Data on fantasy vs contact driven internet-initiated sexual offences: Study selection, appraisal and characteristics

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**Abstract**

Data presented within this article supports the findings of the manuscript “A systematic review of fantasy driven vs contact driven internet-initiated sexual offences: Discrete or overlapping typologies?” (Broome et al., in press) [1]. Inclusion and Exclusion criteria of study selection, PICO Formulation of Study Appraisal, as well as the Study Characteristics and Methodology of included studies are presented.

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**Specifications Table**

| Subject area            | Psychology |
|-------------------------|------------|
| More specific subject area | Forensic Behaviour |
| Type of data            | Descriptive Behaviour |
| How data was acquired   | Descriptive |
| Data format             | Data extraction from studies included in Broome et al. [1] |
| Experimental factors    | Descriptive |

**Data in Brief 18 (2018) 1869–1876**

DOI of original article: https://doi.org/10.1016/j.chiabu.2018.02.021
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Experimental features
Data source location
Data accessibility

Value of the data

- The data allows for interpretation and assessment of studies examining the behavior of internet-initiated sexual crimes against minors, including study characteristics and methodology.
- The data enables comparison of two distinct classification of internet-initiated offences commonly referred to in the literature: fantasy vs contact driven crimes.
- Studies within this field primarily rely on the use of decoy victims, i.e. adults posing as children/young people who engage in proactive investigations. This data enables researchers to identify those studies that use decoy and real child victims.

1. Data

The data set contains information on the Inclusion and Exclusion Criteria for Study Selection (Table 1), and PICO Formulation of Study Appraisal (Table 2) for studies reviewed by Broome et al. [1]. Additionally, Study Characteristics (Table 3) and Methodology (Table 4) for included studies are described.

Table 1
Inclusion and Exclusion Criteria for Study Selection.

| Inclusion | Exclusion |
|-----------|-----------|
| 1. Studies that investigate the strategies of individuals who use the internet to sexually abuse minors. and 2. Studies in which contact and fantasy driven behaviour were identifiable and 3. Studies exploring crime characteristics or grooming strategies of individuals who use the internet to sexually abuse minors and 4. Primary studies to include cohort, case-control, cross-sectional or case series studies | Studies that investigate: a) offline sexual offending only b) child pornography use as a definition of 'fantasy' offending c) the sexual abuse of victims over 18 years of age d) offenders under 18 years of age Review articles and reports Non-English articles |

Table 2
PICO Formulation of Study Appraisal [2].

| PICO | Characteristics |
|------|----------------|
| Population | Total number of participants (differentiating between fantasy and contact behaviour where appropriate), length of grooming/offending process, use of decoy victim. |
| Interest | Crime characteristics, behavioural tactics, communicative approaches and risk assessment strategies of adult online child sexual offenders. Consideration of typology (fantasy and contact groomers) |
| Comparisons | Evaluation of fantasy driven and contact driven individuals to assess whether an empirical distinction exists between the groups. Consideration of statistical analysis and study methodology. |
| Outcomes | Crime characteristics, analysis of tactics, communicative approaches and risk assessment strategies. |
Table 3
Study Characteristics of Included Studies.

