notable concern is the fact that three participants chose to assign low risk level, but only in the Black conditions. While the sample is too small to make any meaningful inference, it is important to acknowledge these findings in the context of racial bias and ethnic minority overrepresentation in the missing population. Spohn (2015) asserted that racial disparities in law enforcement in recent years have become more subtle, and therefore more difficult to detect. The qualitative findings could potentially be argued as an indirect snowball effect of race, contributing to the ethnic minority overrepresentation and biases in the investigation.

We do, however, acknowledge the limitations of this study. During the time this study was distributed, racial bias, criticism about missing person investigations, and the police as an institution were vastly present in the UK media. While participants were not told the true aims of this study, public scrutiny might have been a contributing factor to



show more desirable responses regarding the investigative process. Additionally, to ensure full anonymity and higher levels of participation, participants were not asked to provide details of the area they worked in, and no assumptions can be made regarding the location of the participants. Therefore, this sample might not be representative of the UK police forces. It should be noted that 58.9% of all Black missing incidents in England and Wales were reported in the Greater London Area (UK Missing Persons Unit, 2021), but it is unknown how many participants were from the MET or City of London police force. Finally, external factors to reflect the real-life pressure police officers face that can influence their decision-making were not present in the present study. High workload, which has been shown to impact decisions by prioritising cases over others (Greenhalgh & Shalev Greene, 2021) were not present, as participants were only presented with one case. Additionally, Corsianos (2003) found that media attention from news reporters puts pressure on the police as they are then under public scrutiny. As a result, cases with vast media attention get prioritised. Such public pressure that could influence police decision-making were not included in the design of the study. Future research should therefore take external factors that were not included in this study into consideration, such as media representation of the cases provided and a high workload. Future research should also consider Spohn's (2015) criticism on racial disparities in law enforcement, which suggests that testing only for direct race effects is insufficient. Last, future research should examine whether there is a racial bias found in real-life missing person cases.

This study is the first to examine decisions made by law enforcement as a potential contributing factor to the overrepresentation of ethnic minority individuals in the missing population. Previous research on racial bias have focused on other investigative contexts such as shootings, sexual violence, and violent crime. While the results suggest there is no

racial bias that influences risk allocation and resource utilisation in missing person investigation, this study provided preliminary insight to the decision-making process of police officers which might give us a greater understanding of the investigative process in the context of ethnic minority overrepresentation. The study additionally provided further insight to the subjective nature of the risk assessment procedure; given the importance of correctly assigning risk in a missing person investigation, we propose the need for further training and standardised practice in police forces. Thus, the current research opens the door for future research in this field with the hope of understanding, and therefore tackling, the problem of ethnic minority overrepresentation in the missing.

## References

- Abdullah, T., & Brown, T. (2020). Diagnostic labeling and mental illness stigma among Black Americans: An experimental vignette study. *Stigma and Health, 5*(1), 11–21.  
<https://doi.org/10.1037/sah0000162>
- Adams, A., Vail, L., Buckingham, C. D., Kidd, J., Weich, S., & Roter, D. (2014). Investigating the influence of African American and African Caribbean race on primary care doctors' decision making about depression. *Social Science & Medicine, 116*, 161–168.  
<https://doi.org/10.1016/j.socscimed.2014.07.004>
- Alvidrez, J., Snowden, L. R., & Kaiser, D. M. (2008). The Experience of Stigma among Black Mental Health Consumers. *Journal of Health Care for the Poor and Underserved, 19*(3), 874–893. <https://doi.org/10.1353/hpu.0.0058>
- Baldus, D. C., Pulaski, C., & Woodworth, G. (1983). Comparative Review of Death Sentences: An Empirical Study of the Georgia Experience. *The Journal of Criminal Law and Criminology (1973-), 74*(3), 661. <https://doi.org/10.2307/1143133>
- Biehal, N., Mitchel, F., & Wade, J. (2003). *Lost from view: Missing Persons in the UK*. The Policy Press. <https://www.york.ac.uk/inst/spru/research/pdf/lostFromView.pdf>
- Bignall, T., Jeraj, S., Helsby, E., & Butt, J. (2019). *Racial disparities in mental health*. Race Equality Foundation. VCSE, Health and Wellbeing Alliance. UK
- Bowling, B., & Phillips, C. (2008). Policing ethnic minority communities. In T. Newburn (Ed.), *Handbook of Policing* (pp. 611–641). Willan Publishing. <https://thinkethnic.com/wp-content/uploads/2012/02/Policing%20ethnic%20minority%20communities.pdf>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

