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RESEARCH ARTICLE

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UK and Spanish stranger sexual offenders crime scene behaviours and previous convictions: A cross-cultural comparison

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Abstract

International comparisons of previous convictions (PC) and crime scene behaviours (CSB) of stranger sexual offences can inform offender profiling strategies; especially the degree to which pragmatic models cross validate across countries. The present study compared PC and CSB of 474 UK and 418 Spanish cases. CSB and PC were analysed using Chi-square. UK stranger sexual offenders displayed a higher proportion of all CSB analysed. UK offenders also had a significantly higher proportion of PC with the exception of violence offences. There were no significant differences in sexual pre-convictions. In both the UK and Spain the CSB 'reference to the police' was significantly association with the PC 'Criminal damage' no other similar significant associations were found. Explanations for these findings include differences between the countries in regards to: legislation, crime recording processes, data coding processes, with additional consideration of any cultural, environmental and contextual factors.

KEYWORDS
crime scene behaviour, offender profiling, previous convictions, sexual offender

1 | INTRODUCTION

The UK is renowned for professionalising offender profiling methodology (Alison & Rainbow, 2011) as such having European countries use the same proven profiling methodologies allows academics and practitioners to standardise the process. However, it should not be assumed that findings from a UK model would unequivocally apply to offenders in other countries. This study aims to conduct a direct cross-cultural comparison of UK and Spanish stranger rapists crime scene behaviours (CSB) and previous convictions (PC) to establish whether pragmatic models cross validate across countries or individual countries require their own analysis. Crime scene behaviours (CSB) are defined as any behaviour exhibited during the sexual assault offence. Previous convictions (PC) are defined as convictions for offences obtained prior to the sexual assault offence.

In the UK, the volume of reported sexual offences has tripled in recent years. In 2020–2021 there were over 148,000 recorded sexual offences, and 55,696 recorded rapes (ONS, 2022) resulting in England and Wales having the highest number of reported rapes across Europe (EUROSTAT, 2017). In Spain, the reporting of sexual offences has almost doubled from 8929 in 2013 to 15,319 reported sexual offences in 2019 (Ministry of Interior, 2019). Within Europe, Spain has the eighth highest prevalence of reported rapes, 1553 (EUROSTAT, 2017). As one of the most under-reported crimes (ONS, 2022, 1 in 5 female victims and 1 in 6 male victims report to the police) it is likely that the real figures are much higher. Despite this, reporting of sexual offences are at an all-time high across both the UK and Spain.

1.1 | Offender profiling

Behavioural Investigative Advisors (BIAs) in both the UK and Spain are recruited to assist in the investigation of hard to solve cases and aid the police in relation to crime scene assessments, case linkage, and offender profiling (Cole & Brown, 2014). Offender profiling can help police to prioritise the most likely suspect characteristics based on characteristics of the victim, the offence, and the specific CSB an offender exhibits (Fox & Farrington, 2018). All such inferences should be derived from empirically grounded research within the relevant field (Ivaskevics & Almond, 2019).

Offender profiling assumes that there is a relationship between an offender's CSB and their background characteristics (Canter, 2001). This is referred to as the A–C equation, whereby A refers to the offender's actions, and C refers to the offender's likely characteristics. As previous convictions antecedents (PC) are likely to be present in police databases, examining the link between CSB and PC could provide a heuristic tool in prioritising potential suspects.

1.1.1 | Previous research utilised by UK behavioural investigative advisors

Davies et al. (1997) conducted seminal research in this area. Using a sample of 210 UK stranger rapists (offences taking place 1965–1993), they performed Chi square and logistic regression analyses to consider whether particular offence behaviours could predict unknown offenders' pre-convictions. The researchers identified a number of significant relationships, such that researchers or BIAs could predict the increased likelihood of an offender having certain pre-convictions based on the presence or absence of specific CSB. For example, stranger rapists who took fingerprint precautions at the crime scene were 4 times more likely to have a PC for burglary than a stranger rapist who did not take fingerprint precautions. Until 2018 this research was utilised by UK Behavioural Investigative Advisors (BIA's, Profilers) to support profiling of stranger rapists.