| Study     | Typology | Offender Age | Offender Gender | Decoy Use | Perceived Age of Victim | Victim Gender | Country of Data Source | N. Fantasy | N. Contact | Outcomes                                                                 |
|-----------|----------|--------------|-----------------|-----------|------------------------|---------------|------------------------|------------|------------|--------------------------------------------------------------------------|
| Barber [4] | Contact  | Mean 35      | #               | Yes       | Mean 13                | #             | America                | –          | 90         | Relationships, risk assessment, sexualisation, threatening behaviour, trade-off |
| Bergen [5]| Mixed    | 15–60        | M               | Yes       | 10–18                  | #             | Sweden/Finland         | #          | #          | Trade-off                                                               |
| Bergen [6]| Mixed    | Mean 25      | M = 98          | No        | –13–17                 | #             | Sweden/Finland/america | #          | #          | Deception, trade-off                                                      |
| Black [7] | Contact  | 25–54        | M               | Yes       | 12–15                  | M = 6         | Germany                | –          | 44         | Relationships, risk assessment, sexualisation, trade-off                |
| Briggs [8]| Mixed    | 19–54        | M               | No        | 12–16                  | M = 1         | America                | 21         | 30         | Deception, relationships, sexualisation, trade-off                      |
| DeHart [9]| Mixed    | 18–74        | M               | Yes       | 9–14                   | M = 6         | America                | 48 / 64    | 44         | Relationships, risk assessment, sexualisation, trade-off                |
| Grosskopf | Mixed    | #            | M               | Yes       | 13–14                  | M             | Australia              | 5          | 10         | Relationships, risk assessment, sexualisation, threatening behaviour, trade-off |
| Gupta [11]| Contact  | #            | #               | Yes       | #                      | #             | America                | –          | 75         | Relationships, risk assessment, sexualisation, trade-off                |
| Kloess [12]| Mixed   | 27–52        | M               | No        | 11–15                  | M = 2         | UK                     | 3          | 2          | Relationships, sexualisation, trade-off                                  |
| Krone [13]| Mixed    | 19–55        | M               | Yes       | 10–14                  | M = 2         | Australia              | 8          | 18         | Deception, relationships, risk assessment, sexualisation, trade-off     |
| Lorenzo- | Contact  | 22–63        | M               | Yes       | –                      | –             | America                | –          | 24         | Risk assessment, trade-off                                              |
| Dus [14]  | Contact  | 22–63        | M               | Yes       | –                      | –             | America                | –          | 68         | Deception, relationships, risk assessment, sexualisation, threatening behaviour, trade-off |
| Maloney [15]| Contact| 23–52        | M               | No        | #                      | #             | America                | –          | 31         | Deception, trade-off                                                     |
| Marcom [16]| Contact| 24–51        | M               | Yes       | 12–13                  | F             | America                | –          | 3          | Deception, sexualisation, threatening behaviour, trade-off              |
| O’Connell [18]| Fantasy | #            | #               | Yes       | 8, 10 or 12             | F             | America                | #          | #          | Deception, relationships, sexualisation, threatening behaviour, trade-off |
| Pranoto [19]| Contact | #            | #               | Yes       | #                      | #             | America                | –          | 59         | Relationships, sexualisation, threatening behaviour, trade-off         |
| Study         | Typology | Offender Age | Offender Gender | Decoy Use | Perceived Age of Victim | Victim Gender | Country of Data Source | N. Fantasy | N. Contact | Outcomes                                           |
|--------------|----------|--------------|-----------------|-----------|-------------------------|---------------|------------------------|------------|------------|---------------------------------------------------|
| Quayle [20]  | Contact  | 21–56        | M               | No        | 11–15                   | M = 1         | Italy/UK               | –          | 14         | Deception, relationships, trade-off              |
| Shelton [21] | Contact  | 18–77        | M               | Yes       | 6–17                    | –             | America                | –          | 33¹       | Deception, trade-off                             |
| van Gijn-     | Contact  | #            | #               | Yes       | #                       | M = 49        | America                | –          | 101        | Deception, relationships, sexualisation, trade-off |
| Grosvenor    |          |              |                 |           |                         | F = 52        |                        |            |            |                                                   |
| Williams [23] | Contact  | 24–38        | M               | Yes       | 12–14                   | F             | America                | –          | 8          | Deception, relationships, risk assessment, sexualisation, threatening behaviour, trade-off |
| Winters et al. [24] | Contact  | 19–64        | M               | Yes       | 12–15                   | M = 5         | America                | –          | 100        | Deception, relationships, sexualisation, trade-off |
| Wolak [25]   | Mixed    | 18–40+       | M = 2           | No        | 12–17                   | M = 35        | America                | 30         | 99         | Deception, relationships, threatening behaviour, trade-off |
| Wolak [26]   | Mixed    | 18–40+       | M = 3           | No        | 6–17                    | M = 15        | America                | 68³        | 75⁵        | Deception, threatening behaviour, trade-off       |