- Brown, J., & Osunsami, S. (2019, July 23). Families of missing black Americans fight for media, police to focus on their loved ones' cases. *ABC News*.  
<https://abcnews.go.com/US/families-missing-black-americans-fight-media-police-focus/story?id=64509892>
- Buchmueller, T. C., Levinson, Z. M., Levy, H. G., & Wolfe, B. L. (2016). Effect of the Affordable Care Act on Racial and Ethnic Disparities in Health Insurance Coverage. *American Journal of Public Health, 106*(8), 1416–1421.  
<https://doi.org/10.2105/AJPH.2016.303155>
- Carvalho, A. A. S., Mizael, T. M., & Sampaio, A. A. S. (2021). Racial Prejudice and Police Stops: A Systematic Review of the Empirical Literature. *Behavior Analysis in Practice*.  
<https://doi.org/10.1007/s40617-021-00578-4>
- College of Policing. (2012). *Police Search Management—Missing Persons* (No. 1).  
[https://www.whatdotheyknow.com/request/159896/response/392518/attach/2/291112%20CoP%20PoISA%20Manual%20vol2.pdf?cookie\\_passthrough=1](https://www.whatdotheyknow.com/request/159896/response/392518/attach/2/291112%20CoP%20PoISA%20Manual%20vol2.pdf?cookie_passthrough=1)
- College of Policing. (2021). *Major investigation and public protection: Risk assessment*.  
<https://www.app.college.police.uk/app-content/major-investigation-and-public-protection/missing-persons/risk-assessment/>
- College of Policing. (2022). *Major investigation and public protection: Missing persons*.  
<https://www.app.college.police.uk/app-content/major-investigation-and-public-protection/missing-persons/>
- Cooper, L. A., Roter, D. L., Carson, K. A., Beach, M. C., Sabin, J. A., Greenwald, A. G., & Inui, T. S. (2012). The Associations of Clinicians' Implicit Attitudes About Race With Medical Visit Communication and Patient Ratings of Interpersonal Care. *American Journal of Public Health, 102*(5), 979–987. <https://doi.org/10.2105/AJPH.2011.300558>

- Cooper-Patrick, L., Crum, R. M., & Ford, D. E. (1994). Characteristics of Patients with Major Depression Who Received Care in General Medical and Specialty Mental Health Settings. *Medical Care*, 32(1), 15–24. <https://doi.org/10.1097/00005650-199401000-00002>
- Correll, J., Hudson, S. M., Guillermo, S., & Ma, D. S. (2014). The Police Officer’s Dilemma: A Decade of Research on Racial Bias in the Decision to Shoot: The Police Officer’s Dilemma. *Social and Personality Psychology Compass*, 8(5), 201–213. <https://doi.org/10.1111/spc3.12099>
- Corsianos, M. (2003). Discretion in detectives’ decision making and “high profile” cases. *Police Practice and Research*, 4(3), 301–314. <https://doi.org/10.1080/1561426032000113893>
- Cotterill, B. (2020, November 19). Why are black children more likely to go missing in the US? *Sky News*. <https://news.sky.com/story/off-limits-why-are-black-kids-more-likely-to-go-missing-in-the-us-12135796>
- Crow, M. R., Smith, H. L., McNamee, A. H., & Piland, N. F. (2016). Considerations in Predicting Mental Health Care Use: Implications for Managed Care Plans. *Journal of Mental Health Administration*, 15(1), 13–20.
- Davidow, J., & Levinson, E. M. (1993). Heuristic principles and cognitive bias in decision making: Implications for assessment in school psychology. *Psychology in the Schools*, 30(4), 351–361. [https://doi.org/10.1002/1520-6807\(199310\)30:4<351::AID-PITS2310300410>3.0.CO;2-X](https://doi.org/10.1002/1520-6807(199310)30:4<351::AID-PITS2310300410>3.0.CO;2-X)
- Department of Health. (2005). *Delivering Race Equality in Mental Health Care: An Action Plan for Reform Inside and Outside Services*. <https://documents.manchester.ac.uk/display.aspx?DocID=54691>