Almond et al. (2018) replicated this study with a larger more contemporary UK sample. Data from 474 adult male stranger rapists were obtained from the Serious Crime Analysis Section (SCAS) database in relation to 22 crime scene behaviours and 9 pre-conviction variables. There were significant differences between the Davies et al. original data set and Almond et al. in both the behaviours and the pre-convictions they displayed. Offenders in the Almond et al.

sample were significantly less likely to use sighting precautions and violence and to take fingerprint precautions. They were also significantly less likely to have any of the pre-conviction crime types, with the exception of drugs offences. The results highlight that behaviours and characteristics of stranger sex offenders has changed since the 1990s. Therefore, BIAs in the UK currently use Almond et al. (2018) results to support profiling of stranger rapists. Although this methodology for linking Action to Characteristic is used successfully in the UK, it has to date not been utilised with Spanish offenders.

1.1.2 | Cultural influences

Research has demonstrated that cultural aspects could influence CSB. Almond et al. (2019), for example, investigated whether the CSB of rapists could predict whether the offender was of UK or non-UK nationality. The sample consisted of 651 male-on-female stranger rape offences (434 committed by UK nationals, 217 by non-UK nationals) which occurred in the UK after 1 January 2000. They found that UK and non-UK nationals differed significantly in terms of their crime scene behaviours. Non-UK stranger rapists were more likely to demonstrate control behaviours (such as use of firearm) and low-level aggression. They were less likely to destroy forensic evidence, which may indicate their lack of knowledge or experience with British Police or policing system. In contrast, UK stranger rapists demonstrated more interpersonal behaviours within their stranger rapes and would force victims into a reactive participant role. These findings indicate that culture along with situational aspects could influence offending behaviours. For example, non-UK internationals may have hailed from Countries where access to weapons was less restricted. They may have experienced different social or cultural norms around the role of women, experienced language barriers or other barriers to positive social connections with women in the UK prompting more controlling offence behaviours.

To the authors' knowledge there has been no systematic comparisons of past convictions of international stranger rapist samples. There have also been few direct comparisons of prior convictions of UK and Spanish sex offenders. Becerra-Garcia et al. (2013) found a higher proportion of prior convictions amongst UK child sexual offenders than Spanish child sexual offenders (43.4% and 30.6%) but these differences were not statistically different.

There is a dearth of international research that has examined the bivariate relationships between crime scene behaviours and an offender's previous convictions. Cross cultural comparisons of pre-offence histories and offending behaviours have been conducted (Hanser & Mier, 2008—juveniles; Morton et al., 2010—serial sexual killers; Chopin & Beauregard, 2021, Eichinger & Darjee, 2021, Skott et al., 2021—sexual homicide). These studies, however, have tended to analyse offending behaviours and major adverse developmental events (e.g., prior sexual abuse) with a view to consider the relative homogeneity of risk factors and universal offending aetiologies. Whilst such studies are helpful to form universal theories of offending they cannot necessarily assist pragmatic offender profiling strategies (as in Almond et al., 2018, 2021, 2019; Ivaskevics & Almond, 2019) because information is either non-falsifiable (e.g., offence related fantasies, pro-offending attitudes, cognitive distortions) and/or not available to the police (e.g., emotional states, social difficulties). The nomo-inductive offender profiling approach stresses the importance of empirically derived models of behaviour that can be applied back into investigative practises, using the types of overt intelligence police forces have available (Salfati, 2022). As such, research utilising characteristics such as pre-convictions have been traditionally used by UK police forces to narrow down search parameters for unknown offenders.

Despite having roughly similar size populations, England and Wales has significantly more crime than Spain (National Master, 2021). Spain has a crime rate of 22.35 per 1000 population, whilst in the UK this is 109.96 per 1000. This equates to 5 times more crimes being committed in the UK than in Spain (Nation Master, 2021). Various explanations could be proposed for these findings. Environmental explanations might refer to poverty, given the direct and indirect influence it exerts on crime rates, especially violent offences (Webster & Kingston, 2014). However, the crime differences reported here cannot be explained by poverty as Spain's poverty level is higher than the UK, 26% compared to 20% (JRF, 2021; Lederman et al., 2002). Another potential explanation is economic inequality; previous

research has established strong positive correlations between crime rates and inequality (Lederman et al., 2002). It has been reported that the UK has among the highest levels of income inequality in the European Union (as measured by the Gini coefficient; OECD, 2019).