Note. Mixed typology refers to studies that report results for both contact and fantasy driven individuals. # Data not identifiable.

a Refers to those individuals who received a sexual picture (N = 38) and engaged in cybersex (N = 28).
b Refers to those who met offline (N = 45) and engaged in offline sexual contact (N = 23).
c Includes cybersex and cybersex/schedulers.
d Represents individuals who engaged in cautious, more restrained exchanges (3) and educational exchanges (2).
e Refers to those who aim to reach short term sexual gratification (8) and long-term procurement (2).
f Signifies those individuals charged for exposing a child to indecent materials.
g Refers to individuals who procured a child online for sexual purposes.
h Represents traveling cases, including individuals who met victims online and travelled for intent of sexual contact.
i Includes individuals who committed a no contact offence.
j Includes contact offences (fondling, inappropriate touching (6), oral sex (10), intercourse (57) and sexual violence (2)).
| Study          | Methodology                                                                 | Statistical Analysis                                                                 |
|---------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Barber et al. | Content analysis from grounded theory and frequency word counts were carried | Contrast estimations and rank correlations were conducted to assess the level and     |
| [4]           | on online transcripts to assess for pervasiveness of communicative strategies. | direction of the effect of perceived age and behaviour. Inter-rater reliability was   |
|               |                                                                            | assessed with a median value of agreement being .69 (Cohen's K).                     |
| Bergen et al. | Predictor variables of behaviour were coded based on expression of sexual    | Logistic regression analysis to examine the affect each item of deception and secrecy   |
| [5]           | interest from online transcripts                                            | may have on outcomes. One-sample and independent t-tests were carried out on         |
|               |                                                                            | significant results. OR was reported for differences between the groups for each      |
|               |                                                                            | outcome. Bonferroni adjusted and non-adjusted p-values are reported.                 |
| Bergen et al. | The prevalence and related outcomes of identity deception and keeping the   | Mixed model analysis was carried out with language terms (friendship, relationship,   |
| [6]           | online interaction a secret was assessed via online self-report surveys      | risk assessment, exclusivity and sexual contact related terms) as the dependent       |
|               |                                                                            | variables and the grooming process stage as the independent variable. Chi-square      |
|               |                                                                            | analysis assessed specific manipulation techniques. Inter-rater reliability          |
|               |                                                                            | correlation of coding ranged from .34–.96 for frequency of use in strategies.        |
|               |                                                                            | Kappa values ranged from .72–.95 for presence of strategy.                           |
| Black et al.  | Content analysis of grooming strategies, manually coded against the stages   | Cross-tabulation statistics were calculated to compare and contrast findings between   |
| [7]           | of O’Connell’s (2013) proposed online grooming theory, was carried out on   | contact and fantasy drive individuals.                                              |
|               | chat room transcripts. The Linguistic Inquiry Word Count (LIWC) was used to  | Classification of offender type was based upon exploratory quantitative cluster        |
|               | analyse several language categories representing different stages of        | analyses. Groups were compared using ANOVA for continuous variables and chi-square     |
|               | grooming.                                                                   | analysis for categorical variables.                                                  |
| Briggs et al. | Chat log transcripts were reviewed to identify communicative and            | Cross-tabulation statistics were calculated to compare and contrast findings between   |
| [8]           | behavioural patterns. Behavioural, social and clinical information was     | contact and fantasy drive individuals.                                              |
|               | collected from archival data of individuals referred to a forensic mental   | Classification of offender type was based upon exploratory quantitative cluster        |
|               | health centre.                                                             | analyses. Groups were compared using ANOVA for continuous variables and chi-square     |
|               |                                                                            | analysis for categorical variables.                                                  |
| DeHart et al. | Mixed method analysis of chat log transcripts were carried out to identify  | Classification of offender type was based upon exploratory quantitative cluster        |
| [9]           | key elements of internet crimes against minors, proposing a typology of     | analyses. Groups were compared using ANOVA for continuous variables and chi-square     |
|               | offenders. Qualitative coded was carried out using MaxQDA to sort          | analysis for categorical variables.                                                  |
|               | commentaries into hierarchical categories.                                  | Classification of offender type was based upon exploratory quantitative cluster        |
| Grosskopf     | Semi-structures interviews were carried out with police officers involved   | analyses. Groups were compared using ANOVA for continuous variables and chi-square     |
| [10]          | in online sting operations to qualitatively compare findings to Krone [13]. | analysis for categorical variables.                                                  |