- Devine, P. G. (1989). Stereotypes and Prejudice: Their Automatic and Controlled Components. *Journal of Personality and Social Psychology*, 56(1), 5–18.  
<http://dx.doi.org/10.1037/0022-3514.56.1.5>
- Dixon, L. B., Holoshitz, Y., & Nossel, I. (2016). Treatment Engagement of Individuals Experiencing Mental Illness: Review and Update. *World Psychiatry*, 15(1), 132–20.  
<https://doi.org/10.1002/wps.20306>
- Dwyer, C. (2017, March 27). D.C.'s Missing Teens: A False Number That Spurred A Real Conversation On Race. *NPR*. <https://www.npr.org/sections/thetwo-way/2017/03/27/521655564/d-c-s-missing-teens-a-false-number-that-spurred-a-real-conversation-on-race>
- Foley, L. A., Evancic, C., Karnik, K., King, J., & Parks, A. (1995). Date Rape: Effects of Race of Assailant and Victim and Gender of Subjects on Perceptions. *Journal of Black Psychology*, 21(1), 6–18. <https://doi.org/10.1177/00957984950211002>
- Foy, S. (2004). A profile of missing persons. *The Abstracts of the 39th Conference of The Australian Psychological Society*, 185.
- Fyfe, N. R., Stevenson, O., & Woolnough, P. (2015). Missing persons: The processes and challenges of police investigation. *Policing and Society*, 25(4), 409–425.  
<https://doi.org/10.1080/10439463.2014.881812>
- Gary, F. A. (2005). Stigma: Barrier to Mental Health Care Among Ethnic Minorities. *Issues in Mental Health Nursing*, 26(10), 979–999.  
<https://doi.org/10.1080/01612840500280638>
- Greenhalgh, M., & Shalev Greene, K. (2021). *Impact of Police Cuts on Missing Person Investigations* (p. 30).  
[https://researchportal.port.ac.uk/portal/files/28691081/Final\\_version.pdf](https://researchportal.port.ac.uk/portal/files/28691081/Final_version.pdf)

- Hill, J. (2021, January 30). Why people of color get less attention than whites when they go missing. *The Patriot Ledger*.  
<https://eu.patriotledger.com/story/news/2021/01/30/jalajhia-finklea-missing-persons-african-americans-indigenous-people/4291086001/>
- Horton, T. (2020, September 10). When Black children go missing why isn't this breaking news? *Chicago Defender*. <https://chicagodefender.com/when-black-children-go-missing-why-isnt-this-breaking-news/>
- Johansen, I. L., & Rausand, M. (2015). Ambiguity in risk assessment. *Safety Science*, 80, 243–251. <https://doi.org/10.1016/j.ssci.2015.07.028>
- Jongsma, H. E., Gayer-Anderson, C., Tarricone, I., Velthorst, E., Ven, E. van der, Quattrone, D., Forti, M. di, Group, E.-G. W., Menezes, P. R., Del-Ben, C. M., Arango, C., Lasalvia, A., Berardi, D., Cascia, C. L., Bobes, J., Bernardo, M., Sanjuán, J., Santos, J. L., Arrojo, M., ... Kirkbride, J. B. (undefined/ed). Social disadvantage, linguistic distance, ethnic minority status and first-episode psychosis: Results from the EU-GEI case-control study. *Psychological Medicine*, 1–13. <https://doi.org/10.1017/S003329172000029X>
- Kahneman, D. (2011). *Thinking, Fast and Slow*. Farrarr, Straus and Giroux.
- Landis, J. R., & Koch, G. G. (1977). The Measurement of Observer Agreement for Categorical Data. *Biometrics*, 33(1), 159. <https://doi.org/10.2307/2529310>
- Lohr, D. (2017, June 8). Police Apply Controversial “Runaway” Label To Missing Twin Sisters (UPDATE). *Huffington Post*. [https://www.huffingtonpost.co.uk/entry/police-apply-controversial-runaway-label-to-missing-twin-sisters\\_n\\_59396bb2e4b00610548057df?ri18n=true](https://www.huffingtonpost.co.uk/entry/police-apply-controversial-runaway-label-to-missing-twin-sisters_n_59396bb2e4b00610548057df?ri18n=true)
- Madon, S., Guyll, M., Aboufadel, K., Montiel, E., Smith, A., Palumbo, P., & Jussim, L. (2001). *Ethnic and National Stereotypes: The Princeton Trilogy Revisited and Revised*.

*Personality and Social Psychology Bulletin*, 27(8), 996–1010.