A further explanation could centre upon UK and Spain as dissimilar cultures, with the Individualism-Collectivism index (Hofstede, 1980, 2001) suggesting Spain is a collectivistic culture and UK is an individualistic culture (Hofstede, 2001). Collectivist cultures emphasise values such as conformity, obedience and in-group harmony (Hofstede, 2001) and focus on in-group goals over individual goals. Individualistic cultures focus on the primacy of individuals wishes and desires and do not require individuals to adjust their behaviour to the group. These cultural differences could manifest in reduced levels of crime and disorder in collectivist Spain. Alternative, and as yet unexplored, explanations may emerge from differences in legislation, crime recording processes, and data coding processes.

1.2 | The current study

To date, no research has conducted a direct cross-cultural comparison of offender CSB and PC, despite previous research suggesting that such differences may exist. Previous research has argued that cultural differences may influence offending behaviours (Almond et al., 2019). Hypothesis 1-UK and Spanish stranger sexual offenders will differ in the behaviours they display at crime scene. Differences in crime rates (Nation Master, 2021) would suggests that UK offenders are likely to have more criminal backgrounds than Spanish offenders Hypothesis 2-UK stranger sexual offenders will exhibit significantly greater previous convictions criminal histories than Spanish sex offenders. Previous research exploring the interaction between CSB and PC by UK and non-UK nationalities implies differences (Ivaskevics & Almond, 2019). Hypothesis 3-Associations between crime scene behaviours and previous convictions will be different for UK and Spanish stranger sexual offenders. If differences are found to exist then Spanish investigation teams should be cautious about using research findings from studies conducted using UK offenders as evidence for their offender profiles, and vice versa.

2 | METHODS

2.1 | Sample

The data used in the current study was derived from police databases in the UK and Spain. The dataset includes examples of rape and sexual assault and readers should note there are definitional differences between the two countries. The UK legal definition of rape is 'when a person intentionally penetrates another's vagina, anus or mouth with a penis, without the other person's consent'. However, under Spain's existing laws, there are three types of sexual crimes (1) Violación-Intercourse with violence or intimidation; (2) Agresión sexual, no intercourse but violence or intimidation (3) Abuso sexual, no violence or intimidation, could be intercourse or not. Given the legal definitional differences, both rape and sexual assaults are included from both the UK and Spain. The research question does not require analysis of CSB that hold importance for legal definitions. As such, the reader is informed of legal differences for their understanding only.

Only adult stranger sexual assault or rape cases were included, defined as a sexual assault/rape whereby the offender and the victim did not know each other, the victim was a female over the age of 16, and the perpetrator was male. All offences included a single offender and a single victim. In order to ascertain an offenders' previous convictions only solved cases were included in the analysis.

The UK dataset consisted of 474 rape/sexual assault cases, which occurred in the UK between 2003 and 2015, the data was taken from Almond et al. (2018) study. The average age of a sexual offender in the UK sample was 28.72 years (*SD* = 10.03), and the majority of the sample (73.4%) were European (see Table 1). The Spanish dataset

TABLE 1 Ethnicity of the stranger sex offenders

Ethnicity	UK *n* (%)	Spanish *n* (%)
European	348 (73.4)	272 (65.1)
African Caribbean	77 (16.5)	102 (24.4)
American		36 (8.6)
Asian	37 (8)	
Other	7 (1.6)	8 (1.9)
Unknown	5 (1.1)	

consisted of 418 rape/sexual assault cases, which occurred in Spain between 2011 and 2016. The average age of sexual offender in the Spanish sample was 33.32 years (*SD* = 11,61). The majority of the sample (65.1%, *n* = 272) were European (see Table 1).

2.2 | Variables and procedure

Almond et al. (2018) dataset was provided by the Serious Crime Analysis Section (SCAS) of the National Crime Agency (NCA). SCAS manage ViCLAS, a UK national database held to conduct comparative case analysis on cases of stranger rape, murder and abduction. All police forces in England and Wales are mandated to submit data to SCAS for cases that meet the following criteria *stranger rape*, *serious sexual assaults and motiveless or sexually motivated murder cases*. The behaviour within an offence is indexed by SCAS analysts in a standardised manner onto ViCLAS, and stringent quality assurance processes are in place for the database. The data for this study was taken from the Almond et al. (2018) article.