|               | For those unable to be interviewed, self-report questionnaires were        | Classification of offender type was based upon exploratory quantitative cluster        |
|               | distributed mirroring the questions asked in the interview.                 | analyses. Groups were compared using ANOVA for continuous variables and chi-square     |
| Gupta et al.  | Word frequencies for each stage of O’Connell’s [18] online grooming        | analysis for categorical variables.                                                  |
| [11]          | theory were calculated using LIWC and recorded in a $6 \times 6$ conditional | Classification of offender type was based upon exploratory quantitative cluster        |
|               | probability matrix to calculate the probability of moving through each stage.| analyses. Groups were compared using ANOVA for continuous variables and chi-square     |
| Kloess et al. | Thematic analysis, employing a discursive content-driven approach was      | analysis for categorical variables.                                                  |
| [12]          | carried out on chat log transcripts to identify key information, trends and | Classification of offender type was based upon exploratory quantitative cluster        |
|               | themes. A hierarchical grouping approach enabled assessment of similarity    | analyses. Groups were compared using ANOVA for continuous variables and chi-square     |
|               | and differences across the categories                                      | analysis for categorical variables.                                                  |
| Krone         | Police officers were interviewed and prosecution files were made available   | Classification of offender type was based upon exploratory quantitative cluster        |
| [13]          | with access to demographics, previous criminal history and details about the | analyses. Groups were compared using ANOVA for continuous variables and chi-square     |
|               |                                                                             | analysis for categorical variables.                                                  |
| Study                          | Methodology                                                                 | Statistical Analysis                                                                 |
|-------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Lorenzo-Dus et al. [14]       | Using a Computer-Mediated Discourse Analysis approach, language–focused content analysis was carried out on chat logs. Focusing on speech acts and relational work, a new online grooming communicative model is proposed. | Welch's t-test was conducted to explore differences in the frequency of identified grooming processes. Pearson correlations examined relationships between grooming processes. |
| Lorenzo-Dus and Izura [15]    | A Computer-Mediated Discourse Analysis approach was undertaken. Praise was examined using Speech Act Theory (SAT – complimenting behaviour). The relational and procedural goals of groomers’ use of compliments were explored by the Interactional Sociolinguistics notion of relational work. | –                                                                                   |
| Malesky [16]                  | Qualitative analysis was carried out on a questionnaire response to the question: “what initially attracted you to a particular child/adolescent online that you wanted to establish a relationship with for sexual purposes?” Participant responses were categorised into themes and evaluated by 3 independent reviewers. | –                                                                                   |
| Marcum [17]                   | Qualitative latent coding on chat logs were carried out to explore the underlying meaning of the communication. | –                                                                                   |
| O’Connell [18]                | Sociolinguistic analytical techniques were undertaken on grooming chat logs to develop a typology of child cybersexploitation. | –                                                                                   |
| Prantono et al. [19]          | The term frequency-inverse document frequency (tf-idf) matrix was established from chat logs to identify grooming characteristics. | Paired t-tests were carried out to examine the relationship between words used and grooming characteristics. A logistic model was then developed using step-wise regression. |
| Quayle et al. [20]            | Using a constructivist grounded theory approach interview transcripts of convicted groomers where analysed to explore ways in which online groomers identified victims. Active language was analysed to explore categories within the data, inter-relationships between categories was assessed and theoretical sampling and sensitivity was incorporated into the analysis. | –                                                                                   |
| Shelton et al. [21]           | Investigative reports, offender interviews, sentencing information and criminal record information were accessed from FBI Crimes Against Children case reviews. Data extraction, to include offender background, investigation details and legal outcomes were recorded into an FBI developed protocol. The protocol was reviewed by the FBI’s Behavioural Research Working Group. | Chi-square and t-tests were conducted to explore differences between cases that occurred between 1996 and 2002 (n = 198) and from 2010 (n = 53). No significant differences existed between the cases, the sample was therefore combined. A descriptive analysis of data extraction is provided. |
| van Gijn-Grosvenor [22]       | Qualitative coding of chat log transcripts was carried out by one researcher, identifying 4 categories describing groomer behaviour; offence characteristics, rapport building, sexual matters and concealment. Inter-rater reliability was measured on a sample of cases (n = 13), completed by a second coded. Coders agreed 93% of the time. | Chi square analysis and t-tests were carried out to examine differences between groomers targeting male and female victims. |
| Williams et al. [23]          | Chat logs transcripts were analysed thematically, in an inductive way, with no existing framework to code the data to identify grooming themes. One researcher carried out the initial coding, with a 2nd reviewed coding a sample (10%) of chat logs to evaluate consistency | –                                                                                   |
2. Experimental design, materials and methods