<https://doi.org/10.1177/0146167201278007>

Missing People. (2021, July 13). *Discrimination in the response when someone is reported missing*. <https://www.missingpeople.org.uk/discrimination-in-the-response-when-someone-is-reported-missing>

Mitchum, P. (2017, March 30). The Danger of Forcing the “Runaway” Label on the Missing DC Girls. *The Root*. <https://www.theroot.com/the-danger-of-forcing-the-runaway-label-on-the-missin-1793799915>

Newiss, G. (2005). A Study of the Characteristics of Outstanding Missing Persons: Implications for the Development of Police Risk Assessment. *Policing and Society*, 15(2), 212–225. <https://doi.org/10.1080/10439460500071655>

NHS Digital. (2019). *Mental Health Act Statistics, Annual Figures 2018-19*. <https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-act-statistics-annual-figures/2018-19-annual-figures>

Penner, L., A., Blair, I., V., Albrecht, T., L., & Dovidio, J., F. (2014). Reducing Racial Health Disparities: A Social Psychological Analysis. *Policy Insights from the Behaviour and Brain Sciences*, 1(1), 204–212. <https://doi.org/10.1177/2372732214548430>

Pickett, J. T., Chiricos, T., Golden, K. M., & Gertz, M. (2012). Reconsidering the relationship between perceived neighbourhood racial composition and whites’ perceptions of victimization risk: Do racial stereotypes matter? *Criminology*, 50(1), 145–186. <https://doi.org/10.1111/j.1745-9125.2011.00255.x>

Sainsbury Centre for Mental Health. (2002). *Breaking the circles of fear: A review of the relationship between mental health services and African and Caribbean communities*.



[https://www.centreformentalhealth.org.uk/sites/default/files/breaking\\_the\\_circles\\_of\\_fear.pdf](https://www.centreformentalhealth.org.uk/sites/default/files/breaking_the_circles_of_fear.pdf)

Shaw, J., & Lee, H. (2019). Race and the Criminal Justice System Response to Sexual Assault: A Systematic Review. *American Journal of Community Psychology*, 64(1–2), 256–278. <https://doi.org/10.1002/ajcp.12334>

Sjöberg, M., & Sarwar, F. (2020). Who Gets Blamed for Rapes: Effects of Immigration Status on the Attribution of Blame Toward Victims and Perpetrators. *Journal of Interpersonal Violence*, 35(13–14), 2446–2463. <https://doi.org/10.1177/0886260517703371>

Smedley, B. D., Stith, A. Y., & Nelson, A. R. (2013). *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington DC: The National Academies Press. <https://www.nap.edu/catalog/12875/unequal-treatment-confronting-racial-and-ethnic-disparities-in-health-care#>

Smith, R., & Shalev-Greene, K. (2014). *High Risk? Attitudes to the Risk Assessment Process in Missing Person Investigations* (p. 28). Centre for the Study of Missing Persons. [https://pure.port.ac.uk/ws/portalfiles/portal/1548080/Attitude\\_to\\_the\\_risk\\_assessment\\_process\\_final.pdf](https://pure.port.ac.uk/ws/portalfiles/portal/1548080/Attitude_to_the_risk_assessment_process_final.pdf)

Spohn, C. (2015). Evolution of Sentencing Research: Disadvantage and Sentencing of Black Defendants. *Criminology & Public Policy*, 14(2), 225–232. <https://doi.org/10.1111/1745-9133.12125>

Taylor, T. J., Holleran, D., & Topalli, V. (2009). Racial Bias in Case Processing: Does Victim Race Affect Police Clearance of Violent Crime Incidents? *Justice Quarterly*, 26(3), 562–591. <https://doi.org/10.1080/07418820802266462>

- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185(4157), 1124–1131. <https://doi.org/10.1126/science.185.4157.1124>
- Uhnou, S. (2015). Within ‘the Tin Bubble’: The police and ethnic minorities in Sweden. *Policing and Society*, 25(2), 129–149. <https://doi.org/10.1080/10439463.2013.817995>
- UK Missing Persons Unit. (2021). *Missing Persons Data Report 2019/20*. National Crime Agency. <http://missingpersons.police.uk/en-gb/resources/downloads/missing-persons-statistical-bulletins>
- Valutis, S. A. (2015). The Relationship Between Tolerance of Ambiguity and Stereotyping: Implications for BSW Education. *Journal of Teaching in Social Work*, 34(5), 513–528. <https://doi.org/10.1080/08841233.2015.1088927>
- van de Rijt, A., Song, H.-G., Shor, E., & Burroway, R. (2018). Racial and gender differences in missing children’s recovery chances. *PLoS One*, 13(12), e0207742. <https://doi.org/10.1371/journal.pone.0207742>
- van Ryn, M., Burgess, D. J., Dovidio, J. F., Phelan, S. M., Saha, S., Malat, J., Griffin, J. M., Fu, S. S., & Perry, S. (2011). The Impact of Racism on Clinician Cognition, Behavior, and Clinical Decision Making. *Du Bois Review: Social Science Research on Race*, 8(1), 199–218. <https://doi.org/10.1017/S1742058X11000191>
- Welch, K. (2007). Black Criminal Stereotypes and Racial Profiling. *Journal of Contemporary Criminal Justice*, 23(3), 276–288. <https://doi.org/10.1177/1043986207306870>
- White, N. (2021, April 8). Black people are going missing in vast numbers—But campaigners say their cases are being ignored. *The Independent*. <https://www.independent.co.uk/news/uk/home-news/black-people-missing-b1827530.html>