The Spanish database was developed specifically for research purposes as currently the Spanish central criminal database does not contain crime scene behaviours. A team of five psychologists and criminologists completed training, lasting 1 week in duration, to understand the research and coding processes. They identified cases and requested reports from relevant investigation teams. A coding dictionary was created using previous literature/studies and double-blind and inter-rater reliability were conducted to improve the coding process and data quality.

The authors, one of whom works for the UK's National Crime Agency, and another who works for Spanish Guardia Civil, were able to use definitions from the UK and Spanish database to ensure only comparable crime scene behaviours were included in the analysis. The author also used legal definitions from the UK and Spanish criminal justice systems to ensure only comparable previous convictions were included in the analysis. Both datasets were coded from police records and victim statements. Data was provided in anonymised format and all variables (i.e., CSB and PC) were coded as either present or absent. It is recognised that absent may also indicate cases where a behaviour was not recalled or recorded. This is the inherent challenge of using data not collected for research purposes (Almond et al., 2013).

The CSB could be categorised into eight main themes: precautionary behaviours, sexual behaviours, violence, weapon involvement, injury to body parts, theft behaviours, verbal behaviours, and other behaviours (e.g., offence location, type of approach, time when the offence occurred), see Table 2. PC was recorded for theft, sex offences, burglary, violence, and any criminal record, see Table 3. Violence previous convictions included any crimes in which an offender uses or threatens to use force upon a victim, these ranged from common assault to murder.

2.3 | Statistical analysis

A chi-square test with Yates correction was performed to identify any significant differences in CSB and/or PC between the samples of sexual offenders in the UK and Spain. The odds ratios were also calculated in order to understand the magnitude of any differences found between the countries. Chen et al. (2010) propose that odds ratios below 1.5 indicate a small effect size, between 1.5 and five indicate a medium effect size, and greater than five

TABLE 2 Comparing the presence of crime scene behaviours (CSB) between sexual offenders in the UK and Spain

CSB	UK *n* (%)	Spain *n* (%)	*p* value	Odd ratio
Offender disrobes victim	338 (71.3)	79 (19.1)	<.001	10.51
Theft from victim	152 (32.1)	50 (12.1)	<.001	3.44
Use of weapon by offender	115 (24.3)	43 (10.3)	<.001	2.79
Blitz/surprize approach	205 (43.2)	98 (23.9)	<.001	2.43
Outdoors	297 (62.7)	217 (51.9)	.001	1.55
Confidence approach	242 (51.1)	175 (42.7)	.013	1.40
Reference to the police	43 (9.1)	67 (16.2)	.001	0.52
Violence	241 (50.8)	305 (73.5)	<.001	0.37
Darkness	388 (81.9)	331 (79.2)	n.s.	–
Forced entry	34 (7.2)	34 (8.2)	n.s.	–

TABLE 3 Comparing the presence of previous convictions (PC) between sexual offenders in the UK and Spain

PC	UK *n* (%)	Spain *n* (%)	*p* value	Odd ratio
Theft	218 (46.0)	43 (10.3)	<.001	7.5
Criminal damage	160 (33.8)	27 (6.5)	<.001	7.20
Drugs	104 (22.0)	25 (6.0)	<.001	4.36
Burglary	154 (32.5)	58 (16.5)	<.001	2.91
Criminal record	347 (73.2)	232 (55.5)	<.001	2.19
Violence	132 (27.8)	166 (39.7)	<.001	0.59
Sexual offence	78 (16.5)	57 (13.6)	n.s.	-

indicate a large effect size. The interactions between each CSB and PC were also explored using Chi-square analyses to examine any similarities or differences between UK and Spanish offenders.

3 | RESULTS

3.1 | Crime scene behaviours

Table 2 shows that nearly all of the CSB were found in a higher frequency amongst UK sexual offenders. A chi-square analysis was conducted in order to identify any significant differences.

In comparison to sexual offenders in Spain, sexual offenders in the UK were 10.51 times more likely to disrobe the victim ($\chi^2(1) = 241.22$, $p < .001$); 3.44 times more likely to steal something from the victim ($\chi^2(1) = 50.25$, $p < .001$); 2.79 times more likely to use a weapon during the assault ($\chi^2(1) = 29.59$, $p < .001$); 2.43 times more likely to use a blitz/surprize approach ($\chi^2(1) = 36.53$, $p < .001$); 1.55 times more likely to commit an offence outdoors ($\chi^2(1) = 10.50$, $p = .001$) and 1.40 times more likely to use confidence approach ($\chi^2(1) = 6.18$, $p = .013$).