The process of study selection is defined in Table 1. The criteria were used to assess articles captured by the systematic search strategy in Broome et al. [1].

Studies included in Broome et al. [1] were appraised in consideration of the Population, Interest, Comparisons and Outcomes (PICO) formulation [2], and against an order of hierarchy regarding study methodology (Table 2). Data extraction was founded upon PRISMA guidelines [3] and piloted on a small sample of studies (n = 5).

Table 3 presents the Study Characteristics of included studies, to include Typology (contact, fantasy or mixed (i.e. both fantasy and contact behaviour)), Offender Age, Offender Gender, Decoy Victim, Perceived age of Victim, Victim Gender, Country of Data Source, Number of Fantasy Individuals, Number of Contact Individuals and Outcomes. Quantitative and Qualitative Methodological approaches for reviewed studies are presented in Table 4. Study Quality and Methodological appraisal is considered in Broome et al. [1].

Table 4 (continued)

| Study | Methodology | Statistical Analysis |
|-------|-------------|---------------------|
| Winters et al. [24] | Inductive and deductive coding was carried out on chat log transcripts to investigate offender, decoy victim and conversation characteristics. | – |
| Wolak et al. [25] | 2574 Law enforcement agencies were surveyed and telephone interviews carried out to collect information about the case to include the type of crime, levels of deception, dynamics of the crime and type of sexual behaviour carried out. | – |
| Wolak et al. [26] | Law enforcement officers were interviewed using a computer-assisted telephone system following completion of a mail survey. Officers also provided a crime narrative. The overall aim of the study was to examine whether online groomers are a distinct offender group. | Chi-square cross-tabulation analysis was carried out to compare online-meeting and known-in-person cases. STATA SE11 survey data analysis procedures were employed to consider selection probability variations. |

Note. – denotes data not applicable.

References

[1] L.J. Broome, C. Izura, N. Lorenzo-Dus, A systematic review of fantasy driven vs contact driven groomers: discrete or overlapping typologies? Child Abuse Neglect 79 (2018) 434–444. http://dx.doi.org/10.1016/j.chiabu.2018.02.021.
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