Willis, C. E. (1992). The effect of sex role stereotype, victim and defendant race, and prior relationship on rape culpability attributions. *Sex Roles*, 26(5–6), 213–226.  
<https://doi.org/10.1007/BF00289708>

## Appendix

### *List of Resources Provided in the Survey*

1. Check mental health records, including any medical prescription.
2. Check the person's access to transport.
3. Circulate the person as missing on PNC and check to determine if the person may be in custody.
4. Conduct a house search.
5. Conduct house to house enquiries.
6. Conduct CCTV enquiries.
7. Check close friends.
8. Check close family.
9. Check neighbours.
10. Create a media strategy.
11. Check local hospitals.
12. Obtain DNA.
13. Contact NCA.
14. Check the person's mobile phone.

Table A1

*Number (Percentage) of Participants Drawing on Each Theme and Subtheme as a Function of Race and Mental Health Status*

		No suicide risk	Suicide risk	Total
Mental health	Black	13 (56.5)	17 (58.6)	30 (57.7)
	White	16 (69.7)	17 (68.0)	33 (68.8)
	Total	29 (63.0)	34 (63.0)	63 (63.0)
Medication	Black	1 (4.4)	8 (27.6)	9 (17.3)
	White	5 (21.7)	4 (16.0)	9 (18.8)
	Total	6 (13.0)	12 (22.2)	18 (18.0)
Suicidal thoughts	Black	1 (4.4)	10 (34.5)	11 (21.2)
	White	2 (8.7)	12 (48.0)	14 (29.2)
	Total	3 (6.5)	22 (40.7)	25 (25.0)
Minimisation	Black	0 (0.0)	10 (27.6)	10 (19.2)
	White	1 (4.4)	5 (16.0)	6 (12.5)
	Total	1 (2.2)	15 (27.8)	16 (12.0)
Risk of harm	Black	12 (52.2)	15 (51.7)	27 (51.9)
	White	14 (60.9)	14 (56.0)	28 (58.3)
	Total	26 (56.5)	29 (53.7)	55 (55.0)
No direct risk of harm	Black	8 (34.8)	10 (34.5)	18 (34.6)
	White	8 (34.8)	10 (40.0)	18 (37.5)
	Total	16 (34.8)	20 (37.0)	36 (36.0)
Further enquiry needed	Black	10 (43.5)	8 (27.6)	18 (34.6)
	White	8 (34.8)	7 (28.0)	15 (31.3)
	Total	18 (39.1)	15 (27.8)	33 (33.0)

Direct risk of harm	Black	0 (0.0)	0 (0.0)	0 (0.0)
	White	0 (0.0)	2 (8.0)	2 (4.2)
	Total	0 (0.0)	2 (3.7)	2 (2.0)
Behaviour	Black	12 (52.2)	13 (44.8)	25 (48.1)
	White	15 (65.2)	11 (44.0)	26 (54.2)
	Total	27 (58.7)	24 (44.4)	51 (51.0)
Out of character	Black	12 (52.2)	11 (37.9)	23 (44.2)
	White	13 (56.5)	10 (40.0)	23 (47.9)
	Total	25 (54.3)	21 (38.9)	46 (46.0)
No contact with/did not meet friend	Black	4 (33.3)	7 (24.1)	11 (21.2)
	White	3 (13.0)	5 (20.0)	8 (16.7)
	Total	7 (15.2)	12 (22.2)	19 (19.0)
Vulnerabilities	Black	2 (8.7)	3 (10.3)	5 (9.6)
	White	5 (21.7)	1 (4.0)	6 (12.5)
	Total	7 (15.2)	4 (7.4)	11 (11.0)
No apparent vulnerabilities	Black	2 (8.7)	2 (6.9)	4 (7.7)
	White	4 (17.4)	1 (4.0)	5 (10.4)
	Total	6 (13.0)	3 (5.6)	9 (9.0)
Ethnicity	Black	1 (4.4)	1 (3.5)	2 (3.8)
	White	0 (0.0)	1 (4.0)	1 (2.1)
	Total	1 (2.2)	2 (3.7)	3 (3.0)
Alternative explanations	Black	7 (30.4)	0 (0.0)	7 (13.5)
	White	1 (4.4)	0 (0.0)	1 (2.1)
	Total	8 (17.4)	0 (0.0)	8 (8.0)