In comparison to sexual offenders in UK, sexual offenders in Spain were 2.5 times more likely to use violence ($\chi^2(1) = 47.91$, $p < .001$); 1.9 times more likely to make reference to the police ($\chi^2(1) = 10.39$, $p = .001$). There was no significant difference between the UK and Spanish offenders in relation to the CSB of darkness ($p = .314$) and forced entry ($p = .561$).

3.2 | Previous convictions

Table 3 shows, with the exception of PC for violence, all of the PC were found in higher frequency in the UK stranger rape offenders. A chi-square analysis was conducted in order to identify any significant differences.

In comparison to sexual offenders from Spain, stranger rape offenders in the UK were: 7.5 times more likely to have a PC for theft ($\chi^2(1) = 134.54$, $p < .001$); 7.20 times more likely to have a PC for criminal damage ($\chi^2(1) = 97.95$, $p < 0.001$); 4.62 times more likely to have a PC for burglary ($\chi^2(1) = 68.86$, $p < .001$); 4.36 times more likely to have a PC for drug-related offences ($\chi^2(1) = 44.82$, $p < .001$) and 2.19 times more likely to have a criminal record ($\chi^2(1) = 30.57$, $p < .001$).

In comparison to sexual offenders in UK, sexual offenders in the Spain were 1.7 times more likely to have a PC for violence ($\chi^2(1) = 14.06$, $p < .001$). There was no significant difference between the UK and Spanish offenders who had a PC for sexual offences ($p = .272$).

3.3 | Associations between crime scene behaviours (CSB) and previous convictions (PC)

Chi-square analyses were used to examine whether there were any significant associations between the CSB and the PC variables within each Country dataset. Table 4 shows the significant associations for UK and Spanish sexual offenders. For example, if a UK offender has committed 'theft from the victim' during the offence then they were more likely to have a criminal record. If a Spanish offender attacks in 'darkness' then they are more likely to have a Criminal record. In both UK and Spanish sample the CSB 'reference to the police' was associated with a number of crime types. As Table 4 shows the significant associations between CSB and PC differed between UK and Spanish offenders differed, with the exception of one association. An offender 'referring to the police' during the offence was significantly associated with previous convictions for Criminal damage, regardless of their UK or Spanish nationality.

TABLE 4 Comparing the presence of significant associations between crime scene behaviours (CSB) and previous convictions (PC) in sample of UK and Spain stranger sexual offenders

	UK significant associations	Spanish significant associations
Criminal record	Theft from victim (OR 1.86)	Darkness (OR 0.59)
	Forced entry (OR 2.91)	Reference to police (OR 2.14)
Burglary	Reference to police (OR 3.25)	Weapon (OR 2.72)
Criminal damage	*Reference to police*[a] (OR 2.74)	*Reference to police*[a] *(OR 3.33)*
	Confidence approach (OR 0.67)	Weapon (OR 3.38)
	Darkness (OR 0.61)	
Drugs	Reference to police (OR 2.31)	
Theft	Reference to police (OR 2.37)	Outside (OR 0.46)
	Theft from victim (OR 1.48)	Confidence approach (OR 0.32)
	Weapon (OR 1.80)	
Sex		Offender removes victims clothing (OR 0.54)
Violence		Darkness (OR 0.35)
		Reference to police (OR 2.15)
		Violence to control (OR 1.68)
		Darkness (OR 0.48)
		Outside (OR 1.55)

Note: Odds ratios (OR) in brackets.

[a]Significant in both samples.

All other significant associations between CSB and PC were found either only in UK sample or only in the Spanish sample.

4 | DISCUSSION

The aim of the current study was to establish whether pragmatic offender profiling models cross validate across countries or whether individual countries require their own analysis. To inform a view on this, crime scene behaviours (CSB), previous convictions (PC), and the interactions between the two, were compared within samples of stranger rapists in the UK and Spain. UK stranger sexual offenders differed from Spanish offenders in the CSB they displayed at the crime scene with the former being characterised by criminal behaviour and the latter, violence. A similar profile emerged in the comparison of PCs. Sexual offenders in the UK were significantly more likely to have a criminal record and exhibited significantly greater criminal histories for all offences, with the exception of violence, which appeared more often in the backgrounds of Spanish stranger rapists. There were no differences in terms of sexual PCs. Associations between crime scene behaviours and previous convictions were different for UK and Spanish stranger sexual offenders, indicating that UK models do not cross validate to Spanish stranger rapists and that Spain requires its own model.

UK stranger sexual offenders are disproportionately more likely to disrobe victims, use weapons and steal from victims which is consistent with the emerging thesis that UK stranger sexual offenders are generally more criminal in their approach to offending than Spanish stranger sexual offenders. Theft and use of a weapon are consistent features of UK stranger sexual offender CSBs (as demonstrated by Davies et al., 1997; Almond et al., 2018, 2019) and yet these behaviours are comparatively rarer amongst Spanish offenders. Compared to UK stranger sex offenders Spanish offenders appear to be disproportionately more likely to use violence, they are also slightly more likely to warn victims against communicating with the police.

A similar profile emerged with respect to PCs. Stranger sexual offenders in the UK were significantly more likely to have a criminal record and PC for criminal damage, burglary, theft, and drug-related offences than perpetrators in Spain. Conversely, sexual offenders in Spain were significantly more likely to have a PC for violence, than perpetrators in the UK. There were no differences between the two samples with respects to previous sexual offences. This is perhaps unsurprising given that recidivism rates for sexual offences are demonstrably low and this is a pattern that is found internationally (Schmucker & Losel, 2015).

In terms of explanations, it was previously suggested that UK and Spain have dissimilar cultures, with the Individualism-Collectivism index (Hofstede, 1980, 2001) suggesting Spain is a collectivistic culture and UK is an individualistic culture (Hofstede, 2001). Our results suggest that CSB and PC may be culturally dependent. Individualistic cultures, compared to collectivistic cultures, focus on individual wishes and desires over in-group goals. Individualistic cultures, such as the UK, do not require individuals to adjust their behaviour to the group nor do they emphasise values such as conformity and obedience (Horstede, 2001). In our study, this may manifest in UK stranger rapists being generally more criminal than their Spanish counterparts, this led to more criminal behaviours displayed during offences, more offending histories and higher proportion of different kinds of past offences. Whilst UK stranger rapists were more criminal than their Spanish counterparts, the exception was violence. Spanish offenders were more likely to be violent during the offence and to have pre convictions for violent offences This is somewhat inconsistent with findings of Almond et al. (2019) who found that both UK nationals and non UK nationals demonstrated consistent levels of violence across a range of categories. However, in Almond et al. (2019) all offences took place in the UK. In the present study, Spanish offences all took place in Spain and roughly three out of every four offences involved violence, compared to only one out of every two offences in the UK. Further work is needed to understand whether this is theoretically meaningful finding or a methodological artefact of legal definitions (i.e., violence is emphasised in the reporting and investigation of Spanish sexual offences due to legal definitions between sexual assault and rape). Notwithstanding CSBs, Spanish stranger rapists were also more likely to have pre-convictions for violence. Within

the aetiology of sexual offending, this potentially offers new insights into cross cultural differences. The development of sexual offending with the UK sample appears to occur against a background of anti-social and criminal behaviour whereas, a shared pathway to violence and sexual offences appears to exist for Spanish offenders. The finding that UK offenders were more likely to have a criminal record for the majority of the crime types could potentially be explained by the high crime rate generally within the UK (National Master, 2021), and reflecting on the higher social inequality figures found within the UK (OECD, 2019). The notion of cultural, environmental and contextual factors should be considered in any future studies.

New insights are also provided in this paper in the form of an offender profiling model that can be applied by Spanish offender profilers in the same way that British BIA's make use of the Almond et al. (2018) model. In this new model, predictions can be made about Spanish stranger rapists' likely preconvictions based from their crime scene behaviours. For example, Spanish stranger rapists who make reference to the police are more likely to have a criminal record in general and pre-convictions for violent offences in particular. Offenders who commit offences at night are less likely to have a criminal record and pre-conviction for sexual offences. Offenders who commit sexual offences outside are less likely to have pre-conviction for theft and more likely to have a pre-conviction for violent offences. Importantly, this A-C profile is unique to Spanish offenders. There were only two similarities with Almond et al. (2018); offenders from UK and Spain who make reference to police were more likely to have a pre-conviction for burglary and criminal damage. In summary, this analysis has demonstrated that, where direct comparisons are available, different crime scene actions are related to pre-convictions in UK and Spanish stranger rapists. Application of UK models to Spanish offenders could lead to ineffective targeting of police resources, which in turn could contribute to investigative delays and negative outcomes for victims and offenders.