Table 1

*Logistic Regression for the Influence of Race Mental Health Status on the Allocation of Risk*

	<i>B</i>	SE	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% CI
Race	-0.18	0.43	0.18	1	.675	0.83	[0.36, 1.95]
Mental health status	1.11	0.45	6.07	1	.014	3.02	[1.25, 7.28]
Constant	-3.93	1.23	10.19	1	.001	0.02	

Table 2

*Principal Components Analysis with Direct Oblimin Rotation for the 13 Resources*

Resource	Component loading					
	External parties	Location search	Family and friends	Canvassing	Record check	Communality
DNA	<b>.902</b>	-.023	-.064	.062	.007	.795
NCA	<b>.844</b>	-.033	-.031	-.098	-.078	.733
Media outlets	<b>.563</b>	-.008	.036	-.239	.285	.641
Hospital search	-.010	<b>.906</b>	-.002	-.051	-.005	.840
House search	-.085	<b>.910</b>	-.005	-.030	.027	.839
Close family	.018	.029	<b>-.941</b>	.064	-.072	.859
Close friends	.074	-.010	<b>-.893</b>	-.056	.065	.859
House-to-house	-.006	.037	.071	<b>-.933</b>	.090	.897
CCTV	.127	-.137	-.019	<b>-.805</b>	.045	.730
Neighbours	.031	.288	-.074	<b>-.702</b>	-.163	.659
Mental health records	-.215	-.149	-.256	-.260	<b>.723</b>	.742
Phone records	.175	.028	.229	.057	<b>.735</b>	.623
Transport records	.141	.296	-.222	.071	<b>.528</b>	.534



Table 3

*2 × 2 Between-Subjects ANOVA for the Influence of Race and Mental Health Status on the Likelihood of Resource Allocation*

	Sum of squares	df	Mean square	<i>F</i>	<i>p</i>	Partial $\eta^2$
<b>External parties</b>						
Race	574.14	1	574.14	0.76	.385	.006
Mental health status	871.43	1	871.43	1.15	.285	.009
R × MHS	366.64	1	366.64	0.49	.488	.004
<b>Location search</b>						
Race	9.70	1	9.70	0.11	.741	.001
Mental health status	118.65	1	118.65	1.35	.248	.011
R × MHS	62.68	1	62.68	0.71	.401	.006
<b>Family and friends</b>						
Race	21.63	1	21.63	0.27	.741	.001
Mental health status	118.65	1	118.65	1.35	.248	.011
R × MHS	62.68	1	62.68	0.71	.401	.006
<b>Canvassing</b>						
Race	40.25	1	40.25	0.083	.774	.001
Mental health status	76.74	1	76.74	0.16	.691	.001
R × MHS	149.51	1	149.51	0.31	.579	.003
<b>Record check</b>						
Race	6.21	1	6.21	0.03	.867	.000
Mental health status	1344.74	1	1344.734	6.07	.015	.047
R × MHS	213.82	1	213.82	0.97	.328	.008

*Note.* R = Race, MHS = Mental health status.

Table 4

*Means and Standard Deviations for the Five Likelihood of Resource Allocation Components as a Function of Race and Mental Health Status*

Condition	Likelihood of resource allocation components									
	External partiers		Location search		Family and friends		Canvassing		Record check	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Race										
Black	41.26	27.33	98.11	7.00	97.05	8.456	82.58	20.49	89.39	16.13
White	45.19	27.63	97.70	11.42	97.79	9.47	81.31	23.27	89.34	14.05
Mental health status										
No suicide risk	40.63	26.32	98.39	3.86	97.11	9.46	81.20	23.39	86.20	16.18
Suicide risk	45.71	28.51	96.98	12.69	97.70	8.42	82.75	20.20	92.59	13.30