4.1 | Limitations

The current study presents numerous limitations, some of which future researchers could consider in order to improve the methods of their own research. There are a number of notable differences between the research approaches of Almond et al. (2018) and the current paper that could limit the validity of conclusions as they do not offer like-for-like comparisons. First, fingerprint, blindfolding, victim phone disabled, and forced entry were not included in the Spanish coding. Information relating to CSB differed between the UK and Spain, as outlined above in terms of the differences in CSB coding processes. Consequently, some variables included in the UK dataset had to be removed, and some variables included in the Spanish dataset had to be removed. This may have reduced the ability to explore the concept in-depth, providing a limited representation of the CSB exhibited by sexual offenders in both countries.

Moreover, crime recording and data coding processes differ across the two countries. In the UK data coding is undertaken by trained analysts at SCAS, whereas Spain does not yet have a centralised data coders or database. These differences in recording and processing need further exploration when considering the results of the current study, particularly given the context of the UK holding a significantly higher rate of crime per 1000 population (109.96) compared to Spain (22.35; National Master, 2021). In addition, UK stranger rapists within the current study reported significantly higher proportion of previous criminal histories for all offence types explored, except for violent offences, where Spain held the significant higher proportion. It is worth noting that regardless of the differences in crime rates and recording processes reported above, the two countries did not significantly differ in their rates of previous sexual offences recorded. This may rule out the possibility of social inequality being a factor, which is significantly higher in the UK (OECD, 2019), as social inequality has been found to be a key predictor in increased rates of violent (and acquisitive offences; Newburn, 2016).

The analysis was conducted on an offenders' previous convictions as this information is often known to police during their investigation. However, it is recognised that just because an offender does not have a previous conviction does not mean they have not committed this offence. It is also challenging to determine if a behaviour was not shown at the crime scene, or if it was not recorded or remembered.

A further limitation is the time periods of which the data was collected. UK cases covered a 12-year time period from 2003 whilst the Spanish offences were more contemporary, spanning a 5 year period from 2011. Almond et al. (2018) identified the changing nature of offences in the UK between Davies et al. (1997) and Almond et al. (2018), evidencing how sexual offending is changing. Future research therefore would benefit from a comparison of the Spanish offences with more comparable time period of UK offences.

Moreover, to assume that all the sexual offenders committing crimes in either the UK or Spain possessed the nationality and therefore cultural norms of that country is inaccurate. Although the UK stranger rapists included within the study were UK nationals only their various ethnicities were recorded. The Spanish data contained both Spanish and non-Spanish Nationals. It could, therefore, be suggested that the various cultures within the datasets do not necessarily reflect those of UK or Spain specifically, and as such the results should be interpreted with this in mind.

5 | CONCLUSION

Overall, the results from the current study indicate that CSB and PC of sexual offenders in the UK and Spain significantly differed in terms of the frequency of crime behaviours displayed, previous convictions and interactions between the two. Despite several limitations, the current study was the first to explore cross-cultural similarities and differences of offender's CSB, PC, and the interactions between the two. The findings could prove useful to behavioural investigative advisors in relation to crime scene assessments and considerations within prioritisation of potential suspects in offender profiling. The results could assist investigative teams in having a deeper understanding of how stranger rapists from different countries differ in terms of their CSB and PC. Further consideration in understanding the findings from this initial exploratory study are required in ascertaining the potential explanations, such as offence recording and data processing, in conjunction with contextual, cultural environmental factors. This study has also highlighted the benefits of individual countries conducting/replicating their own research with country specific data rather than over-reliance on UK/US studies which may/may not be applicable.

CONFLICT OF INTEREST

Lee Rainbow works as a Behavioural Investigative Advisor for the UK's National Crime Agency and Dr Manuel Ramos Romero is a member of the Analysis Section of Criminal Behaviour at the Guardia Civil, Spain.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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